From Crisis to Crisis: A Big Data, Antenarrative Analysis of How Social Media Users Make Meaning During and After Crisis Events

Adam R. Bair
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FROM CRISIS TO CRISIS: A BIG DATA, ANTENARRATIVE ANALYSIS OF HOW SOCIAL MEDIA USERS MAKE MEANING DURING AND AFTER CRISIS EVENTS

by

Adam R. Bair

A dissertation submitted in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY in Theory and Practice of Professional Communication

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2016
ABSTRACT

From Crisis to Crisis: A Big Data, Antenarrative Analysis of How
Social Media Users Make Meaning During
and After Crisis Events

by

Adam R. Bair, Doctor of Philosophy
Utah State University, 2016

Major Professor: Dr. Keith Grant-Davie
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This dissertation examines how individuals use social media to respond to crisis situations, both during and after the event. Using both rhetorical criticism and David Boje’s theories and concepts regarding the development of antenarrative—a process of making sense of past, present, and future events—I explored how social media users make sense of and respond to a crisis. Specifically, my research was guided by three major questions:

• Are traditional, pre-social media image-repair strategies effective in social media environments?

• How do participants use social media in crisis events, and how does this usage shape the rhetorical framing of a crisis?

• How might organizations effectively adapt traditional crisis communication plans to be used in social media during future crisis events?

These questions were applied to four case studies to provide a range of insights about not only how individuals respond to a crisis, but also what strategies organizations use
to present information about it. These cases were carefully selected to include a variety of crisis types and responses and include the following:

- A business (H&R Block) communicating to clients about a software error
- A governmental organization (the NTSB) presenting information about the cause of an airplane crash and about missteps in its response
- A governmental group (the CDC) responding to a global health crisis with various audiences and types of responses
- An activist movement (Black Lives Matter) attempting to unify social media users to lobby for change and highlight the scope of the issues to the nation

Analyses of these cases not only show how individuals and groups used social media to make sense of crisis events, but also how the rhetorical strategies used to respond to a crisis situation. Understanding how individuals and groups make sense of crises will provide additional understanding to information designers, public relations professionals, organizations and businesses, and individuals using social media to effect change.
PUBLIC ABSTRACT

From Crisis to Crisis: A Big Data, Antenarrative Analysis of How
Social Media Users Make Meaning During
and After Crisis Events

Adam R. Bair

Crisis events are now common, ranging from computer errors, which might cause only minor inconvenience, to floods, which can cause loss of life and significant property damage. Such events can affect people’s ability to pay bills, trust food sources, or deal with events that could impact the environment and lives for decades. Understanding how crisis information is presented to audiences, how these audiences interpret and respond to a crisis will help researchers develop new approaches to improve communication among and with people affected by crisis.

To understand how individuals make sense of crisis events, I applied David Boje’s theories and concepts of antenarrative, or story fragments, that are used in sense making. As these fragments are retold, they are reimagined by the teller to highlight specific elements and downplay others. In this way, an antenarrative takes on a life of its own, possibly re-creating the same series of events in countless ways.

Comprehending how social media users interrupt an unfolding crisis allows an understanding of how it differs from traditional crisis communication response. Before the advent of social media, an organization in crisis would make an announcement about the event, hold press conferences, and respond to the crisis. Today, social media users can report about a crisis before an organization may fully understand what is happening. Social media users interact with information presented by the organization, so they can question the
company and challenge the crisis in real time. Technology has changed the way a crisis is interpreted, but few organizations have reacted to this change and developed new strategies to communicate about crisis via social media.

The dissertation examines four case studies:

• H&R Block’s response exclusively on Facebook to a software error that delayed tax returns

• The National Transportation Safety Board’s presenting information about the Asiana 214 crash at San Francisco International Airport

• The Center for Diseases Control and Prevention’s reaction to the first case of Ebola in the United States and the strategies it used to present information to hospitals and to the general publics in the United States and West Africa

• #BlackLivesMatter users’ engaging social media to present crisis information to the public to generate support for a legislative agenda that seeks improve the lives of black people.

These cases show not only how antenarratives developed among social media users but also how these users interpreted, retold, and reimagined official narratives of the crisis. These findings allowed an exploration of the best and worst social media crisis communication practices.
DEDICATION

Melissa and Emma Lou,

You have cheered me on, kept me laughing during months of research, and encouraged me to keep writing.

I love you both.
ACKNOWLEDGMENTS

Many people have helped me as I have pursued my Ph.D. I acknowledge the patience and support of my major professor, Dr. Keith Grant-Davie; the assistance of Dr. Ryan Moeller and Dr. Rebecca Walton, who provided feedback and assisted me in finding new ways to analyze my data; and the contributions of Dr. Kristine Miller and Dr. Steven Hanks, who have worked on my committee.

I am grateful for the support of my wife, Melissa, and our daughter, Emma, over the many months of researching and writing for this project; for the encouragement of my parents, Ronald and Karen Bair, throughout the years that I’ve spent pursuing my education; for the love of my siblings, Luke, Katelyn, and Linsey Bair; for the help of my father- and mother-in-law, David and Margo Merrill, and for the encouragement of my brothers- and sisters-in-law and their families.

I acknowledge my mentors Robyn Bergstrom and Fenton Broadhead, who encouraged me to earn advanced degrees and pursue my dreams. I appreciate the support of the Brigham Young University-Idaho administration, especially Dr. Kirk Gifford and Dr. Kimball Galbraith, who granted leaves and provided resources that I needed to finish my dissertation. I would also like to thank my colleagues in the BYU-Idaho Business Management Department for their encouragement during this process. I acknowledge my colleagues at Utah State University, especially Emily Petersen and Rosa Thornley, who shared ideas, support, and empathy. And I thank Elise Tjernagel, who worked with me to negotiate access to Crimson Hexagon, which helped me analyze millions of Tweets in months instead of years. Thank you to everyone who has supported me along the way. We did it.
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CHAPTER 1
INTRODUCTION

In the decade between 2005 and 2015, the global community faced the effects of numerous crisis events: earthquakes from Iran to Haiti, a tsunami that ravaged Japan and caused a meltdown at a nuclear power plant, hurricanes that displaced thousands and cost billions, oil spills, and leaks of sensitive government information. Product defects in the form of faulty airbags, sticky brake pedals, and flawed ignition systems placed millions at risk. Tainted food, drugs, and toys have been sold that have made people sick and even caused death. Crisis events have also included sex scandals, domestic abuse, corruption, and global economic meltdown. In an increasingly interconnected global community, a single incident has the potential to influence people and processes around the world.

Understanding and developing ways to communicate risks, precautions, instructions, warnings, and other information could significantly benefit individuals, organizations, and society.

Significant research has examined the rhetoric of crisis, crisis planning for organizations, and the formulas of apologies, but scant crisis communication research examines how Web 2.0 technology influences current crisis communication practices. Web 2.0 technologies are represented in the change from static web pages (Web 1.0) those that include dynamic, user-generated content. Social media is a hallmark of Web 2.0 technologies; social media platforms (including Facebook, Instagram, Pinterest, Tumblr, Twitter, and YouTube) are constantly changing, but any web-based application that encourages users to generate, share, and connect to content could be defined as social media. For this
dissertation, social media was limited to posts made via Facebook and Twitter, which have
the largest audiences.

Potts, Seitzinger, Jones, and Harrison (2011) have called for research that provides
insight into how people use and process social media information during a crisis event. Potts
(2014) commented on the short-lived role that social media technology plays in a crisis or
disaster event: “People use technology to connect, complete a task, and get out” (p. 112).
Understanding how the flow of information changes over the course of a crisis might
provide additional information about how the knowledge and rhetoric of a crisis are co-
created by organizations and social media participants.

Traditional crisis response scholarship examines a single narrative of events, usually
the “official version” of the incident as prepared by the organization affected or by an
investigative body. This type of scholarship typically researches responses in a neat, efficient
manner, meaning these scholars do not add multiple rhetors or anything else that would
complicate the analysis of the official version of events. Social media allows a wider range of
people to participate in the crisis narrative; individuals now have the power to support the
official narrative, offer counter-accounts of events, question the effectiveness of the
response, and point other social media users to additional information.

Role of Technical Communicators in Crisis Communication

Crisis communication is traditionally the realm of public relations experts, who
advise clients during a crisis, devise new methods of communicating messages, and
improvise to protect a client’s reputation. Scholarship in crisis communication is typically
divided into two areas: the rhetorical analysis of crisis responses and the development of
plans and methods to contain crisis events after they happen. Technical communicators would add a unique perspective in understanding the powerful dynamic that occurs in crisis communication. As Cezar Ornatowski (2004) discussed, technical communicators have the tools to understand how messages are constructed, how means are used to communicate, and how individuals and organizations shape messages:

The technical communicator, as I have argued, stands at the intersection of technology and its various producers, users, and publics. The communicator’s decisions, just as the documents the communicator designs, are shaped by, and, in turn, shape diverse needs and interests and have implication in the realms of technology, culture, and public policy. By virtue of their positions, the technical communicators have tremendous power in a technological society. To understand and use that power, communicators must be aware of the diversity of interests and stakes involved, of the purpose of the communication in regard to those interests and of the implications of different communicative choices. (p. 599)

The strength technical communicators bring to crisis communication scholarship is an understanding of how technology is used to influence culture and public policy. These narratives—in addition to crisis narratives—could provide a deeper and more meaningful explanation about crisis events than already exist.

In addition to an outside perspective, technical communication professionals and scholars bring a wide set of skills to crisis communication. One that technical communication scholars argue for is the use of social media. As Longo (2013) notes:

Incorporating social media into our technical communication toolset for audience accommodation promises that we can design documents that are more explicitly responsive to audience needs and that are more directly inclusive of a range of perspectives across global communities. (p. 24)

As Ferro and Zachry (2014) suggest, social media has changed—and will continue to change—the nature of technical communicators’ work. While there will always be a need for technical communicators who can create, implement, and design single documents that fit the needs of a certain audience, a changing world requires that they develop additional skills.
Social media requires this knowledge and its associated skills for designing communication experiences that fit the needs of multiple users in a collaborative and ever-changing environment. The number of American adults who use blogs, social media, video messaging, text messaging, and portable devices continues to grow each year. The Pew Research Center found that 83% of 18- to 29-year-old adults are likely to use social media, while 77% of 30- to 49-year-old adults and 52% of 50- to 64-year-old adults participate in a variety of social media platforms (Duggan & Brenner, 2013).

As the number of people using social media increases, the role of technical communicators will become more important in understanding power structures, in official and unofficial forms of organizational communication, and in the presentation of both technical and non-technical information to increasingly diverse audiences. Developing methods of communicating in social media environments will be critical for both individuals and organizations. These methodologies will be able to gauge the effectiveness or ineffectiveness of communication on social media platforms, shed light and gain understanding on sites of struggle and hierarchical structures, and provide additional research sites for a growing body of technical communication scholars. Adopting social media as a legitimate research site and developing or adapting a variety of methodologies to study its content and design will provide additional understanding and broaden the scholarship efforts of technical and professional communicators. Beyond simply knowing how to craft effective social media messages, technical communicators should also be examining “conversations and patterns to learn what they can about what people are saying, how information is moving and changing, and how social media forums can be used to promote a safe and informed citizenry as well as the objectives of corporations, nonprofit
organizations, and government agencies” (Bowdon, 2013, p. 51). At its core, technical communication scholarship is concerned about and examines how a message is crafted, what potential pitfalls of understanding exist, and what strategies could be employed to help broader groups understand the message. Social media’s growing popularity and ubiquitous nature allows for scholarship in a number of facets, with a variety of audience sizes and a wide range of topics.

Bowdon’s call to action could be applied to a number of situations in which social media is used to communicate messages; however, crisis communication is a prime location for exploring how a message is transmitted, changed, and crafted to meet the communication objectives of individuals, businesses, nonprofit organizations, and governments. Social media allows for more interaction with messaging than other forms of mass communication. As with previous communication channels, social media can move from its source to the masses, but unlike with those other channels, users can then repost, applaud, edit, appropriate, question, criticize, all while sharing the message with large networks.

In terms of technical communication, social media scholarship is still an evolving and emerging field of research that has examined client projects (Melton & Hicks, 2011), service learning (Kimme Hea, 2011), writing in the classroom (Maranto & Barton, 2010; Vie, 2008), preparing students for the age of social media (Hurley & Kimme Hea, 2013), knowledge work and collaborative practices, (Ferro & Zachry, 2013), collective knowledge-making, (Longo, 2013), and disaster and emergency communication (Bowdon, 2013; Potts, 2011; and Potts, 2014). Potts’s research examines how technical communication skills could improve the experience of people who use social media during a crisis event. Much of her research
examines “information designers and everyday people as active participants empowered to interact and participate with and within systems . . . the literacy of all actors is the key to creating more appropriate and open mediated systems to support people in times of disaster” (Potts, 2009, p. 298). Potts’s work aligns with the type of questions and research sites being explored in sister fields to technical communication. Schultz, Utz, and Goritz (2011) found that Twitter participants were more likely to engage in crisis-related content and, in many cases, to have a clear understanding of the crisis message presented. In studying the Fukushima Daiichi nuclear disaster, Utz, Schultz, and Glocka (2013) found that selecting Facebook to communicate about the crisis provided a “cue for the willingness of an organization to quickly inform its stakeholders and to engage in dialog with them” (p. 45).

The ability to quickly communicate with a desired audience, but without a journalist or other media gatekeeper is perhaps the greatest benefit of using social media for crisis communication (White, 2012). Examining the flow of information between official users and those affected by a crisis event is important work. However, bringing technical communication scholarship to the scene could allow for better understanding of ways to design effective messages; of the user-generated conversation before, during, and after the crisis; and of the power structures and hierarchies at play in the development and consumption of messages.

While social media engagement and communication continues to grow, no social-media-specific analysis tools exist. Most crisis communication scholars use traditional crisis rhetorical analysis that focuses on small numbers of rhetorical artifacts, usually from a single source. However, the nature of Web 2.0 technology makes this approach less reliable because crisis communication research doesn’t take into account a large portion of the
conversation happening via social media or the surrogate nature of users’ attitudes about a crisis event. Technical and professional communicators should bring their skillsets and perspectives about the creation of new methods of analysis to study this area of professional communication. Technical communicators not only bring skills in usability, document design, and rhetorical strategies, but they also implement them in the framework of ethical principles. While considering the goals of the organization, these communicators also take into account the end-user experience and attempt to develop information that is accurate, clear, and honest.

**Theoretical Background**

The majority of the dissertation project is devoted to understanding the rhetoric of crisis events created by the public via social media outlets. Participants might include a number of subgroups such as those directly affected by the crisis event, those who have a secondary connection to the crisis (such as people living near the crisis location or companies and organization that would need to deal with the fallout of the event), and those who have a tertiary connection to the crisis (such as advocates for social, environmental, and legal causes; members of the public who feel connected to the crisis event; and “gadflies” who become involved in the social media fray). While a number of theories and typologies will be used to examine this type of rhetoric—including *apologia*, or a genre where a rhetor defends himself/herself against an accusation (Ryan, 1982)—the underlying element of these theories is dissociation, or the concept that a rhetor will attempt to separate an idea or concept that is usually viewed as one unit into two or more distinct, separate, contrasting units (Perelman & Olbrechts-Tyteca, 1969). Image repair strategies provide a defined
number of specific responses used by rhetors to repair their public images (Benoit & Hanczor, 1994). Public relations theoretical framework and scholarship is deeply connected to the writings of Kenneth Burke. Public relations scholars like Smudde (2004) discuss how Burke’s *Attitudes Toward History* is a manual for applying his theories to practical areas of communication like public relations. Rybacki and Rybacki (1987) argue that public relations experts should widely use Burke’s theory of dramatism because it helps reveal the dramas and system of symbolic language created by organizations. Public relations and apologia scholars like Benoit frequently draw upon the concepts Burke presented. These and other public relations scholars are connected to practitioners because scholarship drives the response in the field; the backbones of public relations responses are Burkean concepts that do not effectively capture all of the possible motivations of audiences. An example is Burke’s archetypes of guilt, purification, and redemption, which explore motivations on the most basic level of symbolic actions. The guilt-redemption cycle is contained in the patterns of all human behavior. By understanding this behavior, we can understand motivations:

Two quite different but equally justifiable positions are implicit in this approach to specifically human motivation . . . . If *action* is to be our key term, then *drama*; for drama is the culminative form of action. But if *drama*, then *conflict*. And if *conflict*, then *victimage*. Dramatism is always on the edge of this vexing problem, that comes to a culmination in tragedy, the song of the scapegoat. (Burke [1966 p. 54-55])

Crisis is inherently connected to conflict and therefore, to victimage. The selection of the guilt-redemption cycle as a modality allows scholars a rhetorical framework to examine the motives of an organization before, during, and after a crisis.

**Guilt**

The cause of guilt is deeply rooted in two concepts Burke presents: humans’ use of symbols and their yearning for perfection. Burke (1966), in his *Definition of Man*, outlines how
humans are driven by the pursuit of perfection and how “this dangerous sense derives sustenance from primary aspects of symbolicity” (p. 18). When humans reach for perfection, they fall short. Thus, humankind produces guilt, beginning the guilt-purification-redemption cycle. Guilt is part of the human condition and is connected to social order and hierarchy (Burke, 1970). Humans use symbols that create a social hierarchy, so when something disrupts that order, they experience guilt. Perfection is also connected to this principle. If the order within the hierarchy no longer exists, there is a need to find equilibrium—thus the need for purification.

Purification

Burke describes the process of overcoming guilt as “purification by sacrifice, by vicarious atonement, unburdening of guilt within by transference to chosen vessels” (1966, p. 478). Sacrifice can be represented in a number of ways, but for Burke, the scapegoat commonly denotes a sacrifice. A scapegoat is a “‘suppurating’ device that brings the evil ‘to a head’” (Burke, 1973, p. 46). This process is similar to the ritualistic usage of a scapegoat in the Old Testament when a group delegates burdens or sins “to the sacrificial vessel of the scapegoat” (Burke, 1973, p. 45). Burke (1969a) argued that a capitalistic society has co-opted the scapegoating ritual and uses it to perform a similar purification function. In *A Rhetoric of Motives*, Burke explored how the concept of killing is connected to rebirth: “The killing of something is the changing of it, and the statement of the thing’s nature before and after the change is an identifying of it” (Burke, 1969b, p. 20). At its essence, the changing of identity (or a rebirth) is redemptive in nature. The scapegoating process and sacrifice of the scapegoat for the greater good represents the purification of an individual or group.
Redemption

“To relieve the old or recurrent agonies is to punish oneself by suffering again one’s sins and their consequences. And so . . . there is the punishment and suffering, which is a way of earning the redemption that terminates the journey” (Rueckert, 1982, p. 123). In the Rhetoric of Religion, Burke (1970) describes how a “perfect scapegoat” can provide redemption for the sins and misdeeds of an individual or group (p. 242). The redemption shows that a change has occurred within the group or individual. This change is facilitated by purification, which includes a scapegoat or vicarious atonement to purge guilt. Redemption is both the end of a cycle and the beginning of a new one. It will remove guilt for a specific action, but over time, new situations will create new guilt. Once a group or individuals understands this process, they will be able take actions to redeem themselves in a continual process. The process explains why both individuals and organizations engage in rhetorical practices to repair images after crises.

While Burke’s writing has been applied to the study of rhetoric and in turn to developing a framework for public relations, his theories focus on individual motivations, overlooking possible social and organizational motivations. He asserts that humanity’s inability to reach perfection and the guilt associated with that inability are the driving motivations for all that we do. During a crisis, those who are responsible for the event might be driven by guilt in responding to it. However, other motivations (that Burke’s models do not account for) could include responsibility to legal systems, shareholders, people who were affected by the crisis, or other societal actors. These motivations are not examined in the core theoretical frameworks of public relations scholarship, making both the analysis and
design of crisis response oversimplified and ineffective for accounting for rhetoric devices beyond the guilt redemption cycle.

Guilt can be a powerful motivation in the cases of people, but it does not control the way a company responds to a crisis. While it would be easy to believe that the only impetus company officials might have is to maximize profits, organizations might also be motivated by care for consumers, by the environment, or by being transparent with the public. Money and profitability are important element of businesses, but they are not the only motivating factor. A United States Supreme Court decision [Burwell v. Hobby Lobby Stores 2014] demonstrates that this isn't always the case: “While it is certainly true that a central objective of for-profit corporations is to make money, modern corporate law does not require for-profit corporations to pursue profit at the expense of everything else, and many do not do so” (p. 23). While making money is a critical element of any business, corporations must also look holistically at multiple audiences—including shareholders, employees, and members of the public—in responding to crises.

Publicly traded companies must provide value for shareholders. Value can be a difficult concept to gauge, as some methods of providing it might cost companies money in the initial investment. For example, replacing dated processing equipment across a company can cost millions of dollars. If an organization is creating value for a short-term speculative investor, spending the money on upgrades could increase operational costs, decrease profit share, and make the investment unprofitable for short-term investments. However, a long-term investor might see a slight short-term dip in the share price but feel assured that the infrastructure changes reduce the organization’s risk of an industrial accident, environmental disaster, or loss of life. Such events could, of course, hurt the long-term value of the
organization, cause a significant dip in share prices, and destroy an investor's confidence in
the organization. For these reasons, during a crisis event, a company must look at the long-
term health of the organization and not necessary the short-term goals of the shareholder.
British Petroleum did so when it spent significant amounts of money to cap the oil leak in
the Gulf of Mexico following the Deepwater Horizon accident in the summer of 2010. Had
the organization refused to make such expenditures, BP could have faced U.S. government
fines, lawsuits from states along the Gulf of Mexico seeking to compensate for reduced
tourism, and individuals who relied on gulf fisheries for their incomes.

Beyond shareholder considerations, organizations must also consider the impacts a
crisis might have on its employees. Current economic environments make moving between
companies easy for technical and knowledge workers. If an organization doesn’t take care of
its workers, they will often find other places of employment. While providing excellent
benefits, outstanding compensation, and a safe work environment might not make sense
from a profit or shareholder-value viewpoint; consistently overlooking the needs of
personnel could cost a company significantly. Conversely, retaining a workforce can help an
organization avoid losing experienced employees and their collective knowledge. Skilled staff
is less likely to make organizational mistakes because they typically have more expertise and
knowledge than new employees do.

During a crisis, leaders should examine the prospective impacts on employees of the
decisions they make. For example, spending a significant amount of money paying fines can
affect the financial health of an organization; in some cases, paying such fines might increase
the likelihood of acquisition, bankruptcy, or organizational failure—all of which could
impact employees’ futures. Organizations that have focused solely on the welfare of
employees after a crisis by paying salaries and awarding bonuses; in doing so, they respond to short-term needs at the risk of long-term corporate health, which could negatively affect employees in the future.

Finally, an organization must be aware of how its actions may have unintended consequences for the general public. During the housing bubble from 1997 to 2005, many mortgage companies provided excellent value for shareholders and created a great environment for employees, but awarding large loans to unqualified homebuyers had a societal impact. Once the economy began to slow, many people could no longer make their mortgage payments, causing the failure of investment banks, the collapse of housing markets, and increased government regulations of both the banking and housing industries (Hardaway, 2009). Regulators and public advocacy groups have placed increased importance on organizational transparency, environmental quality, and corporate responsibility. If an organization overlooks these values, its customers will find another one that meets their expectations.

During a crisis, organizations must balance the needs of three critical audiences for a variety of reasons: shareholders (to make a profit), employees (to maintain a workforce), and the general public (to resolve the crisis’ impacts). Public relations theories based on Burke’s work identify guilt as the motivation for image repair. While they can motivate an individual, guilt and redemption cannot satisfy the needs of organizational audiences. A company’s connection to and dependence on shareholders, employees, and the general public are more complicated than what Burke outlined in his theories. The only way an organization could use Burkian concepts would be in placing higher value on one audience while disregarding the other two.
Scope

Numerous situations could be examined for the dissertation; however, by examining the responses of one business and three governmental organizations, I hope to see a variety of strategies and tactics used to address a wide range of crisis events. My proposed case studies allow insight into four different approaches to social media crisis management. The first case study examines H&R Block’s handling of a software glitch that delayed some tax returns for 10 to 15 weeks in 2014. H&R Block’s only form of communication with both customers and offices was via six posts made to its public Facebook page. Users either supported or opposed H&R Block and its official narrative, prolifically dominating the conversation online while the company remained comparatively quiet.

In contrast to H&R Block’s small-scale crisis communication response, which allowed users to dominate its Facebook page, the National Transportation Safety Board (NTSB) used social media to share large amounts of detailed information during a crisis. The NTSB investigation of the Asiana Airlines 214 plane crash occurred in real time via social media; in this case, the organization was highly engaged with the public. The NTSB released photos and data to the public via Twitter at the same time it released that material to news organizations. Press conferences were live tweeted, and URLs to video streams were provided to the organization’s followers on Twitter. However, because of several missteps, the official NTSB response was clouded by users who questioned the board’s actions and those of other organizations involved in the crisis response.

My third case study will examine a much larger social media response to the 2014 Ebola outbreak. The previous case studies had responses of fewer than 200,000 social media posts. In the month following the announcement of the first Ebola case in the United States,
social media users generated 40 million posts. The Centers for Disease Control and Prevention (CDC) attempted to control—or at least influence—the social media conversation. News of the first case of Ebola in the United States was under embargo until the official press conference; however, the story (with relatively few details) broke on Twitter nearly an hour before the press conference. This created an initial panic; in the first 10 days of the Ebola outbreak, 20 million tweets were generated. The CDC tried to move the social media conversation away from the initial panic created online to an understanding of how Ebola is transmitted, the real risks of Ebola, and what people can do to remain safe.

My final case study examines the evolution of a movement over several crisis events. The, activist movement Black Lives Matter, was founded after George Zimmerman was acquitted on July 13, 2013, for the murder of Trayvon Martin. Since then, Black Lives Matter has used social media to condemn police brutality, violent police tactics, mass incarceration, and racism in any form against African Americans. During the protests of both Ferguson, Missouri, and Baltimore, Maryland, after the deaths of Michael Brown and Freddie Fray, the hashtag #blacklivesmatter was used to organize protests, state demands, and form content groups around the world as an organized form of civil disobedience.

All of the organizations I will examine here feature discrepancies between the official narrative presented by an organization and the information presented by social media users. The scope and range of the cases will be critical in discovering three things:

- What common strategies exist for organizations responding to crisis events via social media?
- How do participants engage with social media to create content and challenge the official statements and narratives of organizations?
• What strategies do participants engage to question official narratives on social media?

These questions drive the development of the dissertation project’s research questions, which focus on the strategies and tactics used to present, support, and challenge crisis information using social media. When examined collectively, these cases provide the best opportunities to examine co-creation of crisis rhetoric because the organizations used social media platforms for disseminating crisis information. Users then shared that information, challenged the official accounts, or attempted to reframe the crisis scenarios.

**Research Questions**

Researchers have called for future inquiry to adapt classic models to fit the needs and demands of crisis communication in a social media context (Utz, Schultz, & Glocka, 2013). These calls represent a developing body of knowledge that could yield a tool to analyze crisis communication events by utilizing social media and identifying ways technical communicators could improve in both creating content and understanding the narratives surrounding crises. My research is driven by the following questions:

• Are traditional pre-social media image repair strategies effective in social media environments?

• How do participants use social media in crisis events, and how does this usage shape the rhetorical framing of a crisis?

• How might organizations effectively adapt traditional crisis communication plans for a social media setting in future crisis events?
Are Traditional Image-Repair Strategies Effective in Social Media Environments?

Traditional image-repair strategies are the backbone of an education in public relations and crisis response. For both scholars and practitioners, crisis communication and image repair rely on a specific set of strategies and case studies that have become industry standards. Because these methods are the trusted responses to crises, public relations experts will rarely vary from them, whatever the situation or crisis context.

Public relations education is often codified around case studies that show how an organization was able to use an image repair strategy to recover following a crisis. These cases often include Tylenol’s response to product tampering in 1982, the Malden Mills fire in 1995, and Firestone and Ford’s tire recall in 2000. The cases show the importance of having a single spokesperson, taking action to repair image, offering compensation, apologizing for actions, and other traditional responses.

All of these cases occurred before the advent of social media, so the methods and responses used may or may not be effective in a social media environment. Social media creates distinct situations in which traditional crisis response strategies cannot fully anticipate the needs of organizations, stakeholders, and participants. The characteristics of social media have changed the ways organizations respond to crises. Social media crisis response is different from traditional crisis response—which is grounded in control and order—in the following ways:

- The response is polyvocal; it is filled with many voices and opinions about the crisis.
- The response is generated by both official and unofficial sources and outlets.
- The response is ever-changing; as new information is presented, the rhetorical strategies needed to respond change.
• The response is not isolated to a single document or statement, but can be generated in thousands or millions of social media posts.

The mobile nature of social media allows information to become viral before an organization is able or ready to respond officially to a crisis. The reports of the first Ebola case in the United States were seen on Twitter before the CDC was able to hold a press conference to brief the public. This announcement resulted in individuals promoting panic, spreading false information, and connecting users to unreliable resources. In an effort to communicate about the Ebola outbreak in Dallas, users filled the CDC’s brief silence with misguided attempt to spread the news and with unreliable precautions that should be taken to avoid contracting Ebola.

Social media has changed the traditional practices in the field of crisis communication and image repair. For the most part, these changes have empowered users, shifted power structures, and allowed previously marginalized groups to be part of the conversations surrounding crisis events. These changes can be seen in several ways. First, social media can shift the focus of the audience. For example, a company might use a single spokesperson to respond to a crisis. In the event that the spokesperson makes a gaffe amid a media interview, individuals might respond by creating a YouTube video mashup of the error and similar mistakes and sharing it with a worldwide audience. Prior to the social media era, such gaffes might garner localized attention, but they would never attract the audience that similar mistakes receive today.

Second, social media can spread misinformation with lighting speed. It also gives individuals a microphone with a worldwide reach. During the BP Gulf oil spill of 2010, a
group created a false BP’s Twitter feed and posted damaging and false information that the press used and credited to BP during the initial days of the crisis.

Third, social media can empower users and place organizations on an equal footing with the general public. Users can comment and challenge responses via social media without censorship. Traditional crisis response depends on a press conference, where an official spokesperson offers a carefully prepared statement to a handful of media outlets. Following the statement, members of the media ask questions, and the spokesperson offers carefully vetted language. However, social media moves power from the precise, official statement to individuals who have emotional connections to the situation. These users can offer firsthand information that will reveal holes in the official narrative as users engage in the process Feenberg (2002) describes as “maneuvers around gatekeepers” to offer content that could be more transparent and truthful than official statements. This process is an example of antenarrative, which Boje (2001) defines as “the fragmented, non-linear, incoherent, collective, un plotted, and pre-narrative speculation, a bet. To traditional narrative methods antenarrative is an improper storytelling, a wager that a proper narrative can be constituted” (p. 1). The prefix ante should not be confused with anti. Ante is Latin for before. Antenarrative, therefore, is “before the creation of a narrative;” by its nature, antenarrative rejects the narrative features of a beginning, middle, or end. Antenarratives will be the primary artifacts examined in the dissertation project. This approach will provide understanding of what social media users are discussing during a crisis event and how this influences the way the public responds. In terms of antenarrative research, Vickers (2012) believes this process of researching sense making “enables researchers to share the bits and pieces, snapshots, grabs and glimpses of respondent lived experiences that are not bounded
by more traditional narrative theory modes of research analysis and presentation” (p. 173). Social media by its very nature allows users to share “bits and pieces, snapshots, grabs and glimpses of respondent lived experiences;” understanding these elements can shed light on how social media has influenced and changed the process of crisis communication. Additional definitions and characteristics of antenarratives and their application to social media will be provided in Chapter 2.

Fourth, social media has transformed the traditional media model and created a new democratized system of communication. Traditional media models have one source that generates content for many receivers; in social media, many sources create content for many receivers. Now an organization cannot simply make a statement and ignore the comments of the general public; it must engage with others who are generating content. This content might require organizations to acknowledge, deal with, or downplay information that might be damaging to the official narrative but essential for users creating an antenarrative.

Most organizations have prepared a number of crisis responses, but rarely take social media into account. In the case of H&R Block’s 2013 tax season, the company had thousands of people posting questions daily but only two social media monitors responding to questions and enforcing H&R Block’s Facebook rules.

Even public relations textbooks that highlight newer cases involving social media often rely exclusively on older crisis response strategies. While these strategies might be effective in a social media environment, no empirical research currently supports this conclusion. Research in crisis communication that uses social media must first study image repair strategies to meet the needs of both scholars and communication professionals.
However, due to the interactive nature of social media, users are able to create a dialogue around the crisis event. This process creates other questions that must be asked:

- What strategies are being used in disseminating crisis information to audiences?
- How do participants use social media in crisis events, and how does this usage shape the rhetorical framing of a crisis?
- How might organizations effectively use social media in the future?

**What Strategies Are Being Used in Disseminating Crisis Information to Audiences?**

“Crisis information” is a broad term that includes the responses of official sources, media commentary about the events, and information and discussion about the events in social media. This combination allows a deeper, more thorough investigation of how information about the crisis is co-created by organizational officials and social media participants. Understanding how crisis information is shared should provide insight about the strategies being used and the ways organizations might adapt traditional crisis communication methods to become more effective in the age of social media.

**How Do Participants Use Social Media in Crisis Events, and How Does this Usage Shape the Rhetorical Framing of a Crisis?**

Rhetorical framing is grounded in the construction of social reality or social constructionism. The process of negotiating reality is the foundation of framing and is laid by Goffman (1974), who theorized that individuals cannot completely understand all of the events occurring around because they struggle to interpret correctly their life events and experiences. In order to accelerate the processing of new information and experiences, individuals construct schemes and frameworks to aid in the interpretation of such data.
Kahneman and Tversky (1979, 1984) examine the weakness of such schemes and frameworks; they studied how different presentations of the same material influenced the choices about and evaluation of the material. Entman (1993) expanded the early framing work by applying it to written communication:

Framing essentially involves selection and salience. To frame is to select some aspects of perceived reality and make them more salient in the communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation for the item described. Frames, then, define problems—determine what a causal agent is doing and costs and benefits, usually measured in terms of cultural values; diagnose causes—identify the forces creating the problem; make moral judgments—evaluate causal agents and their effects; and suggest remedies—offer and justify treatments for the problem and predict their likely effects. (p. 55)

The way text is presented, the information included or excluded, the information emphasized or deemphasized, or the personal lens or biases brought to text can all change the way it is viewed or interpreted by the reader.

Shoemaker and Reese (1996) applied framing theory to the writers of content. They surmised that journalists and other writers present information that will connect with specific audiences by using existing schemas and frameworks. Shoemaker and Reese continue the process as not an attempt to spin a story, but frame is needed for reducing complexity and helping readers decode information in a similar way. Scheufele and Tewksbury (2007) define frames and framing as “invaluable tools for presenting relatively complex issues efficiently and in a way that makes them accessible to lay audiences because they play to existing cognitive schemas” (p. 12). Social media allows citizens to fill the roles of journalists; each post on a social media platform contains some elements of the frame either on the side of the writer or the side of the reader.
Participants (anyone who engages in social media to communicate specifically about an organization during a crisis) have a number of potential responses. They can support the organization, attack it, or seek or provide additional information. For example, do participants use social media to ask questions about the event and the remedies the organization might offer? Do users create alternative narratives and challenge the official accounts of the crisis? Are contributors seeking information or posting resources to help others? By understanding the approaches social media participants are using, an organization could anticipate audience needs during a crisis and provide resources that would help frame the crisis via social media. Framing occurs as the elements of the crisis are presented in a particular way to create a specific interpretation of the crisis event.

**How Might Organizations Effectively use Social Media in the Future?**

A postmortem analysis of several crises should provide a deeper understanding of how companies have used social media effectively in communicating a message or of how an organization could improve the social media strategies it uses amid a crisis. This type of information would be helpful not only to practitioners but also to scholars creating tools and methods to study crisis communication on social media platforms.

While these overarching questions guide my research, for this project, I will examine the problem using a collective case-method approach. Creswell (1998) defines a case “as a bounded system [examined] over time through detailed, in-depth data collection involving multiple sources of information rich in context” (p. 61). A collective case uses multiple sites to help provide a richer, more complete assessment of the phenomenon being studied. Case studies are a critical tool in the study of crisis communication for both scholars and
professionals. The case approach is used to present a complex hypothetical crisis event of a crisis event, as any two crises each have their own set of characters and situations, making each crisis different from preceding ones. In addition to a rhetorical analysis of crisis situations, the case studies will also include quantitative analyses to add reliability and dependability to the findings.

**Methodology**

Traditional rhetorical analysis would provide insight into how individuals and organizations frame arguments and claims during a crisis. On the other hand, a content analysis would provide statistical power in understanding the language or strategies used by rhetors at a defined unit of analysis. The combination of these approaches in a mixed-methods study allows for a deeper exploration of the data sites. “Recognizing that all methods have limitations, … biases inherent in any single method could neutralize or cancel the biases of another method” (Creswell, 2003, p. 15). A mixed-methods approach will provide the best means to get a clear view of what is occurring in the data set.

**Data Sources**

Crisis response in a social media environment offers a unique challenge for researchers who must study not only the approaches an organization takes during a crisis but also how social media users contribute to, challenge, or contradict official accounts and all forms of antenarrative. This co-creation of the meanings, experiences, impacts, and outcomes of a crisis event have not previously been examined in a systematic way. This research project requires social media data surrounding a crisis event. For this project, Facebook and Twitter posts generated by both organizations and other stakeholders will be
critical to understand how a crisis is framed and how rhetoric is co-created by social media participants. In order to expedite the research process, an online tool called Crimson Hexagon was employed. Crimson Hexagon included a historical social media archive for blogs, Facebook, Instagram, and Twitter. While a number of tools are available to conduct social media research, Crimson Hexagon provides access to a complete archive of Facebook, Instagram, and Twitter posts, making it easier to complete historic research. Additionally, the program’s algorithms provide a flexible examination of the data using multiple research protocols. The tool also includes a number of statistical and analytical elements that can be applied to the data.

**Rhetorical Criticism**

The nature of communication is grounded in symbols and people’s perception of them. Rhetorical research has long studied the interaction between symbols and people. Scholars like George Mead (1934), I.A. Richards (1936), and Herbert Blumer (1969) have all examined ways to understand how people create and interact with symbols and the processes needed to decode them effectively. Rhetorical criticism attempts to understand the meaning and interpretation of symbols in a systematic way. As defined by Foss (2004), rhetorical criticism must include three elements. First, “systematic analysis as the act of criticism; second, acts and artifacts as the objects of analysis in criticism; and third, understanding rhetorical processes as the purpose of criticism” (p. 6). Rhetorical criticism allows researchers to deconstruct symbols, the ways individuals interpret those symbols, and the meaning assigned to symbols. In exploring the discourse surrounding crisis events, rhetorical criticism should provide insight about how organizations are presenting
themselves and how individuals are creating narrative and information about the crisis and its effect on individuals, communities, or the environment.

The underlying rhetorical theory used in developing a methodology is Symbolic Convergence Theory (SCT). Developed by Bormann (1973), it examines how groups create and use symbols to form a reality that “provides groups of people with meaning, emotion, and motives for action” (Stone, 2002, p. 229). This process of creating and using shared symbols is rooted in two major assumptions about the communication process:

- The communication process creates reality as groups negotiate the meaning of symbols.
- These symbols create meaning and reality for individuals, and those meanings can converge into a “shared reality” among those who engaged in creating meaning (Foss, 2004). As groups begin to negotiate symbols, they create a shared reality that becomes clear for all members of the group.

While SCT describes the theory, the method of analyzing this process is referred to as fantasy theme analysis (FTA). Benoit, Klyukovski, McHale, and Airne (2001) cite Bormann (1973), who “described fantasy theme analysis as a tool for evaluating a rhetorical discourse, which focuses on the message, as opposed to the speaker, audience, or the situation” (p. 379). Focusing on the speaker, the audience, or the situation can provide insight about many situations, but messages often provide richer, more meaningful evaluation.

The research identifies five structural elements the FTA method requires: rhetorical vision, dramatis personae, plotline, scene, and sanctioning agent. Shields and Preston (1985) define each term: rhetorical vision “is a composite drama in which large groups of people participate” (p. 106). Each member of the group adds his or her individual contribution to
the group’s meaning- and sense-making processes. The rhetorical vision informs the creation of the dramatis personae, or the characters being presented in the artifact. In the development of the collective reality, the group assigns actions to, motivates, and in complex situations, defines personae. The community will also develop plotlines or scenarios that establish action: basically, “who is doing what, to whom and how?” (p. 106). The plotlines allow the researcher to develop the fantasy themes, which describe the action within the drama. Scene also plays a part in shaping of the reality because the setting—just as in a play—can define the rhetorical vision by limiting the characters’ action and the scope of the drama. The final element of a sanctioning agent “justifies the acceptance and promulgation of a rhetorical vision” (p. 108). A sanctioning agent can be an outside power or influence that legitimizes the group’s conclusions. This systematic approach to examining specific discourse provides a means of understanding how individuals work together to create shared meaning and reality.

One example of the types of shared reality that could exist on social media platforms has been explored by Nick Dyer-Witheford (1999). He views any technology advancement as an avenue for individuals to express their feelings toward class struggle. Dyer-Witheford’s claim can also be applied social media technologies, which remove gatekeepers from the process of posting views and opinions. In using a method for expressing underlying social struggles, Dyer-Witheford reports, “Capital has not, however, succeeded in technologically terminating the cycle of struggles. Our travels along capital’s data highways have discovered rebellions at every point” (p. 129). Identification of points of struggle provides an opportunity to observe more carefully the rhetorical methods being used.
In examining crisis communication/information, identification of “any instance of written or oral discourse which aims to inform, convince, please, arouse emotion, or persuade to action, and which has as its communicative content some passion, idea, sentiment, disposition, or purpose in an instance of rhetoric discourse” (Bitzer, 1963, p. xix).

**Quantitative Analysis**

Combining traditional rhetorical analysis with the reliability and generalizability of quantitative applications is also an important element of my methodology. While rhetorical analysis can be easily applied to traditional crisis communication responses like press releases and news conferences, social media crisis response moves the number of artifacts from a few dozen to millions. Applying quantitative methodologies will allow for a more complete and systematic analysis of the social media data. After using rhetorical analysis to establish understanding, I then approach the data using a modified content-analysis approach.

Berelson (1971) defined content analysis as a research technique for objective, systematic, and quantitative description of the manifest content of communication.

Traditional methods of coding would not work for a big-data project with several million data points. However, recent technological advancements provide means for both objective and systematic exploration of a data set. For this project, I have used both human coders and computer algorithms to gather insight about the data set. While the process might seem redundant, Lewis, Zamith, and Hermida (2013) point out that

Researchers must not lose sight of the unique role of humans in the content analysis process. This is particularly true of their ability to bring contextual sensitivity to the content, its manifest and latent characteristics, and its place within the larger media ecology. This contextual awareness is doubly important in studies of Big Data, where the sheer volume might encourage researchers to look for aggregate patterns—while missing the subtleties embedded in the production of that digital content. (p. 48)
In using algorithms, I have discovered larger themes and rhetorical approaches that might not be apparent in a sample of the data. The human coders have examined finer layers of details, like rhetorical devices and methods used in the creation of meaning and discussion of a crisis event. Multiple levels of quantitative analysis have provided additional insights about the interactions on social media following a crisis event.

**Outline of Chapters**

The remaining chapters of the dissertation are outlined below.

Chapter 2, a literature review, serves as the background for my project. It includes detailed information about both crisis communication and social media research and their connections to technical and professional communication. The literature review also explores some of the gaps in previous research and calls for additional research in crisis communication. Chapter 3 presents the methodology of the project. In this chapter, I discuss the procedures for collecting the data, the sample methodology employed, the statistical tests used to verify findings, and the rhetorical-analysis elements of the research.

Cases for the dissertation were carefully selected to represent a variety of crisis situations:

- An internal crisis is an event inside the organization that affects its ability to complete day-to-day operations and accomplish its institutional mission. For example, H&R Block tax return software programming contained an error, and consequently, the tax returns of customers who claimed a higher education tax credit were delayed.
A global crisis is a large-scale event that can affect multiple groups. The crisis often requires several organizations to effectively deal with it. For example, while the 2014 Ebola pandemic was limited to particular regions of the world, the response was global. Countries not directly affected by Ebola (such as Australia, China, Cuba, France, Germany, Japan, Kuwait, Sweden, Switzerland, and Venezuela) provided medical resources and personnel, supplies to build hospitals in rural regions, and debt forgiveness. International agencies such as African Development Bank, the Bill and Melinda Gates Foundation, the European Commission, UNICEF, and the World Bank all provided resources in an effort to control the spread of Ebola.

In addition to exploring how organizations respond to crisis from a defensive posture, social media crisis research should also examine how groups or movements use social media to call attention to issues within an organization.

Activist movements such as Black Lives Matters use social media to “restory” and “renarrate” an organization’s traditional narratives by highlighting specific cases and examples to show racial issues in the United States. By using social media, Black Lives Matter has effectively called attention to incidents that otherwise might not have been widely reported.

These case studies allow for the broad application of the dissertation methodology.

Chapter 4 focuses on H&R Block’s crisis response using Facebook as the main tool for disseminating information during its 2013 crisis. During tax season that year, nearly 600,000 H&R Block customers faced lengthy delays in receiving their returns due to a filing error for those completing the 8863 form for higher education credits. The IRS pledged to work with companies whose software caused the filing error. Those affected posted angry
comments on the H&R Block Facebook page, demanding refunds and pledging never to return to the company (Lopez, 2013). H&R Block used Facebook as its sole means of communicating with both its clients and its regional and district offices. A common concern among social media posters was that H&R Block personnel did not have any more information about the situation than was available on Facebook. The company posted six messages discussing the delay and issues with the IRS receiving Form 8863 to its Facebook wall between February 28 and March 22. Chapter 4 examines the effectiveness of using Facebook as a primary medium for crisis communication and image repair. Chapter 4 provides an opportunity to examine corporate crisis communication via social media. H&R Block is the only business among the cases examined in the dissertation, and in many ways, it had more freedom than the other organizations in responding to crisis and building a strong social media community. Additionally, this case is one of the first crisis responses that occurred completely on social media.

Chapter 5 explores how the National Transportation Safety Board used Twitter in its investigation process in 2013, when Asiana Airlines 214 crashed while landing in San Francisco after traveling from Seoul, South Korea. While the images of the crash seemed grim and three people died, 123 passengers walked away from the crash with no physical injuries, and 182 were treated for minor injuries (Onishi & Somaiya, 2013). This was the second accident involving a Boeing 777 since the plane debuted in 1995. With no apparent outside cause, good visibility, and excellent weather conditions, the NTSB launched an investigation to find the cause of the accident (Norris, 2013). In the process of the investigation, the NTSB used Twitter to communicate findings and progress to the public. The use of #Asiana214 allowed the public to learn about the crash as the details developed;
the Twitter feed included images of the fire damage inside the hull, details about the data
recorders’ recovery process, and information revealed as the NTSB sifted through the
wreckage. This chapter examines the NTSB’s 86 tweets and the rhetorical strategies
employed in the coverage of the accident, determines whether these rhetorical strategies
were communicated in the official media coverage of the event, and discusses whether the
Twitter content is similar to the frame used in the official reports of the crash prepared by
the NTSB. Chapter 5 provides insight into how the NTSB governmental investigative body
uses Twitter as a communication platform. Since June 2010, the NTSB has used Twitter to
post messages about safety, details about transportation-technology advancements, and
public service announcements, in addition to updates about ongoing investigations. While
the NTSB had previously used Twitter to communicate about accidents, Asiana 214 was the
first time it had to respond to internal crises in addition to conducting an investigation.
While this case is unique, it remains a valuable example of how an organization can use
social media to respond effectively to a crisis.

Chapter 6 explores how the CDC responded to Ebola in the United States. On
September 30, 2014, the first case of Ebola in the United States was confirmed. Thomas
Duncan returned to Dallas from Liberia and soon began showing symptoms of Ebola. Texas
Health Presbyterian Hospital Dallas treated Duncan and requested CDC testing to confirm
Ebola. Duncan died October 8 (Fernandez, 2014). The case created a social media firestorm.
From September 30 to October 10, 2014, Twitter users generated more than 20 million
tweets about Ebola. Public health and medical experts attempted to inform the citizens of
the United States and West Africa about Ebola; others used social media to ask legitimate
questions, spread conspiracy theory, or promote fear mongering. The CDC attempted to
answer questions and spread accurate information about Ebola using Twitter. On October 2, the CDC used its first of several #CDCChat hashtags to calm concerns and answer questions (Firger, 2014). In this chapter, I examine the CDC’s positioning in discussing the outbreak, calming public fears, and mitigating fear mongering. Data for this chapter includes roughly 28 million tweets, so it involved the most quantitative research tools to determine how content from the CDC and other governmental organizations influenced the Ebola conversation on Twitter. This case provides an opportunity to examine a crisis event from the perspective of a governmental organization responsible for protecting public health and promoting safety. The CDC served as the clearinghouse of information about the Ebola virus in the United States, oversaw the U.S. response to Ebola in West Africa, conducted training for hospitals and health providers, and managed the health and safety aspects of controlling the virus in the United States. While individual organizations like hospitals and health districts would handle the day-to-day response to the Ebola virus, the CDC was responsible for handling the nationwide handling of the Ebola outbreak. The multiple audiences to which the CDC needed to communicate crisis information make it a unique crisis response to analyze.

Chapter 7 examines Black Lives Matter, an activist movement that relies on social media to promote political and social change. Many believe Black Lives Matter movement was instrumental in a shift in public attitudes about police violence, promoted the use of body cameras among police officers, and changed the national discussion about racism in America (Frosch & Calvert, 2015). Black Lives Matter has effectively used Twitter to organize protests in dozens of cities around the globe, tap into some of Twitter’s most influential users, and get important messages seen by hundreds of thousands of Twitter users.
(Lowery & Weigel, 2015b). This chapter explores the key antenarratives of #BlackLivesMatter during crisis moments. The chapter looks specifically at the acquittal of George Zimmerman in the death of Trayvon Martin; the death of Michael Brown, who was shot by Darren Wilson; and the death of Freddie Gray, who died after being beaten by the Baltimore Police. Unlike other cases in this dissertation, Black Lives Matter is a decentralized activist movement without formal organization or structure. While it was not officially charged with presenting crisis information, Black Lives Matter assumed responsibility for disseminating crisis information. Black Lives Matter provided an outlet for like-minded individuals to connect by promoting advocacy, acting as a community watchdog, and reporting issues. This case provides an opportunity to see how a decentralized organization effectively communicates crisis messages via social media.

Chapter 8 will first directly examine the findings of the cases. It will highlight the similarities between the cases as well as draw distinctions between each group. This process of comparing the data will provide additional insight about how to effectively communicate using social media in crisis situations. First, it will allow for discussion about which organizational strategies were the most and least effective. Second, chapter 8 will provide understanding of how organizations and governments use social media when communicating during and about crisis events and the effectiveness and best practices of crisis communication using technology.

Antenarrative analysis reveals the rhetoric of social media users and how they attempt to draw attention to a specific version of the story, highlight particular details, and reinterpret facts. Understanding the antenarrative process can help organizations plan for specific clusters that might appear on social media. For example, social media users
frequently rely pop culture to interpret an event. During the global Ebola outbreak, many users turned to movies like *Contagion, Outbreak, 28 Days Later,* and *World War Z* to explain why the outbreak occurred, what would happen if it weren’t controlled, and where Ebola originated. Organizations like the CDC could prepare by knowing that pop cultural elements would a key factor in the antenarrative response.

Additionally, antenarrative provides insight into how the narratives presented by an organization during and after a crisis can affect the way the public perceives the organization or the crisis. An appropriately timed statement can directly influence the way social media users’ antenarratives are shaped by narratives. As the National Transportation Safety Board responded to the actions of an intern, the organization was able to downplay the actions of the intern and decrease the outcry by social media users.

Finally, antenarratives provide understanding of how an activist movement like Black Lives Matter is able to use social media to call out crisis events, provide an interpretation for events, and connect users on a global level. For activist movements social media activity is not defensive as they are not responding to attacks, but offensive as they are attacking the status quo. These antenarratives attacks are a way for movements or organizations to unravel and pull apart existing narratives and cultural structures.
CHAPTER 2
LITERATURE REVIEW

Crisis is an inevitable part of our lives. Such events can be relatively small, affecting only a few, or they can have a global impact, influencing the lives of millions. In 2015 we saw a 7.8 magnitude earthquake in Nepal, which killed thousands; a listeria outbreak, leading to the recall of Blue Bell ice cream; a drought in California, leading to strict water-reduction rules; a train derailment outside of Philadelphia; and riots in major cities in the United States, to name just a few. Crisis has the potential to affect people by alternating their routines, making them ill, destroying their financial independence, or prematurely ending their lives.

From a scholarly perspective, crisis communication is influenced and examined by people in a number of fields. It is most frequently found in public relations application research, a type of scholarship that is primarily concerned with two major areas: developing plans before and repairing reputations after a crisis. Another field of study connected to crisis is corporate communication. Corporate communication research focuses on what business leaders should do during and after a crisis. The final major area of crisis inquiry is rhetorical studies, which tends to examine what was said, how it was said, and the rhetorical moves and devices that individuals and organizations use in a crisis response. These areas collectively examine ways to shift focus away from the crisis event itself and focus on and toward elements that are designed to distract people from the despair and difficulty of a crisis to the success of overcoming a crisis, the power of leadership that guided individuals or groups through the crisis, or the ability of words to repair the past.

Until now, crisis communication has been the domain of other fields connected to technical or professional communication. For the most part, technical communication
scholars tend to focus on risk communication. Individuals like Jeffery Grabill, Liza Potts, Michele Simmons, and Susan Youngblood have done significant work in this area. Crisis communication would benefit significantly from similar technical communication perspectives. Crisis as a field of study provides additional insights about how sensitive information is communicated to a large group of individuals; how technical information is communicated to a variety of groups; and how groups use social media to interact, develop, and propagate alternative narratives.

Other technical communication scholars have been able to contribute by conducting research outside of traditional technical communication areas while utilizing technical communication methodology. For instance, Miriam Williams (2006) examined W.E.B. DuBois’ *Color Line* using discourse analysis, but through the lens of regulatory wiring, she provided understanding regarding current *ethos* issues in the genre of regulatory writing. By crossing boundaries into historical rhetorical analysis, Williams was able to produce meaningful research while examining a text from outside the technical communication domain.

Other researchers have crossed boundaries in their research; Buehl, Chute, and Fields (2012) examined ways that using library archives could be beneficial in writing studies. Longo (1998) contends that cultural studies using “more scientifically modeled research in technical writing” would add additional perceptions to technical communication research and practices (p. 69). Kimball (2006) examined extra-institutional documentation to better understand not only technical communication but “also the relationship between technology, discourse, and people’s lives” (p. 84).
While an abundance of academic literature about crisis communication exists in a number of fields, this literature review focuses on exploring the definition of crisis, identifying ways technical communication methods and research could benefit crisis communication scholarship, and reviewing the most prominent and pertinent literature and theories from the public relations, corporate communication, and rhetorical-analysis areas.

**Crisis Definition**

Crisis is defined as “an event, revelation, allegation, or set of circumstances which threaten the integrity, reputation, or survival of an individual or organization. It challenges the public’s sense of safety, values or appropriateness” (Sapriel, 2011 p. 152). A broad definition can include any number of situations. Naglewski (2006) notes, “in business as in life, crises come in as many strains as the common cold. The spectrum is so wide that it is impossible to list each type” (p. 47). With such possibilities for crisis, for most organizations, facing one is inevitable. For this reason, Fink (1986) encouraged businesses to prepare for worst-case scenarios. Doing so aids the organization in facing future crises and helps leaders effectively deal with a crisis and flourish after the event. Every organization—no matter its size, location, or type—will face a crisis in the future, and just as the types of scenarios vary, so can the outcomes.

The definition of a crisis must also include things like loss of integrity and damage to reputation, which help highlight crisis events that might not include the loss of life or natural disasters, but that still merit scholarly consideration. Currently, most scholarship in the area of crisis communication focuses on events such as

an airplane crash, oil spill, financial loss, death of an employee, tainted pharmaceuticals, internal sabotage, natural disaster, or nearly anything else that can interrupt an organization’s normal activity and demand a response. Certain
organizations, such as nuclear power plants, have innate hazards that they can anticipate, while others feel immune to catastrophe. (Horsley & Barker, 2002, p. 407)

However, framing crisis communication only in terms of organizations and events that affect them is not examining the whole crisis communication picture. Every airplane crash impacts both passengers and crewmembers; oil spills affect not only the environment but also locals who may depend on healthy fisheries for employment. Tainted pharmaceuticals hurt more than just the company; they also influence those who depend on the medication to maintain their health. Beyond those individuals or organizations directly influenced by the crisis event, other individuals, whether closely or distantly connected to the crisis, can also be influenced, from the food they purchase to whether they feel safe during their everyday routine.

A crisis event can have repercussions for several layers of individuals. Social media has allowed for all of those layers of people, numerous affected groups, to interact and participate on social media together. Figure 2.1 shows four different groups who are affected by a crisis, but each of these groups responds to a crisis on social media.

Primary audiences are typically those who are directly impacted by a crisis event. In the case of a train derailment with a chemical spill, the primary audience would include individuals living in the area directly impacted by the spill. These individuals need immediate information to take appropriate measures to protect themselves. In terms of social media, the primary audience provides initial information, posts, and photos. This group may have more information than other groups initially. However, once the crisis is widely reported, this will change. A secondary audience would include residents who live downstream from the accident site, ground or surface water users who may face contamination issues in the days, weeks, months, and years after the accident. These groups are connected to the
outcome of the crisis event; however, they will not see impacts of the event immediately after the accident. On social media, members of a secondary audience are not posting original content but sharing and consuming information, which they may or may not need in the future to deal with the crisis. Tertiary audiences are removed geographically from the crisis, but are connected to the event in some way. For example, it could be a city with heavy rail traffic and a higher potential for a similar accident or a city that has experienced similar accidents. Tertiary audiences may also include owners of a railroad, customers transporting goods, regulatory agencies, and elected officials. Social media posts from this group could include anything that previous groups have done but may also include activism to change rules and regulations, stories from other similar accidents, and additional details about the accident. The general public doesn’t have a direct connection to the accident but involves themselves in following the events of the accident, along with its potential outcomes and impacts. The general public may become involved on social media in sharing and posting additional information, like news reports, or they may become more involved in previously discussed social media activities.

The impacts of the crisis move out in concentric circles, like ripples that appear after someone throws a rock into a pond. Traditional crisis communication response follows this model, with information flowing out of the center in an orderly manner. However, social media changes communication about the crisis event. The information no longer flows just out from the epicenter of the crisis; now any group can post information, question conclusions, and advocate for change. Thus companies can no longer respond and expect to provide general information that the news media will broadcast to all four groups.
Organizations must now understand how to present information that fits the needs of each group and anticipate the ways these groups will respond to a crisis.

Figure 2.1

*Groups Affected by Crisis Events*

With the growth in social media applications, it has become easier for researchers to examine crisis in a multidimensional framework rather than solely in terms of the organization affected. How users engage with social media during a crisis, how the public and organizations craft messages for these platforms, and what impacts social media have on the perception and handling of crisis events are just some of what scholars might explore by creating a broad crisis definition that includes those who are impacted by the crisis.
Crisis at the Border of Technical Communication

The nature of technical communication allows for a variety of topics to be explored using the lens and methods specific to technical communication. Fisher (1998) contends the “profession of technical communication is not easily defined in part because the profession encompasses a wide range of skills and crosses many professional boundaries” (p. 186). By crossing the border into crisis communication studies, technical communication scholars could provide new directions, themes, and methodologies. Much of the research currently being conducted in crisis communication focuses on the narrative of the organization dealing with the crisis, how the organization repairs its image, and how the organization can prepare for future crises. While this scholarship is valuable in the realm of public relations, technical communication scholarship offers new avenues and tactics for exploring crisis communication to benefit an audience wider than organizations and businesses: the people affected by crises.

Antenarrative Approach

Current crisis communication scholarship often overlooks the information produced by those affected by a crisis and bystanders. Longo (2013) points to this phenomenon:

New technologies for making and sharing information in a variety of media have made it easy for users to tell their own stories and share their knowledge across media. With the global proliferation of information and communication technologies (ICTs), especially smart phones, content users have increasingly become content producers. (p. 22)

Exploring user-generated content with technical communication tools could provide valuable insight not currently garnered or researched by traditional crisis communication scholars. The vast amount of this content is not included in public relations scholarship;
these scholars tend to focus on the official elements of the crisis event and on the narrative presented by the organization. This approach overlooks the antenarrative being produced by ICT users.

**Definition of Antenarratives.** At its core, antenarrative studies examines and attempts to explain the phenomenon of storytelling, specifically that a particular story will change over time, change depending on the teller, and change with each telling. Antenarrative research is concerned with how the changes in a story are shaped by the individual’s experience and what these changes reveal about him or her. It’s important to note that a story, in terms of an antenarrative perspective, doesn’t need to contain the traditional elements of plot, characters, introduction, and conclusion; narrative fragments or “rhizomatic assemblages” are, perhaps, better ways to conceptualize the term—stories that come from a single source and have defined narrative elements.

David Boje, (2007a) the researcher who first coined the scholarly term *antenarrative*, defines *rhizomatic assemblages* as Deleuze and Guattari (1987) outlined: “a network of subterranean trajectories, including root/stem strands, radices, bulbs, and tubers” (p. 6-7). An example of a rhizomatic assemblage could be a social network; in the workplace it could represent the connection between both the formal and informal power relationships. The map between these connections would resemble the dense roots of a forest, with countless crossovers and intersecting points. A social network could also be represented as a rhizomatic assemblage in the form of a social media platform. Social media allows for an organic development of narrative fragments. As users gather, share, and post information, much as roots would bring in and process nutrients. As narrative fragments pass through the network, some of its elements may be stripped away and replaced with new elements. This
sequence of processing, changing, and sharing a narrative fragment is similar to another Deleuze and Guattari (1987) concept of *deterritorialization* and *reterritorialization*: the process of movement changes both the item moving and the surface upon which it moves. A prime example would be a glacier: although its movement is slow, the glacier picks up and deposits rocks, even as it leaves behind fragments of ice, soil, and rock. As glaciers melt, the movement continues to change both glacier and landscape.

This concept can be applied to a narrative fragment. Not only do stories have the power to change those who read, hear, or tell the fragment; however, those who read, hear or tell them, but readers, listeners, and storytellers also have the power to change narratives as they process and interact with them. For Syed and Boje (2011, p. 53) this process is referred to as *restoring* and *renarrating*.

Antenarrative practices are all about movement and transition. Antenarrative provides a sort of bridge across narratives implanted in place that are stabilized (petrified, in Czarniawska’s concept). There are two forces of movement, one where narratives that are dominant get restoried, so that erased (neglected or marginalized) aspects of the past become the basis for a new living storability. The other force is renarrating, whereas narrative tends to do, the array of living stories are integrated, homogenized, and somewhat totalized into an overriding logic. Such logics are strategic, in that they focus attention, but overused— become stereotypic, leaving out the nuances, and the importance of the play of differences.

The movement and transition of an antenarrative occur as Coupland and Brown (2004) suggested: in these situations—where meaning is being negotiated—an antenarrative is nonlinear because it jumps and reconfigures itself as it is retold. Some fragments of the story are dropped in favor of others, and some elements are emphasized while others are not, as each element is connected to the time and space in which the story is told (Tyler, 2011). The telling, restorying, and renarrating of the fragments are part of a sensemaking process. Antenarrative is concerned with emerging stories that have not been formalized; typically
traumatic or dramatic events need explanations in order to allow individuals and groups to process the series of events. Boje (2011a) argued that “a prospective sensemaking (looking forward)” is something that “is in intraplay with now-spective (in the present moment of emergent being) and retrospective (backward looking) manners of sensemaking. The agential aspects of antenarrative are in its intraplay with materiality” (p. 1). The use of antenarratives provides insight into how groups or the public respond to a crisis event. Social media provides an excellent opportunity to examine antenarratives, as the social media content is written and can contain links to other material that might explain or make sense of a crisis event.

Understanding the concepts of rhizomatic assemblages; deterritorialization and reterritorialization; and restorying, renarrating and sensemaking provide insight in to how Boje (2011a) defines antenarrative as:

a bet on the future pattern, in (more or less) authentic scenario of event-space. It is also a before narrative that serves as a hypothesis of the trajectory of unfolding events that avoids the pitfalls of premature narrative closure (Boje, 2001, 2007, 2008). Antenarratives involve a form of repackaging—where new characteristics are recognized and old characteristics are minimized. This morphological analysis of antenarratives uncovers forms of dissimulation and simulation that mask situational reality. Antenarratives morph and coalesce in storytelling networks. Antenarrative is a prospective sensemaking (looking forward), and is in intraplay with now-spective (in the present moment of emergent being), and retrospective (backward looking) manners of sensemaking. The agential aspects of antenarrative are in its intraplay with materiality. (p. 1)

Antenarrative is the process that occurs before the formalizing forces of a developed narrative overtake the fragments and provide order. Boje (2001) defines the ante in antenarrative as an ante, or bet, being placed is that the fragment will be able to survive the process of being repacked, retold, or renarrated, and be able to continue to unfold and serve
the purpose of sensemaking. An effective antenarrative covers its origins and allows the fragment to continually evolve and meet the needs of the audience.

**Characteristics of Antenarratives.** An antenarrative is a fragment that is retold and provides sensemaking but meets characteristics outlined by Boje (2007b). Antenarrative include these five features:

1. It is unfolding or not fully developed. As the fragment is retold, reimagined, or repeated, new elements are added, other elements are removed, and thus the antenarrative is always in flux.

2. It is unrefined and unorganized. The fragment can be presented without attention to the limitations of traditional storytelling, making the fragment fall outside of the realm of official stories.

3. It is a lived experience. The fragment doesn’t need to contain the elements of story, as it exists before the narrative.

4. It is speculation or a guess. The fragment serves as a tool of sensemaking and doesn’t need to be grounded in facts or reality.

5. It is always changing and never finalized. The fragment is changed by retelling and can be reimagined to fit the needs of the moment.

As a genre, conspiracy theories are strong examples of antenarratives. For example, the conspiracy theories surrounding the death of President John F. Kennedy contain all of these elements. Each of the theories evolves as the people retelling the stories add *new evidence* with each telling. Frequently, the theories are presented as an addendum to the official account, making them outside of the official narrative of the assassination. The theories present the “who and how” behind the shooting, but not the “why,” leaving an incomplete
story. Each theory is speculative as to who really killed Kennedy, but these stories attempt to make sense of how a young and vital man seen as the leader of the free world could be killed. Finally, these conspiracy theories always include new ideas and information and are always changing to meet the needs of the audience. Although antenarratives do not provide the complete story, they do provide “bits and pieces, snapshots, grabs and glimpses of respondent lived experiences” (Vickers, 2012 p. 173). These pieces allow better understanding of how an individual is making sense of a situation, as well as insight into the types of messages being created to process a specific event. These “grabs and glimpses” can be genuine information or comments, or they can be hearsay, lies, or personal vendetta. Determining the validity of an antenarrative can be challenging when it is presented on social media, where an antenarrative can take on increased validity, because social media doesn’t have a gatekeeper or filter; it equalizes the content as social media does not provide privilege to the posts of specific people or groups.

**Types of Antenarratives.** Boje (2011a) discusses four types of antenarrative: linear, cyclical, spiral, and rhizomatous. Linear antenarrative follows a standard plot structure with a beginning, middle, and end: “The linear antenarrative assumes there will be no surprises, no departures from the beginning, middle, and end scenarios” (p. 7). Cyclical antenarrative examines stories in terms of stages, each of which is clearly defined by characteristics such as seasons, economic conditions, or scientific processes: “The antenarrative bet that if two or more stages are about the same as in the past, the cycle will unfold, in the future, such that the next stage is predictable” (p. 10). A spiral antenarrative allows for the unpredictable; it is a series of countermoves affecting each other as the events unfold over time. Finally, rhizome antenarrative allows events to be “fused and separated, stopped and restarted,
encountering and absorbing blocks” (Boje, 2007a, p. 228). Deleuze and Guattari (1987) define a rhizome this way: “The diagonal frees itself, breaks or twists. The line no longer forms a contour, and instead passes between things, between points” (p. 505). The twisting and turning nature of a rhizome follows events and stories that unfold in a natural, unpredictable way. Understanding the patterns of how antenarratives appear is important in developing methods and techniques to study and examine the data of antenarratives.

**Application of Antenarratives.** When conducting research using antenarratives, it is important to acknowledge, as Boje (2001) did, that “the postmodern and chaotic soup of storytelling is somewhat difficult to analyse.” The difficulty of exploring antenarrative can be compounded in social media due to the large amount of data inherent in this platform. However, using social media analytics tools can allow a researcher to discover the “bits and pieces” and “grabs and glimpses” as outlined by Vickers (2012). These elements provide a pathway to themes present in millions of social media posts. Using this data can provide a statistically significant snapshot of the experiences of those affected by a crisis.

Social media and ICT content by its very nature is a “nonlinear, fragmented, and emergent account of incidents or events” (Boje, 2011b, p. 394). This description fits what occurs as social media users post thoughts, memes, videos, data, claims, arguments, and countless other types of content. Examining social media content connected to crisis events using a rhizome antenarrative could provide insight about the experiences not currently being expressed or explored in current crisis research. Much crisis communication research is conducted in a linear nature, starting with the beginning of the event and ending at the resolution of the crisis. However, social media research cannot be conducted in this fashion, as social media “does not have a center, since connections may be established at any time
between disparate parts” (Genosko, 2009, p. 5). Thus, the application of linear-research methods to social media will not discover the clusters and connections that occur in the rhizomatic space. Connecting traditional approaches used in crisis communication to rhizome antenarrative (Boje, 2001) is a way to reconnect “stories of time, place, plurality, and connectivity” to understand the duality of official and unofficial communication occurring before, during, and after a crisis (p. 17).

Antenarrative frameworks have not been used to study crisis, but scholars have applied them to ICT and modern biotechnology. Campos-Lopez, Urdiales-Kalinchuk, and Hernandez (2011) explore how communication technologies are being used “to be ready to cope with climatic contingencies, to link advanced science and technology to the problem of environmental resource sustainability, and to face the increasing health and security threats” (p. 254). Antenarrative research has been used to examine how individuals and groups are using ICT to create “perception, narrative, and representation of coming threats” (p. 254). A similar approach could be used to examine crisis events and the use of ICT to create, develop, and perpetuate antenarrative for those events. By following these rhizomes, scholars could understand how the information and antenarrative cluster around specific themes and antenarrative clusters could possibly allow for the demonstration sites of struggle, methods of sensemaking, and methods of developing situational reality.

Beyond the methodology of antenarrative, technical communication scholarship offers a unique lens from which crisis communication could be viewed. The Society for Technical Communication (STC) claims that one of the major benefits technical communicators bring is their ability to “make information more useable and accessible to those who need that information” (“Defining technical communication,” n. d.). In applying
the STC’s definition to crisis communication research, technical communication scholars might provide new perspective about the efficacy of current crisis communication messages for intended audiences, including those affected by the crisis.

**Audience Centricity**

Technical communicators have the ability to craft messages based on the needs of their audiences. Seasoned professionals in this field center their writing and designing decisions on the background of the audience, the context in which the content will be used, and the education of the end user. Taking time to seriously consider the needs of the audience is a hallmark of communication professionals (Allen & Southard, 2002). Since individuals affected by crisis are not traditionally considered in the design of crisis communication material and rhetorical responses, technical communication professional’s understanding of how to craft messages that meet the needs of the individuals consuming the material and of how to design and draft with the end user in mind could significantly benefit those who are accessing official statements and content.

Social media and other collaborative technologies have increased the need for practitioners who understand the role audience plays in developing rhetorical sound content:

> The technical communicator’s cultural understanding of the situation and relationships affects individual practices as a writer and designer. Instead of only working from these assumptions, now, technical communicators who work in real time collaboration with users must adapt, not only for the overt technical content but also for the interpersonal relationships inherent in these cross-community communications. (Longo, 2013 p. 24)

The addition of interpersonal context and cross-community communication abilities would change the way crisis communication would be crafted, adapted, or analyzed. Many of the rhetorical-analysis elements of crisis communication do not take into account the way the
message was crafted, the message’s usability, or how diverse communities and groups understand or react to the message. Understanding “how to perceive, address, and respond to audience needs while carrying out organizational strategy has always been difficult, but adapting to social media technologies may make the challenge even greater” (Bowdon, 2014, p. 40). Technical communication scholars applying an audience-centric framework to crisis communication—especially technical communication scholars doing so in social media environments—would be able to demonstrate how a message is crafted and show its effectiveness for diverse audiences as it moves from person to person and group to group in social media environments.

**Information Usability and Accessibility**

A user-centered approach (Johnson, 1998) occurs as “users are active participants in the design, development, implementation, and maintenances of technology” (p. 32). This process creates better technology because of the users’ involvement. As users become more involved with specific platforms or devices, customers often become responsible for much of the innovation seen in technology as demand changes to meet needs (Doheny-Farina, 1992). This process has been investigated by Longo (2007), who discusses how “technological systems are shaped by their users, as well as their designers, through a series of decisions made to solve perceived problems and meet perceived needs” (p. 254). Social media has provided users with a variety of applications that fix perceived problems and needs. As users adapt and change a social media platform to fit their needs, unintended networks and uses arise.

Technical communicators have the end user in mind as they begin the development process; frequently they are the only people in the process who are concerned about the user
and how he or she will interface with the document or project. Technical communicators define themselves as the user’s advocates and give themselves the responsibility of making the complex and confusing easy for the end consumer (Redish & Barnum, 2011). As technology becomes increasingly multifaceted, users depend on technical communicators who have the ability to work on complex projects in a variety of roles. Maylath et al. (2013) discuss some of the most important skills technical communicators use in working on complicated projects:

[These projects require] linguistic, terminological, textual, cultural, and topical competencies that translation requires, but also on managerial or so-called transversal skills, such as handling different assignments simultaneously, viewing their assignments with a longer term perspective, dealing with different text versions and, above all, experiencing interpersonal exchanges in both virtual and face-to-face environments. (p. 80)

The value of making information useable and accessible for general audiences has long been seen as the reason to include technical communicators in project development. Grice and Ridgway (1989) argue that as technical elements and applications become intertwined with the completion of everyday tasks at both work and home, technical communication can help users navigate an increasingly complex world.

Examining usability and accessibility could provide a new perspective in crisis communication scholarship. Current tactics are to craft statements that benefit the organization or individual dealing with the crisis, not the people who have been affected. Applying usability to the frame of rhetorical analysis could reveal gaps in or issues with the current practices of public relations professionals. Additional research about how social media users engage with technology during crisis events could reveal innovations and design changes that would enhance users’ ability to connect during and after a crisis. Potts and Jones (2011) call for systematic study about how users and disaster-response agencies use
social media technology during crisis events; previous user research relies on anecdotal accounts and assumptions about how the technology was used.

Use of Social Media Technology as a Technical Communication Tool

Technical communicators use technology as a way to improve the delivery of messages. From using websites to discussion forums, technical communication professionals are well versed in developing a variety of content in numerous contexts. Social media continues to evolve and change, but technical communication scholarship has long examined social media platforms. Pigg (2014) describes the reason technical communication scholars should examine social media: “Social media offer a means through which individuals can aggregate people and knowledge or, at the least, learn how existing webs of participation are held together” (p. 70). As scholars apply tools to this aggregate knowledge to better understand how webs of communication are formed, maintained, and applied to situations, more understanding about the nature of social media will emerge. Ferro and Zachry (2014) argue that social media can provide professionals with new ways to leverage resources, improve connections, and tap into a variety of professionals and experiences.

Social media not only allows for improved access to resources and individuals in a work environment, but it also changes the power structure of organizations and societies: “Social media use may cause a reconfiguration of established power and hierarchy relationships between official agencies, communities, and individuals” (Resnyansky, 2014, p. 64). It is social media’s ability to reconfigure power structures that is particularly interesting in crisis communication. Traditional crisis response patterns rely on official statements, announcements, and broadcast and print media to spread the rhetoric of apology and
employ other public relations tactics and strategies in repairing reputation. When mediated via social media networks, crisis communication becomes a multifaceted tool for multiple groups and across a variety of dimensions.

The power of social media is the way it is defined and used. If employed in the way Kimme Hea (2014) describes, social media can be a powerful agent of change.

[Social media] define, and are defined by, cultural, political, and rhetorical contexts; that change, and are changed by, human relationships; that reveal, and are revelatory of, power relations; and that articulate meaning, even as those media may renegotiate how those meanings are made and exchanged. (p. 4)

By examining the contexts in which users engage social media, additional understanding can emerge about how technology can be used for the renegotiating of meaning and events, especially events surrounding crises. This process will begin to affect society in general, as Hughes (1994) stated in discussing technology: “It can shape or be shaped by society. As they [systems] grow larger and more complex, systems tend to be more shaping of society and less shaped by it” (p. 112). As social media networks become stable and complex, they will begin to shape society as the content that users generate influences others. This concept connects to Bolter and Grusin’s (2000) belief that “the desire to express oneself through media is a hallmark of romanticism and long predates the development of digital media. If the Enlightenment subject was content to stand and gaze through the window frame, the romantic subject wanted to get closer” (234). Social media allows users to not only express themselves but also to capture and direct the actions of the world around them.

During a crisis, social media, used as a tool by individuals, has the ability to provide information to people on their own terms and in the formats they prefer for consuming information. By pushing information to people using existing social media channels, users can connect to the extent they wish to and add to the discussion as they choose. In
discussing ICTs during crisis and disasters, Potts (2011) said “we have the ability to effect positive changes in these ecosystems so that people can more easily find the information they are looking for without adding to the already significant amounts of stress and anxiety that victims, relatives, and friends face during those moments” (p. 104).

As technical communication scholars cross the border into crisis communication analysis and bring with them tools and applications used in the creation, development, and understanding of a variety of texts, they might gain beneficial new insights about crisis communication, including the following: 1) understanding how crisis events create antenarratives around official statements. 2) providing insight about how previously marginalized groups use social media in a crisis to regain some elements of power. Demonstrating ways information design could improve crisis information and understanding about crisis events is a critical perceptive, which technical communication scholars could make. Additionally, technical communication scholarship can provide tools to gain understanding about how the public uses social media as a method of sensemaking during and after a crisis event.

**Public Relations Scholarship in Crisis Communication**

Crisis communication scholarship is often associated with the public relations field. Public relations practitioners are commonly responsible to help both individuals and organizations during and after a crisis. In some cases, these practitioners work with clients before a crisis to develop a plan and potential responses. Public relations scholarship addresses these dual needs of practitioners by defining crisis types, the use of standardized crisis responses, and ways to appropriately deal with a crisis. This literature is essential for
technical communicators to understand how public relation experts will react during a crisis, the criteria those professionals use to determine whether a crisis response is effective or ineffective, and traditional methods they use during a crisis event.

**Public Relations Crisis Types**

Public relations scholars divide crises into two types: smoldering and sudden. Sudden crises include terrorist attacks, sabotage, tampering, technological disruption, and “acts of God.” For the most part, a sudden crisis stems from an external cause (James & Wooten, 2005); all are unanticipated. Smoldering crises, on the other hand, are generated by mismanagement and include events like product defects, workplace-safety issues, lawsuits, rumors, and illegal activities. Smoldering crises typically have internal causes, but a sudden crisis can come to be seen as smoldering if additional information points to internal causes. For example, Hurricane Katrina moved from a sudden crisis to a smoldering crisis when investigation revealed design issues with sea walls that failed, and when a botched response from the Federal Emergency Management Agency caused an act of God to become a series of mismanaged events. These two types of events, sudden and smoldering crises, have a number of different impacts on organizations.

An examination of modern business crisis shows that the majority are smoldering crises (Sapriel, 2003). Pang, Cropp, and Cameron (2006) estimate that 90 percent of all crises within an organization are “smoldering,” which means that an organization can know the potential for crisis. Even when an organization might anticipate a crisis, a smoldering crisis can quickly turn into a raging fire of a crisis capable of destroying the organization. Poor planning, mismanagement, an aggressive stance, a defensive spokesperson, or a cover-up can make a difficult problem worse (Clardy, 2005). While effective handling of a sudden crisis
can quickly extinguish the crisis without allowing much permanent damage to the organization, a smoldering crisis can set off a chain of events that are much more difficult for an organization to fight, and that have the potential to permanently damage it.

The negative outcomes of a smoldering crisis can include impacts on reputation, as in the case of the Bill Clinton-Monica Lewinsky affair, which had some impact on Clinton’s ability to govern (Benoit et al., 2001). Other results can include the loss of sales (Benoit & Brinson, 1994), as in the case of the explosion of BP’s oil drilling rig the Deepwater Horizon’s in the Gulf of Mexico, which caused the company significant financial loss. This event started as a sudden crisis when a fireball engulfed the drilling platform. However, once other information—about BP’s cost cutting measures in safety areas across the company, about its long history of safety violations, and about the way the CEO interacted with the media—became available, it caused the sudden crisis to become a smoldering one. The crisis further resulted in a limit of BP’s oil leases in the Gulf of Mexico, the diminishing of its stock value, the cost of billions of dollars in settlements and fines, and the loss of management-team members’ jobs (Fink, 2013). The negative outcomes of a crisis can destroy an organization or significantly damage it for years. “Smoldering crises are generally perceived as the fault of a firm’s leadership . . . . Generally speaking, stakeholders respond much more antagonistically to crisis situations that are perceived to be the fault or responsibility of management” (James & Wooten, 2005, p. 143). This perception problem can make it difficult for the organization to repair its image after a crisis. Frequently, the organization’s motivations are questioned because it is often responsible for the situation.

These types of crises are important for understanding how the public will interact with the crisis event. A well-managed sudden crisis can generate positive feelings and
goodwill among members of a public toward an individual, organization, or brand. While the impacts of the crisis are real, the public might be willing to forgive the organization, as happened with Tylenol in 1982. Product tampering took place; an outsider (non Johnson & Johnson employee) placed cyanide-laced capsules in multiple bottles in the Chicago metropolitan area, but the company was not at fault and executed a plan to restore confidence in its product.

Conversely, a sudden crisis that is poorly managed can permanently damage an individual, organization, or brand. In the case of the Malden Mills fire in 1995, CEO Aaron Feuerstein used insurance money to rebuild the factory and pay 3,000 employees for six months. This ultimately cost Feuerstein $25 million, his position as CEO, and control of his family’s company. The Malden Mills case is often used as a positive example of crisis communication strategies when viewed in the short term. When the crisis is examined using the long-term impacts of Feuerstein’s decision, the outcomes become more negative. Once Feuerstein spent the insurance payment and his personal fortune, he lost control of the company, the company went into bankruptcy protection twice, and Feuerstein was forced to sell all of its assets. Without a CEO who was concerned about employees, Malden Mills retirees also faced a significantly underfunded pension program.

While crisis is usually perceived to be a negative event, the impacts of a smoldering crisis can be positive for those involved. Actor Hugh Grant was able to repair his image effectively after being charged with lewd behavior in public with a prostitute in 1995. His image repair strategy was so effective that the crisis did not hurt his new film, Nine Months, in the box office (Benoit, 1997). Queen Elizabeth II was able to fix her image of being disconnected and aloof in the aftermath of the death of her former daughter-in-law, Diana
(Benoit & Brinson, 1999). By connecting with the common people and acknowledging the contribution of Diana to the people of Britain, she appeared more human, caring, and understanding. For individuals or organizations that deal with crisis effectively, the results can enhance reputation. While this outcome is rare, organizations that handle a crisis well can overcome the damage to their reputations and not experience lasting damage to their leadership, brands, products, or images (James & Wooten, 2005).

Sudden crises, “are often seen as out of control of people’s hands, [so] there is often more public sympathy and understanding to the reaction of companies in the wake of these events” (Crisis management, 2007 p. 27). However, if an organization doesn’t effectively handle the crisis, the danger and damage to an organization’s reputation can turn into a smoldering crisis (James & Wooten, 2005).

Organizations that face a sudden, human-caused crises may discover (once more facts of the case emerge) that they are actually amid smoldering crises, as happened in the Germanwings 9525 crash on March 24, 2015 in the French Alps. Initially after the crash, the public perceived that Lufthansa was not to blame because a single employee’s personal actions caused the crash. However, as more information became available about co-pilot Andreas Lubtiz, this event shifted into a smoldering crisis because Lufthansa supervisors knew about his mental and medical history, which called into question their ability to make sound judgments.

The types of crisis and the possible outcomes of crisis events are well defined and outlined in crisis communication literature. The impacts that a crisis might have on an organization are also well defined, as are organizations’ potential responses to crisis events. A
number of scholars have dedicated their careers to developing and categorizing crisis response.

**Crisis Response**

Research about how an organization can respond to a crisis has obviously been important to the crisis communication field, but communication professionals have used this body of scholarship in creating responses as they help organizations effectively deal with crisis events. Traditional crisis response occurs in relatively controlled environments with limited and highly trained participants facilitating interaction between an organization and the media without the criticism of outside stakeholders. Crisis communication tactics are not concerned with how an individual will react to a press conference or a story because individuals are far removed from the action between the organization and news media.

Social media, by contrast, is not a controlled environment with a limited number of participants who can actively engage in the crisis response conversation. Rather, “social media is a favorite communication tool for presenting challenges to organizations. Potentially, other stakeholders can view the challenge because it is publicly available on social media sites” (Coombs & Holladay, 2012, p. 408). Web 2.0 has changed the ways stakeholders and other participants view and involve themselves in a crisis event; response no longer occurs in a controlled environment, and it has the potential to engage an unlimited number of participants. Traditional responses do not take into account stakeholders’ involvement or social media challenges and criticism.
Strategies for Dealing with Crisis

Coombs (1995) offers several ways for an organization to respond to a crisis. The first is termed “nonexistence strategies” and involves a leader or spokesperson attempting to remove or downplay the crisis. If a crisis does not exist, it cannot damage the organization. Nonexistence strategies begin with denial, a statement asserting that the crisis did not happen. Clarification explains why the crisis could not have occurred due to the organization’s fail-safe standards. Attack is a nonexistence strategy that attempts to destroy the credibility of the person who claims that the crisis exists. Intimidation applies organizational power to threaten or destroy individuals involved in the purported crisis.

In some cases, it is impossible to use these nonexistence strategies. The crisis might be too large, or the public might believe there is a strong causal link between the organization and the crisis. For situations like these, Coombs (1995) suggests using “distance strategies.” The organization admits there is a crisis but then uses traditional mass media to “weaken the linkage between the crisis and the organization.” The weaker the link between the crisis and the organization, the fewer the negative effects the organization will face. Coombs offers two distinct strategies: excuse, which attempts to connect the crisis to a third party, freeing the organization from responsibility, and justification. Allen and Caillouet (1994) offer the tactics for using the justification strategy: “denying the seriousness of an injury, claiming that the victim deserved what happened, and claiming that the crisis event has been misrepresented” (p. 452).

Organizations might attempt to mitigate negative impacts by choosing to use “ingratiation strategies” that deliver positive public support for the company, its mission, and its objectives. The first ingratiation strategy, bolstering, connects the current image of
the organization to past positive deeds such as donations, work practices, or environmental standards that might counter the negative event. Transcendence is the second strategy; it also attempts to link the organization with something positive, in this case, to an abstract concept of value that is shared by the public and the organization. Making the crisis a small part of a future greater good is one example. The third strategy uses praise of target groups to improve the organizational image. Target groups might include the media, shareholders, workers, or victims of the crisis.

“Mortification strategies” are used when an organization seeks forgiveness for the crisis. The first strategy is remediation, or the offering of compensation to offset the cost of the recovery effort or of payment to those the crisis affected. By offering compensation, an organization is attempting to increase positive public feelings about itself. The second strategy is repentance, or seeking forgiveness for the crisis. The theory behind this strategy is that the better the apology, the more willing the public will be to forgive the organization. Rectification is showing the public that the organization is taking appropriate actions to prevent this type of crisis in the future (Coombs, 1995).

The final strategy is the “suffering strategy,” which attempts to earn the public’s sympathy for the organization. Berg and Robb (1992) said, “suffering portrays the organization as an unfair victim of some malicious, outside entity.”

Other strategies within the crisis communication literature reflect the best practices of public relations professionals, who are used to dealing with crisis. Chong (2004) outlines six steps for dealing with a crisis. The first is “coping,” or using an effective plan to decrease the consequences of a crisis on the organization. If an organization is unable to cope with a crisis, the organization will experience increased damage and losses. The second step occurs
after the organization has dealt with the crisis at a time when the organization needs to “rethink,” or examine what it has learned from the crisis. Leaders and managers in the organization should determine what could have been done better in dealing with the crisis and ensure that a similar crisis does not occur in the future. The third step of “initiating” is grounded in the concept of continuous organizational improvement. At this point, the organization often finds ways to deal with future crises in a better manner as well as ways to improve the structure of the organization so that future crises will be less intense.

“Sensing” is the fourth step in the process. As the organization moves forward, it needs to examine where the potential for additional crisis might exist. The stronger an organization’s ability is to identify a crisis before it happens, the better its chances of not dealing with a crisis. Merely sensing a crisis is not enough, though; the fifth step is “intervening.” Once the signal of a potential crisis exists within the organization, it becomes the leaders’ duty to deal with and fix the problem, thus ensuring that the situation will not become a crisis. The final step is “sandbagging.” In addition to seeking potential crises, management must take steps to protect the organization from the effects of a future crisis. If this step fails, it becomes necessary for the organization to return to “coping” and start the process again. No matter which strategy an organization selects amid crisis, Fink (1986) argues that when an organization or individual is not in a crisis, they are in fact in a pre-crisis. With this in mind, organizations must take steps to not only deal with a crisis but also to prepare for possible future crises and minimize their likelihood.

Coombs’ and others’ research examines how to effectively plan and execute a response during a crisis event. This research has direct, practical application for communication practitioners in allowing them to have plans they could use in a crisis
response. Two major research categories exist in crisis communication literature: crisis planning and strategies and rhetorical analysis of crisis statements. Research centered on social media technologies and geared toward professional application is still limited. Scholarship in the second area has created an image repair typology to categorize and examine the textual responses of organizations.

Individuals, nonprofit organizations, and businesses frequently use public relations strategies, but additional scholarship about the way such groups should respond to a crisis exists in business and business communication journals.

Corporate Scholarship in Crisis Communication

Business and business communication scholarship typically examines how the CEO, management team, and spokespeople should react and respond to crisis events.

Contingency Planning

An effective CEO or management team must ensure that the organization is prepared for a crisis; the only way to begin that process effectively is to create a contingency plan. After the events of September 2001, organizations and businesses have begun to take a “holistic view” when it comes to crisis management planning. While organizations understand the need for contingency planning for these plans to be effective, they must be firmly connected to the management structure of the organization (Sapriel, 2003).

After possible crises are identified, the organization is ready to develop its crisis management plan and appoint crisis management team members. This process should also examine ways to diminish the impacts a crisis would have on the organization, such as planning how to maintain operations and find alternative ways to achieve organizational
goals. An effective contingency plan includes “assign[ing] responsibility; establish[ing] emergency operating procedures; and set[ting] forth lines of communication from the team to employees, senior management and board members and from the company to the media, government officials, shareholders, investment analysts, bankers, suppliers and customers” (Taback, 1991 p. 66).

Contingency planning speaks to five principles of basic crisis management. The first is preparation and having in place a solid plan to deal with such an event. Second, the organization swiftly adapts and responds to the situation, as well as provides information to appropriate parties. Third, the organization makes representatives and other appropriate individuals accessible to the media and the public. Fourth, any information presented is factual, which includes much more than being honest; the company cannot assume or speculate about the events. Fifth, the organization practices how it will deal with the crisis to ensure the response will be appropriate (Hoffman, & Moyer, 2007).

In order to have an effective crisis management plan, an organization does not need to develop a strategy for every possible situation that could occur in the future. It must, however, develop a “comprehensive response” in the case of a crisis; this will allow any organization the freedom to adapt to the crisis it faces (Hurley-Hanson, 2006).

While each plan should be uniquely suited to the organization and its environment, Holcomb (1988) has formulated six areas an organization should examine as it develops a crisis plan:

1. An organization must examine the potential for specific crises (such as earthquakes, fires, or political issues) in a local or regional area.
2. Once potential problems have been identified, the organization must examine how those situations could influence it, evaluating scenarios ranging from the cessation of work to the loss of life.

3. The organization must develop a plan to protect itself from the things that might cause a crisis.

4. Beyond putting a plan on paper, the organization must gather emergency equipment and supplies that can be used in a crisis.

5. Employees of the organization must understand what its crisis plan includes and the role they would play; this might include a mock-disaster drill to evaluate the plan’s effectiveness.

6. The organization should also work with local agencies and communities to understand the resources they could provide during a crisis.

When using a holistic view, an organization must move beyond identifying the elements of crisis and bring together a complete organizational response. The organization should connect “operations, human resources, legal, IT, health safety [and] environment, sales [and] marketing, communications and reputation security” (Sapriel, 2003 p. 350).

Effective contingency planning should allow an organization to survive any negative consequences of a disaster as well as position itself to benefit from any opportunities that are presented (Chen, 2007). An organization that has a significant delay in implementing the plan might appear as though it isn’t being forthright or is disorganized; failure to promptly implement that plan could also call into question the organization’s structure (Hoffman & Moyer, 2007). The most important aspect of effective contingency planning is what the organization will be after the crisis, including how it will recover and move forward (Sapriel,
Kash and Darling (1998) discuss contingency planning as “strategic decisions” a corporation makes to help protect itself during the crisis and to help restore its effectiveness afterward.

Once a plan has been designed, it is important for the crisis management team to practice executing it. Each team member should review each aspect of the plan. Organizations ought to hold a full-scale mock crisis at least once a year in order to find and fix any inconsistencies or issues within the plan (Podolak, 2002). Part of creating an effective crisis plan is preparing a way for the organization to be resilient in its structure, allowing itself to quickly recover after a disaster. Hurley-Hanson (2006), citing Block and Block (1980), compare organizational resilience to “psychological resilience,” which is a trait that allows individuals to recover from negative experiences. The steps for creating an effective contingency plan have not changed, yet few organizations have developed their own plans for dealing with crises.

**A CEO’s Role during Crisis**

A survey found that the personal character of the CEO represents 45 percent of the company’s reputation; if the CEO develops a poor reputation in responding to a situation, the organization will also be negatively affected (Gaines-Ross, 2000). In other words, the actions of the CEO are connected to the public’s perception of the organization. Because of this, if the CEO’s response to a crisis is ineffective, a company will often have no other choice but to remove the leader or risk additional damage (Finkelstein, 2005).

Seeger and Ulmer (2001) list the way a CEO should behave during a crisis; he or she should:

- Be highly visible and active.
• Serve as a spokesperson because he or she brings authority and credibility to the situation.

• Set the tone for how the company will deal with the crisis.

• Work to reduce the consequences for shareholders, accept responsibility, and ensure that similar events don’t happen in the future.

Much of the literature about a CEO’s role during a crisis can be divided into three categories, all of which relate to roles outlined in Seeger and Ulmer’s list: figurehead, spokesperson, and leader.

**CEO’s Figurehead Role**

A figurehead as defined by Mintzberg (1971) is the legal authority and the individual who symbolizes the work of the organization. “Top management constitutes the organization’s symbolic figureheads, who are the guardians and promoters of the organization’s image” (Ginzel, Kramer, & Sutton, 2004, p. 229). In a crisis situation, the figurehead must represent the values of the organization to both internal and external constituencies. The figurehead is the public face of the organization and is responsible for representing it. A survey conducted by *PR Weekly* found that 85 percent of CEOs believe it is critical that a CEO be the figurehead of the organization during a crisis (Schoenberg, 2005). Having the CEO be the figurehead during a crisis is also supported in much of the corporate communication literature. During a crisis, it is the responsibility of the CEO or chairperson to “appear to lead from the front . . . . [The CEO] has to stand and be counted—and he [or she] will be. It is what he [or she] says and does that is remembered long after the event” (Hopkins, 1995, p. 87).
Although the CEO may use other professionals to deal with and plan for the impacts of a crisis on the organization, according to Ucelli (2002), the CEO must be out in front dealing with the situation; “visibility cannot be delegated. Leadership cannot be delegated” (p. 23). While a CEO is not required to have all of the answers, as the figurehead of the organization, he or she must be engaged in managing a crisis situation. As a figurehead, the CEO must provide his or her authority to members of the management team to whom he or she delegates specific responsibilities to during the crisis (Taback, 1991).

**CEO’s Spokesperson Role**

Mintzberg (1971) suggested the spokesperson’s role is to communicate information about the organization’s plans, goals, and performance to outsiders. The spokesperson must be an expert in the organization’s sector of business. In crisis literature, a spokesperson is the most important factor in contending with a crisis situation effectively (Sharbrough & Moody, 1995). The CEO has the responsibility to act as the spokesperson for the organization and must engage in this role very shortly following a crisis event. The CEO need not act as the spokesperson for minor issues, but for major situations that will have long-term consequences for the organization, the CEO must act as the spokesperson (Lucero, Alywin, & Pang, 2009).

The spokesperson must understand how to manage the media effectively: “A crisis leader must . . . possess the ability to deliver news, provide updates, and ensure constant communication to all target audiences. The leader must also use two-way communication, which means listening to and responding to questions, concerns, and feedback” (Schoenberg, 2004, p.16). The spokesperson should also be prepared to provide the types of information each medium will require—for television and radio, sound bites will be most
important, but newspapers will need in-depth access and interviews (Hoffman & Moyer, 2007; and Hatcliffe & Brassell-Cicchini, 2006).

A spokesperson’s role is not only to communicate with the media, but is also to communicate with stakeholders, shareholders, employees, and customers (Ucelli, 2002). There is a temptation to allow multiple people to act as the spokesperson, but Hatcliffe and Brassell-Cicchini (2006) encourage organizations to speak with one voice and one message at all times. Multiple messengers create multiple messages, which can be confusing in crisis situations. The organization should limit the number of employees who have contact with the media. The more people involved, the more difficult it is to create a consistent message and the greater the chances for misinformation. With an effective spokesperson, the organization is able to communicate its intents, frame the situation, and, consequently, recuperate its reputation.

**CEO’s Leader Role**

The public expects a CEO to be “front and center” during a crisis event. If the CEO is missing from the response or is ineffective with the response, the public will hold him or her accountable: “Effective leaders demonstrate situational awareness in a crisis, grasping the significance of the underlying event and its likely impact on the company and its stakeholders. They also demonstrate self awareness and the ability to redirect their attention and energy to mobilize a quick response” (Garcia, 2006, p. 8). In crisis situations, the CEO and organization must be able to collect and disseminate information quickly and in appropriate channels (Paton, 1999). Hoffman and Moyer (2007) suggest that organizations and leaders have only “one to two hours” to take action. This function requires the design of an effective communication strategy, which regularly updates the CEO and senior
management with critical information and developments within the organization. This information allows the CEO to communicate clearly with both internal and external audiences during a crisis; such rapid communication often sets the tone for how the organization will respond to the crisis (Briggs, 2008). Often it falls upon the leader (in most cases, the CEO) of the organization to offer a public apology on behalf of the organization. This responsibility cannot be delegated to subordinates or surrogates; it must come from the leader (Kellerman, 2006).

One of the key responsibilities of the CEO is to help the organization emerge stronger than it was before the crisis (Farmer & Tvedt, 2005). Discourse is often the best way to fulfill this responsibility. During the crisis, a CEO needs to make statements that demonstrate leadership and that can ameliorate fears about the future. These statements should show external and internal audiences that the leader has a solid approach to repair any damage caused by the crisis event (Seeger, Ulmer, Novak, & Sellnow, 2005).

The CEO’s ability to demonstrate organizational leadership to the public can help stakeholders recover. Showing that the leader understands how to prevent similar events in the future is crucial. Often this can be achieved by reaching out to the media after the disaster to show the progress the organization has made in repairing the damage the crisis has rendered (Horsley & Barker, 2002). Corporate communications scholarship is concerned with creating practical application of business leadership. It overlooks the impacts a crisis event might have beyond the bottom line and corporate profits.
Rhetorical-Analysis Scholarship in Crisis Communication

The third major field that claims crisis communication as a research site is rhetorical analysis. The majority of research in this area examines the rhetorical moves individuals and organizations use in responding to crisis. Additional research could examine specific rhetorical strategies used by organizations in crisis communication responses.

Benoit Image Repair Typology

In their image repair research, Ware and Linkugel (1973) created four themes of apologetic speech acts: denial, bolstering, differentiation, and transcendence. These themes, combined with Kenneth Burke’s three responses to guilt, are at the heart of Benoit’s image repair typology (Smudde & Courtright, 2007). This typology is used to examine crisis postmortem and is much more theoretical than the scholarship of public relations and corporate communication. Benoit (2014) offered a complete typology of image repair rhetoric and organized it into five general categories: “denial, evasion [of] responsibility, reducing offensiveness, corrective action, and mortification” (p. 22). Benoit’s typology is outlined in Table 2.1. Denial in Benoit’s (2014) typology is divided into the subcategories of denial and shifting the blame. When engaging in denial, the rhetor can deny involvement in the act or deny the fact that the event occurred (Kennedy & Benoit, 1997). Using the strategy of shifting blame provides advantages to the rhetor: “First, it provides a target for the audience to blame for the wrongful deed. Second, it answers an important question: Well, if you didn’t do it, who did?” (Brinson & Benoit, 1996 p. 30). Evasion of responsibility includes four variations: provocation, defeasibility, accident, and good intentions. Provocation suggests that the action occurred due to a previous incident that provoked the
actor to respond. Provocation makes the deed of the rhetor “defensive in nature” (Benoit & McHale, 1999; Fishman, 1999). Defeasibility is when the rhetor pleads “that the action was due to lack of information or ability, and hence not entirely one’s own fault.” By using this variation, rhetors are not claiming that they committed the action, but they are saying that if they had the knowledge or ability to control the situation, the act would not have happened (Benoit, 2014 p. 27). Accident simply states that the “action occurred inadvertently” (Glascock, 2004 p. 33). When using accident, the rhetor does not deny the event but attempts to provide additional or unknown information that reduces the rhetor’s responsibility for the event (Benoit, 2014). Good intentions do not speak to the outcomes of the actions but to the action’s causes. Benoit (2014) suggests that “people who do bad while trying to do good are usually not blamed as much as those who intend to do bad” (p. 24). The public would be more willing to forgive wrong or even evil if it were done with a good intention (Benoit & Hirson, 2001). Reducing the offensiveness of an event offers six options to the rhetor: bolstering, minimization, differentiation, transcendence, attacking the accuser, and compensation. First is bolstering. Individuals who choose to engage in bolstering are using one of the oldest public relations tactics: emphasizing positive aspects of an individual to alleviate the impacts that negative actions or information might have on his or her image (Metzler, 2001). “Rhetors may describe positive characteristics they have or positive acts they have done in the past” (Benoit, 1997 p. 254). Minimization is the presentation of an argument that would “reduce the magnitude of the negative feelings attributed to the act, in hopes of lessening the ill feelings directed to the accused.” Once the audience sees that the act is not as bad as they originally believed, their opinion towards the rhetor will change (Benoit, 2014, p. 29). Differentiation, the third possibility, allows the rhetor to place the
action in a context where it can be “distinguished from other similar but more offensive actions.” When the audience views the act and compares it to other more offensive ones, it may feel differently toward the rhetor (Benoit & Nill, 1998 p. 130). Transcendence occurs when the rhetor places the act or actions in a better context, perhaps by showing the audience that there were higher values or considerations that played a key role in the act or action (Benoit, 1995). Attacking the accuser allows the rhetor to lessen the arguments and accusations by simply destroying or calling into question the credibility of the person attacking the rhetor (Brinson & Benoit, 1999). The final category is compensation. “Here the rhetor offers to reimburse the victim to help nullify the ill feeling arising from the offensive act. This redress can be valued goods or services as well as monetary reimbursement” (Benoit & Hanczor, 1994, p. 421). Corrective action can be used in two ways. First, as Benoit (1995) said, is a promise to restore the situation to the way it was before the act, “and/or a promise to ‘mend one’s ways’ and make changes to prevent the recurrence of the undesirable act” (p. 26). Benoit has also said that often an audience might withhold judgment until it sees whether “corrective action actually yields fruit” (Benoit, 2000). The rhetor has the option of mortification, which Tollefson (2000) defined as taking responsibility for the action in question and asking forgiveness. Benoit (2014), citing Burke (1970, 1973), also concludes that the audience must believe the rhetor is sincere.

The vast majority of scholarship on crisis communication uses rhetorical methods using Benoit’s typology. While this framework is popular, it overlooks other critical rhetorical elements that might improve understanding in the field of crisis communication. The addition of kairos, and rhetorical situation to crisis communication scholarship could broaden the types of rhetorical studies being conducted.
Table 2.1

*Benoit’s Image Repair Categories*

<table>
<thead>
<tr>
<th>Image Repair Categories</th>
<th>Subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial</td>
<td>Simple denial</td>
</tr>
<tr>
<td></td>
<td>Shifting blame</td>
</tr>
<tr>
<td>Evasion of responsibility</td>
<td>Provocation</td>
</tr>
<tr>
<td></td>
<td>Defeasibility</td>
</tr>
<tr>
<td></td>
<td>Accident</td>
</tr>
<tr>
<td></td>
<td>Good intentions</td>
</tr>
<tr>
<td>Reducing offensiveness</td>
<td>Bolstering</td>
</tr>
<tr>
<td></td>
<td>Minimizing</td>
</tr>
<tr>
<td></td>
<td>Differentiation</td>
</tr>
<tr>
<td></td>
<td>Transcendence</td>
</tr>
<tr>
<td></td>
<td>Attacking the accuser</td>
</tr>
<tr>
<td></td>
<td>Compensation</td>
</tr>
<tr>
<td>Corrective action</td>
<td></td>
</tr>
<tr>
<td>Mortification</td>
<td></td>
</tr>
</tbody>
</table>

**Kairos**

Another rhetorical concept through which crisis communication could be viewed is Aristotle’s concept of kairos. Kinneavy (1986) defined it as the “right or opportune time to do something, or right measure in doing something” (p. 80). Rhetoric scholars have viewed kairos both in positive and negative lights; for some, the use of kairos occurs when a rhetor or orator engages in “opportunism and manipulation” of an audience. However, it can imply “appropriateness and propriety with respect to time and place” (Sheard, 1993 p. 292). Rhetors have the ability to use kairos both positively and negatively; in either case, it is a powerful rhetorical concept that has the ability to heighten the impact of a message.

Kairos in modern rhetoric terms “may be understood as situational context, a more modern term, which can be used critically” (Kinneavy & Eskin, 2000, p. 433). The situational
context includes localized knowledge about how an individual or group will view a situation, feelings toward a topic, and the understanding of space and local realities (Hess, 2011).

In technical communication research, kairos has been studied in terms of the kairotic moment, or when a group is ready for specific resources to address questions or concerns. Cagle and Tillery (2015) explore how and when climate change research was being presented to the public in the media. Scott (2006) examines how the pharmaceutical industry used appropriate timing in the management of risk from bioterrorism. Rife (2010) examines how kairos could help improve the recruitment of people to complete digital surveys.

For crisis communication scholarship, kairos is a critical element of analysis. In some cases, organizations and businesses might use it to manipulate an audience following the aftermath of a crisis event. Others might tailor a message to fit the local people and context of the situation. However, it is also important to note that some response statements do not take kairos into account. For example, in his response to the collapse of the Crandall Canyon Mine, Bob Murray did not use kairos. His first statements were to blame the accident on Al Gore, an earthquake, and mine unions. This caused him to lose credibility with the public and media. Without examining kairos and the kairotic moment, it’s difficult to determine whether specific rhetorical strategies worked effectively or whether other strategies should have been utilized to communicate more clearly.

**Rhetorical Situation**

Crisis communication literature has a strong history in rhetorical analysis; to a large extent, the focus has been on image repair strategies and *apologia*, the rhetoric of defense. However, the addition of other rhetorical elements could provide a deeper understanding of a crisis situation and the rhetoric surrounding the crisis event. Beyond examining kairos in
crisis responses, examining the rhetorical situation can show the complexity of crisis rhetoric. As defined by Bitzer, (1968) the rhetorical situation is:

A complex of persons, events, objects, and relations presenting an actual or potential exigence which can be completely or partially removed if discourse, introduced into the situation, can so constrain human decision or action as to bring about the significant modification of the exigence. (p. 6)

By focusing on one element of the rhetorical situation, this type of analysis overlooks the complexity of people, events, objects, and relations, which are interconnected and influence the tools available to a rhetor. Using this approach will demonstrate that while “the boundaries between the constituents will seldom be clear and stable, . . . pursuing them initially as if they were discrete constituents helps a rhetor or a rhetorician look at a situation from a variety of perspectives” (Grant-Davie, 1997, p. 277). J. Porter (2013) argues that rhetorical theory should meet the following qualifications:

Usable, and useful, rhetoric theory must prompt and push deeper thinking; it must be powerful in the respect that it enables you to see in a new way—to see events, texts processes, positions, and people in a way that deepens your understanding and leads to more productive actions. (p. 140)

Examining crisis from a variety of previously unexamined acts of communication allows different constituents and their accounts to be examined and studied.

Work such as Benoit’s image repair theory examines only the statements of a rhetor who is attempting to repair his or her own image; this scholarship overlooks the rhetoric used by groups and individuals who are affected by the crisis, the commentary about the crisis from the general public, and the official statements of other rhetors about the crisis. By researching across the broad spectrum of the rhetorical situation, scholars will find additional understanding about the nature of crisis.
Crisis communication scholarship is traditionally the domain of mass communication and public relations scholars. These experts have explored numerous cases, developed typology and frameworks, and worked closely with industry professionals to implement their findings. Critically examining their work will allow scholars from other disciplines to contribute to the body of knowledge. In addition to public relations scholarship, the field of general management has provided research about the way a company responds after a crisis. It is often centered on how corporations react to a crisis and on the roles leaders play during such an event. This research has become the norm for how companies behave in a crisis; those that deviate from these standards can encounter negative consequences.

Using traditional crisis communication research in addition to technical and professional communication scholarship provides an opportunity to examine research sites with fresh perspectives and yield different results. The resolution of a crisis might follow the best practices of corporate communication or crisis communication, but when viewed using technical communication tools like usability, information design, and actor network theory, the organization may appear to have missed opportunities previously unseen by past researchers. Viewing crisis response through the lens of information design could provide information about how organizations connect crisis event audiences. For example, H&R Block social media posts about its software crisis were ineffective because many of them attempted to blame other organizations for the problem and because they did not provide critical information to clients about the issues with returns, how the return should be corrected, or when clients should expect refunds.
CHAPTER 3

METHODOLOGY

Just as crisis communication scholarship borders public relations, rhetorical studies, corporate communication, and technical communication, the means of finding answers to crisis communication research questions borders both qualitative and quantitative research. Previous crisis communication and crisis response research has examined crises in terms of rhetorical typologies, (Benoit, 2014), systems of response, (Coombs & Holladay, 2012), the architecture of response networks (Potts, 2014), and how much social media is used during a disaster (Potts, 2011). As the number of social media users and platforms continues to increase, so do the number of posts and comments made. While traditional crisis communication research depends on a few media releases and press conferences, the new approach must include an examination of social media posts in real time. The change from traditional crisis communication response also requires researchers to add elements of big data analysis to rhetorical criticism. Employing both qualitative and quantitative methods to a crisis communication site allows for deeper understanding of situational contexts with increased accuracy, precision, and generalizability.

A mixed-method research design is “research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry” (Tashakkori & Creswell, 2007, p.4). For crisis communication scholars, the ability to “draw inferences using both qualitative and quantitative approaches or methods” can be critical, as it increases researchers’ ability to describe accurately the phenomena being studied. Previous crisis communication research has focused on small, statistically unreliable samples of a single
account or a few hundred tweets. A mixed-method approach provides quantifiable data and triangulation of rhetorical analysis. The results of a mixed-method analysis will paint a clearer picture of how people use social media during and following a crisis event.

**Appropriateness of the Research Design**

The dissertation uses an embedded mixed-method, collective case study. An embedded approach allows the researcher the flexibility to “combine the collection and analysis of both quantitative and qualitative data” within traditional research designs (Creswell & Clark, 2011, p. 90). Creswell and Clark suggest that this methodology is often used when a single analysis method is insufficient to answer a specific research question as a process to ensure rigor in research design and as a method to triangulate data better. Creswell and Clark’s assertions about developing rigorous methods for crisis communication are relevant here; any method should examine both the context of a crisis and the way an individual uses social media to respond to crisis events. Relying on a single method for examining complex situations with a variety of sources could not generate the precise data needed for social media crisis communication research.

In addition to using an embedded, mixed-method design, I will also use a collective case study design, which examines a phenomenon by attempting to study as many elements of the rhetorical situation as possible, including the exigence, rhetors, audience, and constraints. An embedded research design is used when the researcher must incorporate two different types of data, typically qualitative and quantitative data, in order to address fully the researcher’s questions. While each type of data may address some part of the questions, using both types will provide deeper and richer insight into the research questions (Creswell
& Clark, 2011). In examining crisis communication and social media, it is critical to understand the rhetorical context surrounding the crisis event; however, rhetorical context alone will not provide the rich insights that conducting a quantitative examination of social media posts would.

Researchers frequently use case study design to connect an observed phenomenon to a larger population or a general condition (Stake, 2005). Creswell (1998) defines a case “as a bounded system [examined] over time through detailed, in-depth data collection involving multiple sources of information rich in context” (p. 61). A collective case study uses multiple sites to help provide a richer, more complete assessment of the phenomenon being studied. In crisis communication, collective case studies allow the generalization of principles or discoveries across a wider cross section than focusing on a single case would. Additionally, to understand what elements of crisis communication rhetoric and design remain constant among various social media platforms, we must include multiple environments as we effectively examine the data.

Scholars often criticize the case study approach because it can lack the precision and scientific fundamentals of other established research patterns. However, Luck, Jackson, and Usher (2006) suggest “that it is beholden upon the researcher to plan their case study research, applying the usual caveats for rigour, or validity, that apply to their chosen methods” (p. 108). Combining case studies with other research approaches is one way to diminish claims of a weak and imprecise methodology. Yin (2003) and Vallis and Tierney (1999) believe that as researchers use the frameworks and established patterns of rigor found in other methodologies, case studies can become an important, valuable research tool.
I followed statistical-genre analysis, a “mixed-methodological hybridization of qualitative coding and statistical analysis” in my research. Despite “being novel in technical communication, [statistical-genre analysis] has a long pedigree in disciplines ranging from linguistics to psychology” (Graham, Kim, Devasto, & Keith, 2015, p. 76). Statistical-genre analysis provides technical communication scholars a tool to study large data sets and complex problems without excluding the ability to include critical elements of rhetorical research. Graham et al. (2015) examine content from the Food and Drug Administration Advisory Committee Program inclusion of specific evidence affected the content of the Advisory Committee Program meetings. The researchers examine more than 5,000 pages of data and presented both statistical and rhetorical findings. Statistical-genre analysis fits the needs of crisis communication via social media, as it allows researchers to understand what is occurring rhetorically and supports those findings with statistical analysis and validation.

**Research Questions**

Each of the questions I have answered in this dissertation could be answered using a single method, but because of the complexity of social media environments, a mixed-method approach will provide a more complete picture of the situation that surrounds crisis communication. Below are the research questions explored in the dissertation:

- Are traditional pre-social media image-repair strategies effective in social media environments?
- How do participants use social media in crisis events, and how does this usage shape the rhetorical framing of a crisis?
- How might organizations effectively adapt traditional crisis communication plans to use social media during future crisis events?
In developing a methodology to explore these questions, I needed to account for the considerable amount of data that social media users can create. During a crisis, social media users can easily create tens of thousands of posts an hour, leaving researchers with the possibility of examining millions of posts. The nature of my study will require the use of big data and big-data tools to process these millions of social media posts.

**Big Data**

Big data has become a frequently used term in both professional and academic settings; the examination of large to vast data sets is a new standard in statistical analysis. While most people have heard of big data, the majority of definitions rely on the volume of data being produced or stored; typically, the threshold for big data is terabytes to petabytes (Hashem, et al., 2015). However, basing a big data moniker simply on the amount of data is dangerous because as the amount of data collected and the data storage capacity increases, what was once considered big might not be in the future. Big data, according to Boyd and Crawford (2012), “is less about data that is big than it is about a capacity to search, aggregate, and cross-reference large data sets” (p. 663). For technical communication scholars who might not be working with petabytes of information yet still encounter data sets that are large and complex, this definition allows for the application of big-data methods in smaller data sets. Graham et al. (2015) argue that while technical communicators will not encounter the number of data points needed to make climate models or track partial movements in physics, they still study large data sets frequently. For researchers in this field, defining big data by size is problematic. As Graham et al. say, “Managing this data exceeds the investigational capacity of the methodological techniques currently available” to technical communication scholars (p. 89).
The examination of social media posts about different crisis events provides a situation in which the “data exceeds the investigational capacity of the methodological techniques currently available” (Graham et al., p. 89) to technical communication researchers. Social media users can collectively create tens of thousands of posts in an hour, especially during a crisis event. For example, during the first month of the Ebola outbreak in the United States, Twitter users created nearly a million posts each day. Existing methodologies in technical communication would not be able to examine this much data effectively, so I used big-data methods to analyze the case studies outlined for this project.

**Antenarrative**

While big data is the scope of the dissertation project, I have looked more specifically for antenarratives, or fragments of narratives that provide insight into how individuals or groups both process and redefine official narratives to make sense of a crisis situation. Sensemaking is an important function of antenarratives, which Boje (2011a) believes can occur in three different ways: “a prospective sensemaking (looking forward),” something that “is in intraplay with now-spective (in the present moment of emergent being) and retrospective (backward looking) manners of sensemaking. The agential aspects of antenarrative are in its intraplay with materiality” (p. 1). Prospective sensemaking occurs as an individual looks forward. For example, after the March 2011 earthquake in Japan, which caused a massive tsunami and damaged the Fukushima Daiichi Nuclear Power Plant, some social media users posted about the future of nuclear energy. These posts included claims that nuclear energy is too dangerous to be used by an earthquake-prone nation. Now-spective narratives occur as individuals or groups attempt to make sense of the present moment. In the case of the Fukushima Daiichi disaster, now-spective occurred as people
questioned the safety record of Tokyo Electric Power Company and the way the company handled nuclear power generation after the earthquake. Finally, retrospective sensemaking attempts to make sense by looking backward, such as when people questioned the decision to build a nuclear power plant near the ocean only 25 meters above sea level. Others would point to studies conducted by the U.S. Nuclear Regulatory Commission and the Japanese Nuclear and Industrial Safety Agency that the location of the nuclear plant in Fukushima Daiichi was risky.

Analyzing antenarratives shows how groups or the public respond to a crisis event. Social media provides an excellent opportunity to examine antenarratives, as the social media content is written and can contain links to other material that might explain or make sense of a crisis event. Additionally, by searching for clusters of data (groupings of similar posts and content), I can determine the most frequent approaches for sensemaking in a specific crisis. Identifying antenarrative themes and determining how they evolve over the length of a crisis can provide insight about whether social media users cite the causes, reasons, or impacts of the crisis as noted in an organization’s official narrative.

According to Vickers (2012), an antenarrative approach “enables researchers to share the bits and pieces, snapshots, grabs and glimpses of respondent lived experiences that are not bounded by more traditional narrative theory modes of research analysis and presentation” (p. 173). In examining large amounts of social media content, I assemble these “bits and pieces” and “grabs and glimpses” into themes and statistically significant snapshots of the experiences of those affected by a crisis. Specifically, this research examines millions of social media posts for sensemaking rhetoric as these comments form rhizomatic assemblages of antenarratives.
A social media network is a prime example of a rhizomatic assemblage. As individuals join the network, they form a twisting maze of “trajectories” with each user bringing individual biases and beliefs to the network. As like-minded users connect, they form “bulbs and tubers.” As information passes through the network, each user reframes and slightly changes the information. Thus, this living network is constantly processing, consuming, and sharing information. Additionally, this process is happening simultaneously across the whole network, creating what Boje (2001) calls a “postmodern chaotic soup.”

When examining data that is presented in a rhizomatic fashion, I cannot depend on the data being presented in a linear or hierarchical form, as multiple exit and entry points exist within the data. In developing a methodology to account for the way the data is presented, I turned to antenarrative as means to understand the “glimpse and grabs” of social media content. This process would start by examining and categorizing roughly 5,000 posts. For example, Ebola content included posts about the disease’s being an airborne virus, conspiracy theories about the Center for Disease Control and Prevention, content about the inability of U.S. hospitals to effective contain Ebola, speculation that Ebola was developed as biological weapon, and other antenarratives. In addition to defined antenarrative clusters, social media users posted nonsense or irrelevant content, which also became a category in my work. This data represented rhizomatic assemblages of social media users and were explored using basic statistical measurement and rhetorical analysis. The specific process for how data was categorized into antenarrative clusters, nonsense or irrelevant content, and outlier posts will be detailed later in this chapter.
Research Tool

To both access and analyze the data in the cases studies, I engaged with Crimson Hexagon, a social media monitoring and analyzing company based in Cambridge, Massachusetts. The company’s product, ForSight, an automated and nonparametric content analysis software package, uses an archive of 300 billion social media posts from Facebook, Instagram, Tumblr, Twitter, and prominent forums and blogs. ForSight relies on an algorithm developed by Gary King, a professor at Harvard University’s Institute for Quantitative Social Science, that identifies statistical patterns in social media posts’ words and expressions; the software delivers sentiment, themes, conversation sizes, and conversation shifts over time. In a number of tests, the algorithm has a 92 percent correlation to human-based coding systems (ForSight Platform Overview, 2014). This ability is unique for social media-monitoring software, which typically can conduct only basic word counts and negative or positive sentiment analysis. The use of computer-aided coding software offers researchers fewer errors introduced by human coders, especially when large amounts of data are complex or categorized into schemes or tools.

Hopkins and King (2010) evaluated King’s algorithm against other computer-coding processes, hand coding in a variety of scenarios, and discovered that computer coding requires fractions of seconds to code hundreds of documents and has more statistically reliable results than hand coding the same documents would. Additionally, Hopkins and King’s nonparametric content analysis approach was faster than other computer-based coding systems and provided better results in data that required more than a positive, natural, or negative tone designation.
Data Collection

The process of using ForSight begins with selecting the date range and social media platform for analysis. I was able to access archives for Facebook, Instagram, Tumblr, Twitter, and prominent forums and blogs. Depending on the platform, historical data might be limited. For example, ForSight has had access to the Twitter Firehose (which offers real time access to all Twitter posts) since July 2010, allowing the company to create a library of all public tweets since that date. However, if I examine posts made via Tumblr, I will be limited to public information made since January 2015, when ForSight began collecting it. All of the case studies for this dissertation use Facebook data, Twitter data, or both; ForSight’s agreements and libraries with these social media companies are its longest and largest, respectively. Additionally, these two platforms have wide penetration among adults, with 71% of adults using Facebook accounts and 23% of adults having Twitter accounts. Facebook crosses socioeconomic factors like income and education fairly evenly. Twitter reaches a very specific set of users, with 27% identifying as black, non-Hispanic. 37% identify themselves as being between 18 and 29 years of age and 25% as being between 30 and 46 years of age. Twitter users are also typically educated; 30% report having completed college, and 24% report having completed some college (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015).

Once the user selects a date range and platform, he or she provides specific keywords, phrases, or hashtags to search. The researcher can filter results based on those or on other categories, including language, location, and gender. After this process is complete, the researcher is presented with the posts that meet the selected criteria and begins the ForSight data training process. The researcher must identify at least 20 posts that typify each
of his or her categories. However, there is not a limit to the number of posts that can categorize. Using these posts, the algorithm King developed begins finding other posts that use similar language, content, framing, tone, and sentiment. ForSight returns data about the number of posts a day for the time frame selected, the percentage of relevant posts in a selected category, the impressions or views of specific users and posts, and a list of posts within each category.

For example, when examining the National Transportation Safety Board’s response to the Asiana crash, I specified starting and ending dates of July 6, 2013, (the day of the accident) and August 6, 2013 (one month after the accident) in my search to capture all Tweets made about the crash during that time. Crimson Hexagon presented a random selection of 5,000 of them. As I read each post, I would either assign it to an existing category or create a new one. Once I had categorized all 5,000 posts, ForSight, Crimson Hexagon algorithm, applied the content of the categories to all of Twitter posts for the whole time period. In cases where fewer than 50 posts appeared in a category, I disregarded the category in my analysis.

In applying the ForSight data to an antenarrative analysis of crisis communication, I examined the patterns in the data, which provided the unit of analysis for the research project. Creswell (1994) defines unit of analysis as the specific elements being examined; this could include particular words or phrases or people who fit specific requirements. For this research project, the unit of analysis is antenarrative clusters. I could have examined each post for antenarrative characteristics, but by examining at the cluster level, I include only the most significant antenarrative in the research. In social media research, the data set can
consist of millions of posts. Clusters are also critical in accelerating the research process by allowing one to find patterns across multiple case studies.

**Research Methods and Procedures**

While all of the case studies in the dissertation use a statistical genre analysis and ForSight, the context and content of each are unique and require adaptation to fit the specific antenarratives of each situation. Each case study’s methodology is detailed in the following sections.

**H&R Block Case Methodology**

When examining the impact of extra-institutional surrogate communication and how H&R Block responded to a crisis event, we must note that the company has surrogates that supported H&R Block’s actions. A surrogate could include any individual who has a loyalty to the organization and is committed to the survival of the organization. This may include outside individuals like customers, users, or followers. It can also include individuals who are paid by, employed by, or acting on behalf of the organization.

While it may not always be possible to understand who is posting and their intentions, if a company hopes to have surrogates engage on social media, they must create a reservoir of goodwill. Fink (1986) first discussed this concept in regards to how consumers responded to Johnson & Johnson’s handling of tainted Tylenol. As a longtime healthcare company, Johnson & Johnson already had customers’ trust: many believed it would act with people’s best interests in mind. As Johnson & Johnson recalled product, pulled product from store shelves, and created a new triple seal for Tylenol, the company’s credibility
increased exponentially among the public, especially as the company continued to ensure its products were safe.

The definition of a reservoir of goodwill was further refined to mean measures an organization takes to establish a reputation for integrity and credibility that could be used during a crisis event (Fink, Lee, Worcester, & Heath, 2007). A company can achieve a reservoir of goodwill by becoming involved in charitable causes, contributing to the development of a community, seeking ways to improve corporate transparency, and dealing fairly and equitably with customers or clients. As an organization builds a reservoir of goodwill, it is a hedge against the future when having supporters may be critical in effectively dealing with a crisis event.

While a surrogate comes from a reservoir of goodwill to support an organization during a crisis, other social media users may attack a company. Such people can have a variety of motives; they might have a vendetta against the company, they might represent a rival business, or they might simply be social media trolls or flamers. Collectively, this group could be referred to as a gadflies or agitators. McEdwards (1968) outlined the rhetoric of agitation, which has as its end goal a movement away from the status quo. To achieve this end, the rhetor typically uses emotional and inflammatory language: “the agitator must use the jagged word, the snarling word, the insulting word; he cannot clothe his ideas in euphemistic cotton wool to spare our sensibilities” (p. 43). Surrogates and agitators work on social media in order to achieve their individual goals of building up or tearing down an organization during a crisis event.

In developing categories for surrogate rhetoric to filter data on ForSight, I have chosen to limit Benoit’s (2014) image repair strategies to those that a surrogate could use.
Understanding how an audience might defend an organization could allow an organization to have greater effect in repairing its image via surrogates. Table 3.1 outlines the image repair categories, definitions, and examples.

Table 3.1

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scapegoating</td>
<td>An act committed in response to another wrongful act</td>
<td>“The IRS is to blame for the problems. It did not provide H&amp;R Block with the correct forms before the end of the year.”</td>
</tr>
<tr>
<td>Defeasibility</td>
<td>Lack of knowledge or control about important factors</td>
<td>“I don’t believe it is an H&amp;R Block problem. I did my taxes with another program, and I am still waiting.”</td>
</tr>
<tr>
<td>Accident</td>
<td>An excuse for factors beyond an organization’s control</td>
<td>“H&amp;R Block is not to blame. This situation happened because the government could not set tax rules before November of last year.”</td>
</tr>
<tr>
<td>Bolstering</td>
<td>Bolstering an audience’s positive idea of the organization, often through reminding the audience of the organization’s previous good acts or its good reputation</td>
<td>“While not having your return as soon as promised is painful, H&amp;R Block has saved me several thousand dollars in the past. They have also helped me with an audit.”</td>
</tr>
<tr>
<td>Minimizing</td>
<td>Attempting to convince the audience that the action is less serious than it appears</td>
<td>“This kind of thing happens all of the time, and it will be resolved quickly.”</td>
</tr>
<tr>
<td>Attacking the accuser</td>
<td>Questioning the credibility of the source of the accusations</td>
<td>“I work for H&amp;R Block, and you have no idea what you are talking about. We are working hard to fix this situation ASAP.”</td>
</tr>
</tbody>
</table>

If it is possible for surrogates to defend an organization, it is also possible for them to use similar rhetorical strategies to attack or destroy an organization. This type of speech act is broadly defined as *kategoria*, or a speech of accusation. Ryan (1982) categorized the rhetorical motivations of *kategoria* as, “The accuser is the affirmer or the rhetorical prime-
mover in the speech set. The accuser perceives an evil or exigence, he is motivated to expose it, and the rhetorical response to that motivation is a kategoria” (p. 256). While this process of rhetorical attacks can take many forms, Table 3.2 outlines the kategoria strategies used by Facebook users during H&R Block’s crisis. These categories were trained using ForSight and 40 posts were selected for each.

Table 3.2
Agitator Kategoria Strategies

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blame</td>
<td>Assigning responsibility for a fault or wrong</td>
<td>“I must say that I am completely disgusted at the way H&amp;R Block is handling this situation. I understand that accidents happen, but where is the social responsibility that should be taking place? An apology is not getting the money to us any faster.</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Showcasing that an organization had knowledge or control of important factors</td>
<td>“I will probably never use H&amp;R Block again. This was handled poorly from the beginning by not being honest with clients up front. Shame on you, H&amp;R Block!”</td>
</tr>
<tr>
<td>Deliberation</td>
<td>Demonstrating that an organization intentionally created a situation</td>
<td>“H&amp;R Block dropped the ball on this one and made my visit to them a 2 for 1 (first and last). Not only that, but due to their refusal to do anything for the customers affected, I will be spreading the word to not go there. This is ridiculous.”</td>
</tr>
<tr>
<td>Undermining</td>
<td>Providing additional information to weaken the position of an organization</td>
<td>“You should have called your clients. You seriously could have avoided all this instead of trying to hide it by deleting all my posts. Face your wrongdoings.”</td>
</tr>
<tr>
<td>Maximization</td>
<td>Convincing the audience that the situation is more serious than it appears</td>
<td>“Used taxact.com (probably been at least 6 years that we’ve been using them), filed the first weekend of February, had my federal direct deposited in 10 days and state return was direct deposited by end of February.”</td>
</tr>
<tr>
<td>Attacking the accused</td>
<td>Questioning the credibility of the accused organization</td>
<td>“H&amp;R Block has had a number of scandals in recent years. People need to rethink who is preparing their taxes.”</td>
</tr>
</tbody>
</table>
**Data selection.** Two groups of data were available for analysis. First, H&R Block posted six statements—one on each of the following days: February 28, March 10, March 12, March 15, March 18, and March 22—that generated a total of 11,761 posts. The second group of data is Twitter posts from February 1 to April 15 and Facebook posts from the same dates, excluding comments made on the official H&R Block Facebook page. Excluding official outlets provides insights about how rhetorical strategies change based on comment location. These posts were sorted using ForSight by focusing on the following keywords: 8863, H&R Block, H&R, and HRB. This search generated 54,368 relevant posts, all of which were evaluated using the content analysis protocol previously described.

**National Transportation Safety Board Case Methodology**

The National Transportation Safety Board uses Twitter to communicate complex, constantly changing information about its investigations to the public. I hope to understand how statements posted by the NTSB on social media affected the way the public interpreted the actions of Asiana flight 214 pilots and passengers as well as those of U.S. investigators.

In the cases of Asiana flight 214, a number of errors appeared in content about both the rescue of passengers and agency employees. Following the antenarratives of the official investigation, the speculation about the causes of the crash, and a passenger’s death allows insights about how both the government and the public framed the situation on social media. These findings could provide guidelines about what information should be shared with the public immediately on social media and what information should not be shared on social media until more information is available to support claims.
Table 3.3 shows the largest categories of antenarratives present in the case of Asiana flight 214. This information was used to train ForSight in gathering Tweets and other social media posts that used similar antenarrative turns to make sense of the plane crash.

Table 3.3

National Transportation Safety Board Data Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claims of Racism</td>
<td>Any post that details the reporting of fake names or calls KTVU employees or the NTSB intern racist</td>
<td>“Fake Asiana Pilots names from KTVU News: I can't believe nobody caught this before it aired!”</td>
</tr>
<tr>
<td>Asiana’s Lawsuit</td>
<td>Any post that discusses Asiana’s plan to sue KTVU or the NTSB for the release of racist names</td>
<td>“Asiana pilot names: KTVU apologizes for racist prank, but lawsuit possible.”</td>
</tr>
<tr>
<td>Death by First Responders</td>
<td>Any post that provides proof or speculation that one of the victims of the crash died after being hit by a fire truck and not because of the crash</td>
<td>“Victim may have been hit by responder vehicle: One of two teenage girls killed in an Asiana jet crash.”</td>
</tr>
<tr>
<td>Insufficient Pilot Training</td>
<td>Any post that claims the pilot did not have enough training or that gave information about the number of hours he had flown a 737</td>
<td>“Pilot of doomed Asiana plane had 43 hours experience on 777.”</td>
</tr>
<tr>
<td>Pilot Error</td>
<td>Any post that argues that the pilot was responsible for the crash</td>
<td>“NTSB: They set speed at 137 knots and instructor pilot assumed auto throttles were maintaining speed.”</td>
</tr>
</tbody>
</table>

The NTSB categories were used to train the ForSight algorithm and to follow how the antenarratives clustered in social media content. Other categories were explored as the data was examined, but if multiple samples of a category could not be found, it was not classified as an antenarrative cluster.
**Data selection.** The investigation of the cause of the crash took a year to complete, but the majority of the Tweets—385,074 made by both the public and the NTSB—occurred in the first 20 days after the crash.

Posts were sorted using the following key terms: “NTSB,” “#Asiana214,” “Flight 214,” “Asiana,” and “SFO.” Additionally, because the NTSB was investigating other accidents during this time, the terms “Alaska” and “Southwest” were excluded from the data. The researcher limited the content to English-language posts for the sake of efficiency in processing the data. During the first 20 days of the investigation, 85,819 non-English posts about the crash were created. The languages represented in this data ranged from Arabic to Thai, which made accurately translating and categorizing these Tweets difficult.

I examined the posts analyzed by ForSight and each antenarrative by engaging both statistical and rhetorical data analysis techniques.

**Ebola Outbreak Case Methodology**

I examined the Ebola response to explore the narratives presented by the Centers for Disease Control and Prevention (CDC), the antenarratives developed by the general public in the United States, and the antenarratives developed by the general public of African countries affected by the Ebola virus: Guinea, Liberia, Mali, Nigeria, Senegal, and Sierra Leone. Each group presented specific information and developed antenarratives surrounding its views about Ebola, the possibility of contracting it, and the U.S. governmental or international response to the outbreak. Table 3.4 contains the dominant narratives that @CDCgov used in posting to Twitter. @CDCgov contains official information from the CDC as well as questions, comments, and information from members of the general public who referred to the CDC in their social media posts. The CDC used @CDCgov to combat
antenarratives presented by the general public and present official narratives regarding the
CDC’s work to contain the spread of Ebola.

Table 3.4

@CDCgov Content

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ebola Myths</td>
<td>Any post that uses @CDCgov and that presented myths about Ebola</td>
<td>“Once Ebola hits dry/cold winter air = airborne”</td>
</tr>
<tr>
<td>Counterarguments to Ebola Myths</td>
<td>Any post that uses @CDCgov and that countered myths about Ebola</td>
<td>“Ebola virus is spread through direct contact with the blood or body fluids.”</td>
</tr>
<tr>
<td>Updates regarding Ebola in the United States</td>
<td>Any post that uses @CDCgov to provide updates about the virus, patients, measures of containment, and other news about Ebola in the United States</td>
<td>“2nd health worker exhibited no #Ebola signs/symptoms on Frontier Airlines flight 1143 on 10/13, but passengers should contact 1-800-CDC-INFO”</td>
</tr>
<tr>
<td>Flu as a Threat</td>
<td>Any post that uses @CDCgov and that provided information about the dangers of the flu and showed how it was a greater threat than Ebola</td>
<td>“Flu and Ebola have some similar symptoms, but flu is common, and Ebola is rare.”</td>
</tr>
<tr>
<td>Claims of a CDC Conspiracy</td>
<td>Any post that uses @CDCgov and presented conspiracy information about the CDC and its involvement in creating the Ebola virus or that presented anti vaccination information</td>
<td>“This beautiful child was poisoned by the @CDCgov. Vaccinations destroy lives #CDCwhistleblower”</td>
</tr>
</tbody>
</table>

The CDC has used Twitter to communicate with the public about health related information since April 2009 when it used the platform to share details about swine flu (Vargas, 2009). Examining how the CDC used Twitter to communicate after the first case of Ebola was reported in the United States provides an excellent opportunity to compare the
narratives created by an organization (the CDC) with the antenarratives created by the general public and see whether these groups influenced each other’s social media content. Three sets of data were examined to determine how different groups created narratives or antenarratives about the spread of Ebola both in the United States and in West Africa. Some the antenarratives overlapped, but each group had unique antenarratives, too.

**Data selection.** During the month that followed the announcement of the first case of Ebola in the United States, the CDC posted 519 Tweets. Of those, 511 included the word *Ebola*. (A full list of the CDC posts is available in Appendix B.) During this time, the number of people following @CDCgov grew from 368,598 to 427,658, a 16% increase. Total possible impressions of the CDC Tweets posted that month—which is calculated by adding the sender’s followers and the followers of all users who retweeted the original post—was 363,501,439. (Additional data about the CDC Twitter handle is available in Appendix C.) Understanding the CDC’s narratives and how people who engaged with the Twitter handle to create making sense of the Ebola outbreak.

Examining the content of @CDCgov and the ways both the CDC and the general public presented information about Ebola examines just a single facet of the social media conversation. The Ebola content generated by the United States public should be analyzed to provide a clear picture of the Ebola conversation on social media. It is also important to compare this content to that generated under the CDC Twitter handle, @CDCgov, to understand whether the organization’s attempts to deescalate panic about Ebola in the United States worked.

Table 3.5 contains the major antenarrative categories created by the general public in the United States for the month after the first case of Ebola was reported in the U.S.
ForSight was used to constrain the data to posts generated in English in the United States.

Some of the antenarratives reimagine the origins of the Ebola virus, others view the outbreak with a political lens, others blame the government and create conspiracy theories, and others attempt to make sense of why and how the Ebola virus was able to make it to the United States.

Table 3.5

United States General-Public Tweets

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flu as the Danger in the United States</td>
<td>Any post that shows the flu to be more of a threat to the United States than Ebola</td>
<td>“The flu (an assortment of viruses that circles the globe on an annual basis) is waaaay more contagious than ebola”</td>
</tr>
<tr>
<td>Demand quarantines and travel bans</td>
<td>Any post that demands that the United States close its borders, stop people from flying to West Africa, place all travelers from Africa under quarantine, or make similar considerations</td>
<td>“But this is still not enough. We need to BAN these flights, or at least quarantine EVERY one of the passengers, not just those who ADMIT to contact with an Ebola patient.”</td>
</tr>
<tr>
<td>Myths and counterarguments to myths</td>
<td>Any post that presents either a myth or a counterargument to a myth about Ebola origins and transmission</td>
<td>“insanity . . . let me say this slowly . . . ebola is almost as easy to transmit and exactly the same way as the common cold and flu . . . whether either or both are AIRBORNE or not.”</td>
</tr>
<tr>
<td>Politicalizing the Ebola Outbreak</td>
<td>Posts by political figures or their operatives that attempt to use Ebola panic and fear to push a political agenda</td>
<td>“MARCO RUBIO INTRODUCES EBOLA TRAVEL BAN. Take any and all necessary precautions to contain this virus.”</td>
</tr>
</tbody>
</table>

Data selection. The data for this section was gathered from content generated within a month of the announcement of the first confirmed human case of Ebola in the United States. During this time, U.S. Twitter users generated 10,895,432 Tweets. In addition
to the antenarratives developed by Tweets, rhetorical context about the cases is provided to readers using papers of record of the United States. The final set of data analyzed was Tweets generated in countries affected by the Ebola outbreak. Table 3.6 shows the most prevalent antenarratives in data from West Africa. This table also provides a sample of the data used to train ForSight. ForSight was also used to examine data posted from West African countries with cases of Ebola.

Table 3.6

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>News about Ebola Outbreaks around the World</td>
<td>Any post that discusses or links to news about Ebola outbreaks in Africa, Europe, or the United States</td>
<td>“Doctor tested for Ebola in NY: A Doctors Without Borders physician who recently returned from West Africa”</td>
</tr>
<tr>
<td>Pleas for Help in Containing Ebola</td>
<td>Posts that calls for additional funds to help fight or contain Ebola</td>
<td>“IMF Approves U.S. $130 Million Immediate Ebola Response Assistance to Guinea, Liberia, Sierra Leone”</td>
</tr>
<tr>
<td>Fear and Anxiety about Ebola</td>
<td>Any post that showcases fear or anxiety about Ebola, including discussions about the people killed by, people scared about, and events canceled because of the spread of the disease</td>
<td>“RT! Fwd: Host nation Morocco wants Africa Nations Cup 2015 postponed because of Ebola”</td>
</tr>
<tr>
<td>Hoaxes and Rumors during the Ebola Outbreak</td>
<td>Any post that contains rumors of celebrities infected with Ebola, remedies and cures for it, or other false information</td>
<td>“Breaking: Ghanaian football star Michael Essien contracts Ebola”</td>
</tr>
</tbody>
</table>

**Data selection.** People in Guinea, Liberia, Mali, Nigeria, Senegal, and Sierra Leone generated 393,276 posts during the first month of the outbreak in the United States. While West African countries had dealt with Ebola for several months before the first case in the
United States, examining the posts made during the outbreak in the United States is critical to determine whether similar antenarratives occurred in all countries affected by Ebola.

**#BlackLivesMatter Case Methodology**

Black Lives Matter allows insight into the development of antenarratives over the course of several high profile, race-related cases in the United States. Understanding how a group with specific goals influenced social media conversations is critical to understanding whether creating a consistent, coherent argument among diverse users is possible. In developing possible antenarratives to explore in the Black Lives Matter data, I used five social themes outlined by the movement’s founders: criminalizing racial profiling, ending widespread incarceration of black people, stopping police brutality, ending the militarization of police, and including disabled, gay, lesbian, and transgender people in the Black Lives Matter movement. I used each of these themes as categories to examine each of the cases included in the Black Lives Matter chapter.

**Trayvon Martin Case.** The categories used in training ForSight in the case of Trayvon Martin are detailed in Table 3.7. Martin, a 17-year-old African American was shot and killed on February 26, 2012, in Sanford, Florida, by George Zimmerman, a Neighborhood Watch volunteer. Martin’s death occurred before Black Lives Matter officially began; the movement’s founders said that Zimmerman’s trial inspired them to organize it (Craven, 2015). While the majority of events in the Martin case occurred before Black Lives Matter existed, some of the social media rhetoric and antenarratives about Martin’s death can be found in the Black Lives Matter themes.
Table 3.7

*Tweets Following the Death of Trayvon Martin*

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racial Profiling</td>
<td>Any post that suggests the use or consequences of racial profiling in the death of Trayvon Martin</td>
<td>“If you don’t think racial profiling can have fatal consequences, I give you two words: #TrayvonMartin”</td>
</tr>
<tr>
<td>Widespread Incarceration</td>
<td>Any post that discusses or presents data about the mass incarceration of black people</td>
<td>“1 in 9 black children have an incarcerated parent. #blacklivesmatter”</td>
</tr>
<tr>
<td>Police Brutality</td>
<td>Any post that discusses the use of racially motivated brutality by law enforcement officials</td>
<td>“Does @Oprah still believe the Trayvon situation resembles the police brutality and racism experienced by young Emmett Till?”</td>
</tr>
<tr>
<td>Militarized Police</td>
<td>Any post that claims or shows evidence of police officers using military equipment or tactics to counter protesters</td>
<td>Not present in the case of Trayvon Martin</td>
</tr>
<tr>
<td>All Black Lives Mattering</td>
<td>Any post that demands respect for all black lives, including those with disabilities, women, or members of the LGBTQ community</td>
<td>Not present in the case of Trayvon Martin</td>
</tr>
<tr>
<td>Protests in the Martin Case</td>
<td>Any post that discusses or invites people to attend a protest for Trayvon Martin or Black Lives Matter</td>
<td>“come visit us tomorrow for a great protest march in harlem to call for justice for #Trayvon 207 w 133rd st in Harlem USA”</td>
</tr>
</tbody>
</table>

**Data selection.** This case relies on Twitter data generated between February 27, 2012, (the day after the death of Martin) and August 1, 2013 (two weeks after the conclusion of the Zimmerman trial). The data was analyzed by clusters, and the most significant and most typical posts were used to present the context and antenarrative of the death of Martin.
**Michael Brown Case.** Table 3.8 shows the categories used to train ForSight in examining the Michael Brown data. Michael Brown, an unarmed, black 18-year-old from Ferguson, Missouri, was shot and killed by Darren Wilson, a white police officer.

Table 3.8

*Tweets Following the Death of Michael Brown*

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racial Profiling</td>
<td>Any post that suggests the use or consequences of racial profiling in the death of Michael Brown</td>
<td>“Racial profiling exist and if you don’t think so then you are in serious denial. #MikeBrown #TamirRice #BlackLivesMatter”</td>
</tr>
<tr>
<td>Widespread Incarceration</td>
<td>Any post that discusses or presents data about the mass incarceration of black people</td>
<td>“Mandatory minimums must be repealed immediately and mass incarceration must be dismantled.’ @freemarissanow #BlackLivesMatter”</td>
</tr>
<tr>
<td>Police Brutality</td>
<td>Any post that discusses the use of racially motivated brutality by law enforcement officials</td>
<td>“Sick of claims of diff “opinions” in this “debate.” Police brutality that goes unpunished &amp; racist violence AREN’T DEBATES #BlackLivesMatter”</td>
</tr>
<tr>
<td>Militarized Police</td>
<td>Any post that claims or shows evidence of police officers using military equipment or tactics to counter protesters</td>
<td>“Stories from visiting Ferguson: intense harassment &amp; militarized police. #BlackLivesMatter @thefortunesoc”</td>
</tr>
<tr>
<td>All Black Lives Mattering</td>
<td>Any post that demands respect for all black lives, including those with disabilities, women, or members of the LGBTQ community</td>
<td>“Today remembering some of MANY Black lives taken unjustly by police/security. A name. A face. A <em>human being</em> every 15min #BlackLivesMatter”</td>
</tr>
<tr>
<td>Protests in the Michael Brown Case</td>
<td>Any post that discusses or invites people to attend a protest for Brown or Black Lives Matter</td>
<td>“Next #BlackLivesMatter action is tomorrow for a #GlobalShutDown #InternationalHumanRightsDay”</td>
</tr>
</tbody>
</table>

*Data selection.* This case relies on Twitter data generated between August 10, 2014, (the day after the death of Brown) and December 28, 2014 (after the last major protests in
As with the Martin data, this data was analyzed by clusters, and the most significant and most typical posts were used to present the contexts and antenarratives of Brown’s death.

**Freddie Gray Case.** Freddie Gray, a black Baltimore resident, was arrested April 12, 2015, for possessing a knife. In the 45 minutes between Gray’s arrest and being removed from the police van at a police station, he sustained fatal injuries to his spinal column. Table 3.9 examines the antenarratives of Freddie Gray’s death. This case had sufficient data to train ForSight in examining all of Black Lives Matter themes.

Table 3.9

**Tweets Following the Death of Freddie Gray**

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racial Profiling</td>
<td>Any post that suggests the use or consequences of racial profiling in the death of Freddie Gray</td>
<td>“#Baltimore Anti Profiling: #BaltimoreRiots #BaltimoreUprising #FreddieGray #BlackLivesMatter”</td>
</tr>
<tr>
<td>Widespread Incarceration</td>
<td>Any post that discusses or presents data about the mass incarceration of black people</td>
<td>“Militarized police fractures NYC protests, we respond by marching on. #blacklivesmatter #BaltimoreRising #uprising”</td>
</tr>
<tr>
<td>Police Brutality</td>
<td>Any post that discusses the use of racially motivated brutality by law enforcement officials</td>
<td>“Two States of Emergency in Baltimore-the city’s rogue police officers must be held to account. “Stories from visiting Ferguson: intense harassment &amp; militarized police. #BlackLivesMatter @thefortunesoc”</td>
</tr>
<tr>
<td>Militarized Police</td>
<td>Any post that claims or shows evidence of police officers using military equipment or tactics to counter protesters</td>
<td>“I just heard about #MyaHall for the first time... a black trans woman killed by police in Baltimore on March 30th.</td>
</tr>
<tr>
<td>All Black Lives Mattering</td>
<td>Any post that demands respect for all black lives, including those with disabilities, women, or members of the LGBTQ community</td>
<td>“OccupyWallStNYC All night and all day we will fight for #FreddieGray #nyc2baltimore”</td>
</tr>
</tbody>
</table>
**Data selection.** This case relies on Twitter data generated between April 12, 2015, (the day Gray was arrested) and May 6, 2015 (the day the National Guard was ordered to leave Baltimore).

**Sandra Bland Case.** Sandra Bland, a Chicago resident, was in Waller County, Texas, for a job interview on July 10, 2015, when a police officer pulled her over for failing to signal a lane change. Three days later, on July 13, 2015, she was found dead inside her jail cell.

Table 3.10 presents the categories and examples used to train ForSight to gather case data.

**Table 3.10**

**Tweets Following the Death of Sandra Bland**

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racial Profiling</td>
<td>Any post that suggests the use or consequences of racial profiling in the death of Bland</td>
<td>“Yet people still think racial profiling is a myth. #blacklivesmatter #SandraBland #SayHerName #P2P</td>
</tr>
<tr>
<td>Widespread Incarceration</td>
<td>Any post that discusses or presents data about the mass incarceration of black people</td>
<td>“The weapons of modern white supremacy are mass incarceration, mass hysteria, and mass hypnosis.</td>
</tr>
<tr>
<td>Police Brutality</td>
<td>Any post that discusses racially motivated brutality by law enforcement officials</td>
<td>“@Blklivesmatter @BLM_TO @osope-SECOND 10-POLICE-BRUILITY SANDRA BLAND-ERIC GARDEN &amp; VICTIMS RACIST-I CAN’T BREATHE”</td>
</tr>
<tr>
<td>Militarized Police</td>
<td>Any post that claims or shows evidence of police officers using military equipment or tactics to counter protesters</td>
<td>“@BernieSanders We must move away from the militarization of police forces and we must invest in community policing. @deray #BlackLivesMatter”</td>
</tr>
<tr>
<td>All Black Lives Mattering</td>
<td>Any post that demands respect for all black lives, including those with disabilities, women, or members of the LGBTQ community</td>
<td>“If you believe that #BlackLivesMatter then you must love and protect Black Trans Women. #SayHerName #TenTooMany”</td>
</tr>
<tr>
<td>Protests in the Bland Case</td>
<td>Any post that discusses or invites people to attend a protest for Bland or Black Lives Matter</td>
<td>“We will continue to March for justice! #BlackLivesMatter #SamDubose 6:30 rally @ Hamilton county courthouse!”</td>
</tr>
</tbody>
</table>
Data selection. This case relies on Twitter data generated between July 13, 2015, (the day of Bland’s death) and July 31, 2015 (one week after the Texas Safety Board released its first report). Twitter data was collected using the following keywords: BlackBiLivesMatter, BlackBoysMatter, BlackDifferentlyAbledLives, BlackGayLivesMatter, BlackGirlsMatter, BlackImmigrantsMatter, BlackIncarceratedLivesMatter, BlackLesbiansMatter, BlackLivesMatter, BlackMenMatter, BlackQueerLivesMatter, BlackTransLivesMatter, BlackWomenMatter, Bland, Sandra, and Sandra Bland. This data was analyzed just as data in previous parts of the Black Lives Matter case study.

Data Processing and Analysis

Each case study will include the rhetorical situation, themes, and context of the antenarrative. The rhetorical situation is critical in determining the context of the event, the major elements of the crisis, and the ways audiences responded to the event. Providing the rhetorical situation also allows readers to understand how previous events influenced social media users in the creation of antenarratives as they made sense of crises. Each chapter presents the most significant antenarratives of the social media content.

Chapters also include a brief section about how the data was selected, justification for the time frames examined, and specific details about the largest clusters of data in each analyzed area.
The H&R Block case is relatively small both in the number of people affected and the number of social media posts. However, H&R Block presents several unique elements for examination in its response to a crisis situation. First, the situation was announced completely on the company’s social media; H&R Block did not directly contact affected clients. Second, the CEO directly posted to the Facebook page to provide updates about the situation and eventually apologize to clients. Finally, Facebook allowed people to comment on the official statements of the company. Frequently these comments questioned the official statements, offered alternative explanations, and challenged the official corporate statements.

**Rhetorical Situation**

H&R Block, with 11,000 retail locations and a massive online operation, is one of the largest tax-preparation companies in the United States. It serves approximately 25 million customers annually as well as builds and provides tax-preparation software to accountants and others (Hoover’s, 2013). H&R Block’s marketing and advertising claim that no matter how difficult the tax situation, the professionals at H&R Block will provide quality service that delivers results (Postaer, 2013).

In 2000, the company temporarily suspended its online services after users received sections of other customers’ returns and records (Gallagher, 2000). By 2005, H&R Block was feeling the pinch of competitors’ online tax-preparation software, which pulled once-
loyal customers away from H&R Block. In 2006, the Securities and Exchange Commission investigated the company because H&R Block had failed to appropriately file its own corporate taxes (Norris, 2006). H&R Block sold its loan-origination and mortgage-servicing business in 2008 (Kardos, 2008). By leaving this business, H&R Block removed unprofitable divisions from its books and avoided increased government oversight. Government regulation also affected the organization during this time. New federal policies went into effect for the 2010 tax season, requiring tax firms to have individual preparers pay a registration fee to the IRS, pass a test, and have at least 15 hours of tax or financial education each year (Vaughan & Pilon, 2010).

The 2013 tax season involved H&R Block’s largest filing problems to date. Nearly 600,000 of its customers faced lengthy tax-return delays due to a filing error for those completing the 8863-higher education tax credit.

During this crisis, H&R Block used Facebook as its sole means of communicating with both its clients and with its regional and district offices. H&R Block customers began posting angry comments to the H&R Block Facebook page demanding refunds and pledging to never return to the company (Lopez, 2013). H&R Block’s only communication with customers was via social media, not traditional forms of communication like mail, telephone, or email.

This chapter examines how the public used social media to create antenarratives involving the H&R Block tax-refund delays. The chapter will examine how surrogates and agitators or extra-institutional actors used social media to defend, question, or condemn the way H&R Block handled the crisis. H&R Block used its Facebook page as its only method of communicating with affected clients. The antenarratives will be divided into two groups:
those made on H&R Block’s official Facebook page and comments made on social media not connected to official H&R Block outlets.

**Uses of Surrogates in Crisis Communication**

The advent of social media allows users to offer support to causes, provide clarification, and state opinions in public ways. These usages create a situation where individual users become surrogates or supporters of brands, organizations, or causes. Surrogates have long been used in political communication, especially during the busiest times of the campaign season, when candidates have numerous speaking engagements and need to connect with a variety of audiences (Kessler, 1981). During a political campaign, a candidate has the ability to select his or her own surrogate and to help the surrogate craft specific messages needed for the overall success of the campaign. However, social media allows any individual with any agenda to become a surrogate or agitator for or against an individual, organization, or cause.

Social media has changed the relationship between surrogates and the group they are supporting. Unlike political surrogates, social media surrogates are unofficial, extra-institutional spokespersons who will relate their individual versions of the truth. Surrogates under their own volition can use social media to bolster their standing during a crisis by offering credibility, to increase (or decrease) the amount of attention given to the crisis, or to offer statements or evidence that would not make it past the gatekeepers of traditional media. As more people decide to become surrogates and the volume of posts increases, these effects are amplified. Surrogates can support a company; they can also offer information that will damage an organization even more than a crisis did. Agitators or
gadflies are individuals who use social media to post about previous wrongdoings, negative experiences, and other damaging information that magnifies negative scrutiny about an organization. Before social media, surrogates and agitators used communication formats that had limited reach, such as letters to the editor, conversations with individuals, or public forums. Now, with social media, an individual’s post has the potential to be seen by millions of people. This communication can quickly overtake a social media channel, changing the way the public perceives an organization.

Previous crisis response protocols ignore surrogates’ and agitators’ communication and place the burden of image repair on traditional media outlets. Surrogates’ and agitators’ communication can reveal individual or group views that may be underrepresented in traditional news outlets but that have been given voice via social media.

**Surrogate and Agitator Crisis Communication Categories**

Surrogates have countless options for how to respond to a crisis situation; however, individual posts can be categorized into groups with shared rhetorical devices or approaches. A surrogate can communicate about a crisis situation using any of three major approaches:

- Offering excuses about the act or reasons it occurred
- Reframing the conversation about how the company or crisis is viewed
- Attacking the people who make claims against the organization

Table 4.1 displays the categories, definitions, and examples of how surrogates engage in defending an organization, person, or cause during a crisis. If it is possible for a surrogate to defend an organization, person, or cause, an agitator is one who attacks or destroys an organization, person, or rhetorical cause via social media in three major approaches:
• Offering additional evidence that would damage or place additional blame on the organization, person, or cause

• Increasing the responsibility of the organization, person, or cause, or making the crisis seem more severe

• Attacking the organization

Table 4.1

Surrogate Image Repair Strategies

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accident</td>
<td>Any post that contains an excuse for factors beyond their control.</td>
<td>H&amp;R Block is not to blame. This situation happened because the government could not set tax rules before November of last year.</td>
</tr>
<tr>
<td>Attacking the Accuser</td>
<td>Any post that questions the credibility of the source of the accusations.</td>
<td>I work for H&amp;R Block, and you have no idea what you are talking about. We are working very hard to fix this situation ASAP.</td>
</tr>
<tr>
<td>Bolstering</td>
<td>Any post that strengthening the audience’s positive idea of the company. This may include a reminder of previous good acts or good reputation.</td>
<td>While not having your return as soon as promised is painful, H&amp;R Block has saved me several thousand dollars in the past. It has also helped me with an audit.</td>
</tr>
<tr>
<td>Defeasibility</td>
<td>Any post that presents an argument that the organization lacked knowledge or control about important factors.</td>
<td>I don’t believe it is an H&amp;R Block problem. I did my taxes with another program, and I am still waiting.</td>
</tr>
<tr>
<td>Minimization</td>
<td>Any post that attempts to convince the audience the action is less serious than it appears.</td>
<td>This kind of thing happens all of the time, and it will be resolved quickly.</td>
</tr>
<tr>
<td>Scapegoating</td>
<td>Any post that argues the act was committed in response to another wrongful act.</td>
<td>The IRS is to blame for the problems. It did not provide H&amp;R Block with the correct forms before the end of the year.</td>
</tr>
</tbody>
</table>

While much research has been conducted on the image repair, less research has been conducted on the rhetoric of attacks or kategorias. The term kategoria was outlined by Ryan
(1982), who explains it as speech sets where rhetors attack an individual or organization. Pfau and Kenski (1990) extended these speech sets into three major categories: attacking, counterattacking, and preventing attack. Benoit and his colleagues extended this early work in kategoria, Benoit and Wells (1996) researched the persuasive attack of the 1992 presidential debates with Bush, Clinton, and Perot. Benoit and Harthcock (1999) developed six strategies for increasing the offensiveness of an act: 1) emphasize the damage of the act to the audience, 2) show the negative effects of the act to the audience, 3) highlight the effects on the victims for the audience, 4) place blame of the situation on the offender to the audience, 5) emphasize the helplessness or innocence of victims to the audience, 6) make protection of the victims critical to the audience. In addition to these strategies, Benoit and Harthcock (1999) also outlined several for increasing the responsibility of the actor: “1) arguing that the accused committed this act previously, 2) showing that the accused planned the act, 3) suggesting that the perpetrator knew the likely consequences of his or her actions, and 4) claiming that the accused benefited from the act. These elements are also important in developing effective rhetorical attacks and arguments against an individual or organization” (p. 68-69). While previous research has examined how to develop rhetorical attacks, research has not explored the rhetorical moves and patterns used in online forums to attack individuals or organizations. Table 4.2 includes categories, definitions, and examples of how an agitator engages in destroying or damaging an organization, person, or cause during a crisis. Surrogates or agitators can post genuine information or comments, or they can post hearsay, lies, or personal vendettas. By its very nature, social media doesn’t have a gatekeeper or filter; it equalizes the content of anyone who posts information. This environment is perfect for the creation of antenarratives. The unfiltered nature of social media allows users
to create narrative fragments, make sense of the situation, or speculate about the events surrounding the crisis.

Table 4.2

*Agitator Kategoria Strategies*

<table>
<thead>
<tr>
<th>Category</th>
<th>Category Origin</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attacking the Accused</td>
<td>Benoit and Harthcock, 1999</td>
<td>Any post that questions the credibility of the organization or accused.</td>
<td><em>H&amp;R Block has had a number of scandals in recent years. People need to rethink who is preparing their taxes. I understand that accidents happen, but where is the social responsibility that should be taking place?</em></td>
</tr>
<tr>
<td>Blame</td>
<td>Benoit, 2014</td>
<td>Any post that assigns responsibility for a fault or wrong.</td>
<td><em>This was handled poorly from the beginning by not being honest with clients up front. Shame on you, H&amp;R Block!</em></td>
</tr>
<tr>
<td>Responsibility</td>
<td>Benoit, 2014</td>
<td>Any post that argues the organization had knowledge or control of important factors.</td>
<td><em>H&amp;R Block dropped the ball on this one and made my visit to them a two-for-one. Not only that, but due to their refusal to do anything for the customers affected.</em></td>
</tr>
<tr>
<td>Deliberation</td>
<td>Opposite of Benoit (2014)</td>
<td>Any post that argues the organization intentionally created the situation.</td>
<td><em>Used taxact.com (probably been at least six years that we’ve been using them), filed the first weekend of February, had my federal direct deposited in 10 days, and state return was direct-deposited by end of February.</em></td>
</tr>
<tr>
<td>Maximization</td>
<td>Opposite of Benoit (2014)</td>
<td>Any post that convinces the audience that the situation is more serious than it appears.</td>
<td><em>You should have called your clients. You seriously could have avoided all this instead of trying to hide it by deleting all my posts. Face your wrongdoing.</em></td>
</tr>
<tr>
<td>Undermining</td>
<td>Opposite of Benoit (2014)</td>
<td>Any post that provides additional insight or information to weaken the position of the organization.</td>
<td><em>You should have called your clients. You seriously could have avoided all this instead of trying to hide it by deleting all my posts. Face your wrongdoing.</em></td>
</tr>
</tbody>
</table>
Surrogates’ motivations come from a reservoir of goodwill the organization has built with clients and customers over time. The larger this reservoir, the greater the number of people who might post on social media during a crisis event. While Fink (1986, 2013) discussed the reservoir of goodwill, the converse must also exist. As companies and organization fail to care for clients, address concerns, or treat people fairly, they create a reservoir of badwill. Badwill in business situations frequently refers to a situation where a company has violated good business practices. Companies like Enron, Tyco, and WorldCom are all examples of companies guilty of badwill. In terms of crisis communication planning, badwill is an offense or prospective offense that turns customers against the organization. These offenses could include manipulating software to give false vehicle emission readings, violating safety standards and risking lives, or mistreating customers.

This reservoir of badwill can also flow into social media platforms and take a toll on an organization during a crisis. For example, during the H&R Block crisis, users were quick to point out previous errors and issues with H&R Block. In the majority of examples for H&R Block, users posted about how their tax returns were incorrectly filed by H&R Block, about their experience being audited and making repayments to the IRS because of issues, and about previous software mistakes created by H&R Block. As social media users posted comments defending H&R Block, users affected by the reservoir of badwill quickly posted their own horror stories about using H&R Block’s tax services.

Data Analysis

In examining the data and comparing the conversations regarding the refund delays connected to the 8863-form, I found that the strategies used on H&R Block’s Facebook
page are quite different from strategies surrogates used outside of H&R Block’s official Facebook page. The content of the official Facebook page is much more focused than the other content, as the page was the only outlet H&R Block customers had to find information from the company about the issues with the 8863-form. Not all of the content of the page fit into the surrogate categories; some of the posters asked specific questions, some ranted, and some users’ comments did not make sense. Of the sample, 2,253 posts—or 48.5%—fall into this group.

The surrogate strategies that posters used outside of H&R Block’s official Facebook page conversation were much more fractured than the content of the H&R Block Facebook page. However, there was a clear trend in the approach used in these venues. While 29,752—or 57.4%—were off topic, posters included individual questions about their own tax preparation process, comments of anger and rage against H&R Block and the IRS, comments that didn’t make sense, and questions about where to find an H&R Block office or if friends could recommend a tax preparer. The research will include comments made by Facebook users; these comments have not been edited or altered in any way. Many of the comments have significant grammatical and structural issues that will not be edited or called out using *sic*.

**Surrogate Image Repair Strategies**

Few users engaged in image repair rhetoric; those who did often posted in response to other angry users. Of the sample, only 389 posts attempted to repair the image of H&R Block. Understanding the rhetoric employed by this group will provide understanding of how they attempted to influence the debate and conversation about H&R Block. Table 4.3
provides a complete breakdown of the results of the strategies used by surrogates to repair the image of H&R Block on the organization’s official page.

Table 4.3

*Image Repair Usage on H&R Block’s Official Facebook Page*

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scapegoating</td>
<td>126</td>
<td>32.3%</td>
</tr>
<tr>
<td>Bolstering</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>Defeasibility</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Accident</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>Minimization</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Attacking the Accuser</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

Surrogate image repair of H&R Block accounted for a small number of posts; however, all of the image repair posts fit within these six categories. The surrogates’ strategies evolved as the company made statements in an attempt to repair its image. H&R Block’s statements closed some rhetorical possibilities for surrogates, forcing surrogates to either change their rhetorical approach or abandon their surrogacy for the company.

**Scapegoating**

Scapegoating, or blaming the situation on an outside factor or other wrongful act, was the most common approach used; 126 posts—32.3 percent of the comments on H&R Block’s Facebook page were made using a scapegoating approach. These posts focused on issues with the IRS and the federal government as well as on other external factors that impacted H&R Block’s ability to offer an effective product. For example, users like Michelle
Perez posted comments that counter one of the largest complaints about H&R Block’s response—that H&R Block did not effectively or appropriately notify clients about the return delays:

Thanks for posting this. I filed Jan 26 and was held until the 14 for ed credit. And H&R Block did notify us by email as soon as they found out from the IRS about the delay. It still sucks that some of us are still waiting while others already have their DDD or refund, but I do believe that HRB has done everything possible to take care of the issue and this is a problem with the IRS not HRB. (Perez, 2013)

In her comment, Perez shows that the company had communicated with her and acted appropriately during the crisis. The other major scapegoat was the IRS, and a number of users blamed the government for the lack of—or slowness in—receiving tax returns:

The IRS is the reason for 8863 educ credit delay. I have used H R Block for 15+ years. You have to ask questions people. Go to IRS website and be knowledgeable about your options. My HR Block preparer always tells reasons for delays. The educ credit was not even going to be accepted until late Feb/early March. So IRS accepting 2/14 was earlier than predicted. Love H&R Block. . .peace of mind. (Davina, 2013)

Those who used the IRS as a scapegoat simply said that H&R Block could not do anything about governmental failures. Over time, the posts included more reasons that the IRS was to blame for H&R Block’s problems. A prime example is Ymari Ramos’ (2013) post on March 10, which included a high level of detail:

Just came from the H & R Block office. The tax pro there pointed out that the IRS gets the software for tax processing ready in August. However, when Congress kicked the fiscal cliff can down the road in December, Congress also made changes to the educacation tax credits that required changes to the tax processing software. Does anyone really expect Congress to own this problem. Still, H & R Block and the IRS could have gotten the information out a lot sooner than they did.

Besides simply telling the Facebook audience that the IRS was to blame, these users focused on how the IRS was to blame. They frequently cited the fact that the IRS is responsible for providing tax preparers with information so they can effectively build
software. They also said that the government’s slow process of resolving financial issues delayed the IRS’s ability to provide refunds for the education tax credit. These types of arguments felt more logical to many readers than did statements that simply blamed the IRS for H&R Block’s problems. Blaming the IRS continued for the remainder of the crisis, but these scapegoating claims were questioned, and Facebook users asked why other tax preparers did not face similar problems or why some people had already received their returns.

This rhetorical line of defense taken by surrogates became less effective when Bill Cobb, CEO of H&R Block, posted to Facebook. In his post, Cobb said, “We made a mistake when the tax return [the 2013 tax season] was sent to the IRS. And you deserve an apology . . . I want to make it clear that this was absolutely not the fault of your tax professional; your return was prepared accurately. This was an issue with the form transmission. This was our mistake – and I sincerely apologize” (Cobb, 2013). Once the company took blame, Facebook users stopped using scapegoating to defend the company. The company removed all of the other outlets for placing blame; Cobb’s statement made it impossible to make a scapegoating claim effectively against another group.

Bolstering

Bolstering is adding positive information to improve the way an audience perceives a situation. In the case of H&R Block, users attempted to show their satisfaction with the products and services the company offered; sixty-nine—17.7%—of the statements engaged in bolstering H&R Block’s image during the crisis. Two major approaches of bolstering occurred:
• First, users claimed that there was not a real problem but that a minority of clients attempted to make a crisis.

• Second, users posted about the excellent service H&R Block offered.

Sweetlady Strongheart (2013) used the strategy of bolstering by claiming that the crisis was not really a crisis, but just a few people with isolated bad experiences:

If was TRULY and H and R Block problem do you people really think that H and R Block would of given you great service for the last ten years or so? You people makes no sense at all.

Some users claimed H&R Block had provided excellent customer service in the past; these people said that it would not make sense for the company to stop providing excellent service. For the most part, users who engaged in this type of bolstering questioned the logic of those who blamed H&R Block for the situation. Citing previous positive experiences with the company was one way that individuals bolstered the company. Others discussed a specific individual who had helped them feel better about the situation or assisted them during this “difficult” process. Crystal Browning (2013) bolstered H&R Block using this strategy:

I have to say my preparer Tom is awesome. He just called and updated me on information and I didn’t even ask or call him, plus he is going to call me back Wednesday with any new updates. He clarified a lot of things for me and I’m glad he put my mind at ease. One less angry customer since my preparer was nice enough to reach out and explain this for me even when I feel the company as a whole dropped the ball. He has confirmed that most likely if I haven’t gotten my letter I won’t, and the IRS has informed them they have began processing those returns affected today. I will wait and see if I get a letter but also take his word since he read me the update sent to him from the IRS.

Some users, like Browning, attempted to single out an individual who provided excellent service. A number of others examined the character and actions of the CEO after his statement assuming blame for the situation. These people walked a careful line between
being upset about the situation and acknowledging the quality of leadership. Most were unhappy with their current tax situation but happy with how the company was being run.

Ralph Boze (2013) was one of these users:

I have to say I respect a man that stands up and says they made a mistake. In today’s world that that is very rare due to the fear they will get sued or lose business. I have been impacted by this issue just like everyone else. My refund was sent in 1/28/13 and I finally got a DD of 3/18. Even though I feel that an apology is not enough, I would like to see a refund of some of my fees. I will still do business with Block again next year. The people they have truly make the difference. The corporate stuff will get fixed since they know they had issues, they typically will not repeat them. Thanks Bill.

While bolstering only accounted for 17.7% of the total image-building posts, each of these posters commented on someone who had had a negative experience with or remark about H&R Block. These users offered evidence that supported the company and the way it had handled the situation.

Users who posted to the H&R Block page had very specific claims for the arguments they presented. This level of detail changed among users outside of H&R Block’s official Facebook page. Posters’ comments typically had a single idea present but did not always include a high level of detail. For example, many of these users would post things like, “The IRS is to blame for the situation,” or “Congress is to blame because they could not agree.” Some users provided details to support their claims, but even these details were simple and to the point.

In Table 4.4, the surrogate image repair methods used on Facebook and Twitter outside of H&R Block’s official Facebook page are presented. Accident was by far the largest approach used by surrogates, followed by defeasibility, bolstering, scapegoating, attacking the accuser, and minimization.
Table 4.4

*Image Repair Usage Outside of H&R Block’s Official Facebook Page*

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accident</td>
<td>4,775</td>
</tr>
<tr>
<td>Defeasibility</td>
<td>1,088</td>
</tr>
<tr>
<td>Bolstering</td>
<td>1,075</td>
</tr>
<tr>
<td>Scapegoating</td>
<td>548</td>
</tr>
<tr>
<td>Attacking the Accuser</td>
<td>531</td>
</tr>
<tr>
<td>Minimization</td>
<td>432</td>
</tr>
</tbody>
</table>

**Accident**

Accident rhetoric occurs by assigning blame for a situation to something outside the control of the organization. Posters outside of H&R Block's official Facebook page used accident to create alternative explanations of the problem. One of the most constant defenses was claiming that the situation was an accident; 4,775 posts—56.5% of positive comments—claimed the situation was an accident and said that no one could be held responsible. Luis Olano (2013) blamed the government:

IRS issues: I have honest friends doing taxes at H&R Block. But, unfortunately there are some that wants easy money from uncle Sam.

Users presented a number of reasons the situation was beyond the control of any one person or organization. Most attempted to show balance between the negative comments against H&R Block and similar stories about other companies and tax preparers. Beyond simply suggesting that all companies make mistakes, users also expressed confidence that H&R Block would repair the situation and learn from its mistakes. Char Karma QB (2013) wanted people to see that H&R Block was also a victim:

The IRS has confirmed an issue related to certain education tax credits claimed on Form 8863, which has affected and delayed several tax returns. We sincerely regret
this inconvenience and want to assure you that we are doing everything possible to work with the IRS and to resolve this issue quickly.

Attempting to show that the company was doing everything it could to fix the problem was a major element of the accident rhetoric. The users who attempted to defend H&R Block using the accident tactic all showed other parties who might have been blamed for the situation. Most frequently, users cited issues with the federal government and Congress in approving the tax code for the 2013 tax season. As the crisis continued, an increasing number of users cited accident as the reason for the problems.

**Defeasibility**

Defeasibility, or the lack of specific knowledge to be responsible for the situation, accounted for 1,088 posts or 12.8% of comments. However, the majority of these comments occurred early in the crisis. Once more information was available to the public and following the apology of Bill Cobb, the numbers of users engaging in defeasibility dropped significantly. These posters frequently provided additional information for readers in attempts to create a pseudo community of antenarrative sensemaking. Users engaged in prospective, now-spective, and retrospective sensemaking on Facebook and this sensemaking caused many users to speculate or post information they received about when the IRS would start processing returns:

Have you filed Form 8863 Education Credits? The IRS is aware of a problem with a limited number of software company products that affected some taxpayers filing Form 8863, Education Credits, between February 14 and February 22. The problem resulted in those tax returns requiring additional review by the IRS. The IRS is continuing to review the situation and working with affected software companies to assist in the processing of these tax returns. The IRS expects the review process to take up to 8 weeks. This means the IRS may need as much as 4-6 weeks from this date to issue a refund to the taxpayer. While the number of tax returns affected is around 10 percent of the total returns claiming the credit, the IRS continues working
aggressively to address this situation and hopes to reduce those projected refund time frames further. (Hartmann Group, 2014)

By showing that different companies were having similar issues, surrogates attempted to show this was a larger problem. This line of defense continued until Bill Cobb said that H&R Block was accountable for the issues with the crisis. Once he did so, the mistakes could no longer be explained by defeasibility. Thus, the rhetoric of defense had to evolve to meet the needs of a developing situation.

**Agitator Kategoria Strategies**

While image repair strategies were used by a small number of the Facebook users in 950 comments, kategoria strategies and rhetoric were present in 2,001 comments. Table 4.5 shows the specific strategies used. Understanding the approaches used to question, provide alternative narratives, or weaken the response of H&R Block will help organizations and researchers better understand the rhetorical attack methods of disgruntled customers or clients. This, in turn, could allow technical communicators to improve information designed to reduce the anxiety of individuals and improve transparency.

Table 4.5

*Kategoria Usage on H&R Block's Facebook Page*

<table>
<thead>
<tr>
<th>Kategoria</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blame</td>
<td>1,040</td>
</tr>
<tr>
<td>Culpability</td>
<td>292</td>
</tr>
<tr>
<td>Undermining</td>
<td>228</td>
</tr>
<tr>
<td>Attacking the Accused</td>
<td>185</td>
</tr>
<tr>
<td>Deliberation</td>
<td>168</td>
</tr>
<tr>
<td>Maximization</td>
<td>88</td>
</tr>
</tbody>
</table>
Kategoria attacks were more common than surrogate image repair strategies. These comments were divided into six categories; the most frequently used categories for users on the H&R Block Facebook page were blame and culpability. These categories were the easiest for users to engage with, as social media users did not have to provide evidence or proof for their claims of blame and culpability, while the category of maximization would require readers to develop a story to show that the organization was more responsible for the situation than they are currently claiming.

Blame

Users who engaged in image destruction used blame to show others in the Facebook community how H&R Block was at fault for the situation. These users highlighted specific practices that would undermine credibility: accepting returns too early, not communicating with clients, and a number of other issues. Users’ comments were frequently similar to that of Taryn Woods Mahlonie (2013), who examined the systematic issues with the 8863-form during the 2013 tax season:

The IRS announced Jan 28th that at it would accept the 8863 form because they needed to make modifications to the way the form was processed. As a “tax professional” wouldn’t it be COMMON SENSE to wait to see what those modifications were before submitting the form. Other Tax companies held those returns until the 14th to and their clients have already received their refunds. Its just like if your bank was telling you they modified the way they accepted deposit slips. Wouldn’t you wait to see what modifications were made before you deposited cash/or a check with that deposit slip before you just dropped it into the deposit box? Come on with this trying to justify not being on top of what your paid to do.

Providing evidence that H&R Block moved too quickly in developing and launching the 2013 tax-season software, which included a mistake with the 8863-tax credit, affected the organization’s credibility. Showing that H&R Block had developed the software early and had not revised the software once the IRS released modifications placed all of the blame for
the crisis on H&R Block. This line of attack created doubts about the effectiveness of the organization and about the rationales the company was providing about both the refund delays and the software issue. Some Facebook users doubted H&R Block’s employees’ experience and expertise. Users spent significant time discussing the issues they had with H&R Block staff and the training they receive before the start of every tax season. These users often followed a pattern similar to the one Ashley McCowan (2013) used when she posted about her discussion with the IRS:

I was just told by the IRS that h and r block tax “specialist” weren’t trained properly on the new program & for that 80 thousand returns with the education credit were submitted to them Friday. And the wait will be 4-6 weeks. If I would have known that I wouldn’t have even filed with the education credit. I could do without the measly $100 I will be receiving for the education credit. I have used h and r block since I started filing taxes. Never again. Turbo tax it is.

Lack of training among tax specialists would affect their ability to assist clients in preparing tax returns. Introducing doubt about training made other users not only question the type of service they received but also debate these specialists’ ability to respond to questions and concerns about their 8863-form issues. Beyond criticizing individual tax professionals, some users also commented on the quality of H&R Block’s crisis response:

I can’t believe in the H&R Block statement--an apology was not issued. Per the IRS and media sources, this is an H&R Block problem--no one else! I have done my taxes for over 20 years with you--and to have this try to be swept under the rug and not express to your clients until AFTER we were supposed to have received our refunds is unacceptable and told me my business is not needed with your company anymore. And--like others have said, we should have our monies refunded that we paid for filing. (Kostner, 2013)

Some users posted hyperlinks to news stories and websites that confirmed the crisis was solely an H&R Block issue, again reducing the opportunity for those seeking to bolster H&R Block’s reputation by making the issue a larger one that all tax-preparation
organizations encountered. Users like Paula Waidley (2013) even questioned the way clients of H&R Block were informed about the situation:

My only question is... why the heck are you updating on facebook and not calling people or emailing people who have an email address... you need to realize not everyone has facebook and are left in the dark...these people should receive a partial refund because they were not properly notified by their preparers, and I do feel bad for those who don’t have computers who are left in the dark. If you really wanted to claim excellent customer service you should have personally called each one of your clients and made them aware, just because you update in this thread doesn’t mean anything to people who don’t care for nor have facebook.

Such questions led some readers to wonder whether H&R Block was using social media to reduce the influence and limit the reach of information about the crisis. Frequently users with the 8863-form issue learned about the problem not from H&R Block but from the news media or from an IRS letter that told them that their return was being reviewed because of missing information. These users placed even more blame on H&R Block. While the company was responsible for the issue, it did not take appropriate steps to inform clients about it or to provide resources to help them.

Blame was by far the largest category of rhetorical attack present in the H&R Block posts with 1,040 comments (51.9% of the analyzed posts on the company’s Facebook page). Blame as a strategy required users to find a single issue or situation unique to H&R Block and show why the company was to blame.

Responsibility

Among users who attempted to assign responsibility to H&R Block, the major claim was that the company had knowledge and control of important factors surrounding the event but that it didn’t share that knowledge with customers. The most common complaints in these comments deal with the incompetence of H&R Block employees, the organization’s
unwillingness to communicate with affected clients, and its dishonesty about the scope of the problem. For example, Abby Albright (2013) complained not only about the lack of communication about the problem but also about the way the company treated her when she wanted additional information:

I just spent 30 minutes on hold to get an agent who had no idea what I was talking about then transferred me to someone who said I’d reached the wrong department. I will NEVER use H&R Block again! I counted on this for rent due to being a struggling college student and just received my eviction notice 5 days ago. Who’s going to fix that for me⁉️

While H&R Block might not have had control over or knowledge of the 8863-form issue, the company could have managed the way it interacted with clients who were affected by the refund delay. Poor customer service is an important factor in H&R Block’s responsibility claims because it was one of the largest concerns Facebook users expressed. The fact that H&R Block did not communicate with clients about a problem with the process of transmitting tax returns to the IRS made it seem to many clients as though the company was attempting to hide the situation. Even on the company’s Facebook page, users who asked questions did not receive responses from the page administrators.

Other users wanted to know more about how H&R Block responded to the crisis. For example, Jason Crowell (2013) questioned some of the vital facts that H&R Block CEO Bill Cobb presented to the media and via the organization’s social media channels.

Bill Cobb: you say that you fixed the transmission issue right away. . .? Yet we had to do our own research and find out on our own 3 weeks later that there was a problem⁉️ That’s is horrible customer service and says everything I need to know about your company from now on.

Once the organization started communicating with clients through its Facebook page on February 28, Cobb made several statements about how the organization was responding to the issues. By questioning the way the organization was responding and by providing
additional information that would refute or ameliorate the impact of the official organization statements, users influenced the effectiveness of Cobb’s claims. These users showed that the organization had more control over and knowledge about the situation than they had originally believed.

Responsibility accounted for 14.5% of the total attacks against the organization. The majority of these claims occurred as Cobb made statements defending H&R Block and how it had handled the crisis. Effective timing of these attacks called into question statements that attempted to show that the members of the organization had specific knowledge or information regarding the way H&R Block was handling the crisis that they were withholding from the public.

**Kategoria Usage Outside of H&R Block’s Official Facebook Page**

Of the general Facebook and Twitter comments regarding H&R Block and the 8863-form issue, the majority were negative. When sorted into the kategoria framework, 16,170 user comments fit within the coding framework. These posts attempted to attack H&R Block with additional damaging information about the company. Users who posted outside of H&R Block’s official Facebook page were less specific than those who posted on the company's Facebook page.

Table 4.6 shows the most frequently used strategies of users outside H&R Block’s Official Facebook page and Twitter. The strategies were different than the strategies employed by users on the official H&R Block page. The general attacks by the public on social media were different than those on the H&R Block Facebook page. The most frequently used kategoria strategies were also attacks that were easily posted by social media
users. Attacking the accused and undermining statements required the users to make claims against the organization or show how H&R Block was not effectively resolving the problem.

Table 4.6

*Kategoria Usage Outside of H&R Block’s Official Facebook Page*

<table>
<thead>
<tr>
<th>Kategoria</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attacking the Accused</td>
<td>7,788</td>
</tr>
<tr>
<td>Undermining</td>
<td>4,780</td>
</tr>
<tr>
<td>Culpability</td>
<td>1,373</td>
</tr>
<tr>
<td>Blame</td>
<td>837</td>
</tr>
<tr>
<td>Maximization</td>
<td>756</td>
</tr>
<tr>
<td>Deliberation</td>
<td>636</td>
</tr>
</tbody>
</table>

**Attacking the Accused**

Attacking the accused involves questioning the credibility of—and attacking—the organization. More than other kategoria strategies, this rhetorical technique attacks the organization by including additional negative information or blaming it. Most frequently, users used litigation to complain about the company. For example, Gilliland CPA (2013) posted the following message:

Tax refund delays lead to lawsuits—H&R Block customers have filed lawsuits seeking redress for a filing snafu that has delayed receipt of their tax refunds.

This type of rhetoric enflamed the organization and motivated additional users to post comments encouraging others to take legal measures against the company. Posters most
frequently referred to some type of legal term such as a breach of contract and then invoked
the use of a government organization (such as the Federal Trade Commission) as the means
of solving the issues with H&R Block. These posters persuaded H&R Block clients to file
two different class action lawsuits. Both lawsuits claim that because the company promised
in its advertising a 100-percent-satisfaction guarantee and because clients were not refunded
fees or otherwise compensated for the issues, it is both negligent and in breach of contract
(Rogers, 2013). Facebook and other social media channels were able to connect these users.
As users banded together via social media, they combined power to provide additional
actions and remedies that might not have been available to an individual or small group.
Social media shifted power away from the large organization to customers.

Other users, like Lisa Jackson (2013), attacked Cobb about his inaction in fixing the
problem:

Just a random thought . . . that if you have been doing your taxes at the same place
for the past decade . . . and then this year they screw up BIG . . . lying to the
customer is probably not the best solution . . . don’t say it is not HR Block’s fault for
the delay in refunds, its the IRS fault, when in all actuality it is HR Block’s fault . . .
ask your CEO, Bill Cobb, at HR Block who wrote and published a whole message
on the HR Block website last Friday stating . . . “Let me set the record straight
about the Form 8863 issue that has affected you, our valued clients: We made a
mistake when the tax return was sent to the IRS. And you deserve an apology, an
explanation, and to know what we’re doing about it . . . I want to make it clear that
this was absolutely not the fault of your tax professional; your return was prepared
accurately. This was an issue with the form transmission. This was OUR (meaning
HR BLOCK’s) mistake-and I sincerely apologize . . .” So when I call and ask for my
prep fees to be refunded . . . do NOT tell me that it was not HR Block’s fault . . . An
apology a month later after those affected have waited a month already for their tax
return, some longer, and are STILL WAITING potentially another 4-6 weeks as I
was informed just doesn’t seem to be enough . . . seems like some compensation
needs to be attached to that apology for the customers who are suffering as a result
of this mistake, the tax preparer’s shouldn’t suffer, because they didn’t screw
anything up, but HR Block did, and customer’s deserve to be compensated . . . I’m
just saying, If I made a colossal mistake like this at my job, I wouldn’t have a job . . .
Just some food for thought!!!
Another common feature of these comments is sarcasm and name-calling. While other rhetors use the elements of attacking the accused, they also offered additional criticisms or claims against H&R Block.

**Undermining**

For a comment to be categorized as undermining, it must present additional information that would reduce or weaken the position of H&R Block. This category was composed of 4,780 comments, or 29.5% of the kategoria posts. For the most part, these posts included individuals who questioned the motives of the Facebook page administrators, who posters claimed were deleting posts that placed H&R Block in a negative light. The minority of posters took issue with what Cobb said or how the organization was not living up to its mission statement and advertising. Natalie Bernard-Reynolds (2013) represented many users who were upset by the censorship of the Facebook page when she said

> I’ve posted a link twice on here as to the H&R Block issues and they have deleted it twice! Wow, I’m further disgusted by this company. Clearly they monitor these postings and have no intention on letting us know the truth. Disgusting.

While the company had specific rules regarding user content and had stated that it could remove comments, these users claimed their posts did not violate the rules or community standards. H&R Block’s Facebook page specifically forbade obscenity and profanity, illegal activity, and comments concerning violence, sexual material, personal attacks, promotional material, comments unrelated to the original post, etc. Many users claimed they did not violate these standards, but their comments were deleted.

By claiming that H&R Block was withholding information by deleting posts that did not break or violate the community standards, these users hoped to cast doubt on how H&R Block was using the page, the company’s rationale behind page, and the truth of the
information being presented there. Other users, including Peter Bisher (2013), countered Cobb’s statements:

I am sure many H&R Block customers sincerely appreciate your apology concerning the delayed tax returns; however, you did not address the issue of students selected for the verification process being unable to receive student loans/financial-aid, due to H&R Block’s negligence. The issue is not so much “we want our money now,” which you so intently focused on in your address to your customers. What of the indirect, adverse consequences many students are facing, because of our inability to obtain tax transcripts for the 2012 year, which are a requirement for students randomly selected for the verification process? As mentioned, your apology was sincerely appreciated, yet it lacked any real value, as it only addressed the surface problem and not the numerous other problems that your customers are facing, as a result of your company’s negligence. This is the second consecutive year I have been confronted with this same issue, due to H&R Block and their lack of concern for their customers. Is H&R Block willing to provide financial restitution for those being financially affected, with regards to student loans/financial-aid, as a result of H&R Block’s negligent error? I would greatly appreciate a reply, Mr. Cobb. That is of course dependent upon whether or not you truly care to address the serious issues. Users who questioned whether H&R Block was fulfilling its promises to clients in both its mission statement and advertising provided juxtaposition between what the company claimed to be and what customers experienced. This type of undermining was the simplest to achieve because it exposed the public to the surrogates’ perception of the organization and not the carefully controlled image of the organization. Users continued to make similar claims, and some eventually sought legal options.

**Conclusion**

H&R Block’s approach to social media communication was opaque; the organization shared via its corporate Facebook page information about a software error that delayed roughly 600,000 tax returns that claimed a Higher Education Tax Credit. Facebook was the clients’ only source of information about the issue. Its posts were also the only
communication about potential H&R Block problems that employees—including district
and branch managers—received.

Moreover, the company posted just six times about the issue during the 2013 tax
season. These posts did not provide clients the information about what they needed to do to
correct the problem or about what H&R Block was doing to fix the problem. Instead, the
posts contained messages blaming the problem on the IRS, bolstering the image of H&R
Block by repeating that the company was working to resolve the problem, and asserting that
the situation was isolated.

Finally, H&R Block attempted to control elements of the conversation on its
corporate Facebook page. During the 2013 tax season, a number of posters claimed that
H&R Block page administrators were deleting posts that questioned or critiqued the
company. Natalie Bernard-Reynolds’ (2013) comment represents what many users felt about
the censorship of the H&R Block Facebook page:

I've posted a link twice on here as to the H&R Block issues and they have deleted it
twice! Wow, I'm further disgusted by this company. Clearly they monitor these
postings and have no intention on letting us know the truth. Disgusting.

By claiming that H&R Block was censoring negative information itself and the way
employees were handling the crisis, users were trying to cast doubt on the rationale for the
page and the accuracy of the information presented there.

These three elements of H&R Block’s social media communication further damaged
the company’s image. First, H&R Block was not clearly communicating about the cause of
the tax-refund delays and what the company was doing to solve the problem. Second, those
600,000 clients whose tax refunds were delayed included many young adults who used
Facebook to share how H&R Block had affected their ability to pay for rent, transportation,
and file Free Application for Federal Student Aid (FAFSA) paperwork on time. Third, H&R Block’s Facebook page administrators were not prepared for the volume of posts made. In many cases, users asked questions only to be ignored by H&R Block officials, which caused additional frustration and anger, which in turn generated more comments. Due to the lack of information and the fact that the CEO changed his course in responding to the crisis, many users claimed H&R Block was not being transparent about the crisis and its cause.
CHAPTER 5
FROM COMPLEX TO MUNDANE: THE NATIONAL TRANSPORTATION SAFETY BOARD’S USE OF TWITTER DURING A CRISIS

The National Transportation Safety Board responds to airplane accidents, bus crashes, train derailments, and other mishaps involving transportation in the United States and is frequently invited to participate in the investigation of international accidents. The NTSB is widely respected and can quickly and effectively discover the cause of an accident and make recommendations to help prevent similar accidents in the future.

The Asiana 214 crash occurred on July 6, 2013 as the plane approached the San Francisco International Airport, the NTSB dealt with a number of missteps. First, an intern for the organization shared false, racially insensitive names of the pilots with a news organization, which broadcast them on live television. Second, first responders were responsible for the death of at least one of the victims. Finally, Twitter posts from the NTSB did not include the nuance of the press conference, placing blame before the NTSB had concluded the investigation.

Rhetorical Situation

The day of the Asiana 214 crash, San Francisco had good weather: light wind and excellent visibility. The pilots had not declared an emergency or noted any conditions that would lead to the crash (Pasztor, 2013a; Pasztor, Areddy, & Vara, 2013). This was the second accident involving a Boeing 777 since the plane debuted in 1995. With no apparent external factors, good visibility, and excellent weather conditions, the accident required the National Transportation Safety Board to launch an investigation into the cause of the crash.
The flight was carrying 307 passengers and crewmembers from Seoul. Initially, two of the passengers died, and 180 others were hospitalized with a variety of injuries. Eight of them were in critical condition, and two were paralyzed due to their injuries (Smith, Ostrower, and Pasztor, 2013). A third passenger died several days later at San Francisco General Hospital (Somaiya, 2013). Within hours of the accident, questions were raised about the death of one of the victims and whether she survived the crash to only be killed by a fire engine responding to the accident (Elinson & Harless, 2013). It was later confirmed that Ye Meng Yuan was killed when a firefighter repositioned the truck and did not see her because she was covered in firefighting foam (Harless, 2013a).

In its initial report, the NTSB said that “the pilots came in too slowly, took too long to realize it and tried to abort the landing seconds before the crash.” The pilot had only 43 hours of flying time in a 777 and had never before landed at the San Francisco airport (Onishi, Drew, Wald, & Sarah, 2013, p. A1). Beyond pilot error, the NTSB cited issues with the Boeing 777’s “inadequate warning systems.” The board also said that excessive air-traffic-control instructions were “significant contributing factors” to the crash (Nam, 2014). Airline executives defended the pilot’s training. While they admitted the pilot did not have significant experience flying a 777, he had trained in a simulator in addition to his thousands of hours flying smaller aircraft (Kong & Min, 2013).

Beyond the findings of the NTSB’s investigation, Asiana Airlines was also fined $500,000 by the U.S. Department of Transportation because it took the airline more than five days to notify the families of travelers involved in the accident (Nicas, 2014). Passengers then filed a lawsuit against Asiana Airlines for what they called “gross negligence and recklessness” because the crew could not perform the basic task of landing an airplane on a
clear day with no outside factors that affected the operation of the aircraft (Jones & Pasztor, 2013).

The NTSB investigation was not without missteps. An NTSB intern engaged in a prank in which he provided a news organization with what he said were the names of the pilots but that were actually pseudonyms with vulgar and racist connotations. The fake names were reported on live television, and the NTSB offered an apology, terminated the intern, and said the organization would develop protocols to ensure that similar unauthorized media contacts did not happen in the future (C. Porter, 2013).

Social media played an important role for both the NTSB and news organizations in communicating about the crash. The events of the crisis were widely circulated via social media; even media players like ABC News and the Huffington Post pushed content to audiences using Twitter. David Eun, a passenger on Asiana 214 and an executive for Samsung, used Twitter to describe the events of the crash from his perspective (Laundor, 2013). The NTSB also used social media to communicate official findings with the general public. Social media, especially Twitter, has been a part of the NTSB public outreach since NTSB Chair, Deborah Hersman, announced in February 2011 that the agency would be creating both a Twitter handle and YouTube channel to broaden its ability to communicate. “Social media is yet another opportunity for us to engage with our most important stakeholders—the traveling public” (“NTSB moves into,” 2011). The board used Twitter widely in the Asiana 214 investigation to communicate findings and progress. The use of #Asiana214 allowed the public to learn about the crash as the details developed; the Twitter feed included images of the fire damage inside the hull, the data recorders’ recovery process, and investigators sifting through the damage.
NTSB’s Use of Asiana 214 Hashtag

The Twitter handle @NTSB posted 54 tweets using #Asiana214 from the investigation to the release of the final report. During this time, the organization was careful about the type of content it released via Twitter; 20 of the posts included pictures of the investigation; the damage to the airplane; and investigators interacting with the media, the public, or the wreckage. Eight of the posts included links to videos of press conferences, hearings about the accident, and animation of the crash. The largest group of Twitter posts was 26 updates that included everything from information about the new location of a press conference to a link for the final report. However, during the course of the official investigation, several events occurred surrounding the NTSB’s work that did not appear on the organization’s Twitter feed. The content surrounding these events created a significant amount of the Twitter buzz around the Asiana 214 crash. During the course of the Asiana 214 investigation from July 7, 2013 (the day of the crash) to July 14, 2014 (the release of the final report), the NTSB posted 53 times (A complete list of NTSB tweets are listed in Appendix A). Table 5.1 shows the dates and numbers of the posts.

Table 5.1

National Transportation Safety Board Twitter Posts about Asiana 214

<table>
<thead>
<tr>
<th>Date</th>
<th>Posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/7/13</td>
<td>5</td>
</tr>
<tr>
<td>7/9/13</td>
<td>10</td>
</tr>
<tr>
<td>7/10/13</td>
<td>14</td>
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<tr>
<td>7/11/13</td>
<td>5</td>
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<tr>
<td>7/16/13</td>
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<td>1</td>
</tr>
<tr>
<td>5/21/14</td>
<td>1</td>
</tr>
<tr>
<td>6/24/14</td>
<td>9</td>
</tr>
<tr>
<td>7/16/14</td>
<td>1</td>
</tr>
</tbody>
</table>
The majority of posts from the NTSB occurred after investigators arrived in San Francisco and took control of the crash site. Dates with a high number of posts are days of press conferences or other media events that included posting links to transcripts, video, and pictures. In some cases, statements from the press conference were shared via Twitter as well. Eighteen of the 53 posts came between December 2013 and July 2014, long after the public had moved on from the plane crash. The NTSB was still conducting the investigation and finalizing a report, but Twitter users were no longer interacting with #Asiana214 to the extent they did during the two weeks following the accident. During the 15 days following the crash, 380,124 posts were made about Asiana 214 displayed in Table 5.2. The first day received the heaviest traffic with 119,233 posts; the number of daily posts decreased over time.

Table 5.2

<table>
<thead>
<tr>
<th>Non National Transportation Safety Board Twitter Posts about Asiana 214</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/7/13</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>119,233</td>
</tr>
</tbody>
</table>

The general public posted about the crash most frequently in the 10 days that followed it. While the NTSB posted throughout the investigation, members of the public did
so only when the crash received media attention. July 6 and 7, the days with the highest number of posts, were in the first 36 hours after the accident, and the media was reporting extensively about it. July 12 was the day an intern working for the NTSB confirmed incorrect and racially insensitive names of the pilots. By the end of July, public attention had shifted to other things, and the number of Tweets dropped significantly.

**Antenarrative**

In developing a framework to analyze the Twitter data produced by the public that discusses the work and nature of the NTSB investigation, the use of antenarrative provided insights about the stories used to make sense of the accident and the investigation. Much of the antenarrative storytelling occurred among members of the audience who were outside the NTSB or other official investigative bodies; many audience members sought official information as they drew conclusions about the investigation.

Traditional applications of antenarratives are situated in text and interviews. Social media creates global conversations by using hashtags and keywords to curate the discussion, thus creating a text surrounding any topic from the most urbane to the most mundane, providing a new research site of antenarrative scholarship. By its very nature, social media meets the criteria for antenarrative because it is fragmented, multi-voiced, and collectively created (Grow, 2008). Another characteristic of antenarrative is that it is “never finalized, existing without a beginning, middle, or end, and either the immediacy of those experiences disallow them from being made sense of or the act of sensemaking” (LeFebvre & Blackburn, 2012, p. 218). Facebook and Twitter posts exist independently of the beginning, middle, or end as traditionally viewed in narrative; they provide a snapshot of what people are thinking
or what organizations are communicating about a variety of topics. Users post as a means of making sense of a situation, of questioning the official version of events, of reframing the official account, and of offering a variety of perspectives. These actions are the impetus of sensemaking and are thus the resolution that ends the antenarrative.

Following the Asiana 214 crash, social media users posted at the start of and during the crisis; posts continued as new events unfolded. Tens of thousands of posts each tell part of the story individually, and together these posts can show broader antenarratives and themes. In examining patterns among 559,634 Twitter posts made between July 6, 2013 and July 16, 2014, four major themes emerged from the data:

- Claims that the NTSB issued racist remarks
- The death of a crash survivor killed by an emergency-response vehicle
- The pilot’s lack of training
- A pilot error’s causing the crash

These themes provide insight into how people used Twitter to make sense of the events. They also reveal differences between the accounts shared via the official communication channels and those shared in the unofficial, multi-voiced antenarrative discussion. The polyvocal nature of social media antenarratives creates what Gergen (2007) describes as writing that embraces ambiguity and ambivalence, as it must leave room for the voice of others and the voice of the audience as they interact with the content. This interaction creates new meanings for all who add to the writing or engage with the writing as they bring their own beliefs, ideas, or preconceptions to the conversation. This process is similar to the process of storybuilding described by Daphne Jameson (2001), where narratives are created collectively in order “to provide evidence, and to influence others.” Collectively developed narratives tell
a story that is more powerful because it takes multiple perspectives and adapts each version to make a strong, persuasive, and insightful story. As these larger stories are retold, tellers “[link] their individual narrative discourse in various ways—chiming in as a chorus, layering on details, and retelling story variants with different agents or denouements” (pp. 489, 490). Antenarrative developed using social media platforms is similar to storybuilding, as it allows each person to engage a fragment to develop deeper, more powerful meaning.

Claims of Racism

During the investigation, the NTSB would face its own crisis involving a summer intern. On July 12, the intern “confirmed” names of the crewmembers for flight 214 to KTVU, a news station in Oakland, California. The names that appeared in an on-air graphic included Captain Sum Ting Wong, Ho Lee Fuk, Wi Tu Low, and Bang Ding Ow. The names were clearly racially insensitive, crude, and offensive. These names quickly went viral on Twitter and resulted in significant criticism from social media users (Wemple, 2013). Beyond these issues with racism, the media raised additional questions about the NTSB’s processes and guidelines. Media personnel asked how an intern could be put in a situation in which he had direct access to journalists and in which he could confirm or deny names and other details about the crash and investigation. They wondered why anyone would think it appropriate to make a joke following an accident in which three people died. And they asked how trained journalists at the station did not catch such an apparent error (Farhi, 2013). Social media users amplified these questions and concerns following the KTVU broadcast of the names.
The NTSB issued a statement apologizing for “inaccurate and offensive names that were mistakenly confirmed.” The statement also reinforced that the intern had “acted outside the scope of his authority” and that the NTSB does not release or confirm names of crewmembers or people involved in its investigations (National Transportation Safety Board, 2013b). The NTSB did not post its apology on Twitter or answer any questions about the release of the names or about what actions were being taken to prevent similar situations in the future. The press release did not stop Twitter users from posting their disdain for how the NTSB handled the incident; in the first few hours after the television broadcast, 40,519 people posted about it. This series of events changed the whole conversation of Asiana 214 on Twitter. Before the broadcast of the fake names, the majority of comments on Twitter were about the pilot’s training, a potential lawsuit with Boeing, and actions of the Asiana CEO in responding to the crash. Table 5.3 shows the racist-names topic started trending July 12 after the KTVU broadcast and continued to receive at least 500 posts daily until July 18. During this time, Tweets about the fake and racially insensitive names accounted for 72.2% of the Twitter conversation about the Asiana crash.

Table 5.3

Posts Dealing with Pilots’ Fake Names
The coverage of the fake names on Twitter started late on July 11, after the names were broadcast on television. By the next morning, it was clear the names were a prank, and Twitter users reacted to this information. The NTSB issued an apology on July 12, which helped defuse the situation. The fake names also became a staple of late-night television shows, and the majority of posts made after July 14 included humor.

Of all of the antenarrative themes about the Asiana 214 crash present on Twitter, this topic had the widest-ranging and most varied response from Twitter users. Some people viewed the actions of the NTSB intern as a prank rather than a serious offense, while others deemed the names offensive and racist. This divide reveals undercurrents and hidden racial issues in the United States. While some people were outraged, others treated the slurring of Korean names as a joke, as something to laugh about during the investigation of a fatal accident. This reaction foreshadowed racial tensions that would appear in Ferguson, Missouri, and Baltimore, Maryland, in 2014 and 2015.

A core of posts condemned the NTSB; the intern who “confirmed” the names; and KTVU, the station that released the names. One such user was Causey (2013), who posted, “Seriously folks, inexcusable: KTVU apologizes after on-air gaffe of Asiana pilot names.” As apologies from the NTSB and KTVU were released, many users believed the gaffe was inexcusable. Other users questioned how racial comments could be made during a tragedy. “@NTSB That was deeply offensive. You DO NOT make fun of #Asian names or of ANY ethnicity esp in a tragedy.#Asiana214” (Quirino, 2013). Not only were these users repulsed by the release of fake names, but the comments were more egregious because of the accident and of its consequential deaths and injuries. Some users ignored the racial content and
treated the situation as a joke. For example, Sandy (2013) posted, “I really wanna thank the ‘intern’ at the NTSB! thats the best laugh I’ve had since Obama took office!”

Other users claimed that while the content might have been wrong or offensive, it was funny and that the humor somehow excuses the content of the post. McDreamy (2013) posted “Prank of the year #asiana #pilots #prank #hilarious #kindaracist.” By using #kindaracist, posters acknowledged that the content was racist but tried to downplay the that to post material they believed was funny. These comments continued, “Very wrong but funny. Asiana Pilots names from KTVU News” (Steer, 2013). This process of overlooking a serious social issue because it might be considered funny provides evidence of a deep-seated divide over racial issues among Twitter users.

**Asiana’s Lawsuit**

The other interesting element of the situation was Asiana’s announcement of a lawsuit against both the NTSB and KTVU. The airline claimed that the false names had damaged its reputation and hurt business. Most users responded to these claims like Brooks (2013) did: “Asiana suing t.v.station over bogus names claiming reputation is hurt. Really? What about landing on a wall?” Users were disgusted about the racial names, but most thought it was a joke that Asiana believed the news report about the pilots’ fake, racist names was the only element that had damaged Asiana’s reputation.

Other users believed the lawsuit was a PR stunt by Asiana and its CEO to change the focus of the discussion from the crash to the news report. Smith (2013) was one of these posters: “#Asiana suing #KTVU = brilliant PR move. They’ve changed the dialog from incompetent aviators to incompetent journalists #Journalism #Avgeek.” The threat of a lawsuit quickly changed the conversation from one about race to one about public relations
strategies. The public relations discussion weakened the racial conversation on Twitter; before the possibility of litigation, users were engaged on either side of the racial divide. The introduction of the public relations antenarrative allowed people to move quickly past the sensitive, uncomfortable territory of racial relations.

**Death by First Responders**

The initial impact of the crash killed two Chinese teenagers and injured 182 other people (Jun & Chiu, 2013). After the crash, authorities believed it was possible that one of the victims, Ye Meng Yuan, did not die due to injuries sustained from impact but because a fire truck ran over her as she lay on the tarmac (Harless, 2013b). As the debate about what happened to the victim intensified, coroner Robert Foucault said he would conduct an autopsy to confirm the cause of death (Areddy, 2013). The fact that the body was found covered by fire-retardant foam and in the track of a fire truck caused additional speculation about what happened (Elinson, 2013). Foucault concluded that the victim was alive on the tarmac but was killed when the truck ran over her. The federal investigation confirmed Foucault’s findings. However, the San Francisco International Airport and San Francisco Fire Department official report ruled that the victim was already dead before she was run over by the fire truck (Nicas, 2014). The agencies’ findings were complicated as new video from a helmet cam showed a firefighter telling the fire truck driver to avoid the body of the teenager. However, minutes later, when the victim became covered in foam, she was invisible to drivers.

The victim’s family filed a wrongful-death claim because rescuers abandoned the teenager and left her in harm’s way (Banfield, 2014). The controversy was reflected on
Twitter, and each new development in the story created additional rounds of posts.

Significant speculation about her death happened the day of the crash; 20,668 posts—17.3% of the total Asiana 214 conversation—were devoted to this topic shown in Table 5.4. The conjecture in news media continued for several days as the story received wider coverage.

On July 12, the death of a third victim was reported, renewing the discussion about the fate of Ye Meng Yuan.

Table 5.4

<table>
<thead>
<tr>
<th>Posts Dealing with the Victim Killed by an Emergency Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>7/6/13</td>
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<tr>
<td>7/19/13</td>
</tr>
<tr>
<td>7/20/13</td>
</tr>
</tbody>
</table>

The data in this chart shows two spikes of content about emergency vehicles. The first occurred the day after the crash. This material consisted of pictures and descriptions of the rescue vehicles responding to the accident. A few of these posts speculated that the death of Ye Meng Yuan was caused by emergency vehicles. In the days after the accident, the number of posts decreased. On July 12, Liu Yipeng, another teenage passenger on Asiana 214, died
in the hospital due to injuries from the crash. This event caused additional speculation about the cause of the deaths of both Yuan and Yipeng.

On July 19, Foucrault announced that the girl was alive before being struck by the fire truck; 91% of that day’s Twitter posts about Asiana 214 were dedicated to the discussion of what happened to this teenaged victim. Although the conversation shifted as more facts became available, the initial posts were much like Bilimoria’s (2013): “Devastated to learn that 1 of the 2 teenagers who passed away on #asiana214 may have been run over by an emergency vehicle on the tarmac.” These posts often included words like *may*, *might*, and *could*, leaving uncertainty about what occurred on the tarmac until July 19, when Foucrault released his findings. The coroner’s investigation changed everything in terms of the conversation. Chuang (2013) posted “#Breaking SMC Coroner confirms 1 #Asiana214 victim (16 yrs old) would still be alive if not run over by SFFD vehicle.” There was no more room for doubt about the cause of death. Post after post cited the coroner’s findings and solidified in the minds of the public what had happened.

In January 2014, an investigation by the San Francisco International Airport and the San Francisco Fire Department concluded that the victim had died before being hit by the fire truck. Coroner Foucrault said that he stood by his findings and that he believed that the investigation’s conclusions were politically motivated to help the city avoid litigation (Nicas, 2014). On January 15, the day the report was released, users once again posted on Twitter to discuss the findings of the report via 3,400 posts, or 55% of the total conversation about Asiana 214. Many posters linked to or discussed the video: “Video shows Asiana victim: Ye Meng Yuan, 16, survived a plane crash in San Francisco, only to die shortly” (Irvine, 2014). The users claimed the video shows exactly the opposite of what the report reveals.
“Firefighters saw Asiana crash victim: Teenager Ye Meng Yuan didn’t die from a plane crash at San Francisco Int” (Whatsapp, 2014) Twitter allowed users to question the official report and provide new evidence, thus changing the conversation about the crash. This process of sensemaking is antenarrative, as it allows multiple interpretations of the same event by different users, who bring their own lenses to the process of communicating via social media.

**Insufficient Pilot Training**

From the start, NTSB investigators focused on the training of Asiana 214 pilot Lee Kang-guk, who had 43 hours of experience flying a Boeing 777 and had landed this type of jet with a passenger load eight times. This was also the first time the pilot had landed at San Francisco’s airport. Due to Lee’s limited flying time, he was under the supervision of a veteran 777 pilot. This was a new assignment for Lee Jeong-min, the training pilot. The NTSB was interested in examining whether Asiana had an appropriate training program to prepare both the pilot and the training pilot for their new roles (Pasztor & Ostrower, 2013). Asiana spokespeople defended the pilots by claiming that both were “highly experienced” and had completed training that conformed to all international standards. In the same statement, Asiana representatives confirmed that the company would enhance pilot training, update information about airports with difficult approaches, and create new systems to improve cockpit pilot communication (Pasztor, 2013a). Concerns about pilot training were a constant topic on Twitter from the day of the crash until the final report was issued. Technical topics discussed in NTSB press conferences appeared on Twitter and raised additional questions about training. On the day of the crash, 22.1% of the Asiana posts discussed pilot training, especially when it was announced that the pilot was still in training.
and had landed a 777 with passengers on board only a few times. From July 6 to July 31, 2014 the pilot training topic accounted for 22.9% of the Asiana 214 conversation and included 97,264 posts. Table 5.5 shows the posts dealing with pilot’s insufficient training.

Table 5.5

*Posts Dealing with Pilot’s Insufficient Training*

<table>
<thead>
<tr>
<th>Date</th>
<th>Posts</th>
</tr>
</thead>
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<td>7/16/13</td>
<td>2,339</td>
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<td>7/17/13</td>
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<td>540</td>
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<td>429</td>
</tr>
</tbody>
</table>

In its first statements about the crash, the NTSB presented information about the pilot, co-pilots, and crew of Asiana 214. One of the elements of this press conference included data about the training of the crew and Asiana training programs. The day after the crash, Twitter users were discussing both the complex nature of landing at San Francisco International Airport and the inexperience of the pilot. In the days that followed, posts about inexperience and lack of training were common. As interest in the crash waned, so did the number of posts about the lack of training. As the NTSB released initial statements about the pilot and crew during the early phase of the investigation, the Twittersphere co-opted the data to argue that the pilots had not been well trained or that they had received insufficient training for their jobs. These claims received additional fuel through actions, such as the pilots’ not
immediately evacuating the plane after crash-landing, which called into question their ability
to handle emergency situations.

Many Twitter users framed and reframed the information as the story was told.
Frequently, additional information was removed from posts, which made the acts seem more
damaging than they really were. One such user was Salonga (2013): “NTSB: Instructor pilot,
in command, was in first flight with flying pilot.” The pilot was on a training flight, a
common situation for airlines that are promoting pilots to new equipment or moving them
from a co-pilot to a pilot position. Another poster who attempted to reframe information
was Molinari (2013): “Asiana Airlines pilot had only 43 hrs of training, flying on Boeing.”
The way this post was written highlights the pilot’s training hours but not his flight time
before becoming the pilot of a 777. Other users would leave out the phrase “flying on
Boeing 777” when talking about pilot training, making it seem like the pilot had less
experience than he did. Daliah (2013) was one such user: “Pilot of Asiana plane that crashed
at SFO was ‘in training’ having less than 50 hours flight experience.” When comparing the
information present on Twitter to the facts presented in the final NTSB report, there is a
significant difference. The difference could be explained as a function of sensemaking; once
terrorism, mechanical failure, and weather were removed as possible factors of the crash,
most people concluded that only one explanation remained: pilot error. This process is
similar to what Fahnestock (1986) described about reporting scientific materials: while
information is developed and written for a scientific audience, frequently non-scientific
audiences consume it. Fahnestock discusses how material written for the scientific
community is written in the language of science, which communicates doubt and hedges for
future discovery; however, when scientific discovery is presented to the public, the hedging
and cautious language is removed and replaced with certainty by the news media. Similar events may occur as technical and complex information is presented by a government organization to the public; the media or the public may interpret the information to be more certain and less nuanced.

This occurred for the NTSB when spokespeople mentioned the pilot’s limited experience during a press conference. The sound bite that many people heard left out additional supporting information. For example, the pilot did not have any “previous accidents, incidents, or company disciplinary actions.” He also had 9,684 total flight hours, including his time as a captain of a 747 for more than two years and an A230 for five years (National Transportation Safety Board, 2014). The NTSB’s actions in releasing so much information so quickly was criticized by the Air Line Pilots Association of Korea when organization representatives said: “information released by the U.S. National Transportation Safety Board has focused only on pilot error while neglecting possible contributing factors” (Pasztor, 2013a, p. A6). Even the NTSB cautioned the public about assuming the crash occurred because of pilot error; organization officials told reporters not to rush to judgment about the cause of the crash until the investigation was finished.

Two other elements affected Twitter users’ views of and attitudes toward the pilots. First, the pilots told the flight attendants to not evacuate the plane after the crash. Most users who posted this information retweeted original posts from news organizations: “After Crash, 90 Seconds Before Evacuation Order: Inside the wreckage of Asiana Airlines Flight 214” (Anku6, 2013). Frequently these posts included images of the burnt remains of the cabin. Other users posted that “Asiana passengers [were] initially told not to evacuate after crash” (Buletin, 2013). For many Twitter users, the claim that the pilots did not follow
protocol called into question their training for emergency situations. The second major action that affected Twitter users was Asiana Airlines’ announcement of an improved pilot training program. This in turn raised questions about the recently promoted pilot’s ability to fly the plane. “Asiana will give special safety training, including an enhanced program for visual approaches and automated flight, to all of its pilots. It said it would also strengthen its training programs for those switching to a new type of jet” (Sang-Hun & Wald, 2013, p. B8). These events increased the number of people posting about the pilot’s training and his lack of experience, which could have contributed to the accident. Questions about pilot training were closely connected to the other major antenarrative theme of pilot error, which emerged in Twitter posts.

**Crash Caused by Pilot Error**

Within days of the crash, the initial black box analysis was complete, and the data pointed out several anomalies in the way the pilot was controlling the aircraft. As the plane was approaching the runway with landing gear down and wings at 30 degrees—normal landing behavior—the aircraft was only traveling at 137 knots, too slow for a safe landing. At seven seconds before the crash, someone in the cockpit called for an increase in speed. Three seconds later, the alarms indicated that the plane was about to stall, or go below the speed required for the airplane to maintain lift. At 1.5 seconds before impact, someone in the cockpit said the crew should add power and wave off the landing, then fly to a higher altitude and attempt a second landing. While the data was presented at a press conference by NTSB chair, Deborah Hersman, she would not confirm that these actions could be called pilot error (Knickerbocker, 2013).
The pilots claimed that an equipment malfunction caused the crash. The blame was placed on the auto-throttle, an automatic speed-control system, which disengaged by itself, without alerting the crew, causing the plane to lose speed and crash into the seawall. The NTSB countered these claims, announcing that the crew did not correctly activate the auto-throttle (Pasztor, 2013b; Jung-a, Odell, & Waters, 2013). During the process of the investigation, the pilots, Asiana, and the NTSB issued a number of contradictory statements. This dialogue significantly influenced the content Twitter users posted. The crew frequently cited a mechanical failure as the cause of the accident; Asiana supported this claim and blamed Boeing for a design flaw in the controls of the 777. The NTSB maintained there was no evidence of mechanical failure.

As claims of lack of training increased, so did claims that the crash was caused by pilot error. Both occurred early in the investigation, before there was any evidence that either caused the accident. As with claims about pilot training, claims about pilot error peaked the day after the crash and diminished over time as shown in Table 5.6.

Table 5.6

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
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<td>7/8/13</td>
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</tr>
</tbody>
</table>
Calls for Caution about Speculation

One of the major comments made by NTSB representatives was a recommendation to withhold judgment until the investigators were able to complete their work and to wait until the final report and analysis were complete. As NTSB representatives were asking the public to withhold judgment, they concurrently provided information that pointed to pilot error as the cause of the accident. Nelson (2013) posted, “On mechanical vs. pilot error: NTSB ‘would encourage all of you to be very cautious about speculating on the cause of the crash.’ #Asiana214” This poster just copied the information as presented by the NTSB, but other users highlighted information to make an argument. Most Twitter users did not attempt to follow the NTSB’s request. For example, Roberts (2013) posted, “NTSB: Too early to point to pilot error in Asiana crash, but mechanical failure does not appear to be factor.” By eliminating the possibility of the mechanical failure, this poster is using the NTSB’s rhetoric to point to pilot error as the only explanation of the accident. The majority of users would follow the example of Friedlander (2013), who said, “Pilot error is so obvious. Asiana CEO admitted by apology and bow of head.” For some, the actions of Asiana Airlines CEO were enough to place blame on the company and the pilots. These claims intensified as the CEO announced that the airline would sue both the NTSB and KTVU over the release of the fake names and Boeing for faulty design of automated systems that Asiana Airlines said disengaged without alerting the pilot. For many Twitter users, the actions of the CEO were enough to blame pilot error for the accident.

As more details became available, social media users found it easy to blame the pilot. One such user was Lewis (2013), who posted, “NTSB: That analysis from the flight data recorder. Those speeds are way low and significantly slower than target speed of 137 knots.”
Presenting the facts and letting the individuals decide who was to blame was a common approach. Every piece of information from the flight data recorder presented by the NTSB made it to the hands of Twitter users.

Users posted each part of NTSB Chair, Deborah Hersman’s press conference with information about what occurred in the cockpit before the crash. “NTSB chairman Hersman: no mention of speed by Asiana 777 pilots heard on CVR until 9 seconds, or 100 feet, before impact w/ SFO sea wall” (Karp, 2013). Calling attention to the fact that the pilots were not monitoring speed before the crash left little option but to blame the pilots. This continued with information about what occurred seven seconds before the crash. “Deborah Hersman, Chair of NTSB: 7 seconds prior to impact, a call to increase speed was made on the CVR” (Rabinowitz, 2013). In the last seconds before the accident, the pilots said that they needed to increase their speed to avoid an accident. However, they did not respond to this realization quickly enough because four seconds before the crash, “the stick shaker” (a device that vibrates the control yoke before a stall) activated, alerting the pilots about the plane’s low air speed and the impending stall. Blackwell (2013) posted about this action: “NTSB: 4 seconds prior to impact, crew of Flight 214 alerted that they were approaching a stall.” “NTSB: Pilots asked to do a ‘go-around’ 1.5 seconds before impact” (AmericaStrike, 2013). All of this information made it very difficult for Twitter users not to pass judgment about who was to blame. To the majority of Twitter users, it was obvious that pilot error was to blame for the crash of Asiana 214.
Conclusion

The NTSB attempted to be open as it discussed its investigation of the crash of Asiana 214 at the San Francisco International Airport. Using Twitter, organizational representatives shared photos of the wreckage and of investigators combing the crash site. Additionally, information for media professionals, including links to live feeds, was posted in advance of every press conference. The NTSB also provided links via Twitter to sophisticated computer simulations using the flight’s data recorders to determine the cause of the accident. This information was shared simultaneously with both the public and members of the news media. While this approach provided easy access to crash information, it also caused some to ask whether the NTSB was giving too much evidence before the end of the investigation.

The biggest issue occurred during a press conference, when NTSB chair Deborah Hersman disclosed the pilot’s and copilot’s flight experience, including the number of hours each had flown a 777. However, the sound bite that many people heard was limited to a comment about a pilot still being in training and having less than 50 hours of flying time in a 777. Likely because of Twitter’s character limits, users shared the first part of the statement about the number of hours but not what followed: the pilot did not have any “previous accidents, incidents, or company disciplinary actions.” He also had 9,684 total flight hours, including his time as a captain of both a 747 for more than two years and an A230 for five years (U.S. National Transportation Safety Board, 2014). The Air Line Pilots Association of Korea criticized the NTSB’s actions in releasing significant amounts of information so quickly; its representatives said, “information released by the U.S. National Transportation Safety Board has focused only on pilot error while neglecting possible contributing factors” (Pasztor, 2013a, p. A6). Even the NTSB cautioned the public about assuming the crash occurred
because of pilot error; officials told reporters not to rush to judgment about the cause of the crash until the investigation was finished. However, when an organization presents nuanced data to the general public using a form of communication that limits the number of characters in communication, subtlety disappears and can be replaced with concrete evidence where none exists.

The lessons learned from the NTSB are important for any organization to remember. First, whatever the organization’s history, it can quickly become the focus of the crisis event. An intern acting outside of his role created a major problem for an organization that depends on its credibility to deliver accurate information about accidents. Second, organizations must try to explain information in a way that does not allow for alternative interpretation. The work of NTSB is complex and specific, but communicating via social media can lead to detail being disregarded for brevity and conciseness. In using any platform to provide updates about a situation, organizations should keep information basic and direct.
CHAPTER 6

EBOLA: TRACING GLOBAL-CRISIS ANTENARRATIVES
DURING A PUBLIC-HEALTH EMERGENCY

The 2014 Ebola epidemic offers two unique situations for analysis of antenarrative usage in social media rhetoric. First, the social media response to the announcement of the first case of Ebola in the United States was significant because Twitter users reported the first case before the Center of Disease Control and Prevention (CDC) was able to hold a press conference to announce it. Second, the CDC was prepared with social media responses that fit the needs of a variety of audiences. The CDC frequently posted information to counter false claims and reports about Ebola, held live Twitter question and answer sessions with a variety of experts about Ebola, and frequently used prominent and influential Twitter users to spread the CDC’s messages about the disease.

Rhetorical Situation

The first outbreak and discovery of the Ebola virus occurred in the Democratic Republic of Congo near the Ebola River in 1976. These first cases were isolated geographically from the rest of the world and garnered little media attention. That changed when, in 1989, a variation of the Ebola virus killed a number of monkeys at an animal quarantine in Reston, Virginia. This form of Ebola was carried only by animals and was not transmitted to humans. As a result of this outbreak, the United States Centers for Disease Control and Prevention (CDC) created new and tighter quarantine rules for animals entering the United States from regions with previous Ebola outbreaks. Similar outbreaks occurred in 1990 and 1996 in animal quarantines but were not widely reported (Callahan, 2011;
Oldstone, 1998). Virologists have identified four different variations to the Ebola virus that cause Ebola in humans: *Zaire ebolavirus*, *Sudan ebolavirus*, *Tai Forest ebolavirus*, and *Bundibugyo ebolavirus*. The fifth, *Reston ebolavirus*, has only infected nonhuman primates. *Zaire ebolavirus* has the highest mortality rate, with an average of 83%. This variation is also responsible for the 2014 outbreak in West Africa.

Before the 2014 outbreak, Ebola had infected humans only in Africa. Previously, Ebola was a pop culture staple in the United States. Tom Clancy featured it prominently in his novel *Executive Orders*, as did Richard Preston in his nonfiction thriller, *The Hot Zone*. (Preston’s book inspired the movie *Outbreak*, which stars Dustin Hoffman, Morgan Freeman, and Rene Russo.) For most U.S. citizens, an Ebola outbreak in the United States was in the realm of science fiction. People anticipated that if an outbreak did occur, it would be small, as previous outbreaks had been. The largest outbreak before 2014 occurred in Uganda in 2001 with 425 cases. (For a history of Ebola outbreaks, cases, and deaths, see Appendix B.) The limited and remote nature of previous outbreaks made Ebola in the United States seem unlikely to most U.S. citizens.

This misconception would be challenged with the most recent Ebola outbreak, which started in December 2013 in Guinea. The number of cases soon grew, and by August 2014, the World Health Organization declared the situation a “public health emergency of international concern” (Cumming-Bruce, 2014, p. A10). This outbreak was larger (with 15,209 confirmed cases) than all previous incidents of Ebola combined, and by mid-September 2014, five countries—Guinea, Liberia, Nigeria, Senegal, and Sierra Leone—reported Ebola related deaths. The World Health Organization (WHO) gave a bleak outlook
for controlling Ebola and predicted it would continue to spread without additional support and mechanisms for monitoring patients (WHO Ebola Response Team, 2014).

The majority of cases and deaths from Ebola occurred in the West African countries of Guinea, Liberia, and Sierra Leone. Neighboring countries of Mali, Nigeria, and Senegal had Ebola infections but on a smaller scale. Other countries like Italy, Spain, the United Kingdom, and the United States also had cases of Ebola but on an even more limited scale than countries in West Africa. Some officials believe the number of cases and deaths could be higher due to cases in rural areas of West Africa not having been reported or deaths not having been attributed to Ebola. The total numbers of cases and deaths from the 2014 Ebola outbreak are shown in Table 6.1.

Table 6.1

*The 2014 Ebola Outbreak by Country*

<table>
<thead>
<tr>
<th>Country</th>
<th>Confirmed and Unconfirmed Cases</th>
<th>Laboratory-Confirmed Cases</th>
<th>Total Deaths</th>
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</thead>
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</tr>
<tr>
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</tr>
<tr>
<td>Total</td>
<td>27760</td>
<td>15209</td>
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</tr>
</tbody>
</table>

(2014 Ebola Outbreak in West Africa; Case Counts, 2015)
On September 30, 2014, the CDC confirmed a case of Ebola in Dallas, Texas. Initially, the CDC would not confirm the name of the man infected, but it did note that the man had recently traveled from Liberia to Texas. Four days after returning to the United States, the man developed symptoms and sought treatment at Texas Health Presbyterian Hospital in Dallas on September 26.

To reduce the fears of the public, Dr. Tom Frieden, the director of the CDC, announced that the organization would find and monitor people who had been exposed to the infected man. Ebola’s incubation period is a maximum of 21 days, meaning that anyone infected would exhibit symptoms of the virus within three weeks. Anyone being monitored would consequently be isolated for 21 days to prevent the spread of the disease (McKay & Campoy, 2014). Within two days of the CDC announcement on October 1, members of the media had confirmed that Thomas Eric Duncan was the man to whom the first announcement had referred, that he had tested positive for the Ebola virus, and that the CDC was monitoring his five children and a small group of adults who had come into contact with Duncan after he developed symptoms (Koppel, Frosch, & McKay, 2014). By October 3, the CDC announced that 100 people were being screened and monitored for potential exposure (Campoy, Hinshaw, & Frosch, 2014). As more information became available and the media spent increasing amounts of time devoted to covering Ebola, U.S. citizens began to panic about the possibility of a large-scale outbreak. Four major admissions about the Duncan case created additional fear and panic among the public:

- U.S. and Texas health officials agreed there would be additional Ebola cases in Dallas because of the number of people who had been in contact with Duncan.
• Duncan had sought medical treatment before being admitted on September 26, but Texas Health Presbyterian Hospital had released him because doctors were not told that he had recently traveled to Africa.

• Duncan’s children had been in contact with him, had subsequently attended public school, and had continued to do so even after Texas health officials quarantined the family.

• In taking a mandatory questionnaire at the airport in Liberia, Duncan lied by saying that he did not have contact with an Ebola victim (Campoy, Colleen, & Koppel, 2014).

This information would fuel public panic and concerns about Ebola. These fears were magnified on social media, especially as inaccurate information about the disease spread.

The public’s use of social media would challenge the CDC’s efforts to use crisis communication techniques. On Twitter, anxiety and fears about a large-scale U.S. outbreak were a foregone conclusion. White House Press Secretary Josh Earnest and President Obama made several statements to reduce the misinformation; additionally, the White House website, blogs, and Instagram and Twitter accounts were used to publish accurate information about Ebola. CDC officials were concerned about public anxiety and false information on social media, as such communication could make it difficult for the public to receive accurate details about the virus (Armour, 2014a).

Some of these fears subsided after Duncan died on October 8, 2014, and the other U.S. citizens who sought treatment in the United States after contracting the disease in Africa were recovering (Bustillo, Campoy, & McKay, 2014). This claim did not last, as Nina Pham, a nurse who cared for Duncan at Texas Health Presbyterian Hospital, tested positive
for Ebola. Hospital officials had told healthcare workers they were at low risk of contracting
the disease because they had been using protective gear. After this new case was announced,
CDC representatives said the infection occurred because of a “breach of protocol” in caring
for Duncan (McKay, Bustillo, & Beck, 2014).

These comments generated criticism for doctors and hospitals across the country,
claiming the CDC had failed to train and provide resources for hospitals treating Ebola.
Within days, the CDC created a new policy in which a CDC-trained special-response team
would be flown in to train health workers and monitor the containment of Ebola at any
hospital treating an Ebola patient. This was to ensure that other secondary infections would
not occur as a result of primary care (Bauerlein & Bustillo, 2014). Just six days after Pham
tested positive for Ebola, a second Dallas nurse, Amber Vinson, contracted Ebola. The
Vinson case created additional panic when the media discovered Vinson had traveled from
Dallas to Cleveland via Frontier Airlines and had returned to Dallas two days before
receiving a positive Ebola diagnoses (Bustillo & Frosch, 2014). Many health experts,
including the director of the CDC, and members of the general public asked how a nurse
involved in treating Ebola was allowed to fly and possibly transmit the virus.

In response to concerns about new cases of Ebola coming into the United States
from West Africa, United States airports Chicago O’Hare International, Hartsfield-Jackson
Atlanta International, John F. Kennedy International, Newark, and Washington Dulles
International began screening all passengers arriving form Guinea, Liberia, Nigeria, Senegal,
and Sierra Leone (Melanie, 2014a). This measure was not enough for the public and
lawmakers, who increased criticism and attacks about how the U.S. government was
handling the Ebola response. Members of Congress demanded travel bans to and from
infected countries in West Africa. Members of Congress also called on President Obama to create an Ebola czar—someone to act as the go-between for all governmental organizations and effectively execute a new response to cases of Ebola in the United States (Armour & Lee, 2014).

Three weeks into the Ebola crisis in the United States, public fears had not been calmed, and the public was pressuring the government and the CDC to acknowledge the risks and be honest about the response to Ebola. Most of the criticism resulted because of a press event with Frieden, who said six times that the United States would stop Ebola “in its tracks.” In addition, President Obama stated that the CDC’s protocols would “greatly reduce the risks of anybody catching this disease.” However, Ebola started with one individual, and now two nurses who had cared for him were infected. The confirmed cases and a growing number of false alarms across the country had reduced confidence in how the government was handling Ebola (Armour, 2014b p. A4).

On October 23, 2014, a fourth patient in the United States was diagnosed with Ebola. Craig Spencer, a physician who had been working with Doctors Without Borders in Guinea, began showing symptoms of the Ebola virus a week after returning home to New York City. While only four cases of Ebola had developed in the United States from September 29, 2014, to October 24, 2014, CDC representatives had investigated more than 400 possible cases of Ebola across the country (Dawsey, Tangel, & McKay, 2014). Public concerns about new and potential Ebola cases began to subside in mid-November when Dr. Spencer was released from New York City’s Bellevue Hospital (Melanie & McKay, 2014). When none of the hospital staff treating Spencer developed Ebola symptoms, and with no new cases reported in the United States, much of the fear of a massive outbreak ended and
the emphasis of the Ebola crisis returned to containment overseas (Hartocollis & Santora, 2014). The U.S. focus turned to how the international community could help stop the spread of Ebola. Additionally, an Ebola vaccine, cAd3-EBO Z, was tested and declared safe. In November 2014, GlaxoSmithKline announced that it would be available beginning in January 2015 (Burton, 2014).

As the battle of Ebola continued in West Africa, Frieden said that the world needed to support the fight against Ebola and that the fight would be long and hard. “The epidemic will not end,” he said, “until every contact is traced and every chain of transmission broken” (Grady, 2014b, p. A10). In February 2015, U.S. military troops would start to downsize operations after building 14 treatment centers and seeing the number of cases decrease (Nissenbaum & Barnes, 2015). For many U.S. citizens, once no new cases were reported in the United States, this was the end of the Ebola story. The impact of Ebola in the United States was limited in terms of loss of life, but it had a significant impact in terms of political ammunition, public anxiety, and new and tighter regulations for medical providers volunteering in West Africa. However, when examining Ebola solely via social media, a different picture emerges.

In August 2014, Ebola cases continued to grow in West Africa, and the situation was constantly covered by a variety of media outlets. During this same time, Ebola began to trend on Twitter in the United States. Two U.S. citizens who were working in West Africa were transported to Emory University Hospital in Atlanta for treatment. This announcement caused panic on Twitter as users created scenarios similar to those in Outbreak, in which the virus grows out of control and kills millions. Even American business mogul Donald Trump weighed in by saying that Ebola patients “should be treated in Africa and not enter the
United States because the U.S. has enough problems” (Achenbach, Dennis, & Hogan, 2014). As the Twitter conversation continued in August, a trending topic was false information users posted, such as the following:

- Ebola spreads through the air
- Ebola is a flesh-eating virus
- Ebola outbreaks are unreported (Krisch, 2014)

Once a confirmed case appeared in the United States, the anxiety expressed on social media grew exponentially. Public opinion surveys indicated the angst was felt outside the virtual world as well. A *Washington Post* poll revealed that two-thirds of U.S. citizens were worried about an Ebola epidemic in the United States and that 4 in 10 people were “very” or “somewhat” worried that they or a close family member might catch the virus (Harlan, 2014).

The rumors about Ebola created additional fears. A student in California claimed she had Ebola symptoms to get out of classes. Others used Adobe Photoshop to create fake news pages, including one that reported an outbreak at Anchorage High School. Others claimed prominent people had contracted Ebola. Still others pointed to marijuana, salt water, or vitamin C as cures for the virus (Dewey, 2014). This type of content prompted President Obama to acknowledge what was occurring on social media: “We can’t give in to hysteria or fear, because that only makes it harder to get people the accurate information they need . . . . If we’re guided by science—the facts, not fear—then I am absolutely confident we can prevent a serious outbreak here in the United States” (Jaffe & Brittain, 2014, p. A11).

However, until late November 2014, after no new cases of Ebola had been confirmed in the
United States, social media users continued to create anxiety and fear as a result of the antenarratives used to make sense of this possible threat.

**Antenarratives in @CDCgov Tweets**

The predominant themes that emerged from the comments made using the @CDCgov Twitter handle were myths of Ebola’s transmission and counterarguments to the myths presented, updates regarding patients and the spread of Ebola across the United States, arguments that the flu was the larger concern, and a variety of conspiracy theories involving the CDC. (A complete list of @CDCgov Tweets is available in Appendix C.)

**Ebola Myths and Counterarguments to Those Myths**

As the news of the first diagnosed patient in the United States spread, the number of rumors and myths about how the virus was transmitted grew as well. Twitter users started posting information about Ebola being airborne and claimed the use of protective gear as evidence. Users like Kimberly Singh (2014) were the pattern for this approach: “How are doctors and nurses contracting #ebola when they are fully covered? Especially if its ‘not airborne?’ @CDCgov @CDCemergency @ABC7NY.” Other users were more direct in claiming that the virus is airborne by saying the virus had mutated and had become airborne: “@CDCgov @BrentFitness it’s a virus, virus’ mutate, a mutated strain will be airborne before we know. Don’t believe the govt, they lie!!” (FatRatAl, 2014). These claims about Ebola transmission increased enough that the mainstream media published articles about the myths; Laurie Garrett (2014) wrote one such article, which was published in The Washington Post. In the article, Garrett counters the claims of both airborne and mutating virus: “Yes, the virus is mutating—a recent paper in Science shows that more than 300 mutations have
occurred. But what is now a virus that latches onto receptors outside endothelial cells lining the circulatory system won’t change into one that can attach to the alveolar cells of the lungs. That’s a genetic leap in the realm of science fiction” (p. B2). This did not stop people from continuing to post myths that the Ebola virus had mutated into an airborne one and that the CDC was involved in a cover-up to protect this information. During the crisis, 48,099 Tweets provided counterarguments against Ebola myths shown in Table 6.2.

Table 6.2

Twitter Posts Countering Myths about the Ebola Virus

<table>
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<th>Posts</th>
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<td>10/43/14</td>
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</table>

Most of the spikes in the data are connected to additional cases of the Ebola virus in the United States. On September 30, the CDC announced a Dallas, Texas, man was hospitalized and lab tests had confirmed he was infected with the Ebola virus. The posts until October 8 were people responding to the news of the Ebola outbreak. On October 8, the spike in data was connected to the death of the first Ebola patient in the United States.
The uptick in posts on October 10 was connected to the diagnoses of a hospital worker who cared for the first victim. After the second hospital worker was confirmed with Ebola on October 15, Twitter posts increased as users speculated that the infections would continue. The next spike, on October 23, occurred as a fourth U.S. Ebola patient was hospitalized in New York City. As Ebola received additional attention in the United States, Twitter users increased the number of posts countering myths about Ebola.

In August 2014, the CDC turned to Twitter to inform the public about the way Ebola was spread. The organization used the hashtag #CDCchat in live, hour long discussions answering the public’s questions (Koren, 2014). The CDC hoped to prevent public panic once a confirmed case appeared in the United States and used social media as a critical tool for describing “how Ebola can—and cannot—be transmitted” (Grady, 2014a, p. A1). In opposition to the myths being presented on Twitter, users began retweeting information the CDC presented. The Department of Health and Human Services, using its Twitter account HHSGov (2014), retweeted this message: “RT @CDCgov @MamaSweet222 #Ebola has not mutated to become airborne. Currently transmitted thru bodily fluids (common blood, urine, feces) #CDCChat.” This presented a counterclaim to what those spreading myths and rumors about transmission were sharing. Users, such as Blerdman (2014), presented facts in their retweets: “RT @CDCgov #Ebola is spread by direct contact w/ body fluids of a sick person or exposure to contaminated objects, like needles.” These two posts were retweeted thousands of times during the month of October. The efforts to present the facts significantly changed the discussion around Ebola in the United States. Individuals who provided counterarguments to myths on Twitter posted or retweeted 48,099 times during the month following the announcement of the first U.S. case
compared with users who claimed that the Ebola virus had mutated and was now airborne, who posted 9,401 times during the same time period.

Another major myth that emerged was that the disease could easily spread in confined spaces (like an airplane) from people who did not appear to be sick. This was countered with “RT @CDCgov #EbolaFact: A person infected with #Ebola is not contagious until symptoms appear” (Mackinlay, 2014). In the case of Amber Vinson, the second nurse who contracted Ebola and had flown from Dallas to Cleveland days before developing symptoms, this information would have helped to reduce fears of the outbreak becoming a national pandemic.

**Updates Regarding Ebola in the United States**

The CDC confirmed the first case in the United States on September 30, but Twitter users were reporting the possibility of an Ebola patient in Dallas, Texas, on September 29: “RT @DoctorYasmin Statement from the #Dallas hospital where a suspected #Ebola #patient is in isolation. @CDCgov expects results 9/30” (Knox, 2014). Twitter played a critical role in breaking the news.

As the CDC was preparing for a press conference, it issued an embargoed press release, meaning the information could be released to the public only after a specific time. Several news organizations broke the embargo by reporting the story both in mainstream locations and on Twitter before the publication restrictions were lifted (CDC Confirms First, 2014).

Once Twitter users had broken the news of the first Ebola case, the public turned to Twitter for additional information throughout the crisis. Table 6.3 provides details about the number of posts that occurred during the first month of the crisis.
Table 6.3

Twitter Posts Providing Updates about Fight Against Ebola in the U.S.

Posts regarding updates about Ebola containment are also connected with major Ebola developments in the United States. The first major increase in posts was the day of the announcement of the first case of Ebola in the United States. The second increase in posts, on October 15, occurred as a third confirmed case was announced. This third case was a hospital worker at Texas Health Presbyterian Hospital who worked on the first Ebola case. This case was the second healthcare worker at the same hospital who was infected with Ebola.

Most users were reporting news about Ebola patients that was widely available to the public. Charles Johnson (2014) posted, “RT @toddgillman At @CDCgov, Dr. Frieden says 2d #Ebola case shows clearly a ‘breach in protocol.’” Any development in Duncan’s health status was reported on Twitter. Twitter users also reported other Ebola news: “RT @WNTonight Mark Zuckerberg and wife donating $25,000,000 to help the @CDC.gov fight Ebola” (Radford, 2014). Beyond updates about victims and donations, posts included
changes in protocols and prevention of Ebola infections in hospitals (Glucksman, 2014):

“RT @NPPTL October 30 update: #Ebola prevention and control recommendations for workers from @CDCgov @NIOSH.” New CDC protocols included training of how to put on and take off protective clothing, limits on the number of staff who care for an Ebola patient, and ways to sanitize contaminated surfaces (Melanie, 2014b).

Two incidents outside of this normal activity received wide coverage on Twitter. The first occurred on October 15, when the CDC announced that Amber Vinson, a nurse who helped to treat Thomas Duncan at Texas Health Presbyterian Hospital, contracted the third case of Ebola in the United States. Vinson had flown from Dallas to Cleveland and back before being diagnosed (Palazzolo, 2014). This information caused additional public panic, and health officials attempted to allay fear by pointing out that “all transmissions of the disease so far have been limited to health care workers at the one hospital” (Bustillo & Frosch, 2014). However, Vinson had flown with a temperature of 99.5 degrees, .9 degrees below the CDC guidelines for screening travelers. While Vinson did not have other symptoms of Ebola, CDC Director Thomas Frieden said she should not have traveled because of her possible exposure at the hospital. Frontier Airlines and the CDC contacted all 132 passengers on flight 1143 that had possibly been exposed to the Ebola virus (Berman, Sun, & Achenbach, 2014). This caused a stir on Twitter as posters spread the news. Michael Marks was one such user (2014): “BREAKING: @CDCGov says second health worker infected with #Ebola flew from Cleveland to Dallas w/ 132 others night before reporting symptoms.”

Beyond spreading the news, Twitter was also used to reach out to those on the flight from Cleveland: “RT @dallasnews @CDCgov wants all 132 people who flew Frontier 1143
from Cleveland to DFW on Oct 13 to call 1-800-232-4636” (Tkarow, 2014). Comments from Dallas Mayor Mike Rawlings also caused a spike on October 15. Users quoted Rawlings in their Tweets: “RT @JeffSmithNBC5 @CDCgov says more Ebola cases in Dallas is an ‘eventuality’. The mayor of Dallas says ‘this may get worse before it gets better’ @NBCDFW” (Russell, 2014). This comment caused additional fear about the outbreak spreading in Dallas.

The second incident to receive broad coverage occurred on October 27 after Doctors Without Borders nurse Kaci Hickox was interviewed by a CNN reporter and wrote a letter to The New York Times about her experience. After returning to the United States from treating patients in Sierra Leone, Hickox was placed in state-mandated quarantine. Quarantines had been used historically to prevent and control the spread of disease; the flu pandemic of 1918 was the last time quarantines were widely used in the United States (Weiser & Goodman, 2014). On October 25, 2015, Chris Christie and Andrew Cuomo, the governors of New Jersey and New York, respectively, issued orders for all people arriving from West Africa to be placed in a quarantine until tests confirmed they did not have Ebola.

The New Jersey quarantine facility was a tent with a portable toilet and no shower near the Newark airport; health experts and officials criticized the conditions as inhumane (Fitzsimmons, 2014). Hickox hired a civil rights attorney to fight her case and have the quarantine lifted. Public health experts argued that New Jersey and New York’s quarantine policies were not based on good science and could have unintended consequences if widely adopted by other states or the federal government (Colleen, Melanie, & McKay, 2014). On October 27, Hickox was allowed to travel to her home in Maine where she stayed for the remainder of the quarantine period (Flegenheimer, Shear, & Barbaro, 2014). Hickox became
a trending topic on Twitter on October 29, when she told reporters she would not comply with state rules regarding her quarantine and took an hour long bike ride followed by reporters (Berman & Dennis, 2014).

*The Wall Street Journal* conducted a poll that found 82% of New Yorkers supported a 21-day quarantine for anyone who had contact with an Ebola patient (Orden, 2014). This opinion was apparent on Twitter, as users posted comments like, “Ebola nurse Kaci Hickox violates quarantine, dares you to do something about it: Making things worse” (TheGRIM, 2014). These users questioned Hickox’s reasoning and the risks she was taking with other people’s health. Some users attempted to show that they thought that Hickox was not acting responsibly: “Kaci Hickox’s boyfriend: ‘Not trying’ to spread Ebola” (Oluwaseun, 2014). Other users attempted to show Hickox as foolish and her actions as reckless: “I’m not sure who’s more foolish, Nurse #Hickox refusing to be quarantined, or the press with her trying to get her reason why? #Ebola” (Bond, 2014). While the majority of users condemned Hickox and supported her being quarantined, others attempted to defend her: “Harassment of Kaci Hickox is grotesque. What’s next in the ignorant circus? Think a woman who put herself on #Ebola front lines isn’t tough?” (Wright, 2014). Although they were in the minority, these users argued that the quarantine wasted resources, especially in cases in which people did not show signs or symptoms of Ebola.

Hickox never developed Ebola, and no one else was quarantined at the New Jersey or New York airports. To avoid Hickox’s fate, many healthcare workers returning to the United States from West Africa flew into airports that did not have quarantine policies. Medical experts condemned the use of quarantines in New Jersey and New York and said that the Obama administration, which maintained the policy, went beyond federal health
laws and was never challenged in court (Hartocollis, 2014). Future outbreaks of communicable diseases, including Ebola, might generate legal challenges to the concept of quarantine in the United States.

**Flu, Not Ebola, was the Threat**

The outbreak of Ebola in the United States coincided with the beginning of the flu season, and the early symptoms of Ebola parallel those of the flu. Influenza, or the flu, is a viral respiratory infection that can cause severe illness and life-threatening medical complications. More than 200,000 people are hospitalized each year with complications from the flu. “Over a period of 30 years, between 1976 and 2006, estimates of flu-associated deaths in the United States range from a low of about 3,000 to a high of about 49,000 people” (“CDC Seasonal Influenza, 2015, p. 1). The flu is active in the United States between October and May each year. The fear of an early flu season would compound healthcare professionals’ problems, as professionals would have to treat all cases of the flu as though they were Ebola to protect the public (Gottlieb & Troy, 2014).

The outbreak of Ebola in the United States occurred at the same time the seasonal flu vaccine was widely available. The early days of the Ebola outbreak in the United States saw limited discussion about the threat the flu posed for citizens. The tipping point for this discussion occurred once the third case was announced. Many Twitter users claimed these first three cases would be the start of a large, national pandemic. These claims caused additional fear and uncertainty. Claims about the flu being the larger threat helped counter these claims. Table 6.4 includes the data about Twitter posts regarding flu as the threat.

As the flu spread, many people who were infected with it came to believe that they might have Ebola. Twitter users again turned to the CDC for official information regarding
flu and Ebola. A frequent post was, “RT @CDCgov @wolfiemouse Unless you have been in contact with a confirmed person, flu-like symptoms will most likely be flu #CDCChat” (Marrow, 2014). This type of post was meant to calm an anxious public, especially as Ebola symptoms permeated news reports. Ed Balkovic (2014) posted, “RT @HHSGov A reminder from @CDCgov: #Flu & #Ebola have some similar symptoms, but flu is common, Ebola is very rare.” Beyond telling the public Ebola was rare, other Twitter users like Clinton Andersen (2014) also attempted to highlight the dangers of the flu: “Flu & Pneumonia killed about 3 times the people in the United States in 2010 then #Ebola has killed worldwide, ever. #FactsNotFear @CDCgov.”

Table 6.4

Twitter Posts Flu, Not Ebola, was the Threat

While the public was concerned about Ebola, a virus without a vaccine at this point, the virus with a widely available vaccine, the flu, did not cause the public to act and protect themselves. This CDC Twitter flu shot campaign did not change the number of U.S. citizens who received a flu shot. A study conducted by the CDC found that as of November 2014,
40% of children ages six months to 17 years and 39.7% of those 17 years and older had received a flu shot (CDC National Early Season, 2014).

**Claims of a CDC Conspiracy**

As news of Ebola entering the United States filled newspapers and broadcasts, a number of conspiracy theories appeared on Twitter. Some of the conspiracies concluded that President Obama purposely brought Ebola to the United States. Others claimed that an old episode of *The Simpsons* predicted the Ebola outbreak in the United States. Even singer Chris Brown weighed in by saying Ebola was a birth-control plot (Millman, 2014b).

Conspiracy theories provide another form of antenarrative that examines power relationships between governmental, business, or organizational entities and individuals, groups, or the powerless. These antenarratives explain of anxiety, demonstrate ways of understanding and finding answers to the unfamiliar, and show how those in power develop systems to maintain power. “Outbreaks, as a genre, have long attracted conspiracy theorists, beginning in medieval times when the Jewish leaders of Toledo, Spain, were blamed for having spread the Black Plague. More recently, the AIDS epidemic was also said to have been caused by a government plot” (Feuer, 2014, p. SR5).

These theories provide insight into how society views events and the ways in which individuals make sense of a situation. With Ebola, public health officials were quick to correct information presented in conspiracies. In some cases, these corrections caused more damage to the CDC’s rhetoric than the original conspiracy theory. For example, officials attempted to reassure the public that the medical facilities in the United States were advanced enough that “any hospital could safely handle Ebola parents with little risk” (Altman, 2014, p. D2). Once the disease spread from the first patient, Twitter users turned
these words against the CDC. Table 6.5 shows the number of conspiracy theory Tweets generated during the first month of the outbreak in the United States.

Table 6.5

*Twitter Posts Claiming Conspiracy*

Claims of conspiracy correlate with the most intense news coverage of the Ebola cases in the United States. As reports about Ebola increased, so did antenarratives in order for the public to understand and make sense of the situation. Two major groups of conspiracy claims appear in the data:

- A CDC cover-up involving the myth of a link between vaccination and autism
- A conspiracy involving the outbreak of Ebola, where it came from, and the involvement of large pharmaceutical companies

The first group of theories frequently used one of two hashtags—#CDCfraud and #CDCwhistleblower—to connect their conversation and accusations. On August 28, 2014,
the scientific journal *Translational Neurodegeneration* removed an article written by Dr. Brian Hooker that concluded that African-American boys have increased risk of developing autism if they are administered the measles, mumps, and rubella (MMR) vaccine before the age of two. Hooker claimed CDC scientists at the National Immunization Program knew of the elevated risk to African-American males who received the MMR vaccine before age 2 but did not publish these findings (Goldschmidt, 2014). This situation was further complicated when Dr. William Thompson, a senior scientist at the CDC, collaborated with Hooker in a reanalysis of the CDC’s data.

Andrew Wakefield, a leader in the anti vaccination movement, turned recorded conversation between Thompson and Hooker into a YouTube video. In the video, Wakefield compared the CDC’s study to the Tuskegee syphilis experiment—which involved U.S. government researchers who withheld treatment from individuals who had syphilis in order to record the progress of the diseases when untreated—and to actions by Hitler, Stalin, and Pol Pot. In recorded conversations, Thompson claimed his autism research team did not publish statistically significant findings that showed a link between the MMR vaccine and autism (Saunders, 2014). These new developments increased social media attacks against the CDC that coincided with the outbreak of Ebola in the United States. Posters referred back to the news developments in August 2014 as evidence of the CDC cover-up.

Deb Nantz (2014), in addition to many others, posted, “RT @JakeLCrosby @slupkin @ABC Brian Hooker’s Findings Are Confirmed by @CDCgov’s #CDCwhistleblower.” Many posts included a link to a page called Autism Investigated, at which statistical tables are presented to support Hooker’s claims. Other posters created headlines about a possible link between MMR vaccines and cases of autism to communicate
with those who may not have known anything about the Hooker study. The study published the statistically significant findings not published by Thompson’s research team. One such poster was Melissa Altmeyer (2014), who wrote, “VACCINES NOW NOT SAFE! Senior @CDCgov scientist William Thompson, he knows #CDCwhistleblower Tip of the iceberg.” By connecting the claim that vaccines are not safe to words like “CDC” and “senior scientist,” users were adding credibility to the idea that vaccination is linked to the development of autism.

Other users posted more general attacks against vaccination by using the @CDCgov Twitter handle. Renne Souza (2014) was one such user and posted, “@CDCgov @CDCfraud 1.5 million children with autism is not genetics nor pollutants it’s terrorism with a biomedical weapon #warfare #vaccines.” Some users moved in the direction of focusing on individual children rather than the masses; many of these posts were similar to Roxie Fiste’s (2014): “RT @MARS0411 When @CDCgov decides #EveryChildCounts, our kids won’t have vax injuries & regressive ASD #CDCwhistleblower.” These posters continued their attacks of the CDC and the autism/MMR vaccine link during the month of October and beyond. The outbreak of Ebola increased the number of individuals following the @CDCgov Twitter handle and gave a larger platform for messages from #CDCwhistleblower and #CDCfraud.

Other users employed the rhetoric of the anti vaccination movement to discredit any claim made by the CDC. Becky Hastings (2014) posted, “RT @MARS0411 After the way @CDCgov handled Ebola, U think they won’t lie abt vaccines causing Autism? They lie abt everything. #CDCwhistleblower says so.” While there was some overlap between autism
claims and Ebola, the majority of conspiracy comments dealt with either Ebola or autism, but not both.

Users also created conspiracy theories around Ebola and the U.S. outbreak. One major theme of these posts included speculation on the origin of the Ebola virus. Some users said that Ebola did not occur naturally and that it was created in a lab. One such user, Ali AwDoll (2014), posted, “@AGENT_GATTACA I said it in reference to the claims that #Ebola virus was created in an American lab by #CDC @EbolaVaccineNow @CDCgov.” This theory would continue in the posts of others, such as Daruis Philip (2014), who wrote, “@WhiteHouse @HHSGov tell him [President Obama] to stop the lies! Ebola is a bioweapon engineered by @CDCgov patented and curable.” By claiming the virus was not a natural occurrence, these posters implied something more sinister: that the government had created a virus and allowed people to die in order to gather additional research. These claims are not new; similar conspiracy theories emerged when AIDS first appeared in media reports during the 1980s. Conspiracy theories claimed, “that scientists created H.I.V. at Fort Detrick, an Army base in Maryland, from which it escaped to infect the world” (Altman, 2014, p. D2). A similar claim is a key component of the movie Outbreak, in which the army developed a weaponized version of the virus and created an antidote but used an outbreak to gain additional research about how the virus was spread.

The other dominant claim was the involvement of pharmaceutical companies in the outbreak of Ebola. These posts focused on the development of a vaccine or a cure for Ebola. Some users claimed companies had delayed the development of Ebola treatments for decades because a sufficiently large market didn’t exist to pay for the drugs. Hickory (2014) posted such a claim: “@CDCgov @AlphaSterile JUST ENOUGH SCARE and BIG
PHARMA ready to rake in $$$ for vaccine. Bring EBOLA here—the most lucrative market.”

These claims centered on the money and power the pharmaceutical industry would gain in treating Ebola. Some Twitter users discussed the money pharmaceutical companies would make by selling treatments or vaccines to a U.S. market: “@LondonTweeter1 @WhiteHouse @CDCgov mKe no mistake, big pharma stands to gain billions of $ from the Ebola hysteria” (KaliniuS, 2014).

As early as 1999, there were developments toward making an Ebola vaccine; however, large companies would not continue working towards a vaccine because there was no mass market for the product (Schoofs, 2000). A number of experimental drugs were developed and used to fight Ebola. They never underwent human trials and a formal approval process but were used due to the extraordinary circumstances created by Ebola in 2014 (Dennis, 2015). While the pharmaceutical companies were able to engage in a research and development process for drugs, they did not engage in profiteering, as the drugs were never widely produced.

**Antenarratives in Tweets from the United States Public**

The CDC had the role of creating official rhetoric for the U.S. government about the progress, containment, and other health risks of the Ebola outbreak. Examining not only the official rhetoric of the CDC and those who interacted with it but also the Tweets of the United States public provides additional insight about the creation of Ebola antenarratives. While overlap exists among the narratives created by the CDC—especially in the case of influenza as a major threat—other antenarrative is specific to the general public group due to the number of people who posted during the first month after the first case of Ebola in the
United States was confirmed. An examination of Tweets made in the United States revealed four major themes:

- Identification of the flu as a more significant concern than Ebola
- Calls for travel bans and mandatory quarantines
- Debate over the myths surrounding Ebola’s transmission
- The use of Ebola as a means to gain political points

American Tweets Naming Flu as the Danger in the United States

One of the CDC’s major strategies during the Ebola outbreak was promoting the danger that the flu—not Ebola—posed to the U.S. public. The CDC pointed out the ease of transmission and the number of deaths the flu causes as reasons to worry about the flu. Media cited the death totals of the Spanish flu pandemic of 1918, which killed 585,135 people in the United States, as well as more recent statistics. The range of annual flu deaths between 1976 and 2007 in the United States was a low of 3,000 and a high of 49,000 (Miller, 2014).

The other major reason the CDC was concentrating on the flu during the Ebola outbreak was the similarities of both diseases’ early symptoms. The major concern was that if Ebola was widespread in the United States and if the outbreak “coincide[d] with the cold-weather peak of the flu season—when symptoms of influenza can be confused for the early signs of Ebola—the health care system’s ability to quarantine all the people with suspected Ebola infections, and test them in the required specially equipped labs, could be overwhelmed” (Gottlieb & Troy, 2014 p. A13). The CDC attempted to educate the public
about the similarities between Ebola and the flu while downplaying the chances of contracting Ebola in the United States.

Hospitals across the country prepared for increased false alarms and emergency-room traffic. In the week following Duncan’s Ebola diagnosis, U.S. hospitals reported at least 5,000 false Ebola cases. Healthcare professionals anticipated this as one of the consequences of the public’s attention on Ebola. Similarly, during the swine flu pandemic of 2009, some hospitals saw an increase of 20% in pediatric visits to ERs because of parents’ fears of possible swine flu exposure (Millman, 2014a). Table 6.6 shows the volume of Tweets regarding flu and the flu as a danger to the U.S. public.

Table 6.6

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<th>U.S. Tweets about Flu as the More Significant Threat</th>
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The general public of the United States also tweeted about the threat of the flu being greater than Ebola; however, these posts also clustered around dates of significance in the
Ebola outbreak. The first clusters occurred in the first few days after the announcement of the first U.S. case of Ebola, the second after the death of the first patient, and other spikes occurred as other cases were confirmed on October 12, 15, and 23.

The major flu antenarrative themes on Twitter were similar to what was being presented by the CDC. First, users focused on the number of flu cases and on the insignificant chances of contracting Ebola in the United States. Users like Jay Wilson (2014) attempted to show the real health risks of each disease to the U.S. public: “RT @140elect Americans in past year killed by…#Ebola: 1. #ISIS: 2. Gun violence: 31,000. Flu/Pneumonia: 54,000. Cancer: 575,000. Heart disease: 600,000.” By comparing the deaths Ebola caused to those caused by other health issues (like cancer and heart disease), these users subtly argued that the public’s attention should be turned elsewhere. Other users, like Chris Reimer (2104), were concise with their arguments: “The flu will kill thousands of us this winter. And there’s a shot that can help, & many of us won’t get it. But let’s freak about Ebola, k?”

Reimer was not alone in pointing out Americans’ access to the flu vaccine and their unwillingness to take advantage of this benefit. Other users made similar points by focusing on the number of people killed by the flu versus Ebola each year. Ben Kehoe (2014) posted, “RT @KQEDnews The flu kills more people in a year in the U.S. than Ebola has killed in the history of the world.” Even when compared to the worldwide totals of Ebola deaths, the flu in the United States still kills more people every year.

Similar arguments were made using statistical data generated by the CDC in its public outreach campaign. Twitter posters like Adam Feuerstein (2014) focused on the flu’s impact in the United States: “RT @LizSzabo Putting Ebola’s risks into perspective: it has killed
3500, but flu kills up to 49,000 Americans a year.” This antenarrative attempted to shift focus away from Ebola toward a more significant public health risk—the flu.

The other major issue was similarity between Ebola and flu symptoms. Brad Plumer (2014) wrote, “One reason why there are so many Ebola false alarms is that the early symptoms just look a lot like the flu.” These similarities caused other users to encourage members of the public to get a flu shot; Deke Bridges (2014) posted, “Hospitals Brace as Ebola Panic, Flu Season Collide . . . similar symptoms. Get your flu shot! It’s available now.” Public officials echoed these sentiments; Samuel Rubenfeld (2014) retweeted New York City Mayor Bill de Blasio’s message: “Get a flu shot. It helps our medical teams since flu symptoms are similar. #Ebola.” Other users reminded the public how rare Ebola is compared to the flu. Loyola Wellness (2014) posted, “A reminder from @CDCgov: #Flu & #Ebola have some similar symptoms, but flu is common, Ebola is very rare.” All of these users attempted to draw attention away from Ebola and calm fear about the possibility of a widespread outbreak.

U.S. TweetsDemanding Quarantines and Travel Bans

As the number of people infected with Ebola grew in the United States, some people wanted the U.S. government to ban travel to West Africa. Additionally, there were calls to prevent people with passports from countries with widespread outbreaks from entering the United States. This rhetoric spiked on October 15, when Speaker of the House John Boehner called for President Obama to institute a travel ban (Tavernise, 2014). When the government refused to create travel bans, other U.S. politicians wanted to impose a mandatory quarantine on all travelers coming from West Africa. Spencer, the New York City
doctor who contracted Ebola while treating patients in West Africa and returned home before developing symptoms, was the major reason that the governors of New Jersey and New York created a mandatory 21-day quarantine. The quarantine policy created substantial resistance from the federal government officials who did not want to impose quarantines but did not have legal grounds to fight it, as public health laws placed power for quarantines in state and local governments (Colleen, et al., 2014).

The public discussion of the quarantine would continue from October 23 until the end of the month. During this time, Hickox, the quarantined nurse who returned from Sierra Leone, fought her quarantine in New Jersey (Haddon & Dawsey, 2014). Twitter users frequently agreed with calls for travel bans and the need to quarantine everyone traveling from West Africa. Table 6.7 shows the number of posts demanding restricting travel and limiting the movement of people who could have been exposed to the Ebola virus.

Table 6.7

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<th>U.S. Tweets Demanding Quarantines and Travel Bans</th>
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Unlike previous antenarrative clusters, calls for quarantine only increased after the first three cases of Ebola were confirmed. These calls were particularly intense after the third patient flew across the country before being tested for Ebola. The second heavy cluster of data occurred after a nurse who was treating Ebola patients in West Africa returned to New Jersey and was placed in a state quarantine. She defied the state and was released from the quarantine early. Her early release from quarantine caused Twitter users to demand all travelers from West Africa be placed in a mandatory quarantine.

Early calls for a travel ban came from Donald Trump, who demanded the government take action to protect the United States and its citizens. Maria Sarasua (2014) tweeted the following: “@RiannaRichards: This is why I agree with Donald Trump: They should ban flights from #Ebola infected countries from entering the U.S.” Many users quickly pointed out that other countries had banned travel and suggested that the United States should follow suit: “Even Saudi Arabia bans Ebola stricken countries from hajj pilgrimage but US still won’t ban ebola countries from US” (Gustafson, 2014).

U.S. government officials did not want to ban travel because it would make fighting Ebola more difficult. Travel bans would limit the ability of medical volunteers to reach West Africa and provide services to those infected with Ebola. Richelle Carey (2014) posted, “CDC says problem with the approach to ban travel to/from Africa is makes it harder to respond to #Ebola outbreak there, increase risk here.” This line of reasoning was effective for some; however, a distrust of the CDC was still a major element of these posts. Joe Walsh (2014) was one such user: “CDC Head is lying to America about Ebola to cover for Obama who won’t suspend travel visas & ban flights. American lives put at risk.” Such attacks increased as politicians called for travel bans; Marco Rubio (2014), a Republican from
Florida, led the charge to create a travel ban: “When Senate returns to session I will file bill
to ban visas to those traveling from #Ebola impacted countries.”

Similar arguments were made for quarantines. Some Twitter users questioned the
logic of allowing people who could have been exposed to Ebola to interact with the public
and possibly infect others with the virus. Anthony De Rosa (2014) was among them and
wrote, “Shouldn’t everyone who’s been in contact with Ebola self quarantine themselves for
at least 21 days? Am I missing something? #NYC.” Arguments for self-imposed quarantines
were quickly replaced with demands for mandatory ones. Danni Victoria (2014) posted,
“You treat Ebola patients in West Africa & you fly back to America-you do 21 day
mandatory quarantine. Period. End.”

A minority of Twitter users argued against mandatory quarantines, using the
reasoning presented by CDC and WHO leaders who claimed that such restrictions would
make it difficult for U.S. health professionals to help treat patients in West Africa. One of
these users, Alan R. Hutson (2014) posted, “New Ebola Quarantine Protocol Seen as Barrier
to Volunteers.” The debate about quarantines continued and increased when Hickox fought
the mandatory quarantine of New Jersey.

**U.S. Tweets Regarding Myths and Counterarguments to Myths**

As the Ebola outbreak grew, a number of myths about the virus also spread. These
myths created public panic and caused additional misconceptions about the virus. The CDC
worked quickly to argue against the claims about how the virus spreads, where it comes
from, and what must be done to contain it. The CDC prepared infographics with
counterarguments to the top ten myths in the United States about Ebola. The CDC
infographic attacked the largest myths regarding the transmission of the virus, including those that suggested that Ebola had become airborne, that the virus was waterborne, and that even brief contact could spread the virus. News outlets began broadcasting and publishing the actual means of Ebola transmission—that “fluids like blood, sweat or urine has to come in contact with your eyes, mouth, nostrils, ears, genital area or an open wound in order to infect you” and not just casual contact with someone (Almendrala, 2014).

Although the counterarguments to the myths appeared in a variety of media outlets, access to this information did not end the posting of myths. Table 6.8 shows the number of Tweets that present an Ebola myth and counterarguments to the myths during the first month after the first case of Ebola in the United States.

Table 6.8

U.S. Tweets Regarding Ebola Myths and Counterarguments to Myths
A comparison of posts about Ebola myths and counters to those myths reveals an interesting pattern. Counterarguments to myths were most common near major news events about Ebola in the United States. The counters to myths outnumbered the users who posted about myths even on days that did not include major developments in the outbreak of Ebola. However, users who posted about myths did so in a frequent manner over the month of October.

The major myth and counterarguments to myth involved the transmission of the Ebola virus. The majority of users attempted to counter the claim that Ebola is an airborne virus by posting information about how Ebola is actually spread. Deborah Blum (2014) posted, “Ebola isn’t airborne. You can only get it by coming in contact with the bodily fluids of someone showing symptoms.” Other users included additional details: “not airborne. Direct contact-touching, sweat/other bodily fluids. Being in contact w a carrier doesn’t mean u will get Ebola” (C. Carpenter, 2014). These users relayed the information prepared by the CDC, but it did not persuade some readers.

Those who promoted claims that the virus was now airborne followed a specific progression of wording in their Tweets. Dr. Lee Vliet (2014) posted, “Ebola Update: CDC now admits possible airborne transmission.” Vliet and other posters included words like “possible,” “might,” or “could” that hedged the possibility of an airborne virus. Other users would report the same news but remove critical words. Todd Bishop (2014) was one such user; he omitted the word possible in his post: “Airborne? CDC Now Confirms Concerns of Airborne Transmission of Ebola.” In just a few hours, the idea of an airborne virus went from a possibility to a certainty. Just as Fahnestock (1986) discussed how journalists remove doubt or possibility from scientific reports and findings, the same is true of social media
users who may not understand the nuance of scientific communication and replace it with what they believe to be fact and certainty. Timothy Poplin (2014) also posted, “U.S. Army: Ebola Goes Airborne In Cold Weather.” These arguments were given support and credibility as they were shared. Karl Frisch (2014) retweeted, “Rep. Peter King says Ebola virus has turned airborne, scolds experts for being ‘wrong.’”

The more the topic was discussed on Twitter, the more the information was spread to the public. After several weeks and the Ebola virus not mutating into an airborne pathogen, users again took a cautious position. Meredith (2014) wrote, “Here’s a reason to take ebola seriously, it is a virus that can mutate and become airborne at any time. Food for thought.” In these posts, the threat went from a certainty to an impending disaster. Other users highlighted the fact that a mutation had not yet occurred as a good thing; Allen Salkin (2014) posted, “If Ebola mutates to become airborne and kills a billion people, we’ll wish we’d invested more in containing it while we could.” No matter what information the CDC presented, some Twitter users could not believe that Ebola was not easy to catch or that it was not (and could not become) airborne. While the number of users countering myths was significantly greater, the arguments and evidence those users shared could not put to rest the myths and conspiracies presented on Twitter.

**U.S. Tweets Politicalizing the Ebola Outbreak**

The Ebola virus came to the United States not only at the start of flu season, but also a few weeks before the midterm elections. As the Ebola risk to U.S. citizens increased, the risk to U.S. politicians became even more real. Members of the public were demanding answers about why and how the United States was facing the spread of Ebola (Eilperin, 2014). The topic quickly became a factor in public debate. For Republicans, Ebola became
evidence of another failure of the Obama administration, which they determined had not acted quickly enough to keep the virus out of the United States. A *Washington Post*-ABC News poll showed that 65% of the U.S. public wanted a travel ban to help prevent the spread of the virus, and many Republicans promoted the ban to keep the U.S. safe. This rhetorical attack affected the public perception of President Obama’s response to the Ebola outbreak; a YouGov poll showed that only 33% of U.S. citizens had confidence in the President's plan to fight Ebola (Ellison, 2014). Political attacks using Ebola remained high throughout the month of October as politicians were out on the campaign trail. Table 6.9 shows the number of political posts that occurred during the first month of the Ebola outbreak in the United States.

Table 6.9

*U.S. Tweets Politicalizing the Ebola Outbreak During October 2014*
The day the CDC confirmed the first case of Ebola in the United States was the day with the fewest Tweets politicizing the Ebola outbreak. While other publicly generated Tweets reacted in real time to developments in the Ebola outbreak, political posts had at least a two-day lag between the development and a spike in posts. For example, after the third case of Ebola was confirmed on October 15, the political posts did not reflect this development until October 17. Politicians took two approaches in addressing Ebola: to attack the Obama administration and to tell the public the “real truth” about Ebola. They frequently used Twitter to spread their messages.

Conservatives like Ted Cruz, Rush Limbaugh, Rand Paul, and Donald Trump used the crisis to make claims against the Obama administration or to tell “the real truth” about the Ebola virus. The most prolific poster on Twitter was Trump, who posted 53 times during the month of October. Trump (2014a) first blamed the Ebola patients: “The Ebola patient who came into our country knew exactly what he was doing. Came into contact with over 100 people. Here we go—I told you so!” Blaming Duncan continued in Trump’s October 4 post: “This Ebola patient Thomas Duncan, who fraudulently entered the U.S. by signing false papers, is causing havoc. If he lives, prosecute!” (Trump, 2014b).

The attacks on Duncan soon escalated to attacks on the broader situation: “The CDC chief just said Ebola is spreading faster than AIDS. Marines are preparing for a pandemic drill. Stop all flights from West Africa!” (Trump, 2014c). In addition to demands of stopping flights, Trump backed quarantines for people coming from Africa: “All the governors are already backing off of the Ebola quarantines. Bad decision that will lead to more mayhem” (Trump, 2014d). As the government resisted travel bans and federal quarantines, Trump (2014e) again reminded people of his demands for travel bans: “If there
is one more Ebola case in the U.S., a full travel ban will be instituted. This common sense move should have been done long ago!” In his final October Tweet, Trump (2014f) blasted Obama about requiring troops working in West Africa to be quarantined for 21 days but not requiring this domestically: “Obama will quarantine all soldiers returning from Africa for 21 days. But he still allows all who contract Ebola into country? Hypocrite.” Trump’s rhetoric about Ebola and vitriolic comments about how the government was handling the crisis influenced other conservatives. Trump’s future republican presidential opponents also took to Twitter in commenting about Ebola and criticizing the President and the CDC.

Rand Paul made several comments about Ebola that were subsequently communicated on Twitter: “Rand Paul: Ebola is ‘incredibly contagious,’ and the @WhiteHouse is being dishonest about how easily it can spread” (Joe the Dissident, 2014). These remarks were followed by Paul’s worrying about airline passengers catching the virus on flights; Adam Serwer (2014) quoted Paul: “Rand Paul worried about people with Ebola on flights ‘vomiting all over you’ you know just like at cocktail parties.” Paul’s rhetoric about Ebola being highly contagious continued in additional statements; Vaughn Sterling (2014) posted a Paul sound bite from a CNN interview: “Govt makes people thing #ebola isn’t very contagious; says he thinks the virus can be transmitted via coughs.”

When U.S. military officials announced that troops would help fight Ebola in West Africa, Paul shared his view of what would happen to them: “You also have to be concerned about 3,000 soldiers getting back on a ship. Where is disease most transmittable? When you’re in a very close confines on a ship, we all know about cruises and how they get these diarrhea viruses that are transmitted very easily. Can you imagine if a whole ship full of our soldiers catch Ebola?” (Killough, 2014). While none of Paul’s concerns manifested, his
comments were widely retweeted, and many people were outraged that the government was not living up to the expectations of a crisis situation.

Ted Cruz, the junior senator from Texas, also joined in criticizing how Ebola was being handled at a national level and argued to stop air travel. While Cruz did not post on Twitter, Amanda Carpenter, a senior communications advisor and speechwriter for Cruz, posted his public comments to Twitter. His first statement demonstrated his support for his state and indicated that he was dismayed that Ebola had come to the United States: “CRUZ: Health professionals in TX are preparing, but first line of defense should be to prevent terrible virus from coming #Ebola” (Carpenter, 2014a). Once Cruz had supported Texas, he called for travel bans to keep other cases of the virus from coming to the United States: “CRUZ: I asked the FAA why they have not stopped commercial air travel from nations stricken with Ebola” (Carpenter, 2014b). As the weeks passed and there was still no movement toward a travel or flight ban, Cruz would continue his calls for a ban: “CRUZ: Common sense dictates we impose a travel ban on commercial airline flights from nations afflicted by Ebola” (Carpenter, 2014c).

Cruz and other Republicans kept fighting for the government to implement a travel ban: “CRUZ: If the president will not act, then leaders of Congress should reconvene Congress” (Carpenter, 2014d). Cruz continued criticizing Obama’s resistance of a travel ban and accused the President of using the crisis to his political advantage while not caring about the safety of the U.S. public. Cruz continued his criticism of the President’s reaction to the Ebola crisis: “As Ted Cruz said yesterday Obama’s Ebola response seems to be ‘dictated by politics, rather than by common sense’” (Carpenter, 2014e).
Cruz’s campaign to institute a travel ban was not without a misstep, though. Nick Muzin, Cruz’s Deputy Chief of Staff, used Twitter to blame Ebola on Obamacare. Although Muzin deleted his Tweet, other Twitter users retweeted his remarks: “Before Obamacare, there had never been a confirmed case of Ebola in the U.S.” (Wu, 2014). The majority of Twitter users disagreed with this statement, and Muzin acted quickly by apologizing and deleting this comment.

At the state level, New Jersey Governor Chris Christie and New York Governor Andrew Cuomo created a tremendous amount of press and gained notoriety on Twitter as they worked together to deal with Ebola in their states. Christie (2014a) first commented on Twitter about Ebola on October 9 when he posted, “We are working at all state & federal levels to be prepared to handle Ebola here in NJ.” Cuomo (2014a) joined him a week later when he posted, “We are prepared and there is no reason for undue anxiety. #Ebola #EbolaResponse.”

The pair would continue to attempt to calm the public. Christie (2014b) posted, “Also to people in public office, we need to be responsible and cautious when talking about Ebola. It’s not helpful to add to the hysteria.” Cuomo (2014b) next retweeted a post about the first potential Ebola case in New York City: “@HealthNYGov @HealthNYGov is closely monitoring a potential case of #Ebola to ensure public health & safety.” This was quickly followed by another Tweet: “RT @BilldeBlasio Today, a patient at Bellevue Hospital tested positive for Ebola. But let me be clear: there is no reason for New Yorkers to be alarmed” (Cuomo, 2014c).

Once the threat of Ebola was confirmed in New York, Christie’s and Cuomo’s rhetoric changed tremendously; no longer would the pair issue statements calling for calm.
With the possibility of additional cases in the United States, Christie (2014c) posted, “@NYGovCuomo and I are learning new things every day on how to handle this for NY and NJ. #Ebola.” Both Christie and Cuomo appeared in a joint press conference to announce new quarantine policies for travelers coming to New Jersey or New York. Following that event, the governors posted a number of Tweets: “We will be increasing current Ebola screening procedures for people accessing NY/NJ borders” (Cuomo, 2014d). “Steps include mandatory quarantine of those providing medical services to #Ebola patients in Liberia, Sierra Leone, or Guinea” (Christie, 2014d).

The federal government and nonprofit health groups questioned the quarantine and the impacts it would have on the fight against Ebola in West Africa. Cuomo defended the policy: “The @CDCgov has determined that states have the right to determine their own Ebola screening and quarantine guidelines” (Cuomo, 2014e). He continued, “Different states are developing their own Ebola protocols. We think these protocols are appropriate for our region”(Cuomo, 2014g). Cuomo also defended the move from voluntary to mandatory quarantine: “A voluntary Ebola quarantine is not enough. This is too serious a public health situation” (Cuomo, 2014f).

Cuomo’s tweeting stopped once New Jersey detained Hickox in quarantine after she landed at Newark Liberty International Airport. However, Christie tweeted to defend the state’s policy: “Today, a healthcare worker arrived at Newark Airport, w/ a recent history of treating patients w/ Ebola in West Africa, but w/ no symptoms” (Christie, 2014e). As medical and health officials increased pressure against New Jersey and New York’s quarantine policy, Christie (2014f) posted, “We are trying to be careful here. This is common sense. The American people know this is common sense. #Ebola.” Christie’s (2014g) final
post about Ebola stated, “Our policy will not change.” This was not the case in the following 
days, though; Christie bowed to public pressure and allowed Hickox to travel to her home in 
Maine.

The conservative criticism of elected officials became fodder for conservative news 
outlets that amplified the panic over Ebola. During an interview with Dr. Gil Mobley, a critic 
of the U.S. government’s response to Ebola, Fox News posted the following: “Doctor who 
claims #CDC is lying about low #Ebola risks: People need to be scared” (FoxNews, 2014a). 
“Imported cases are going to be happening if not weekly, possibly daily and possibly hourly” 
(FoxNews, 2014b). “The #CDC is asleep at the wheel” (FoxNews, 2014c). This began the 
speculation about Ebola: “Could deadly #Ebola virus become ‘bioterrorist threat?’” 
(FoxNews, 2014d).

Mike Huckabee, former Arkansas governor and Fox News commentator, posted, 
“What we’re talking about here is the issue of whether #Americans live or die” #Ebola” 
(FoxNews, 2014c). He would continue by posting, “@GovMikeHuckabee on #Ebola: “This 
isn’t the only case we’re going to see. That ought to scare the daylights out of everyone” 
(FoxNews, 2014f). In his criticism of the CDC, Huckabee posted, “The big problem is not 
who’s in charge. The fact is that we don’t think anybody’s in charge” (FoxNews, 2014g).

Fox News commentators and Huckabee’s colleagues strongly supported the travel 
ban as a method to contain the Ebola outbreak. Ben Carson posted, “We have to think 
about the worst-case scenario” (FoxNews, 2014h). Greta Van Susteren agreed with Carson 
when she posted, “A travel ban is the most logical thing to do—and we will have to do it 
#Ebola” (FoxNews, 2014i). A number of other posts questioned why there was not a travel 
ban in the United States: “St. Lucia, Colombia institute Ebola travel bans” (FoxNews,
This campaign continued: “Time to lock it down? #Ebola fears spur calls for travel bans” (FoxNews, 2014k). This commentary was retweeted and supported by Republicans on the campaign trail; the significant number of Twitter posters who cited this and similar content shaped the antenarrative regarding the dangers of Ebola in the United States.

**Antenarratives in Tweets from Affected African Countries**

Three days before the first case of Ebola was announced in the United States on September 30, 2014, the CDC estimated that the number of deaths in West Africa would be more than 25,000 people, with at least 1.4 million people infected by January 2015, if the global response did not provide medical workers and supplies (Pflanz, 2014). In addition, to offer warnings about the number of infected individuals, the CDC also recommended that tourism, foreign exchange, research, and other travel to the Democratic Republic of Congo, Guinea, Liberia, Nigeria, and Sierra Leone should be postponed and that all nonessential travel to the region should be avoided (Bakalar, 2014).

To prevent the spread of the virus, the CDC trained airport personnel in West African countries to screen departing passengers. However, the process did not stop Duncan from traveling to the United States (Wald & Mouawad, 2014). Once the Ebola virus reached the United States, many began to question why more was not being done to treat patients in West Africa. President of the World Bank Jim Kim said, “Thousands of people in these countries are dying because, in the lottery of birth, they were born in the wrong place . . . . This pandemic shows the deadly cost of unequal access to basic services and the consequences of our failure to fix this problem” (Mui, 2014, p. A7).
The ability to stop the virus is not dependent on wealth but on knowledge and training (Mui, 2014, p. A7). To contain Ebola, affected countries would need to isolate at least 70% of those infected; a large number of medical professionals would be needed to achieve this. Many international aid and nonprofit groups faced difficulty in recruiting volunteers because travel restrictions had reduced the number of flights to Africa. By October 2014, only two airlines continued operations in West Africa: Brussels Airlines and Royal Air Maroc. Without these flights, it would become difficult for medical volunteers to reach Guinea, Liberia, and Sierra Leone (Worland, 2014). Medical workers who volunteered for a short period of time would be quarantined for 21 days before returning to work (McKay & Hinshaw, 2014).

In April 2015, more than a year after the first case of Ebola appeared in West Africa, the spread of the virus had slowed. New cases had dropped to zero in Liberia and only 30 cases between Guinea and Sierra Leone. In reducing the number of cases, a public health system had been developed by the WHO to combat not only Ebola but also malaria and measles—frequent concerns in West African nations (Cooper, 2015). The spread of Ebola in these countries was much different than in the United States; investigating how social media was used in West Africa to communicate about the virus will provide insight about what types of information should be communicated and how it should be communicated during similar outbreaks and crisis events in the future. Examining how a select international audience viewed the Ebola crisis will provide important comparisons to how U.S. citizens and organizations used social media to discuss Ebola.

Four major themes emerged from the data from the West African Tweets:

- News of the Ebola outbreak regionally, in Europe, and in the United States
• The resources, aid, and other help needed to fight Ebola in West Africa
• Fear and anxiety about the progression of the virus
• Hoaxes and rumors about how to treat or cure Ebola

In October 2014, people in West Africa created 370,536 posts. The countries of Guinea, Liberia, Nigeria, Senegal, and Sierra Leone have a combined population of 217,392,816, which means the region’s population did not produce massive amounts of Twitter data (Central Intelligence Agency, 2015). While the number of posters was limited, the total potential impressions (calculated by adding the number of followers of each Twitter user who posted) of these users was 1.9 billion. The opinions and beliefs about Ebola among West African Twitter users still had a significant impact on those who viewed and responded to Tweets. While members of the WHO used Twitter to communicate with West Africa, they realized that the people with the greatest risk of contracting the virus did not have the resources to access Twitter. Many of these individuals lived in rural regions and could not access Twitter messages that could help them protect themselves and their families against Ebola. In some areas, like rural Liberia, disconnection from society was the means of survival; people closed businesses, stayed inside, and avoided travel during the Ebola outbreak. However, Twitter was an important tool for developing awareness about Ebola in urban populations where people often had more access to the technology and networks to connect to Twitter (Zawacki, 2014). These claims are supported by the data in Table 6.10, which breaks down the geographical locations of Twitter posts. Crimson Hexagon mines this data in two ways:

• First, it uses smartphone data tags, which provide latitude-longitude coordinates of the user’s location at the time of posting.
• Second, it uses previous posts, user data, the time zone of the post, and the language of the post to determine an approximation of the user’s location. If there is not enough data to determine location, it is not included in Crimson Hexagon’s geographical locations data. In this case 204,018 of the 370,536 posts were assigned a location.

Table 6.10 shows Twitter usage across countries in West Africa that had cases of Ebola. This data is broken down by geographical region, which shows urban areas had the highest number of Tweets.

Table 6.10

West African Tweets by State or Region

<table>
<thead>
<tr>
<th>Country</th>
<th>State/Region</th>
<th>Posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>Lagos</td>
<td>120,613</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Federal Capital Territory</td>
<td>29,047</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Oyo</td>
<td>7,975</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Rivers</td>
<td>4,977</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Anambra</td>
<td>4,792</td>
</tr>
<tr>
<td>Liberia</td>
<td>Montserrat</td>
<td>4,781</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Kaduna</td>
<td>4,299</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Edo</td>
<td>3,262</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Kwarra</td>
<td>2,370</td>
</tr>
<tr>
<td>Guinea</td>
<td>Conakry</td>
<td>2,021</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Kano</td>
<td>1,905</td>
</tr>
<tr>
<td>Mali</td>
<td>Bamako</td>
<td>1,751</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>Western</td>
<td>1,712</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Delta</td>
<td>1,639</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Ondo</td>
<td>1,571</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Benue</td>
<td>1,563</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Imo</td>
<td>1,376</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Cross River</td>
<td>1,318</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Osun</td>
<td>1,154</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Plateau</td>
<td>1,139</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Ogun</td>
<td>1,006</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Enugu</td>
<td>877</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>204,018</td>
</tr>
</tbody>
</table>
Some of these regions were not affected by Ebola, and some posters were posting without seeing or being exposed to the virus. The location of Twitter users might have influenced the content of Twitter posts. The majority of Ebola cases occurred and spread more easily in rural areas because these areas lack medical infrastructure and other resources, which would have slowed the spread of the Ebola virus.

**West Africans Posting News about Ebola Outbreaks around the World**

Twitter became a source of news during the Ebola outbreak; a prime example was the diagnosis of Dr. Craig Spencer. Within an hour of Spencer receiving the results of his Ebola test, which confirmed he had the virus, he was sharing the results on Twitter in West Africa. Social media technology allowed information to flow freely from even the most remote locations (S. Johnson, 2014). Many believe Twitter to be the perfect news source because users select their interests and media outlets, and those outlets push content to users. Twitter also allows individuals to report on a story based on firsthand experiences, creating a rich pool of content connected by hashtags (Wexler, 2014). During the Ebola outbreak, Twitter users in West Africa shared and retweeted a wide range of information, including regional news, European news, and U.S. news. The instant nature of Twitter allows news to travel quickly—in some cases, faster than traditional mainstream media. Table 6.11 shows the number of Tweets originating in West Africa that included news elements. This was the largest category; it accounted for 34% of the 388,990 West African Twitter posts.

Twitter was used to post news and updates about Ebola in West Africa. The news included events happening in the region, the United States, and in Europe. Major events or developments caused increases in the number of Twitter posts. The critical dates of September 30, October 8, October 12, October 15, and October 23 were for the
developments in Ebola in the United States. These events were heavily posted and discussed by Twitter users in West Africa.

Table 6.11

West African Tweets about News Coverage

Other increases in posts are connected to other events. On October 6, posts included information about the first confirmed case of Ebola in Spain. The increase of posts on October 14 was connected to the WHO press conference sharing information about the virus for global news organizations. The number of posts was driven by news events not just on a regional level, but internationally.

Regional News. Twitter posts from West Africa included a wide range of content, from updates about the spread of Ebola in West Africa, new developments in the outbreak, and the spread of the Ebola virus to the United States. Users frequently posted information about either confirmed or suspected cases of Ebola; Muhammed Uba (2014) wrote, “First
case of Ebola confirmed in Mali: health minister: BAMAKO (Reuters)-Mali said on
Thursday it had detected.”

Twitter was a critical source of information for both confirmed and unconfirmed
airport.” Updates also included developments in containing and stopping Ebola. One such
post was about a new testing process. Tijani Oluwamayowa (2014) wrote, “Nigerians unearth
30-minute test to detect Ebola http://t.co/3yTusZYZX2 via @thecableng #Ebola
@EbolaAlert.” Another major topic was Duncan’s infection, especially in stories with a
regional or local connection. This included Nigeria Renaissance’s (2014) post about
Duncan’s travel and connection to infected patients: “Update: Liberian Cab Driver Opens
Up on How US Ebola Patient Got Infected As Liberia plans to prosecute.” Twitter was an
important source of both information and rumors for regional users. For individuals who
were attempting to avoid close contact with infected people, Twitter was a critical
information outlet for those who had access. In addition to information about the spread of
Ebola, developments from new testing processes and vaccine clinical trials were tweeted
widely.

**European News.** While regional news often had the most direct impact on West
African Twitter users, particularly as they sought to avoid areas with active cases of Ebola,
those users also shared information about other parts of the world dealing with outbreaks;
Europe was among them. During October 2014, one case of Ebola was confirmed in Spain,
and a number of potential cases were investigated. Twitter users followed this news closely;
Akim Yung Muller (2014) posted, “RT @BreakingNews Spain says a Madrid hospital nurse
has tested positive for Ebola; emergency protocol put into place-@Reuters, @AP.” Other

U.S. citizens who became infected with Ebola were treated in major hospitals in the United States. Volunteers of other nationalities were treated in European hospitals, which received the attention of Twitter users in West Africa. Gboru Markson (2014) provided a prime example of this: “Sudanese aid worker dies of Ebola in Germany.” This event was widely reported on Twitter in West Africa.

Beyond cases of Ebola, the other major element that West Africans shared on Twitter dealt with discrimination. Ayorinde (2014) posted, “Sigh @BBCAfrica: Sierra Leonean student refused accommodation in Norwich, England because of #Ebola fears.” As concern about Ebola grew in European countries, these types of incidents were not isolated. However, once the WHO declared Nigeria as Ebola free, the rhetoric on Twitter quickly changed. Oziohu (2014) posted a common sentiment: “@IsimaOdeh: Dear England, don’t be stupid kindly remove Nigeria from your Ebola infected countries list and put USA.”

West African Twitter users continually challenged biases about Ebola and its sources, especially after Ebola cases appeared in the United States.

**United States News.** The United States outbreak itself and updates about patients were significant elements of the West African Twitter conversation about Ebola in the United States. Confirmed case trends among West African users were similar to those among users in the United States: play-by-play progress reports of people fighting Ebola. However, West African users were interested in updates about protocols and vaccines for fighting the virus. For instance, 9ijaNews (2014) posted, “New Testing Starts on
Experimental Ebola Vaccine U.S. health officials say they’ve started human testing.” This type of information might have provided hope in stopping the advancement of Ebola around the world.

Other users were interested in possible cases in the United States. Uche Anayo (2014) wrote, “Washington Hospital Rules Out Ebola For Patient Back From Nigeria.” Twitter provided users in West Africa a means to see firsthand how U.S. citizens were reacting to Ebola in their country. The way Twitter users in the United States framed and discussed the outbreak revealed their widespread panic and anxiety, which could have been helpful in connecting two regions of the world with their common fear of the Ebola virus.

**West African Pleas for Help in Containing Ebola**

By August 2014, eight months after the start of the outbreak in West Africa, many of the affected countries did not have the resources they needed to contain or slow the spread of the virus. At that point, 3,069 cases had been reported in West Africa, and 40% of them occurred in August. The coordinator of Liberia’s Ebola Taskforce, James Dorbor Jallah, said on August 29, 2014, that, “Ebola is moving at the speed of sound and the aid organizations are moving at the speed of a snail” (Hinshaw & McKay, 2014, p. A7). In September 2014, the U.S. military deployed 3,000 personnel to build treatment centers, train local volunteers, and direct international aid shipments across the region (McKay, 2014a). However, these troops were insufficient to contain the virus, as the reported cases in Liberia doubled every 15 to 20 days and every 30 to 40 days in Sierra Leone. International health organizations called for more dramatic measures to control the virus, including trained medical professionals and aid funds (McKay, 2014b).
The need for additional help in containing the virus was seen in West African Tweets. Table 6.12 shows the number of posts made about the need for additional aid and resources to stop Ebola from killing more people and spreading to other countries.

Table 6.12

*West African Tweets Asking for Help*

![Bar chart showing the number of posts per day over a period of time.]

West Africans frequently posted about the need for resources and help in containing Ebola. Spikes in data were driven by organizations like the International Monetary Fund, the World Bank, the United Nations, and the World Health Organization posting or discussing the need for help to control Ebola. These comments fueled additional posts by West Africans who repeated the claims of these organizations.

A major topic was the lack of aid and the gaps between what international government had promised and what had been delivered: “Liberia: Promised Ebola Aid Falls Short of Needs: [VOA] Six months after the Ebola outbreak emerged” (Samuel, 2014). As
the outbreak continued, some counties reduced their commitment to fighting Ebola in West Africa as they faced possible outbreaks of their own. Britain was among them: “Ebola crisis: ‘Britain has not abandoned Sierra Leone’-but cuts bilateral aid by a fifth” (Vicanbi, 2014). As countries reduced funding, the president of the World Bank, President Jim Yong Kim, demanded more to fight the virus. IG...147_pique (2014) posted, “Global response to Ebola has failed miserably, says World Bank chief: Jim Kim demands $20bn fund.”

Funding for containing Ebola was only one of the themes presented on Twitter. The second major theme was the need for trained medical professionals who could help run hospitals and treatment centers. Holuwadamilare (2014) wrote, “More: WHO says it is still ‘terrifically difficult’ to get enough domestic and international workers to fight Ebola in West Africa.” Without sufficient help to care for the sick, containing it would be difficult. Inaction could lead to additional problems, like the one forecasted by Kotun Ola Suraj (2014): “RT @MobilePunch Ebola epidemic could lead to failed states –WHO.”

The WHO defined a “failed state” as a country that cannot provide for the needs of its citizens and jeopardizes global stability and economic and social development. Previous Ebola outbreaks occurred in isolated areas where it was easy to keep the disease from spreading to population centers. Even developing countries could deal with this type of health crisis. However, the 2014-2015 Ebola outbreak occurred in more populated areas, which often overwhelmed healthcare facilities and infrastructure. These countries needed outside help to control the spread of Ebola. Some posters also attempted to shame wealthy nations into helping fight Ebola. Omo ola (2014) was among them: “RT @ChenguGold Cuba is now the biggest single provider of healthcare workers to the Ebola crisis in West Africa, more than all richer nations.” By showing that Cuba, an isolated country in the
western hemisphere that lacked the resources of more developed nations, was able to find trained staff to help fight Ebola, users like Oma ola were asking what excuse other countries had for not providing help to contain the crisis.

**Fear and Anxiety about Ebola**

West Africans also lived in uncertainty about the spread of Ebola. This fear and anxiety was expressed in many places, including control policies. For example, Sierra Leone had “stay-at-home days” to try to prevent people’s contracting the virus. Freetown, Sierra Leone, created rules against shaking hands to avoid spreading Ebola (Nossiter, 2014). The porous borders of West African countries also caused problems in containing the infected in specific regions. Sierra Leone created checkpoints where travelers had to stop to have their temperatures taken and to wash their hands in chlorinated water. The frequency of checkpoints increased in areas with a widespread outbreak. Living under such observation and alongside a quickly spreading disease created anxiety in the region. This fear can be seen in the Twitter feed.

Fear and anxiety was a global theme on Twitter as shown in Table 6.13. In West Africa, these feelings peaked on October 16. The day after the third confirmed Ebola case in the United States, many posts speculated that the United States would reduce or eliminate aid in containing Ebola. After the first case of Ebola in the U.S., major airlines decreased the number of flights to West Africa, making it more difficult for resources and medical personnel to reach this area.

The fear and anxiety Tweets came to a climax on October 16; a variety of events occurred earlier in October that fed the discussion. First, there was concern about the 2015 Africa Cup of Nations, scheduled from January 17 to February 8 in Morocco, being a source
of additional outbreaks. During the week of October 16, Morocco wanted to be released from hosting the games: “RT @SkySportsNewsHQ Sky Sources: 7 countries asked if they are willing to replace Morocco as hosts of Africa Cup of Nations amid fears of Ebola #SSNHQ” (Specimen, 2014). African governments were afraid public gatherings would create a larger outbreak across wider parts of Africa. Factions appeared among posters; some did not want to cancel the event while others spoke about the need to contain the virus.

Table 6.13

*West African Tweets about Fear and Anxiety*

During this time, the United States faced increasing calls for travel bans to contain the virus and stop its spread. Yomi Isaac Medale (2014) posted, “Rick Perry wants to ban air travel from West Africa amid Ebola outbreak.” Although other U.S. politicians had demanded travel bans, several events increased the possibility of such bans being created.
Even Donald Trump called a second time for a travel ban. Omobar Blog (2014) posted, “Donald Trump again calls for stop of all flights from West Africa.”

The WHO and the International Rescue Committee both agreed a travel ban would cause more problems in the fight against Ebola than it would solve. It would slow the aid, resources, and personnel needed to fight the disease. By October 20, only two airlines were flying to West Africa, and a travel ban would end those flights. Many members of the international community feared a travel ban would increase the number of people attempting to leave West Africa to avoid contracting Ebola. Without legal means of travel, people might have attempted to be smuggled across borders. This could result in additional cases that would be difficult for countries and governments to control (Nicas & Carey, 2014).

This did not stop countries from closing their borders, as two South American countries did when creating a travel ban: “Ebola Scare: St Lucia, Colombia Bars Travelers from Nigeria, Guinea, Liberia, Sierra Leone and Senegal” (Glass House Ent, 2014). These announcements created additional fear that other countries would follow suit and close their borders to flights to and from West Africa, reducing the resources needed to fight Ebola.

**Hoaxes and Rumors During the Ebola Outbreak**

One of the trending topics during the Ebola outbreak was the number of claims of a cure; the fake remedies became pronounced in social media channels as people attempted to protect against or overcome the effects of Ebola. Two Nigerians died after consuming large amounts of salt water; claims that doing so would immunize against Ebola appeared online. The WHO attempted to stop and correct Twitter users who made wild claims about cures for Ebola (Sifferlin, 2014). WHO issued a release that stated, “Decades of scientific research have failed to find a curative or preventive agent of proven safety and effectiveness in
humans, though a number of promising products are currently under development. All rumours of any other effective products or practices are false. Their use can be dangerous” (WHO, 2014).

Twitter became a source of rumors, and users both supported and attacked remedies for the Ebola virus. Table 6.14 shows the number of Tweets made late September and October in West Africa about rumors, hoaxes, and other unconfirmed information about Ebola.

Table 6.14

<table>
<thead>
<tr>
<th>West African Tweets about Hoaxes and Rumors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>9/28/14</td>
</tr>
<tr>
<td>9/30/14</td>
</tr>
<tr>
<td>10/2/14</td>
</tr>
<tr>
<td>10/4/14</td>
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<td>10/6/14</td>
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</tr>
<tr>
<td>10/28/14</td>
</tr>
<tr>
<td>10/30/14</td>
</tr>
</tbody>
</table>

Even with the WHO’s efforts to quell rumors and fake cures, a number of posters continued tweeting this information. Oduah (2014) posted, “WHO: #Ebola patients in 1 litre of clean water, add 6 teaspoons of sugar; 1/2 teaspoon of salt. drink solution daily.” This belief was perpetuated by Words (2014), who tweeted, “It was hoped that ebola virus
could not survive in a highly concentrated salt surface.” Other users, such as Blezed (2014), made fun of the rumors and fake cures: “If think bathing with salt & water can prevent you from ebola then you should also bath with palm oil, it’ll prevent you from any bomb blast.”

Other suggested cures became a point of ridicule: “Lols EBOLA CURE: Doctor Suggests That Marijuana Can Protect You From Ebola” (Phynest, 2014). For some users, any discussion or post about a possible cure for Ebola was a contentious matter. Tunde Mo’ Aguda (2014) posted, “The same way one drunk scientist claimed Ewedu cures Ebola is the same way another drunk is saying eating kpomo is dangerous.”

Unlike U.S. citizens who used Twitter to question how Ebola was transmitted and to expose possible conspiracies, West Africans used it to promote or attack the use of folk remedies. Even with WHO intervention and Twitter users’ challenging remedies, they did not decrease.

Conclusion

Ebola presented a significant challenge for the CDC, WHO, and other health organizations. These groups had to play a significant role in containing the spread of the virus, build infrastructure in developing countries to provide medical care for those infected with it, and present information to the public to reduce fears and stop the spread of misinformation. The CDC was responsible for U.S. resources that monitored the spread of and contained Ebola in West Africa, but this role shifted September 30, 2014, when the first case of Ebola was reported in the United States. At that point, the organization became responsible for helping hospitals and health districts across the United States prepare for a possible widespread domestic Ebola outbreak. The CDC also established protective
standards to contain cases and provided information for government organizations and the general public.

In providing information to the public, health organizations used social media. The CDC and WHO employed two significant rhetorical strategies in communicating these messages: amplification and sprezzatura. Amplification occurs as an initial message is posted and causes surrogates to interact with the information and share it with their networks. If enough people share the post, the content becomes viral. Viral content exploits existing social media networks by encouraging sharing of the message. Lindgreen, Dobele, Beverland, and Vanhamme (2008) outlined five things on which viral social media content depends:

- Emotional appeal
- The reputations of those sharing it
- The quality of its message
- Information that is unique, highly visible, or frequently discussed on social media
- High rates of response from other social media users

The Ebola content presented by the CDC in the United States and by the WHO in West Africa met these characteristics:

- The messages were designed to reduce the fear of the general public.
- News organizations, doctors, hospitals, and politicians frequently shared the content.
- The CDC and WHO developed specific, well written posts and responded to trending content on social media.
- After news broke about an Ebola case in the United States, content about the virus became even more popular.
• The few hundred posts that the CDC developed were shared and viewed hundreds of thousands of times.

*Sprezzatura,* the other strategy used in presenting information via social media, was originally a term used by Count Baldassare Castiglione in his medieval handbook, *Il Libro de Cortegiano (The Book of the Courtier).* In it, Castiglione advises a gentleman to complete everything in life with “stylishness and panache that make them [the tasks] look easy” (Epiro and Pinkowish, 2001, p. i). In modern research, Suh (2009) defines *sprezzatura* as the “ultimate art of finesse, of carefully balancing the concealment of the art (to the audience) with the discovery of it (to the initiated)” (p. 253). In technical- and crisis-communication scholarship, *sprezzatura* can apply to any technological process that hides the process’ complexity from the audience. In the cases of most specialized applications, work is removed from view. For example, in the case of an event organized by public relations professionals, the public might see the event, its effects, and the possible reasons it occurred; it does not see, however, the technical work occurring behind the scenes. For that reason, some members of the public might perceive the creation of content, the findings of an investigation, or solutions generated to respond to a problem as simple or even mundane.

In the Ebola case, the CDC employed *sprezzatura* in communicating about potential dangers of the virus. The fact that the CDC was able to shift attention and concern from Ebola to the flu shows careful social engineering of information. CDC communication officials’ ability to quickly generate social media messages suggests that the CDC had created a communication plan prior to the crisis. Beyond the messages it generated for Twitter, the CDC also used doctors and other experts to answer the public’s questions about Ebola. The answers were simple, straightforward, and easy to remember and repeat, suggesting that
these doctors received training about how to respond to questions. Using common but specific language to communicate complex information about the risks of Ebola is a form of sprezzatura; it made understanding technical information seem simple. The CDC balanced describing complex information using specific language with the restrictions on content length on various social media platforms. While the CDC’s use of sprezzatura was successful, any organization that presents complex information as part of a crisis response risks oversimplifying it and causing consumers to draw incorrect or dangerous conclusions. Organizations using sprezzatura must acknowledge those risks and carefully plan their social media messages so that they avoid miscommunication.

As borders between nations become more fluid and travel to remote locations becomes easier, the greater the likelihood of viral outbreaks. Health organizations and governments will need to not only contain outbreaks but also provide information to keep people safe and calm. The work of both the CDC and the WHO in responding to Ebola outbreaks established best practices of social media crisis communication:

• The CDC established organizational channels long before it needed to communicate during a crisis. Creating a handle on Twitter nearly five years before the Ebola outbreak and using it to provide important updates about health topics developed the credibility of information released via Twitter.

• During the outbreak in the United States, the CDC promptly engaged the help of social media users who had credibility but were not employed by the organization. The CDC used Twitter to share live question-and-answer sessions with Ebola experts, to encourage news organizations to retweet its content, and to post information from other sources.
• The CDC focused its content around major concerns about and misconceptions of Ebola expressed in both traditional and social media. It addressed these issues and helped correct inaccurate information. Building networks and asking experts to provide content before a crisis is critical to using social media to change attitudes and address important topics.
Unlike the other cases, Black Lives Matter is an activist movement that uses social media not as a defensive tool in a crisis event but as an offensive one to bring attention to racial relations in the United States. Users of the hashtag #BlackLivesMatter frequently highlight racial discrimination and inequality. Such activity intensified after the deaths of black people at the hands of law enforcement officials. This chapter explores how a movement used social media to drawn attention to and question the narrative of racial relationships in the United States.

**Rhetorical Situation**

When examining how groups and organizations use Twitter to communicate and form narratives, researchers should not overlook Black Twitter—the use of the Twitter platform to discuss issues important to the black community. Black Twitter was a term coined by Feminista Jones in a Salon.com article, “Is Twitter the underground of activism?” Media organizations identified this phenomenon as early as 2010, when Farhad Manjoo, a *Slate* correspondent, found that African-Americans represented up to one fourth of Twitter users and that they used Twitter differently than other racial groups (Mount, 2010). A panel discussion at the South by Southwest technology conference in 2012 was the first time the power and nature of Black Twitter was discussed in the mainstream; it was influential because users were active and engaged and could spot trends in both social media and society (Esco, 2011). Black Twitter became a powerful political tool in 2013 when users were
instrumental in stopping a book deal with a juror who had acquitted George Zimmerman of the murder of Trayvon Martin. Additionally, African-American Twitter users condemned Paula Deen after she admitted to using racial slurs in the past (Holland, 2014).

The power of Black Twitter as a tool for activism became clear following the death of Michael Brown, an unarmed 18-year-old in Ferguson, Missouri. His death caused protests and rallies nationwide. Social media became an outlet for debate regarding the events leading up to Brown’s death; people used it to plan vigils, organize rallies, and post real time video of the protests in Ferguson (Harris, 2014). The actions and rhetoric of users brought national media focus to events that might not have been widely reported otherwise (Dey, 2015).

Black Twitter users have created powerful hashtags that have called attention to racial issues in the United States. These hashtags include #OscarsSoWhite in response to the ethnicities of Academy Award nominees; #ShadesOfRevlon, created after Revlon CEO Lorenzo Delpiani allegedly made racially insensitive comments; #HandsUpDontShoot and #Ferguson, created in response to the death of Michael Brown; and #ICantBreathe in response to the death of Eric Garner in New York City. The hashtag #BlackLivesMatter was critical in drawing attention to racial inequality in the United States (Ballin, 2015). Alicia Garza, Patrisse Cullors, and Opal Tometi created #BlackLivesMatter in July 2013 to hold George Zimmerman accountable for the murder of Trayvon Martin; the hashtag also responds to societal anti black rhetoric and racism.

The popularity of the message of #BlackLivesMatter pushed it beyond the realms of social media. After the death of Brown in Missouri, the founders of Black Lives Matter issued a call for people to drive to Ferguson and protest. The movement asked that those who could not be in Missouri use technology to share personal experiences of injustice and
racism. As the Black Lives Matter activist movement gained users and notoriety, it started to appear in mainstream media outlets, including in an episode of *Law and Order: SVU* (Garza, 2015).

The founders of Black Lives Matter have specific objectives for the movement. The founders faced criticism about why the movement was not #ourlivesmatter. Many Twitter users were upset that #BlackLivesMatter was not taking into account the value of *all* human lives, was overlooking other forms of discrimination that people experienced, and was not effectively dealing with racial issues. Other social media users cited specific reasons for focusing on *black* lives, mainly because of the higher death rates of young black men compared to those of the whole population, the high number of black families living in poverty, and racism against blacks in the United States. Following the death of Brown, the Black Lives Matter website listed national demands:

- The demilitarization of local law enforcement across the country
- A comprehensive review of systemic abuses by local police departments, including the publication of data relating to racially biased policing and the development of best practices of stopping police brutality
- Repurposing of law enforcement funds to support community-based alternatives to incarceration
- Making Department of Justice funding contingent on the ending of discriminatory police practices and the adoption of DOJ best practices
- A congressional hearing investigating the criminalization of communities of color, racial profiling, police abuses and torture by law enforcement
• Support for the passage of the End Racial Profiling Act, which would prohibit any law enforcement agency from using racial profiling

• The Obama administration’s development of, legislation for, and enacting of a national plan of action for racial justice (#BlackLivesMatter stands, n.d.).

The Black Lives Matter activist movement provided specific goals, but the movement did not detail a roadmap for achieving them or for forming leadership; the founders simply created a hashtag as a means for like-minded individuals to communicate. The users bring their own ideas, experiences, and notions to the #BlackLivesMatter, meaning as a whole users are not cohesive in the way they respond to situations or events. However, the social media campaign is credited with the increase of body cameras on police, legal actions for police involved in the deaths of unarmed victims, and a shift in public sentiments about police violence and brutality.

The Pew Research Center released data in August 2015 that showed that half of U.S. citizens think that racism is a big problem in society and that 59% of respondents think more should be done to achieve racial equality. This number increased by 17% from similar research conducted in August 2014 (Frosch & Calvert, 2015). Black Lives Matter has drawn publicity to racial issues in the United States, and its use of social media has played a significant role in shaping the conversation. Black Lives Matter activists are among Twitter’s most influential users; their posts frequently cause a topic to “trend” nationwide (Williams, 2015). These individuals have criticized politicians and celebrities for remarks or actions that could negatively influence the movement. Additionally, these activists are not tied to a political ideology; they have demanded action regarding racial issues from liberals Hillary Clinton and Bernie Sanders and conservatives Jeb Bush and Donald Trump. Black Lives
Matter contributors are attempting—and have had limited success—to induce presidential candidates to discuss issues like police brutality, mass incarceration of blacks, and racial relations in the United States (Lowery & Weigel, 2015a). The ability of Black Lives Matter contributors to use social media to create a long-term activist movement that can organize, connect, and communicate with the public is an important factor in its growth. However, examining how this group functions during a crisis will provide information that other social media communities can use in dissolving traditional power structures.

**Data Selection**

The data from #BlackLivesMatter could be analyzed in a variety of ways using a number of approaches. However, looking at how antenarrative from the same group has evolved over time is one element that other cases have not provided. The Twitter handle @blklivesmatter was created in July 2013 and until August 31, 2015, had been actively involved in 11,021 demonstrations that protested racism or demanded changes to laws and policies discriminating against minorities in the United States. The Black Lives Matter activist movement used Twitter as the means of connecting people and getting them involved (Robinson, 2015). Examining selected examples of how users engaged with #BlackLivesMatter allows for deeper analysis of the core messages the movement adapted to fit the needs of specific cases. While Black Lives Matter has engaged in a variety of causes, the heaviest involvement has come following events in which a police officer killed a black person. However, generating a complete list of individuals who have been killed by police is difficult.

In December of 2014, the NAACP Legal Defense Fund published a list of 76 “colored people” killed by police (Juzwiak & Chan, 2014). A *ProPublica* investigation revealed
that these numbers could be even higher, as law enforcement employees are not required to file federal reports regarding police officers’ fatal shootings. *ProPublica’s analysis* of data reported to the Federal Bureau of Investigation found black men are 21 times more likely to be killed by police than their white peers (Gabrielson, Jones, & Sagara, 2014). In addition to the lack of a complete list of fatal shootings involving police and black Americans, there is not even a list of deaths protested by #BlackLivesMatter. Without this data, a random selection of cases was not possible. As a result, I selected four prominent cases to examine: the deaths of Trayvon Martin, Michael Brown, Freddie Gray, and Sandra Bland. These cases also allow for analysis at specific times in the development of the Black Lives Matter activist movement, from its start to the beginning of the 2016 presidential campaign.

Five themes in Twitter users’ posts—all derived from the demands of Black Lives Matter—will be examined:

- Ending the widespread incarceration of black people
- All black lives mattering, including those of disabled, gay, lesbian and transgender members of the community
- Ending the militarization of police
- Stopping police brutality
- Criminalization of racial profiling

Understanding how these themes have evolved over time will provide insight into how the Black Lives Matter movement has also changed.
Social Media Response to the Death of Trayvon Martin

Martin’s death was the genesis of the Black Lives Matter activist movement; the group created its Twitter profile in July 2013. The founders of Black Lives Matter reacted to the news of Zimmerman’s acquittal and the conversations about racism and justice in the United States by creating the hashtag #BlackLivesMatter. Of the movement’s origins, Opal Tometi said, “We created #BlackLivesMatter. We created a platform. We used our social media presence online in order to forward a conversation about what is taking place in black communities . . . . This was actually a racial justice project for black people” (Craven, 2015). While the movement developed in the days after Zimmerman’s trial, Black Lives Matter quickly created demands to improve racial relations in the United States.

During the evening of February 26, 2012, 17-year-old Trayvon Martin was killed in Sanford, Florida. Martin was walking home from a convenience store carrying some money, a bag of Skittles, and a can of iced tea when George Zimmerman, a Neighborhood Watch volunteer, confronted and shot him. Zimmerman, who was patrolling the area, saw him and called 911 to report a “suspicious person.” In the 911 tapes, Zimmerman said, “This guy looks like he’s up to no good or he’s on drugs or something. These a*******, they always get away.” Zimmerman followed Martin even though doing so opposed what police recommended. In Zimmerman’s second 911 call, made after he shot Martin, Martin could be heard screaming for help (Capehart, 2012, p. A15). Zimmerman testified in court that he acted in self defense. Florida law provides a range of options for self protection when someone feels threatened. These “‘Stand Your Ground’ laws grant immunity to people who act to protect themselves if they have a reasonable fear they will be killed or seriously injured” (Alvarez, 2012, p. A10).
The story that began in an Orlando suburb quickly gained national notoriety. Martin’s parents, Tracy Martin and Sybrina Fulton, posted an online petition demanding the arrest and prosecution of Zimmerman; it was signed by more than a million people. Martin’s death sparked a national conversation about the young black men who die at a rate disproportionate to those of other young men of different races (Parker, 2012).

Sixteen months after Martin’s death, Zimmerman’s trial began on June 10, 2013. During those sixteen months, the public outcry increased, causing three developments in the case. First, Martin’s death started as a homicide investigation, and the State of Florida filed second-degree murder charges. Second, the Sanford police chief was fired. Finally, the case was assigned to a special prosecutor who was a state attorney (Buckley, 2013). On July 16, 2013, Zimmerman was acquitted in the death of Martin.

Following Zimmerman’s acquittal, a group called the Dream Defenders lobbied for changes in Florida’s “Stand Your Ground” laws, which provided greater legal protections for individuals who act in self-defense (Alvarez, 2013b). After the trial, one of the jury members said she believed that Zimmerman had committed murder. She wanted to convict him of second-degree murder, but Florida law had made that impossible. For the jury to return a y verdict, the prosecutor had to present evidence that Zimmerman had intentionally killed Martin (Alvarez, 2013a).

Table 7.1 presents the data for the largest antenarratives in the Martin data. Even before Black Lives Matter developed its five themes, Twitter users were discussing racial profiling, police brutality, and widespread incarceration of blacks.
Table 7.1

*Core Themes of #BlackLivesMatter Tweets in the Trayvon Martin Case*

<table>
<thead>
<tr>
<th>Date</th>
<th>Racial Profiling</th>
<th>Police Brutality</th>
<th>Widespread Incarceration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Mar-2012</td>
<td>106,621</td>
<td>64,667</td>
<td>32,058</td>
</tr>
<tr>
<td>1-Apr-2012</td>
<td>23,152</td>
<td>9,866</td>
<td>11,820</td>
</tr>
<tr>
<td>1-May-2012</td>
<td>3,746</td>
<td>1,139</td>
<td>5,828</td>
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<tr>
<td>1-Jun-2012</td>
<td>5,279</td>
<td>2,876</td>
<td>3,485</td>
</tr>
<tr>
<td>1-Jul-2012</td>
<td>11,925</td>
<td>1,514</td>
<td>2,677</td>
</tr>
<tr>
<td>1-Aug-2012</td>
<td>3,308</td>
<td>564</td>
<td>2,629</td>
</tr>
<tr>
<td>1-Sep-2012</td>
<td>3,688</td>
<td>296</td>
<td>1,419</td>
</tr>
<tr>
<td>1-Oct-2012</td>
<td>4,430</td>
<td>428</td>
<td>2,783</td>
</tr>
<tr>
<td>1-Nov-2012</td>
<td>1,733</td>
<td>812</td>
<td>2,673</td>
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<tr>
<td>1-Dec-2012</td>
<td>2,646</td>
<td>975</td>
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<tr>
<td>1-Jan-2013</td>
<td>784</td>
<td>147</td>
<td>985</td>
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<tr>
<td>1-Feb-2013</td>
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<td>237</td>
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<td>1-Mar-2013</td>
<td>723</td>
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<tr>
<td>1-Jul-2013</td>
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<tr>
<td>1-Aug-2013</td>
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<td>959</td>
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</tr>
<tr>
<td>Totals</td>
<td>336,155</td>
<td>94,545</td>
<td>95,747</td>
</tr>
</tbody>
</table>

The death of Trayvon Martin was the catalyst for the formation of Black Lives Matter. The highest months of activity were immediately following Martin's death. In the months it took to prepare for trial, the number of posts decreased and would only increase after a development in the case brought new media attention. This pattern is similar for other previous crisis studies; however, future Black Lives Matter cases would not follow this established pattern.

**Racial Profiling**

Martin’s death started a national debate about racial profiling and police practices. Both state and federal lawmakers focused on the pitfalls of racial stereotyping in law
enforcement (Eligon, 2012). Zimmerman, a Neighborhood Watch volunteer, deemed Martin a “suspicious person.” Court records showed Zimmerman had a history of calling police to report circumstances that didn’t merit their attention, including potholes and people who own pitbulls, as well as “suspicious youth, especially Black youth” (Birzer, 2013, p. 25).

In a congressional speech, U.S. Representative Bobby Rush of Illinois condemned racial profiling and the role it played in Martin’s death. Martin was wearing a dark hoodie when Zimmerman saw him walking in the neighborhood, and Zimmerman said his race and the type of clothing he was wearing made him look suspicious. Rush said, “Just because someone wears a hoodie does not make them a hoodlum” (Huetteman, 2012, p. A17). He also blamed racial profiling for Martin’s death, and many Twitter users did the same. Toussaint Jahi (2012) retweeted, “If you don’t think racial profiling can have fatal consequences, I give you two words: #Trayvon Martin.” Jahi was not alone in referencing racial profiling as the case of Martin’s death; Bobbi Hampton (2012) posted, “It is time to protect our sons and end racial profiling. George Zimmerman must be arrested. #Trayvon.”

Many police department employees claimed that racial profiling programs like “stop-and-frisks” were critical to keep people safe, reduce crime, and catch criminals in urban settings. Stop-and-frisks are defined by Terry v. Ohio (1967) as police stopping suspects in brief, nonintrusive ways. Police are required to have a reasonable suspicion. However, data from the New York City Police Department countered claims that stop-and-frisks reduce crime: “Of the nearly 700,000 ‘stop and frisks’ conducted by police in New York last year . . . 87 percent of the people stopped were black or Hispanic. Yet only about 12 percent of the stops led to arrests or summonses” (King, 2012, p. A15).
Some Twitter users posted their arguments against racial profiling using specific cases and citing particular outcomes. Austin Almaguer (2012) retweeted an NAACP post: “Stop & Frisk = Racial Profiling. We’ve lost many people to these unfair practices: Trayvon Martin, Amadou Diallo, Sean Bell.” Posts that discussed racial profiling comprised the largest theme in the #BlackLivesMatter posts and continued until after Zimmerman’s acquittal. Lisa Michalek (2013) wrote, “Trayvon Martin’s Mother: Stop And Frisk Is Racial Profiling, Just Like What Was Done To Trayvon.”

Many Twitter users were attempting to change the policies of police departments that engage in stop-and-frisk practices or in racial profiling by connecting these practices to Martin’s death. Some users also attempted to show that they deemed “stop and frisk” a euphemism for racial profiling; Andrew Coombes (2013) was among them. He retweeted, “Trayvon Martin lawyer on stop-and-frisk: ‘No matter what you want to call it, essentially it’s racial profiling.’”

Martin’s death continued to be cited as a reason for criminal justice reform in the United States even three years after it happened. In January 2015, a number of speakers at events commemorating the birthday of Martin Luther King, Jr., said that much more needs to be done to achieve King’s dream of racial equality in the United States and that criminal justice reform is a critical piece of the to-do list (Paulson, 2015).

**Police Brutality**

Twitter users most frequently discussed racial profiling in the aftermath of Martin’s death, but they also talked a lot about police brutality. April 2012 marked the twentieth anniversary of the beating of Rodney King, a black man who was beaten by four police officers. A bystander videotaped the incident, and the video was aired on KTLA; the footage
outraged people and caused rioting across Los Angeles. For some, the King case provided “palpable evidence of racialized police brutality, media stereotyping of African Americans, and unsanctioned racial segregation” (Metcalf & Spaulding, 2015, p. 1).

Many might argue that in the 20 years since that event, racial relations have changed in the United States; they might cite as proof the election of a black man as president of the United States, the increasing recognition of black entertainers, and the growing numbers of middle-class homes and white-collar jobs occupied by blacks. However, for some observers, Martin’s death provides evidence of how little things have changed.

Since 1992, a number of federal policies, including the mandatory minimums and the three-strikes provision—laws that increase the harshness of sentences if an individual has committed two similar crimes in the past—have increased the number of black men in the American justice system; “one in three African American men between the ages of 18–29 is now in the justice system (in prison or jail, on probation or parole)” (Metcalf & Spaulding, 2015). This history of brutality and the laws that have increased black prison populations were an easy transition for social media posters who were seeking someone or something to blame for the death of Martin.

Some Twitter posters were quick to connect Martin’s death with a history of police brutality in Sanford, Florida. Aja (2012) was among them: “#Trayvon case: #Raimondo, officer in charge, involved in previous cover-up SANFORD CITIZENS RECALL POLICE BRUTALITY.” Detective Anthony Raimondo was initially leading the investigation in the Martin case, but it was quickly reported that he had several misconduct reports on his official record and that “he once allowed the son of a high-ranking police officer and grandson of a local judge to go free after the young man had savagely attacked a local
homeless man” (Minnis, 2012, A3). When Raimondo’s past became public, Florida governor Rick Scott quickly appointed Angela Corey, a state’s attorney, to lead the Martin case. The developments after Martin’s death that caused the appointment of a new attorney generated increased national attention on the case.

On social media, the majority of posters connected police brutality to larger racial issues in the United States. Michael Buell (2013) retweeted the following: “We can never be satisfied as long as the Negro is the victim of the unspeakable horrors of police brutality #MarchOnWashington #Trayvon.” This theme was repeated in Alma Nalisha’s (2013) post, “Quite heart sore right now! Oscar Grant, Trayvon Martin & Israel Hernandez. Damn, they abolished slavery and replaced it with police brutality.” Police brutality was the smallest category of Tweets in the Martin case because Zimmerman was not a police officer; however, Martin’s death was a catalyst for discussing justice issues in a racial context in the United States.

**Widespread Incarceration**

Evidence of a growing prison population and the strain it was placing on both the federal government’s and states’ budgets can be seen in an August 2015 directive from Attorney General Eric Holder. To help reduce prison populations nationwide, Holder asked federal prosecutors who were reviewing criminal cases with minor drug violations to find ways to charge criminals with less severe crimes. The rates of incarceration in the United States have more than quadrupled since 1980, and most prisoners were incarcerated because of mandatory minimums, which provide specific sentence guidelines for specific crimes (Klein & Soltas, 2013). Martin’s death called attention to deep-seated racial issues in the United States and the need to reform a systems and laws that result in the use of racial
profiling and widespread incarceration. These federal programs can also overlook issues of unemployment, homelessness, poverty, and hunger, which affect millions in the United States (Lewis, 2013). Many opponents to current correctional and judicial practices cite federal and state legislation of the 1980s and 1990s that promised to punish criminals and make society safer. However, many of these laws removed programs with a history of reducing recidivism rates and emphasized building more and larger prisons rather than working to rehabilitate people at high risk of committing crimes (Jacobson, 2005).

The majority of posters who commented on widespread incarceration and Martin's death used the latter element as evidence of institutionalized racism in the United States. Steve Yip (2012) posted, “June 5th = 100 days since Trayvon's murder. Wear hoodies with slogans calling for Justice 4 Trayvon and End to Mass Incarceration.” Yip was not alone in critiquing the U.S. justice system; Tanya Golash-Boza (2012) posted, “Killing of #Trayvon is part of same system that killed #TroyDavis. Controlling image of black men as criminals justifies mass incarceration.” Some users, including Leonard Jones (2013), simply used hashtags to capture racial issues related to the Martin case; he wrote, “#Trayvon Martin as case study in American institutional #racism #prison #incarceration #black #obama #profiling.” Such feelings would be the beginning of the more solidified rhetoric of the activist movement, which continued to draw attention to individual cases and connected them to racial issues in the United States.

Table 7.2 displays the number of Tweets that included information about protests and rallies for Martin. This includes posts that suggested, planned, or encouraged acts of protest or civil disobedience. Just as with posts about the death of Trayvon Martin, social media users’ attempts to make sense of the events peaked around significant coverage or developments in
the case. The use of Twitter to plan and organize protests peaked immediately after the death of Martin and when developments occurred in the case.

Table 7.2

*Tweets Organizing and Mobilizing Protesters about the Martin Case*

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**Protests after Martin’s death**

Protests occurred in Sanford, Florida, a suburb of Orlando. On March 16, 2012, four weeks after Martin’s death, his parents said they “no longer had any faith in the Sanford Police Department” and wanted the FBI to complete the investigation. At this point, a “black militia group” said it would place Zimmerman under citizen’s arrest (Jonsson, 2012). Demonstrations and vigils held in Martin’s name were occurring across the country (Thompson & Horwitz, 2012). These rallies led to the Million Hoodie March in Philadelphia on March 22, 2012, which honored Martin, who was killed while wearing a black hoodie. The hoodie would become a symbol of Martin’s death; millions of social media users
“posted pictures of themselves wearing hood[ies] and ask[ed] ‘Do I look suspicious?’”
(Wiggins, 2012).

Protests intensified after Zimmerman was acquitted for Martin’s death. Demonstrations occurred in more than 100 cities nationwide, many of which were attended by thousands. These events had no reports of violence (Somasekhar, Lydersen, & Dazio, 2013). In a column in the Washington Post, Martin Luther King III used the Martin case to remind the public of the work remaining to fix “appalling racial injustice” in the United States. He pointed out that Martin’s death helped ignite a “new era of protests against racial injustice” (King, 2013, p. A15). Twitter served as a method of communication for organizing and coordinating events across the country. People used it in three ways:

- Communicating symbols of the protest
- Providing locations for gathering
- Reporting developments in the Martin case

At the start of the Zimmerman trial in June of 2013, many Twitter users, including Michael Skolnik (2013), posted messages encouraging others to wearing hoodies: “The murder trial of George Zimmerman begins tmw. Although it may be hot in many parts of the nation, we will ‘wear’ our hoodies for Trayvon!” Skolnik’s post was retweeted 438 times, and many users, including Global Grind (2013) conveyed this message in their own words: “Our hoodies will always stay up for Trayvon Martin!” Such posters used the hoodie not only as a method to remember Martin, but also as a symbol of the fight for racial equality.

Other Twitter users posted the times and locations of protests. For example, Supgv (2012) tweeted, “March for Trayvon Martin, NRA protest rally, Saturday, April 14, 1 pm, St. Louis.” The use of Twitter to communicate information about protests would
continue until after Zimmerman was acquitted. Johnathan A Cooper (2012) posted, “The Protest for #Justice4Trayvon will also be in Philly at Love Park on 3/26 at 7pm – let’s make this National #Trayvon.”

Twitter was used not only to promote protests, but also to report about them. Kendra Baker (2013) was among those who used Twitter for this purpose. She posted, “HUNDREDS ATTENDING RALLY IN UNION SQUARE IN MANHATTAN FOR TRAYVON MARTIN.” Baker also linked to an Instagram photo of the crowd gathered in Union Square. People like Baker tweeted to show their involvement in protests while others, including Algebra Project (2013), were broadcasting protests: “LA Holds Weeklong Protest Demanding Justice For Trayvon Martin.” The most widely shared protest news was images of both Jay Z and Beyoncé attending a protest in New York City. Gossip Dawg (2013) posted, “Jay Z & Beyoncé--Protest In NYC . . . With Trayvon Martin’s Mom.”

Trayvon Martin’s death instigated using social media as a method to coordinate and connect a variety of geographical areas to unite and organize protest efforts. Additionally, Martin’s death created antenarratives that show issues with racial relations in the United States, from the use of police brutality to various forms of racial profiling. The overall tone of posts showed users’ anger not only about the death of Martin, but also about the value people placed on black lives. These postings served as an impetus in the activist movement; the real power of #BlackLivesMatter would not be seen until the death of Michael Brown.

**Social Media Response to the Death of Michael Brown**

On Friday, August 9, 2014, unarmed black teenager Michael Brown was shot by a white police officer in Ferguson, Missouri, a suburb of St. Louis. Officer Darren Wilson said
he shot Brown after struggling with him through the open widow of his police car to gain control of his (Wilson’s) gun. The gun was eventually fired while Wilson was in the car. At that point, Brown ran, and Wilson pursued him and shot him multiple times. Ferguson Police Department representatives said the shooting was justified because of Brown’s aggression toward Wilson (Bosman & Williams, 2014). Ferguson citizens, many of whom are black, responded to this justification with skepticism and outrage. After a fatal shooting, police departments typically release the names of officers involved. However, the Ferguson Police Department announced it would not release the name of the officer who shot Brown due to concerns for the officer’s safety (Bosman & Williams, 2014). That decision increased tension between police and protesters, the latter of whom continued to riot after Brown’s death.

On Sunday night, two days after the shooting, a candlelight vigil for Brown ended with a confrontation between a crowd of vigil attenders and hundreds of police officers with riot gear and K-9 units (Bosman & Fitzsimmons, 2014). By Monday, the FBI announced it would conduct a civil rights investigation of Brown’s death. His death and the conflict with police following the vigil fueled violent protests that resulted in looting and property destruction (Lowery & Berman, 2014). Social media users entered the fray; even Anonymous, a group of hackers, announced on Twitter that it had hacked Ferguson’s computer system and released the personal information of police chief Jon Belmar. The group threatened to “bring down city, county and federal networks if the police overreacted to rallies and protests” (Bosman & Eckholm, 2014, p. A.1). Anonymous continued its operation against Ferguson by encouraging citizens to confront police, crash the city’s web servers, and release the name of the officer they believed had killed Brown (Perlroth, 2014).
Riots, looting, and protests had continued a week after Brown’s death, and the way Ferguson police responded escalated tensions in the community. To control demonstrators, police used armored vehicles, tear gas, and military weapons.¹

After public outcry over the tactics being used in Ferguson, Missouri, Governor Jay Nixon announced that the state highway patrol would oversee law enforcement in Ferguson. However, many Ferguson residents did not believe the change would improve racial tensions or bring the protests to an end (Peters, Kesling, & Devlin, 2014). Nixon mobilized the National Guard on August 18, 2014, to offer protection for Ferguson’s residents; additionally, he implemented a midnight-to-5 a.m. curfew to help halt violent protests (Farhi, 2014). The night of Tuesday, August 19, 2014, brought calm to Ferguson; no looting or violence was reported. While demonstrations and protests continued, gatherings remained peaceful and did not involve confrontations with police (Dolan, Shallwani, & Kesling, 2014).

On August 20, 2014, a grand jury convened to hear evidence about the shooting of Brown by Darren Wilson, a Ferguson police officer. The jury’s work ended on November 24, 2014, with the announcement that Wilson would not be indicted on any charges. Within hours, Twitter users were calling for action, recommending that people avoid Black Friday shopping. Both #BoycottBlackFriday and #BlackoutBlackFriday appeared alongside #BlackLivesMatter to show opposition to Officer Wilson’s not being charged for the death of Brown (Halzack, 2014).

¹ [The Ferguson Police Department had received surplus military equipment from the Pentagon. The Pentagon has used its 1033 program to deliver more than $4 billion of gear to cities’ law enforcement agencies. A number of studies of previous protests in which military equipment was used showed that the equipment increased tension and disorder (Beavers & Shank, 2014).]
In Ferguson, what had been peaceful protests prior to the grand jury verdict turned violent once the findings were announced; crowds smashed windows, set fires, and looted businesses. Protesters crowded on the roads and closed Interstate 44, blocking traffic in several locations in Ferguson. Police received reports of heavy automatic gunfire in a Ferguson neighborhood near the St. Louis Airport. Officials closed the airport for the night as a safety precaution (Davey & Bosman, 2014). To prevent a second night of violence, Nixon increased the number of National Guard members in Ferguson from 700 to 2,220. These troops would provide additional security for businesses and homes (Kesling, Shallwani, & Peters, 2014). The second night of protests involved only one store being looted by protesters (Healy, 2014).

After the rioting had stopped in Ferguson, the city’s Chamber of Commerce released information about the damage to businesses in St. Louis; a total of 60 had been looted, vandalized, or burned the weeks after Brown’s death in August 2014, while 12 additional businesses had been destroyed during the days after the grand jury’s decision not to file charges against Wilson (Shallwani, Kesling, & Porter, 2014). While Wilson was not indicted, he resigned from the Ferguson Police Department. That was received well by protesters, but many of them wanted the department to be completely restructured (Healy & Davey, 2014).

Beyond protests in Ferguson, thousands of people across the country began protesting in Atlanta, Los Angeles, New York, Philadelphia, and Washington, D.C. For the most part, these groups remained peaceful but caused disruption (Eligon & Fernandez, 2014). A nationwide protest was organized for Black Friday using the hashtags #NotOneDime and #BoycottBlackFriday to bring more publicity to Brown’s death. Some malls and shopping centers had to be closed as die-ins (large groups of people lying down in
entrances and exits and pretending to be dead) blocked building access and created fire hazards. Appeals to stop shopping over the Thanksgiving weekend were generated on social media as an act of solidarity with Black Lives Matter. The National Retail Federation reported an 11 percent drop in year-over-year sales, which social media organizers claimed as a victory. News organizations reported that the drop in profits was due to deep price discounts, an increase in online sales, and previously inaccurate sales data (Sommer, 2014). However, Twitter users posted claims that #BoycottBlackFriday reduced the number of sales and affected retail revenues.

The Black Friday results were a turning point for protest organizers who wanted to move beyond focusing on a single case or event and do the following:

- Protest police brutality and racial profiling
- Demand reporting requirements in cases of police shootings
- Require the use of special prosecutors for police shootings (Davey, Eligon, & Bidgood, 2014).

The Black Lives Matter activist movement organized protests nationwide that demanded changes in police officer’s treatment of minorities, mandated wider usage of body cameras among police officers, and required increased monitoring of police conduct (Hudson, 2014). These protests caused the U.S. Justice Department and police departments across the country to examine the tactics and practices police used. Investigations revealed that many police departments used excessive force and engaged in racial profiling (Shallwani, Elinson, & Fields, 2014).

As shown in Table 7.3, these categories accounted for 14.3% of the total relevant posts following Brown’s death. New categories of militarized police and of all black lives
mattering developed on Twitter following Brown’s death and accounted for 84.5% of the relevant posts. Posts in the Michael Brown case remained constant during the first five months after Brown’s death. Some weeks saw spikes; for example, after Ferguson police responded to protest with surplus military equipment, the number of posts about militarized police increased. Black Lives Matter users’ posts about Brown’s death leveled the variance of post from week to week, unlike in the case of Trayvon Martin. The critical themes in the analysis of Martin’s death—racial profiling, police brutality, and widespread incarceration—were still present after Brown’s death but at significantly lower levels.

Table 7.3

*Core Themes of #BlackLivesMatter Tweets in the Michael Brown Case*

<table>
<thead>
<tr>
<th>Date</th>
<th>Racial Profiling</th>
<th>Police Brutality</th>
<th>Widespread Incarceration</th>
<th>Militarized Police</th>
<th>All Black Lives Mattering</th>
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<tr>
<td>10-Aug-2014</td>
<td>90</td>
<td>32</td>
<td>142</td>
<td>290</td>
<td>1,355</td>
</tr>
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<td>17-Aug-2014</td>
<td>80</td>
<td>201</td>
<td>266</td>
<td>658</td>
<td>323</td>
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<td>24-Aug-2014</td>
<td>94</td>
<td>5</td>
<td>493</td>
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<td>31-Aug-2014</td>
<td>44</td>
<td>5</td>
<td>741</td>
<td>523</td>
<td>553</td>
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<tr>
<td>7-Sep-2014</td>
<td>124</td>
<td>4</td>
<td>107</td>
<td>45</td>
<td>178</td>
</tr>
<tr>
<td>14-Sep-2014</td>
<td>102</td>
<td>201</td>
<td>254</td>
<td>730</td>
<td>368</td>
</tr>
<tr>
<td>21-Sep-2014</td>
<td>16</td>
<td>3</td>
<td>286</td>
<td>111</td>
<td>295</td>
</tr>
<tr>
<td>28-Sep-2014</td>
<td>74</td>
<td>12</td>
<td>198</td>
<td>28</td>
<td>406</td>
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<tr>
<td>5-Oct-2014</td>
<td>8</td>
<td>6</td>
<td>550</td>
<td>585</td>
<td>1,861</td>
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<tr>
<td>12-Oct-2014</td>
<td>2</td>
<td>7</td>
<td>168</td>
<td>29</td>
<td>641</td>
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<tr>
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<td>7</td>
<td>5</td>
<td>207</td>
<td>114</td>
<td>451</td>
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<tr>
<td>26-Oct-2014</td>
<td>53</td>
<td>10</td>
<td>103</td>
<td>81</td>
<td>555</td>
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<tr>
<td>2-Nov-2014</td>
<td>24</td>
<td>7</td>
<td>268</td>
<td>30</td>
<td>113</td>
</tr>
<tr>
<td>9-Nov-2014</td>
<td>113</td>
<td>27</td>
<td>126</td>
<td>160</td>
<td>292</td>
</tr>
<tr>
<td>16-Nov-2014</td>
<td>13</td>
<td>3</td>
<td>229</td>
<td>416</td>
<td>390</td>
</tr>
<tr>
<td>23-Nov-2014</td>
<td>148</td>
<td>40</td>
<td>1,170</td>
<td>10,504</td>
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<td>30-Nov-2014</td>
<td>622</td>
<td>201</td>
<td>2,417</td>
<td>1,063</td>
<td>18,675</td>
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<tr>
<td>7-Dec-2014</td>
<td>408</td>
<td>1,683</td>
<td>1,633</td>
<td>532</td>
<td>1,773</td>
</tr>
<tr>
<td>10-Dec-2014</td>
<td>225</td>
<td>635</td>
<td>1,668</td>
<td>3,515</td>
<td>6,212</td>
</tr>
<tr>
<td>17-Dec-2014</td>
<td>73</td>
<td>843</td>
<td>1,029</td>
<td>5,365</td>
<td>14,963</td>
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<tr>
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<td>3,930</td>
<td>12,055</td>
<td>26,935</td>
<td>82,016</td>
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</table>
Militarized Police

The Ferguson Police Department’s reaction to protesters caused national indignation. “Police monitored the protests from atop armored vehicles with weapons aimed at crowds and responded to riots with tear gas while dressed in camouflage and toting shotguns, M-4 rifles and gas masks” (Chokshi & Larimer, 2014, p. A2). These scenes were replayed on broadcast news programs, and Twitter users condemned the police and the federal programs that had provided them with military resources. This outrage caused scrutiny from both a White House taskforce and people participating in Congressional hearings; in May 2015, the federal government banned specific weapons from being transferred to police departments. New federal guidelines banned police from obtaining “tracked armored vehicles, bayonets, grenade launchers, firearms and ammunition of .50-caliber or higher, and some types of camouflage uniforms” (Nakamura & Lowery, 2015, p. A4).

Twitter users frequently commented not only on the situation in Ferguson, but also about the militarization of police departments across the country. For example, citizensandhya (2014) posted, “Not just Ferguson: police militarization nationwide: #BlackLivesMatter”, with a link to a photo of police training using full riot gear while riding an armored vehicle. Many Twitter users also pointed to the amount of money spent on specialized weapons and military gear for police departments; one such user, Cinnamon Apple (2014) wrote, “@Bklivesmatter The state of California has received more $2 militarize police departments than any other state in the U.S.-@osope #BlackLivesMatter #LA.” Users also attacked politicians and policies that allowed money to be spent on these efforts. Some users, like War Tax Resister (2014), critiqued the situation by posting other
ways the money could be spent: “Militarized police brutality is a direct result of the #war budget. Resist and redirect taxes for peace and justice. #BlackLivesMatter.” Using the money to improve education, reduce poverty, and create jobs were common suggestions among Twitter users.

Other users posted about how militarized police were being used; one such user, Yuma Wray (2014), posted, “The military is protecting Walmart in #Ferguson Freedom to punch each other over #BlackFridayDeals is more important than #BlackLivesMatter.” For some users, this highlighted the class struggle between the urban poor and large corporations; using law enforcement personnel to protect the store while not using resources to protect the people of Ferguson worried some Twitter users. These concerns resulted in calls for change to the current police structures in the United States, which allows the use of military equipment and weapons against civilians. Scottie Baugh (2014) posted, “It’s time the ‘good ‘ole boy’ system of military policing comes to an end. #BlackLivesMatter.” Twitter users frequently called for action to remove military equipment from police departments.

Beyond being used to condemn law enforcement, Twitter was also the means of cataloguing the actions of militarized police forces. ACT UMD (2014) posted, “NOW! Military police firing rubber bullets and tear gas at crowd of protestors! #Ferguson #ACAB #BlackLivesMatter.” This post also included a link to videos of police using military equipment and tactics on protesters, include one that showed tear gas being fired into a crowd in Ferguson. Others posted updates about police movement and images of law enforcement personnel using military gear against protesters. For example, Marcus_Kwame (2014) posted, “#Ferguson law enforcement & officials are gearing up for more militarized instigation. Be safe my people #BlackLivesMatter.” Of course, the posts focusing on the
militarized police were not limited to the actions of Ferguson police; a number of users discussed the actions of police interacting with a group of students protesting on the UC-Berkeley campus. Dega Omar (2014) posted, “@RoadToPalestine Militarized police assaulting students in Berkeley #BlackLivesMatter.” Like many others, this Twitter user linked to a video of police firing tear gas into crowds and then using riot gear to lead them down the road.

Alicia Garza, one of the founders of Black Lives Matter, discussed in an article published by The Feminist Wire how the Black Lives Matter activist movement was designed to broaden the black liberation movement in the United States: “Black Lives Matter affirms the lives of Black queer and trans folks, disabled folks, Black-undocumented folks, folks with records, women and all Black lives along the gender spectrum,” she wrote. “It centers those that have been marginalized within Black liberation movements” (Garza, 2014, p. 1). Twitter users who posted content affirming the value of all black lives did so in three ways:

- They supported the movement’s goal of being inclusive of all black lives.
- They referenced the importance of the Black Lives Matter movement.
- They reported the death of a black person at the hands of law enforcement personnel.

For example, Cranky (2014) posted, “We cannot erase women, girls, queer community, trans men and women, anyone. ALL #BlackLivesMatter.” This sentiment was echoed by Darnell L. Moore (2014), who wrote, “State violence against Black folk doesn’t discriminate but the violence of queer/trans antagonism among Black folk does. #BlackLivesMatter.” Others cited data and statistics to support their claims; Jill (2014) was among them: “Blacks kill blacks at 10x the rate of whites, 35x the rate of Jews. We rob our
own lives of value. #Ferguson #BlackLivesMatter.” These users provided general support for including all black lives in the Black Lives Matter movement.

However, others supplied specific evidence about why previously marginalized groups were to be included in and recognized by Black Lives Matter. For example, Jenny (2014) posted, “2013 had the highest rate of homicides against black trans women ever documented. Friendly reminder: don’t talk #BlackLivesMatter without us.” Others posts discussed the high rates of violence and death among black, transgender individuals. Societal Obstacle (2014) reposted, “RT @reinagossett if all #BlackLivesMatter we must center black trans people facing & fighting the highest rates of criminalization #FergusonFridays.”

These users’ claims and evidence fueled commentary and support for including black LGBTQ individuals in Black Lives Matter. Statistics regarding homicide and police violence against minorities in the LGBTQ community were also used to argue for inclusion in the movement. The National Coalition of Anti-Violence Programs, a national advocacy group for LGBTQ communities, reported that in 2014, 60% of homicide victims among members of the LGBTQ community were black, and 55% were transgender women. The black LGBTQ community is 1.8 times more likely to experience police violence than members of other groups; for transgender minorities, that rate climbs to 6.2 (National Coalition of Anti-Violence Programs, 2015).

Twitter users also posted to support the Black Lives Matter movement, which was designed to create a national discussion about the race, poverty, and burdens of being black in the United States. However, some social media users attempted to counter the goals of Black Lives Matter by creating #AllLivesMatter to claim that Black Lives Matter was being racist and not respecting all lives. David Bedrick, a psychologist and counselor (2015),
critiqued the creation of #AllLivesMatter: “1) In the shadow of ‘All Lives Matter’ is a form of willful colorblindness—the erasure of the issue of race. 2) In the shadow of ‘All Lives Matter’ lurks the privilege white folks have to not experience their own lives in racial terms. 3) In the shadow of ‘All Lives Matter’ is an aggressive resistance to focusing on the value of black lives” (p. 1).

A number of Twitter users attempted to provide evidence about why #BlackLivesMatter is important and should continue. For example, Señorita Ana (2014) posted, “#AllLivesMatter is proof positive that white people don’t want black people to have nothing, not even a hashtag #BlackLivesMatter.” Other users had similar feelings but took a less direct communication approach. Many criticized government failings, which created a system that doesn’t value black lives. For example, Alexandra Bateau (2014) posted, “#BlackLivesMatter because we are human beings despite the states systemic failure to recognize our humanity. #FergusonFridays.” Doran Schrantz (2014) retweeted this text: “A system cannot fail those it was never meant to protect—WEB DuBois.” However, the quote doesn’t belong to DuBois; it was posted on Twitter by Rihanna on July 14, 2013, after Zimmerman’s acquittal and has been retweeted 11,000 times. While Rihanna frequently received credit as the originator of the post, Vann Newkirk, whose Twitter handle is W.E.B.B.I.E. DuBois, created the post. Newkirk confirmed to Time that the post was his original words (Rothman, 2014). While the quote was misattributed, the feelings about the United States justice system’s not protecting black people resonated with the Black Lives Matter audience.

Finally, some users would provide updates about other cases in which police killed blacks or blacks died under police protection. While Brown’s death was the focus of the
#BlackLivesMatter hashtag during the months following his death, many users attempted to broaden the discussion. J Maurice Titus (2014) posted, “Black Cleveland woman w/ mental illness died after police used takedown #BlackWomenMatter.” The victim was Tanisha Anderson, a 37-year-old woman with a history of schizophrenia. Police were called to Anderson’s home after receiving a report that she was disturbing the peace. When officers arrived, they used a takedown method that involved pushing Anderson to the pavement. She lost consciousness, didn’t wake up, and was declared dead within a few hours of the incident. The medical examiner ruled Anderson’s death a homicide (Seewer, 2015). This case was reported but did not receive the national media attention that Brown’s death did.

Another case that was widely report on #BlackLivesMatter (but not at the level that Brown's death did) was posted by Charles Woodruff (2014): “#BlackLivesMatter #shawshooting Another young black teen shot dead by white cop in St. Louis last night.” That teenager, Antonio Martin, was shot on December 24, 2014, in Berkeley, Missouri, just five miles from Ferguson. This case increased tension between protesters and law enforcement personnel in Missouri (Lowery, 2014).

Twitter users also provided updates about the investigation of Eric Garner, who was selling cigarettes illegally on Staten Island when police arrested him on July 17, 2014. After attempting to place handcuffs on Garner, officer Daniel Pantaleo pulled him to the pavement and placed him in a chokehold. Video of the arrest shows Garner repeatedly saying, “I can’t breathe.” He died the same day of his arrest (Goldstein & Schweber, 2014).

In December 2014, a Staten Island grand jury announced there was not enough evidence to charge Pantaleo and his partner with a crime in connection with the death of Garner. However, a U.S. Justice Department spokesperson reported the department would
open a civil rights investigation into Garner’s death and said he was confident the government would obtain indictments against the officers (Weiser, 2014). In August 2015, the U.S. Justice Department had not concluded its investigation, but the New York City Police Department had finished its evaluation of the arrest and death of Garner. The department announced that it had come to a decision regarding Pantaleo’s misconduct but that it would not release it until the Justice Department has finished its work (Shallwan, 2014). Six months later, in February 2016, federal prosecutors started presenting evidence to a grand jury to determine whether an indictment could be brought against the police officers involved in Garner’s death. During the previous month, the NYPD brought charges against Sergeant Kizzy Adonis, who was placed on a desk assignment (Baker & Rosenberg, 2016).

References on Twitter to Garner’s death and the investigations continued even after the death of Brown on August 9, 2014. #BlackLivesMatter was a place for users to post experiences, examples, or evidence of police brutality, racial profiling, and discrimination. In the case of Garner, several rallies and protests occurred at the same time as Brown’s protests as a result of these postings, but none of them reached the intensity of those in Ferguson.

Twitter serves as a powerful way for Black Lives Matter to keep individuals in various regions connected to the goals of the movement; it also was a means for users to report local incidents to a worldwide audience. These communications allow Black Lives Matter to refine its messages and help followers believe in the movement’s goals. Table 7.4 shows the number of Tweets made about the planning and execution of rallies and demonstrations.

The first four months after Brown’s death was highlighted by protests and riots not only in Ferguson but also around the country. The data shows a steady number of posts
until November 23, 2014, the day before the grand jury’s decision was announced. After November 23, the number of posts increased, and their content changed as well.

Table 7.4
Tweets Organizing and Mobilizing Protesters in the Michael Brown Case

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<tr>
<th>Date</th>
<th>Tweets</th>
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<td>11</td>
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<tr>
<td>24</td>
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Tweets before the Grand Jury Announcement

Social media users frequently invited others to become involved in protests or participate in causes promoted via #BlackLivesMatter. For example, Alisonwisneski (2014) posted, “#Denver! Who wants to participate in a #FergusonSolidarity protest at @DenverPolice dept?! #Ferguson #BlackLivesMatter.” Many posts did not include the dates and times for the protests. Twitter users made such posts presumably to gauge possible involvement before organizing an event. Other posters retweeted requests for help; Johryn (2014) was among them: “RT @solbutterfly Help us get 71 ppl from Chicago to Ferguson as part of #BlackLivesMatter Labor Day call to action @thewayoftheid.” This Tweet included a link to a fundraising page; its proceeds were to help offset travel expenses for a group of medics, community organizers, media specialists, counselors, and attorneys from Chicago to
travel to Ferguson for an August 30, 2014 protest. Other users, like Marion Mendheim (2014), posted information about a national week of action: “Correction: #BlackLivesMatter national week of action will be October 20-26th. #BLMSTL.” This effort was an opportunity for communities outside of the St. Louis metropolitan area to show support for Ferguson and demand an end to state violence against blacks.

**Tweets after the Grand Jury Announcement**

Thirteen U.S. cities—Albuquerque, Atlanta, Boston, Chicago, Cleveland, Los Angeles, Minneapolis, New York, Oakland, Philadelphia, Portland, Seattle, and St. Louis—reported protests following the grand jury’s announcement on November 24, 2014; these protests would continue until the end of December. Twitter users coordinated their times and locations to attract larger crowds.

People began planning protests before the grand jury’s announcement. For example, Krystle Star (2014) on November 24 posted, “(NYC) Protest at Union Square awaiting the Grand Jury decision. #NYC2Ferguson #BlackLivesMatter #MikeBrown.” Star included a picture of people gathering in Union Square to potentially protest the grand jury’s decision. Other posters provided more detail, including locations and times of protests. For example, RightWingWatch Fan (2014) retweeted, “@jeff_gang #BlackLivesMatter. Boston protest tomorrow: 7 p.m. Tuesday at 2400 Washington St.” Such posts created about events in cities across the United States continued. ThePinHook (2014), for example, posted about an event in Durham, North Carolina: “Tomorrow in Durham let’s support and rally and commune. #shutitdown #BlackLivesMatter.” WompWomp (2014) posted about a protest in Seattle: “Seattle #protest takes a stop for moment of silence at E. Pine St. & Bellevue Avenue #BlackLivesMatter.” Protesters used Twitter to organize—and in many cases, document—
events. Twitter was an important way to communicate about protests and allowed users to share information with their followers.

After the death of Brown, Black Lives Matter refined its message on Twitter by focusing not only on high-profile cases of racism and police violence but also on racial inequality and injustice. As the Black Lives Matter movement continued, the lessons and methods learned via Brown’s death influenced the ways the group and its followers communicated.

**Social Media Response to the Death of Freddie Gray**

Freddie Gray, a 25-year-old black man, was arrested for possession of a switchblade on April 12, 2015, in Baltimore. Gray initially ran from the police but was caught and restrained on the ground while the officers awaited backup. Upon arriving at the police station, Gray had a broken vertebra and an injured voice box from being in the back of the van without proper restraints. Gray was transported to the Shock Trauma Center at the University of Maryland Medical Center. He died a week later on April 19, 2015 (Welsh & Kaltenbach, 2015). The Baltimore Police Department announced it would suspend the six officers involved in Gray’s arrest while it conducted an investigation. Deputy Police Commissioner Jerry Rodriguez confirmed that Gray died of a spinal cord injury but said that the department had no evidence of police wrongdoing (Sheryl, 2015a).

In the hours before Gray’s death, protesters started to gather in front of the West Baltimore Police Station, where Gray was taken after his arrest (Calvert, 2015a). On April 21, 2015, members of Gray’s family and Reverend Jamal Bryant, a prominent pastor, joined them. (Sheryl & Nixon, 2015). On April 24, 2015, Baltimore Police Commissioner Anthony
Batts said Gray should have received medical attention when he was arrested. Batts also said that the officers who arrested Gray did not follow protocol because they transported him in the back of a van without a seatbelt. In the week following Gray’s death, demonstrations occurred in Baltimore, the largest on April 25 (Babcock & Corrales, 2015). This peaceful demonstration gave way to violence as a group of protesters began smashing windows, throwing rocks and bottles at police, and marching toward Camden Yards, where the Orioles were playing the Red Sox. Police in riot gear met the protesters, and the stadium was placed in lockdown during the tenth inning of the game (Sheryl & Babcock, 2015). Protesters made comments on both social media and in public to “shut it down” and “no business as usual” in the city of Baltimore (Hermann, 2015). Following Gray’s funeral on April 27, 2015, residents of his neighborhood confronted police in riot gear; set cars on fire; and looted a drugstore, a market, and convenience stores. As the violence escalated on April 27, Governor Larry Hogan declared a state of emergency, closed schools, and implemented a 10-p.m.-to-5-a.m. curfew (Sheryl, 2015b). The protests of April 27, 2015, resulted in 15 buildings and 144 cars being set on fire, 235 arrests, and 19 police officers being injured. Many Baltimore residents blamed the violent protests on the involvement of gangs, including the Black Guerrilla Family, the Bloods, and the Crips, all of which had participated in rioting. On Wednesday, a number of peaceful marches and rallies occurred in hopes of drawing focus from the rioting of the weekend (Nixon & Scott, 2015). On May 1, 2015, the Baltimore Police gave State’s Attorney Marilyn Mosby the results of the investigation of Gray’s death. In it, police confirmed Gray’s injuries were “consistent with what medical examiners often see in car collisions,” but the report findings were not released to the public (Bui, Hernandez, & Zapotosky, 2015, p. B1). The next day, Mosby announced that charges
would be filed against all six police officers involved in Gray’s arrest (Stewart & Fausset, 2015). The charges stemmed from Gray’s being illegally arrested, having his hands and feet bound, not being restrained by a seatbelt, and being denied medical care when he asked for help immediately following his arrest (Fausset, Kovaleski, & Oppel, 2015). On May 3, 2015, Baltimore Mayor Stephanie Rawlings-Blake, lifted the mandatory curfew, and Hogan announced that the National Guard would begin reducing its troops in the city until all were out by May 6, 2015 (Blinder, Fausset, & Stewart, 2015).

Rawlings-Blake asked the U.S. Justice Department to launch an inquiry of the Baltimore Police Department, specifically looking at “patterns of misconduct.” In addition to this probe, on April 21, 2014, the Justice Department had started a civil rights investigation of Gray’s death (Calvert, 2015b). On September 3, 2015, a Baltimore judge refused to dismiss the charges against the six police officers charged in connection to Gray’s death. The officers’ attorney said that Mosby had engaged in misconduct regarding the case and comments she had made about it publicly. However, the judge’s ruling cleared the way for the officers’ (Palazzolo, 2015). The first trial, that of Officer William Porter is slated to start on November 30, 2015. It is believed the final officer will go to trial sometime in March 2016 (McLaughlin, 2015). Unlike Twitter posts in previously examined events, tweets made about Gray’s death focused more on the issues of Black Lives Matter rather than solely on the person killed. Much of the Twitter content focused on an issue (like racial profiling, for instance) and connected it to the name of an individual using a hashtag. This development allowed Black Lives Matter to focus on larger issues as determined by users of the hashtag #BlackLivesMatter while ensuring that loss of life would not be forgotten. Many of the tweets about Gray referred to him with a hashtag but had content that focused on other
aspects of the Black Lives Matter movement. Table 7.5 categorizes the posts made between April 12 and May 3, 2015, during protests and riots following Gray’s death.

Table 7.5

Core Themes of #BlackLivesMatter Tweets in the Freddie Gray Case

<table>
<thead>
<tr>
<th>Date</th>
<th>Racial Profiling</th>
<th>Police Brutality</th>
<th>Widespread Incarceration</th>
<th>Militarized Police</th>
<th>All Black Lives Mattering</th>
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<td>3</td>
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Following Gray’s death, most Black Lives Matter posts were about the value of all black lives. This represents a shift in the Black Lives Matter movement; unlike in the death of Martin and Brown where users focused on death of the individuals, after Gray’s death, the focus was about the movement, and Gray became evidence in an argument for change.

**Police Brutality**

The largest category of posts using #BlackLivesMatter during this period discussed police brutality. Users like Mr. Bentley (2015) cited Gray by posting, “My future son could be Freddie Gray & Trayvon Martin & Tamir Rice & Mike Brown and others who been murdered by Police.” Like Twitter users in the events mentioned previously, Mr. Bentley is connecting current events to prospective ones. Other users cited Gray in correcting mistakes in reports about his death. For example, when the *Oregonian* published the headline “Riot erupts after Baltimore funeral for man hurt in police custody,” Sister Krissy (2015) posted, “@Oregonian Seriously? Freddie Gray wasn’t ‘hurt’ in police custody. He was killed. His spine was severed. #BlackLivesMatter.” Other allusions to Gray on Twitter discussed law enforcement officials in Baltimore. Tia Hall (2015), for instance, posted, “Bloods, Crips & NOI Brothas coming together protest police murder of Freddie Gray #BlackLivesMatter: @KonQuestNow.” The three largest gangs in Baltimore joined forces in this event; many Baltimore residents blamed riots, arson, and unrest on the gang members’ involvement in what they deemed previously peaceful protests. (Nixon & Scott, 2015). While Gray’s death instigated protests and demonstrations in Baltimore, much of the #BlackLivesMatter conversation about police brutality did not focus on him. These users shared content ranging from general commentary about police brutality to personal experiences with police brutality. Kris Ankarlo (2015) posted, “#BlackLivesMatter has been calling attention to
police brutality, now it has come to Baltimore—People’s Power Assembly mtg

#FreddieGray.” Some users criticized how the police involved in Gray’s death were treated by the public and news media; Nichole Persing (2015) posted, “Zero paid maternity leave, but be a policeman, kill another human being & get suspension with pay #FreddieGray #BlackLivesMatter #wtf.” Beyond planning meetings and discussing the brutality of Baltimore police, many users posted support for Black Lives Matter’s work against police brutality. For example, Ashley Stanford (2015) posted, “@ATLRaiseUp #BlackWorkMatters and #BlackLivesMatter because being Black should not be a life sentence of poverty or a death sentence by police.” Others responded to accusations of Black Lives Matter’s having an antipolice agenda; Jasmine (2015) posted, “Please understand that #BlackLivesMatter is not a movement against police but against Police brutality @IMKristenBell.” Protesters across the country began using antipolice slogans and frequently referred to police officers as pigs. Police arrested protesters in Springfield, Massachusetts, on April 14, 2015, after the protesters ignored a lawful order to disperse. As they were arrested, the protesters chanted, “What do we do when pigs attack? Stand up! Fight back!” (Steele, 2015). Other users decried coverage of the Baltimore riots that contained no references to the reason for the riots. For example, Raqiyah Mays (2015) posted, “The story isn’t about #BaltimoreRiots. It’s about #FreddieGray #policebrutality #Race #EnoughIsEnough The people are tired #BlackLivesMatter.” The nature of Gray’s death—and the fact that his injuries occurred while he was in police custody—fueled the conversation about police brutality, as did photos of Baltimore police subduing protesters while dressed in riot gear.
All Black Lives

The second-largest category of comments following Gray’s death focused on the value of all black lives. This content fits into the same categories used in evaluating all-black-lives posts made following Brown’s death: the importance of women, the importance of transgender people, and the killing of black people.

Women have played a central part in the Black Lives Matter movement, and many Twitter users discussed this; Samantha Pajor (2015) was among them. She wrote: “@TheBlackVoice W/o Black women, there wouldn’t have been a Freedom Movement (civil rights movement), Black Power Movement or #BlackLivesMatter movement.” Many users moved beyond noting the role women have played in the Black Lives Matter movement to defending black women. What Negrodamus (2015) posted represents the feelings of many Twitter users: “@Russian_Starr Yes, we must march for black women, but we have to do something even more basic than that: value them. #blackwomenmatter.”

As cited earlier, placing women at the center of the movement was a major organizational goal of the creators of Black Lives Matter. Additionally, they sought to include members of the LGBTQ community in Black Lives Matter. Users reflected their support of this—especially of transgender individuals. For example, Soraya Anastasia (2015) retweeted, “@Moore_Darnell Apathy is black men saying #BlackLivesMatter but denying that Trans-hatred, sexism and rape culture are problems.”

Users also cited the high number of crimes committed against black transgender individuals; John Noble (2015) posted, “Trans women of color disproportionately affected by systematic oppression-get aligned with our message. #BlackLivesMatter @NPAction.” #BlackLivesMatter users tweeted not only protests about Gray’s death but also details about rallies for transgender people on April 12, 2015. One
example was retweeted by Spectrum at LSU (2015): “@YouthBreakOUT Please support our NOLA Trans March Social Media Rally. Friday, April 24, 2015 at 3:00 PM.” The content of posts after Gray’s death included messages supporting the inclusion of LGBTQ individuals in the Black Lives Matter activist movement, but the addition of events, protests, and rallies specifically for black LGBTQ people was a new development in Black Lives Matter cases.

Users also attempted to provide evidence about the deaths of all blacks. For example, Jeannie Hartley (2015) posted, “@samswey: These police departments killed black people at the highest rates in 2014. #BlackLivesMatter #HumanRights.” While some Twitter users kept their posts general, others focused on development in previous cases or new and underreported cases they felt the community should be aware of as it called for legislative and protocol changes. For instance, some posters demanded justice for Rekia Boyd, a woman who had been shot five times and was killed by a Chicago police officer on March, 21, 2012. The officer said he felt threatened because she moved toward him as he confronted Boyd about the noise she and her group were making at a park. The City of Chicago settled a lawsuit with the Boyd family for $4.5 million. In April 2015, a Chicago judge found the officers not y of involuntary manslaughter (Schmadeke, 2015).

RebekahTheGrey (2015) posted, “We want justice for #RekiaBoyd and all Black women and girls! #RekiaMatters All #BlackLivesMatter #BlackWomenMatter.” Other users posted about Margaret Mitchell, who was shot and killed in 1999 by a Los Angeles police officer. The FBI started an investigation that year to determine whether the police officer used excessive force in shooting her. Based on investigation results, the city reached a settlement of $975,000 with the victim’s family (Riccardi, 2000). Diamond Latchison (2015) posted, “@sohumstudios The city settled for $975,000 in death of Margaret Mitchell. A mentally ill
102 pound homeless woman killed by police. #BlackWomenMatter.” Other users cited more-recent cases of what they deemed police violence against blacks, such as that involving Eric Garner. Dylan (2015) posted, “@IndRule4080 We say #ICantBreathe they say #f***yourbreath. #EricGarner #EricHarris #BlackLivesMatter.” Both Garner and Eric Harris, an unarmed black man who was shot and killed on May 12, 2015, were frequently mentioned in the #BlackLivesMatter content that followed Gray’s death. Robert Bates, a Tulsa County, Oklahoma, Reserve Deputy, mistakenly grabbed his gun rather than his Taser and killed Harris (Kindy, Tate, Jenkins, Rich, Alexander, & Lowery, 2015). While the story was not widely reported or covered in the media, many users included Harris’s name as a hashtag to promote awareness of his death. For example, Maze (2015) posted, “How is it that #Bates gets to go on vacation. He just killed #EricHarris! Why does he still have his passport? #BlackLivesMatter.” By April of 2015, #BlackLivesMatter was a powerful network of identifying and reporting incidents of racism, police brutality, and police involvement in the deaths of black Americans. The movement was also effective in using this information to mobilize protesters and demonstrations to demand legal and political changes to address and end racism in the United States.

**Racial Profiling**

The category of racial profiling appeared in #BlackLivesMatter tweets after the death of Gray was racial profiling. Twitter posts connected Gray’s death to profiling practices of the Baltimore police. Among the users who posted about Gray was Emma (2015), who said, “Are we just going to overlook the fact that they arrested Freddie Gray for looking at a cop? Thats racial profiling, folks #BlackLivesMatter.” Twitter content about Gray typically referred to the police’s motives for chasing and arresting him. Other users focused on the
media’s attention not being on the police’s actions or profiling but on the results of the Baltimore riots. For example, Ainsley Lambert (2015) posted, “And people continue to be more outraged over looting, than police profiling, beating, killing, & shooting. #FreddieGray #BlackLivesMatter.” While focus on Gray’s death did occur on Twitter, most users called attention to racial-profiling practices they saw across the United States. For example, Ace (2015) posted, “If you don’t get #BlackLivesMatter then you don’t get the words ‘profiling and ‘discrimination’.” Users like Ace used their content to show how race can give people different experiences dealing with police. Other users, like Manager William J (2015), attempted to validate previous accusations of racial profiling in the United States. “We’ve been saying all along, #cops racial profile us. I’m so glad it’s all coming to light now. #BlackLivesMatter #FF.” Similarly, some users provided evidence of racial profiling. For example, Joel St. Julien (2014) gave anecdotal support by posting, “I work w young black men at my job and racial profiling is fact. Cops are looking for trouble, even if its not justified. #BlackLivesMatter.” Other Twitter users provided more concrete evidence of police departments’ racial-profiling practices. Advancement Project (2015) posted, “Not just #Ferguson, former Ladue, MO Police Chief alleges he was ordered to profile Black motorists #BlackLivesMatter.” Such profiling claims were validated by users who posted news articles, results of lawsuits, or personal experiences. While some users offered evidence that profiling occurs, others asked why such practices were not being changed or outlawed. Sophia Nelson (2015) posted, “How many black men/women have to die before we get a grip that racial profiling & racial animus exists in law enforcement. #BlackLivesMatter.” At this point in the Black Lives Matter movement, antenarratives were much more refined and
organized by not solely focusing on the death of an individual but connecting it to the goals of Black Lives Matter.

While core Black Lives Matter messages existed in data from the Martin and Brown cases, the content generated after Gray died was more about the goals of the organization than it was about his death. Table 7.6 displays Twitter data about protests, demonstrations, and rallies occurring after Gray’s death.

Table 7.6

Tweets Organizing and Mobilizing Protesters in the Freddie Gray Case

The spike in the data between April 27 and April 30, 2015 represents the peak of the Baltimore riots. On April 26, more than 1,000 people marched through downtown Baltimore chanting, “All night, all day, we’re gonna fight for Freddie Gray!” (Sheryl & Babcock, 2015). The next day, some of the protests turned into riots as crowds looted stores and injured 15 police officers. On April 28, the Baltimore Orioles spokesperson announced
that the team would play the Tampa Bay Rays but that the game would be closed to the
public. The National Guard helped enforce a citywide curfew and used pepper balls and
smoke grenades to disperse a crowd that had gathered after the curfew had started (Calvert,
Palazzolo, & Maher, 2015). By April 29 and with more than 3,000 National Guard troops
stationed across Baltimore, calm had returned to the city.

#BlackLivesMatter Twitter content included information about protests in Baltimore
as well as those in other cities. For example, Qurban’s (2015) post: “#Baltimore will burn
tonight. America will suffer the penalty of #injustice. This is what happens when #racism
flourishes. #BlackLivesMatter.” Posts from others, such as Drew Kyle (2015), suggested that
they believed that riots are the only way the public would pay attention to racism in the
United States: “America isnt racist but black men have only become a topic of discussion
when people riot and burn s*** down. #BlackLivesMatter.” Other users commended the
way Baltimore protesters were behaving; MightyBulls (2015) posted that they were,
“showing great restraint not BANG on the Baltimore police right now #BlackLivesMatter
#FreddieGray.” While property was damaged during the riots, no police officers were killed
in the line of duty. Many media outlets and social media users said that with the involvement
of gangs, the amount of damage and number of injuries and deaths could have been much
higher. Other users, including Nefertari (2015), posted to show support for the protesters:
“@KarenCivil Baltimore . . . The fight for justice never ends..Love & Prayers to everyone
protesting. #BlackLivesMatter.” In addition to tweets that specifically referred to the
protests in Baltimore, the Black Lives Matter activist movement would continue to have
rallies and protests that supported the group’s larger agenda. For example, Joseph A. Parker
(2015) retweeted, “@abroaddus More than 100 students have walked out of Southwest High
School as part of the #BlackLivesMatter movement.” Other users were still using #BlackLivesMatter to organize rallies in cities across the country; Occupy Rochester MN (2015) posted, “@LeslieMac STARTING SOON @FergusonResp ACTION #Harrisburg PA Judicial Center 12PM Court Reform Rally #BlackLivesMatter.” The hashtag #BlackLivesMatter was also being used to connect followers with information outlets; Carla Kibble (2015) wrote, “Follow @fergusonaction Text ‘HANDSUP’ To 90975 to receive urgent Ferguson Action updates & announcements on your phone. #BlackLivesMatter.” The use of technology to connect Twitter followers to physical locations for workshops, meetings, protests, and rallies was part of the Black Lives Matter movement, which embraced social media not only as a way to communicate messages but also as a method for involving people in the movement.

Social Media Response to the Death of Sandra Bland

In July 2015, Sandra Bland was moving from suburban Chicago to Texas to start a job at her alma mater, Prairie View A&M University outside of Houston. A police officer pulled her over for failing to signal a lane change in Waller County, Texas. After collecting Bland’s driver’s license and registration and taking them to his vehicle, state trooper Brian T. Encinia returned to Bland’s car and asked her to put out her cigarette. Bland refused, and the situation escalated and ended with Bland being arrested for assaulting a public servant (Blow, 2015). Three days after her arrest, on July 13, 2015, she was found dead in her jail cell. The Harris County medical examiner ruled Bland’s death a suicide (Montgomery, 2015a) but it raised a number of concerns:

- A lack of evidence that Bland was suicidal or in an altered mental state
• The justification for Bland’s arrest
• Her history in speaking out against public brutality

These concerns caused both the FBI and the Texas State Department of Public Safety to investigate Bland’s death (Montgomery & Wines, 2015). Officials from the Department of Public Safety released the police dash-cam video, which shows what should have been a routine traffic stop quickly escalating into a physical struggle between Bland and Encinia. (A transcript of Bland’s arrest is available in Appendix D.) After the release of the video, Encinia was widely criticized by Texas authorities for his behavior, specifically for intensifying the situation and not using his training. Encinia was placed on administrative duty after the incident (Smith, 2015).

At Bland’s funeral, family and friends questioned the ruling of her death a suicide; she was remembered as a smart and outspoken woman who was actively engaged in her church, who served on a number of committees, who reached out to elderly parishioners, and who had multiple job offers. Many of the speakers encouraged people to use social media to seek justice for Bland. As the investigation of Bland’s death continued, historical actions by residents and political officials in Waller County were published. In 2004, the county fought to keep Prairie View A&M University’s students, historically black, from voting locally. Between 1877 and 1950, Waller County had the highest number of lynchings in Texas (Rowley, 2015). Current Sheriff R. Glenn Smith has had a number of race-related lawsuits brought against him. In 2008, Smith was fired after executing faulty warrants against black residents. However, months after he was fired, Smith was elected sheriff of Waller County (LaFraniere, Oppel, & Montgomery, 2015b). A review panel concluded in April 2016 that policy alterations needed to occur at the Waller County Jail, including better medical and
mental health screening; a new, more modern facility; and other administrative changes to increase inmate surveillance (Montgomery, 2016).

Table 7.7 shows the number of tweets in each of the major themes of the Black Lives Matter movement following Bland’s death. The majority of posts occurred in the police-brutality and all-black-lives categories.

Table 7.7

<table>
<thead>
<tr>
<th>Date</th>
<th>Racial Profiling</th>
<th>Police Brutality</th>
<th>Widespread Incarceration</th>
<th>Militarized Police</th>
<th>All Black Lives Mattering</th>
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<td>12,397</td>
</tr>
<tr>
<td>22-Jul-2015</td>
<td>26</td>
<td>2,810</td>
<td>91</td>
<td>7</td>
<td>2,741</td>
</tr>
<tr>
<td>23-Jul-2015</td>
<td>21</td>
<td>6,020</td>
<td>21</td>
<td>35</td>
<td>685</td>
</tr>
<tr>
<td>24-Jul-2015</td>
<td>54</td>
<td>2,824</td>
<td>10</td>
<td>668</td>
<td>887</td>
</tr>
<tr>
<td>25-Jul-2015</td>
<td>365</td>
<td>1,629</td>
<td>7</td>
<td>526</td>
<td>745</td>
</tr>
<tr>
<td>26-Jul-2015</td>
<td>320</td>
<td>3,345</td>
<td>453</td>
<td>7</td>
<td>527</td>
</tr>
<tr>
<td>27-Jul-2015</td>
<td>505</td>
<td>779</td>
<td>96</td>
<td>242</td>
<td>1,066</td>
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<td>28-Jul-2015</td>
<td>26</td>
<td>1,214</td>
<td>85</td>
<td>243</td>
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<tr>
<td>29-Jul-2015</td>
<td>9</td>
<td>1,281</td>
<td>117</td>
<td>644</td>
<td>881</td>
</tr>
<tr>
<td>30-Jul-2015</td>
<td>41</td>
<td>768</td>
<td>555</td>
<td>5</td>
<td>459</td>
</tr>
<tr>
<td>31-Jul-2015</td>
<td>167</td>
<td>422</td>
<td>385</td>
<td>88</td>
<td>266</td>
</tr>
<tr>
<td>Totals</td>
<td>1534</td>
<td>31,356</td>
<td>3661</td>
<td>5,837</td>
<td>38,597</td>
</tr>
</tbody>
</table>

Posts after the death of Sandra Bland continued the pattern developed after Gray’s death of using the incident as evidence of Black Lives Matter core themes, and most users posted about all black lives mattering and referred to Bland in their posts.
All Black Lives Mattering

Following Bland’s death, Twitter posts included more discussion of black women than they had in previous cases. However, many users were upset that Bland was receiving attention when other black women had not been mentioned by the mainstream media. For example, GRITtv (2015) posted, “@NewJusticeDept 3 black women have been found dead in jail in the past 2 weeks . . . #KindraChapman #SandraBland #RalkinaJones
#SayHerName #BlackWomenMatter.” July 2015 provided Black Lives Matter an opportunity to respond to Bland’s high-profile death. Many Twitter users saw the event as an important test for the movement. Clint Smith (2015), for example, posted, “This is a crucial moment for #BlackLivesMatter. Black women have been leading this since day one. We can’t allow their deaths to be ignored.” Supporting and standing up for black women was a critical element of Twitter posts. Some, like Dorothy Roberts (2015), did so by posting data about them: “Black women are race/sex/class segregated in lowest-paying jobs & paid less for same work. #BlackWomenMatter.”

Twitter content about women and their inclusion in the Black Lives Matter movement appeared frequently, but some users were upset that India Clarke’s death was not receiving more attention. Clarke, a 25-year-old transgender black woman, was found dead in Tampa, Florida, July 21, eight days after Bland’s death. Detectives reported that she died after being shot in the head and arm (Campbell, 2015). Michele J. Andrews’ (2015) post reflected the feelings of many Twitter users: “@TransGriot If you say #SandraBland’s name, but refuse to acknowledge #IndiaClarke because she’s #trans then you don’t believe all #BlackLivesMatter.” Other Twitter users provided statistics about black transgender people to raise awareness about their plights. For example, Nuala Cabral (2015) retweeted,
“@kathrynesquire A black trans woman has a life expectancy of 35 years old and an annual income of 10k. #NN15 #BlackTransLivesMatter.” Users like Mane Moves TV (2015) retweeted, “@audrelorde We need to be uplifting #IndiaClarke as we lift up #SandraBland #BlackTransLivesMatter.” The Black Lives Matter movement included support of transgender people via content ranging from narratives about why transgender individuals are important to statistics about that population in the United States.

**Police Brutality**

The content about police brutality can be divided into two subcategories: posts that cited Bland’s death as evidence of police brutality and those that discussed police brutality generally. Posts that referred to Bland frequently did one of two things: challenged her cause of death or provided links to more information about her arrest or death. For example, Richard Punko (2015) posted, “@EWDolan #BlackLivesMatter founder: Sandra Bland didn’t commit suicide—she was ‘a victim of state violence’.” This was a common conclusion social media users made about Bland’s death. Violeta Ayala (2015) wrote “@monifabandele Todays #DeathsInCustody like #SandraBland are eerie reminder of the violence and brutality of #Attica #DeathPoliticsAttica #BlackLivesMatter.” Tyler (2015) posted, “#SandraBland is another victim of racist police brutality #BlackLivesMatter.” Many #BlackLivesMatter users did not believe the official report about Bland’s death, and several placed blame on police. Others referred to the video of Bland’s arrest, in which Encinia threatened to tase her if she did not get out of her car. Twitter users frequently linked to and retweeted the video. While failure to use a turn signal can result in an arrest in Texas, the vast majority of these offenses result in a ticket. (Lai & Park, 2015). For many Twitter users, the arrest of Bland was another example of police brutality. While some users cited Bland’s experience specifically, others
referred to police brutality in a more general way. Jaznice (2015) was among them: “my biggest fear in life is becoming a hashtag due to police brutality, not because of my success or the good i’ve done #BlackLivesMatter.” Users like Jaznice focused on the possibility of police brutality in their own lives, while others discussed police brutality in terms of a shared African-American experience. For example, Extensor Jones (2015) retweeted, “We are witnessing the genocide of African-Americans by police—if you do nothing to stop it, you have blood on your hands #BlackLivesMatter.” In fact, the death of Bland shifted the focus of posts using the hashtag #BlackLivesMatter from police brutality and black men to brutality against women and children. Previous claims that supported All Black Lives and women’s importance to the Black Lives Matter movement did not have a specific woman or women as the champion; Bland’s case was the first major one involving the death of a black woman. This development was noted by Rahiel Tesfamariam (2015), a Washington Post columnist who called Black Lives Matter a movement that chants “black lives matter,” leaving no room for footnotes about who is included in that declaration and who is left out. The movement’s decentralized structure has ensured that the concerns of subgroups are not sidelined. After women in the movement pointed out that it had become exclusively focused on police brutality against black men, targeted hashtags such as #SayHerName emerged. Those efforts kept national attention on cases of women and girls, including Sandra Bland and Rekia Boyd. (p. B2)

Twitter users’ development of antenarrative, which influences the actions of a movement, is a unique attribute of Black Lives Matter. Table 7.8 shows the number of tweets about protests, actions, and rallies following Bland’s death. The number of posts remained relatively flat until July 23, 2015, the date on which the first major news stories about her death appeared. On July 20, 2015, Waller County sheriff’s officials released additional information; District Attorney Elton Mathis said, “This investigation is still being
treated just as it would be a murder investigation.” The case would also be turned over to a grand jury in August to determine whether charges would be filed in the case. In November 2015 the grand jury began hearing testimony for the case (Montgomery, 2015b, p. A14).

Table 7.8

*Tweets Organizing and Mobilizing Protesters in the Sandra Bland Case*

On July 23, Smith, the county sheriff, announced that Bland had attempted suicide in the past and should have been placed on suicide watch after her arrest but was not. However, an attorney for Bland’s family said that they had no evidence that she had ever attempted suicide or struggled with depression. The family’s statements came the day after Texas authorities released the dashboard-camera footage of Bland’s arrest (Montgomery & Wines, 2015). This information paralleled the increase in tweets demanding and organizing protests. For example, Jypsy Jeyfree (2015) posted about involvement in a protest by writing, “Attended the protest today in Union sq and sister #SandraBland we will continue the fight! We Want JUSTICE #BlackLivesMatter.” The protesters were disbursed by the New York Police Department on July 23. Ash J (2015) posted, “Protest of #SandraBland death broken
up by #NYPD in #NYC #SayHerName #BlackLivesMatter #SandySpeaks.” In addition to planning and executing protests, a number of users wanted to invoke the government to address the problem. For example, the handle #SandraBland (2015) posted, “Time For A mass Protest At The @WhiteHouse @uscapitol We Demand Representation #BlackLivesMatter #JusticeForSandraBland #LEAccountability.” Like this poster, many users tweeted about wanting justice for Bland and other victims of police brutality. Adam Greenberg (2015), for example, posted, “Sandra Bland was killed in a jail for being black. We can’t take it any more. It’s justice or else! #SandraBland #BlackLivesMatter.” Other users echoed Greenberg’s statements; Sherri Law (2015) posted, “I will not be silenced . . . . I will continue the struggle until justice has been served not just for Sandra Bland but for all. #BlackLivesMatter.” In addition to demanding justice for Bland, many Twitter users wanted the U.S. Justice Department to start an official investigation into her death. K. Travis Ballie (2015) was among them and posted, “Join me in DC tonight at @TheJusticeDept to demand justice for #Sandra Bland. #SayHerName #BlackLivesMatter.” A MoveOn.org petition was created that called for Attorney General Loretta Lynch to open an investigation of Bland’s death. On July 30, 2015, activists delivered the petition with more than 500,000 signatures and protested outside the Justice Department building in Washington, DC, but as of September 2015, the Justice Department had not initiated an investigation. On August 3, 2015, Bland’s mother filed a federal wrongful-death lawsuit against Encinia, guards at the Waller County Jail, and the Texas Department of Public Safety. As of October 2015, the Justice Department had not responded to the MoveOn.org petition or demands for a federal investigation.
Conclusion

Black Lives Matter as an activist movement is not a true group or organization with membership and hierarchy. The users of the hashtag have—in a coherent way—demanded and protested for important changes to improve the living conditions of the African American community. In examining the activities of #BlackLivesMatter after the death of Trayvon Martin, Michael Brown, Freddie Gray, and Sandra Bland, critical antenarrative fragments appeared in two major categories: first, the black experience in America and second, the use of Twitter to coordinate protests, demonstrations, and legislative agendas. Each of these cases allowed Twitter users to refine the antenarratives and make sense of the victims’ deaths and police brutality and other forms of discrimination. Black Lives Matter’s use of social media attempts to draw attention to the racial climate in the United States. Social media users employed antenarrative as a means to unraveling the narrative of a progressive and colorblind America. With each post, users questioned the narratives that suggest that the Civil Rights Movement of the 1960s repaired racial relations in the United States, that discrimination no longer exists, and that power structures have worked to integrate minorities.
CHAPTER 8

CONCLUSIONS AND IMPLICATIONS

In examining the manner in which H&R Block, the National Transportation Safety Board (NTSB), the Centers for Disease Control and Prevention (CDC), and Black Lives Matter have used to respond to a wide variety of crisis events, I have found that much of the previous scholarly work in crisis communication has accounted for the way that organizations—but not individuals—react to crisis events. With the advent of social media, it is now possible for both organizations and individuals to question official narratives of a crisis, provide conflicting information, and share these views with the world in a matter of seconds. Crisis communication research can no longer consist of only examining official narratives, analyzing spokespeople’s remarks, or investigating an individual’s image repair strategies; new research must account for the way social media users respond to and make sense of crisis events.

Three questions have guided my research as I developed this project:

- Are traditional pre-social media image repair strategies effective in social media environments?
- How do participants use social media in crisis events, and how does this usage shape the rhetorical framing of a crisis?
- How might organizations effectively adapt traditional crisis communication plans to use social media during future crisis events?

While not all of the case studies provided answers to each of the questions, each question was explored in at least one chapter of the dissertation. This chapter examines each question and provides insights gathered from cases that answer those specific questions.
Additionally, this chapter will explore the impacts this research will have on technical communication scholarship and the types of research that should be conducted by technical communicators in the future in the areas of both crisis communication and social media.

**Are Traditional Image-Repair Strategies Effective in Social Media Environments?**

Social media has empowered users, shifted hierarchical structures, and allowed members of marginalized and disenfranchised groups to participate fully in critical conversation about the way a crisis event has impacted their lives. While the social media environment in which image-repair strategies are used is very different than that in which a sole rhetor speaks to representatives of traditional media, the strategies Benoit (2014) outlined can work via social media.

In the case of the H&R Block software error and tax-refund delay, which hindered roughly 600,000 tax returns, CEO Bill Cobb employed a traditional response method: issuing an apology. H&R Block posted his statement on its corporate Facebook page. Not only was informing clients of the problem via social media ineffective, but the post’s content didn’t work for several reasons:

- The company did not effectively communicate the delay of all returns that claimed a higher-education tax credit.
- The statement used too many image repair strategies.
- The strategies did not address customers’ concerns.

H&R Block did not initially communicate with those affected by the problem; the IRS had to reach out to H&R Block clients about it. It was not until the end of February that H&R Block posted about the tax delay on its corporate Facebook page. That was the
company’s sole communication about the mistake; H&R Block did not contact customers whose tax returns were affected by its error.

On February 28, 2013, H&R Block posted initial information about the delayed returns for its customers. The company first attempted to bolster its image by posting this content on Facebook: “Some taxpayers are receiving letters from the IRS informing them their returns are now under further review. Some of these letters are related to Form 8863 (Education Credits). Rest assured your return has been prepared accurately and your estimated 21 day refund cycle has not changed” (H&R Block, 2013a). Bolstering alone did not repair the company’s image among people who had received letters from the IRS, so H&R Block used scapegoating by emphasizing the role the IRS played in the issue.

In a March 10, 2013 post, H&R Block said it was “working hard with the IRS to expedite a solution” (H&R Block, 2013b). This content suggests that the IRS was responsible for the solution therefore suggesting they were originally responsible for the problem. Selecting the IRS as the agent of both the action and the correction removed the responsibility from H&R Block and placed it with the IRS. Up until this point in the crisis, the IRS was the only organization to send any individual, formal communication to H&R Block clients. H&R Block communicated with its customers solely via its Facebook page.

The remainder of the March 10 post explained that the IRS had changed the way it was processing and accepting answers on Form 8863 and that the IRS had not shared this with H&R Block. Once H&R Block learned of the change the post stated the company quickly revised its software to comply with the new IRS procedures.

This strategy of bolstering image and blaming someone or something else for a situation—scapegoating—can be a successful public relations tactic. However, in the case of
H&R Block, scapegoating was ineffective. Clients did not believe the IRS was responsible for the problem because other tax-services companies were not having similar problems processing Higher-Education Tax Credit returns. H&R’s Facebook pages were filled with comments questioning the intent of the post as well as the accuracy of H&R Block’s statements.

The company continued to bolster its position with this statement: “H&R Block appreciates that this issue may cause problems for our clients” (H&R Block, 2013b). This was seen as an attempt to sympathize with customers and show that H&R Block understood the problems that a delayed return could create for customers and their families.

In this post, the company added an element of corrective action by offering ways to help customers correct the problem. “For those clients who have received notification from the IRS and have yet to respond, please call your local H&R Block office or 800-HRBLOCK. The office or customer service agent will be able to better serve you and provide next steps” (H&R Block, 2013b).

On March 12, 2013, the company made its third post about the ongoing refund issues. This content focused solely on H&R Block’s corrective action. The company said it “wanted to give [customers] a place to go to get those facts and the next steps … in this situation. In addition to this page on our website, linked below, we are reaching out to each and every one of you individually to give you direction and give you the facts. Please look for those emails, calls or letters starting tomorrow” (H&R Block, 2013c). While H&R Block claimed it would reach out to the individuals affected by the delay, this never occurred. Many of the comments associated with that post provide examples of individuals who contacted
H&R Block and talked with representatives who did not know how to respond to their questions.

Three days later, CEO Bill Cobb posted this message: “We made a mistake when the tax return was sent to the IRS. And you deserve an apology…I want to make it clear that this was absolutely not the fault of your tax professional; your return was prepared accurately. This was an issue with the form transmission. This was our mistake—and I sincerely apologize. I want you to know that we hear the frustration of those impacted by this issue loud and clear, and we're working every avenue we can to get your refund to you as fast as possible (H&R Block, 2013d).

Before the March 15 post, H&R Block had already tried to diffuse the situation by using bolstering, scapegoating, and corrective action. The March 15 post nullified these efforts by using the mortification technique—taking responsibility for the situation and requesting forgiveness. In his statement, Cobb took responsibility for the mistake but still placed blame on the transmission of returns and not on their preparation. In addition to apologizing, Cobb also used bolstering when he said, “I want you to know that we hear the frustration of those impacted by this issue loud and clear, and we're working every avenue we can to get your refund to you as fast as possible.” This combination not only showed the human side of Cobb as the CEO of the organization, but it allowed him to take responsibility for the delay.

Cobb’s statement also highlighted the corrective actions H&R Block was using to expedite and improve the situation for its clients.

We have been and remain in daily communication with the IRS, who are doing everything being communicated and refunds are definitely being funded. But we also recognize that in an already delayed season, it’s still not as fast as we want, and we're not letting up until every client has his or her refund. (H&R Block, 2013d)
In this post, Cobb not only took responsibility for the mistake, but he also showed customers what the company was doing to fix the problem. Four days later, on March 18, 2013, Cobb reposted material to help those who had been affected by the tax-return delay, offered resources to individuals who were planning on filing their Free Application for Federal Student Aid paperwork, and updated clients on the effectiveness of H&R Block’s corrective action:

Let me begin with a confirmation that the positive progress on the processing of your returns continues. It looks like it has moved from nearly half, to over half of our affected clients have their refunds or a date by when you will receive them, based on the data we are tracking. While this progress continues, we remain focused on getting the returns of all our affected clients processed and refunds delivered. (H&R Block, 2013c)

In these posts, H&R Block used image repair strategies that have historically proved effective for a variety of businesses and organizations in crises. In those cases, however, crisis events were communicated via traditional—not social—media. H&R Block provides a wrinkle in my research question because while the rhetorical strategies of image repair translated well in a social media environment, many of the people who posted on H&R Block’s corporate Facebook wall assumed the role of an extra-institutional surrogate, or someone who posted information that either attacked H&R Block for its actions or defended H&R Block from attackers. Many of the users who defended H&R Block sought to provide evidence that the IRS was to blame, or asserted that other tax organizations were facing similar issues. Users who presented evidence were more effective in countering claims of others and questioning those who attacked H&R Block than users who just made claims that H&R Block was not at fault. Blame was the most frequently used strategy, but once Bill
Cobb took responsibility for the error, it was no longer a viable option, and many users abandoned it.

In the statements that defended H&R Block, many users employed language similar to what appeared in the company’s Facebook content. This type of behavior is not accounted for in traditional image repair strategies. As traditional-strategy best practices are adapted to fit social media, groups will need to reconsider how they approach image repair. If organizations were able to provide statements about the crises they face and about their responses to the events—statements that are easily communicated—extra-institutional surrogates in the form of social media users could share those messages quickly and more effectively than a top-down organizational response could. Evidence of the effectiveness of such an approach can be found in the other three cases.

**NTSB Response to Claims of Racism**

During the crash investigation of Asiana flight 214, an intern released false names of the plane's pilots to KTVU in San Francisco. To the shock of many, the names were racial slurs, and when they were reported on a news program, outrage erupted on both social and traditional media. On the day of the broadcast, Twitter users generated 40,519 tweets about the incident. Within a few hours of the broadcast, the NTSB released the following statement:

The National Transportation Safety Board apologizes for inaccurate and offensive names that were mistakenly confirmed as those of the pilots of Asiana flight 214, which crashed at San Francisco International Airport on July 6.

Earlier today, in response to an inquiry from a media outlet, a summer intern acted outside the scope of his authority when he erroneously confirmed the names of the flight crew on the aircraft.
The NTSB does not release or confirm the names of crewmembers or people involved in transportation accidents to the media. We work hard to ensure that only appropriate factual information regarding an investigation is released and deeply regret today's incident.

Appropriate actions will be taken to ensure that such a serious error is not repeated. (NTSB, 2013)

Elements of this apology—along with statements from KTVU—appeared on social media and were covered by traditional media. These actions reduced the number of tweets from 40,519 on July 12 down to 14,827 on July 13. By July 18, only 788 tweets were posted. While the initial decrease is most likely connected to the apology alone, by July 18 the passage of time probably caused fewer people to comment. The NTSB’s and KTVU’s prompt action resolved the situation. Because these organizations used their own social media outlets to communicate directly with Twitter users, and because the apology was retweeted, the crisis was quickly resolved.

**CDC Response to Myths about Ebola Transmission**

Once the first case of Ebola was confirmed in the United States, many Americans felt panicked about how Ebola was transmitted and what steps should be taken to control the outbreak. Many communicated their concerns via Twitter and, in some cases, these posts resulted in the perpetuation of myths about the virus. The most common of these was that Ebola was an airborne virus and that with the onset of winter, the major cold and flu season in the United States, the virus’s transmission rate would mirror that of the cold and flu viruses.

Table 8.2 shows the posts by @CDCgov about Ebola transmission. This table also provides data about the number of potential impressions, which is calculated by adding the sender’s followers and the followers of all users who have retweeted the post.
Table 8.1

@CDCgov Posts about Ebola Transmission via @CDCgov

<table>
<thead>
<tr>
<th>Date</th>
<th>Sent Post</th>
<th>Number of Retweets</th>
<th>Potential Impressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/02/2014</td>
<td>@LilShortNerd There is no evidence that mosquitos or other insects can transmit Ebola virus. <a href="http://t.co/VcvMgyZqgs">http://t.co/VcvMgyZqgs</a></td>
<td>8</td>
<td>10,334</td>
</tr>
<tr>
<td>10/02/2014</td>
<td>#Ebola healthcare workers wear protective gear to protect themselves from bodily fluids not because #Ebola is airborne.</td>
<td>143</td>
<td>2,314,880</td>
</tr>
<tr>
<td>10/02/2014</td>
<td>@ElaineSchattner #Ebola is transmitted through contact with the body fluids from an infected person so possible but unlikely. #CDCChat</td>
<td>23</td>
<td>20,616</td>
</tr>
<tr>
<td>10/02/2014</td>
<td>@BrentFitness #Ebola is only transmitted thru contact w/ body fluids from an infected person; unlikely to spread via droplets #CDCChat</td>
<td>69</td>
<td>1,681,825</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>@KaiiitlynB Ebola has been found in sweat. It’s very low risk and not commonly thought as a body fluid that would transmit Ebola. #CDCChat</td>
<td>65</td>
<td>80,253</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>@MamaSweet222 #Ebola has not mutated to become airborne. Currently transmitted thru bodily fluids (common blood, urine, feces) #CDCChat</td>
<td>57</td>
<td>535,144</td>
</tr>
<tr>
<td>10/16/2014</td>
<td>RT @WhiteHouse “It is not like the flu. It is not airborne.” —President Obama on #Ebola:</td>
<td>0</td>
<td>407,901</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>365</td>
<td>5,050,953</td>
</tr>
</tbody>
</table>

A large audience viewed these posts as users shared them in their own Twitter feeds in the month following the announcement of the first U.S. Ebola case. As people retweeted posts, the possible audience of the message grew. Twitter allows organizations to provide information directly to individuals who can quickly spread an important message more effectively than they might if relying solely on traditional media outlets.

Twitter users are able to amplify messages via sharing and retweeting. The more a message is disseminated, the more people will see its information and possibly act on it.

Beyond correcting misconceptions about the way Ebola is transmitted, Twitter users widely
shared messages from prominent republicans who wanted to quarantine travelers and close the borders of the United States. Twitter users were quick to repeat the opinions of Fox News hosts like Mike Huckabee and Greta Van Susteren and republicans like Ted Cruz, Rand Paul, and Donald Trump. During the month following the Ebola cases in the United States, 443,974 Tweets were posted that questioned why a travel ban had not been established. Many tweets called on the government to quarantine anyone who had possible exposure to Ebola. These calls for action occurred soon after health experts had opposed a mandatory quarantine. *The New England Journal of Medicine* condemned state and local governments for creating mandatory 21-day quarantines when simple monitoring of at-risk individuals would have been as effective in detecting possible cases of Ebola before a patient became contagious (Drazen, Kanapathipillai, & Campion, 2014). However, these health expert opinions were not widely communicated using social media. For the most part, medical professionals expressed their opinions on newscasts, in editorials, or to other medical professionals, making it more difficult for extra-institutional surrogates to communicate this information widely on social media. In developing content for social media, organizations must develop content that can be clearly communicated in a short amount of text. Diseases like measles and pertussis have an $R_0$ (the average number of cases that one case generates over the course of the infection in uninfected populations) of 12 to 18 and are transmitted by air, while Ebola has an $R_0$ of 1.5 to 2.5 and is transmitted via body fluids. This technical information is difficult to communicate simply on social media, which could be one reason for health experts’ preference for sharing content via traditional media. The CDC was able to communicate clearly that the flu was a bigger threat in the United States than Ebola was. This type of information is easier to communicate than transmission
vectors and $R_0$ are. Developing this ability could help organizations like the CDC prepare for future outbreaks and crises. However, simply communicating complex and difficult information in a simple and straightforward manner is not enough for governmental organizations to build reservoirs of goodwill. Governmental organizations cannot act in the same ways a business can in building social media followings. The Government Accountability Office (GAO) recently fined the Environmental Protection Agency (EPA) for conducting a “covert propaganda” campaign. The GAO showed that the EPA used Twitter, Facebook, YouTube and other platforms to counter proposed rules intended to offer more protections for streams and surface waters. Federal government regulations allow agencies to use social media to promote polices, “but are not allowed to engage in propaganda, defined as covert activity intended to influence the American public. They also are not allowed to use federal resources to conduct so-called grass-roots lobbying—urging the American public to contact Congress to take a certain kind of action on pending legislation” (Lipton & Shear, 2015, p. A1). This rule could limit the ability of governmental organizations to develop social media campaigns during a crisis. While federal rules may limit using social media content to prepare for crises, other organizations can and should do several things to build an effective social media presence:

• Develop valuable social media channels to attract users. Organizations frequently create channels that have a limited number of followers; without followers, a channel cannot communicate for an organization.

• Tailor valuable content for a particular audience. This is what helps channels build a strong following. Many people follow @CDCgov because it provides information about new diseases and outbreaks as well as about improving health. Users are
engaged in the content and see the source as credible and reliable, which increases the likelihood that they will return.

- Engage users by not only posting valuable content but also giving them opportunities to interact with the organization. Organizations might try hosting real-time question and answer sessions or commenting on users’ posts to develop a strong community.

- Identify influential followers who have a large number of followers themselves and encourage them to help increase the organization’s number of followers.

- Develop the resources needed to continually post to social media channels during a crisis. One post about the event is not enough; the more an organization provides information, the more likely followers are to share it.

  Resources might include public relations or marketing writers who can develop social media content, web links, presentations, and other information to help the public understand the crisis and the organization’s response. Professional communicators can also develop a store of such content in advance by considering the types of crises that might occur. Then, if the event does happen, their time is spent revising—not developing—useful content.

**Black Lives Matter**

In the cases mentioned previously in this section, extra-institutional surrogates communicated information from organizations to broader social media users. Black Lives Matter, on the other hand, consists entirely of extra-institutional surrogates who are free to post and direct others to support the actions of a loosely organized group of like-minded individuals. Black Lives Matter is an activist movement of free-agent surrogates who are able to draw attention to cases of police violence against blacks. They attempt to mobilize people
to protest and demand changes to federal and state laws that allow racial profiling and the use of surplus military equipment.

How Do Participants Use Social Media in Crisis Events, and How Does This Usage Shape the Rhetorical Framing of a Crisis?

Perhaps the greatest change social media has caused in the rhetorical framing of a crisis is the speed at which messages are communicated. In traditional crisis responses, a representative of a company or organization—typically the CEO—stands at a podium and presents a prepared statement and then answers reporters’ questions or refers news-media personnel to the organization’s crisis response team for additional information. This traditional one-to-one-to-many model is broken in a social media setting. Social media crisis communication occurs from one to many to many more. A single post can be seen by thousands of an individual’s followers, and if followers repost it, the chain continues until a single message has been viewed and shared hundreds of thousands—or even millions—of times.

Social media participants use this model in a variety of ways, including questioning official information, posting false or misleading information, sharing new information, and organizing protests. Each of these actions can impact both the way an organization responds to a crisis and the way the public perceives it.

Defending and Questioning Official Information

Some social media users post content to act as a surrogate for an organization. These users can amplify the rhetoric already being used by the organization or they can develop their own defensive rhetoric for the organization. This phenomenon was most apparent in
the H&R Block and CDC cases. During the H&R Block cases, several hundred users defended the organization and its actions. Most commonly, the defense rhetoric defended the action of the organization and countered claims by other social media posters.

First, users shared their positive experiences with H&R Block. Some users emphasized how much money the organization was able to get them in tax returns, the company’s ability to complete complex tax returns, and their personal relationship with tax professionals. These users attempted to recast H&R Block in a positive light, and some of these users also attempted to show and claim that any accident was an isolated incident.

Second, other users blamed outside factors for the tax delays experienced by some of H&R Block’s clients. Most frequently, Facebook posters blamed the IRS for not effectively communicating with tax preparation companies about changes in the tax return. Some users also claimed that H&R Block was not the only major tax preparation company that was dealing with delayed tax returns. Finally, some social media users expressed confidence that H&R Block would make this right for clients who were affected by the delay in tax returns.

Likewise, in the United States Ebola cases, social media users both supported and defended the CDC. Most frequently the attacks came from individuals who wanted the United States to return to non-interventionist policies. Many attacks claimed that resources and doctors should not be fighting Ebola in West Africa but should instead be in the United States attempting to protect the homeland. Social media users quickly pointed out this flawed thinking by showing that, in order to protect the United States, it was critical to control the virus at its sources. Other social media users also defended the CDC because it had developed protocols for hospitals to control and contain the spread of Ebola. These users also frequently cited how the infrastructure of the United States and of government
agencies such as the CDC would be critical and limit the number of cases of Ebola in the United States.

In most cases, social media users act as a third party to keep organizations honest about events that have occurred. This type of response can be found in every case included in this dissertation. However, one of the greatest examples of how the watchdog of social media impacts organizations’ honesty is with the Black Lives Matter movement. When local law enforcement officials ruled Sandra Bland’s death a suicide, for instance, many of her family and friends used social media to express their doubt about her official cause of death. Social media posts caused others to demand information about her encounter with a Texas state trooper and why someone who had just accepted a new position would kill herself. As the number of posts grew, the State of Texas launched an official investigation into Bland’s death. Without social media questioning, Bland’s case might not have been evaluated for additional scrutiny.

Similar patterns appeared in all of the Black Lives Matter cases examined. After the deaths of Michael Brown, Freddie Gray, and Trayvon Martin, many social media followers questioned the official accounts of the incidents or the actions of the police officers involved. In the case of Martin, the public questioned why a neighborhood watch member escalated a situation to the point of shooting an unarmed teenager; this questioning led to Zimmerman’s trial. Others doubted the police chief’s ability to be objective in the investigation, resulting in the case being assigned to a state attorney. Brown’s death resulted in an official government inquiry into the Ferguson Police Department and possible racial biases, which led to an FBI probe into the actions of the police department. Additionally, pictures of military gear and equipment being used against protesters in Ferguson caused
questioning about why police departments have access to military-grade equipment. As a result, laws were passed banning the transfer of military equipment to local law enforcement. Gray’s death caused a probe into racial-profiling, discrimination practices, and the conduct of Baltimore police operations. Social media users as well as traditional-media personnel asked why it took Gray so long to receive medical attention after being arrested. These questions resulted in a Department of Justice investigation of the Baltimore Police Department and indictment of all police involved in Gray’s arrest and transportation.

Questioning does not always result in action, though. Thousands of people, including central Republican figures, demanded that the United States seal its borders and quarantine all travelers in response to the Ebola outbreak. However, only New Jersey and New York imposed quarantine policies; other states did not take action. In the H&R Block case, many users questioned why the company did not refund its fees due to the error, but this did not result in any change from the organization.

Based on these cases, in order for questioning to create a result, the number of followers an organization or cause has needs to be large enough that the content is continuously repeated. Additionally, users must provide sustainable evidence that the questions seem rational. For example, “#Trayvon case: #Raimondo, officer in charge, involved in previous cover-up SANFORD CITIZENS RECALL POLICE BRUTALITY” (Aja, 2012). Detective Anthony Raimondo was initially leading the investigation in the Martin case, but it was quickly reported that he had several misconduct reports on record and that “he once allowed the son of a high-ranking police officer and grandson of a local judge to go free after the young man had savagely attacked a local homeless man” (Minnis, 2012, A3). These revelations caused the governor of Florida to appoint a state attorney to
the case. This post had a combination of bold claims with a specific allegation that could be supported with evidence. Once evidence was provided, the state had to respond to the claims.

Posting False or Misleading Information

Posting false or misleading information is the antithesis of what users who question information try to achieve. In many cases, the false or misleading information is actually an attempt to make sense of the situation. However, these types of posts often spread quickly and cause additional concern about the crisis. Frequently, these posts have the characteristics of antenarratives. During the Ebola cases in the United States, many users attempted to make sense of the origins of Ebola and why the virus had not been stopped. These users typically developed conspiracy theories to address these concerns. Some users blamed the origin of Ebola on the U.S. government and claimed Ebola was a failed biological weapon. Other users claimed pharmaceutical companies had developed the virus in order to drive sales of drugs and vaccines. And others claimed that pharmaceutical companies were not spending research and development dollars on Ebola until it moved into larger markets that would pay a premium for an Ebola vaccine. These antenarratives were all an attempt to make sense of how modern medicine could be so unprepared for such a lethal virus.

Other social media posters created antenarratives to speculate about the Ebola virus. For example, once the first case was confirmed in the United States, social media users and the general public became worried about how the virus was transmitted and what precautions should have been taken by the government to prevent Ebola cases in the United States. FatRatAl (2014) was among them and posted text containing myths as he grappled with the situation: “@CDCgov @BrentFitness it’s a virus, virus’ mutate, a mutated strain
will be airborne before we know. Don’t believe the govt, they lie!!” Hundreds of users posted claims that Ebola was—or would become—airborne and that this development would cause hundreds of thousands of deaths. These claims were, of course, false; the Ebola virus is spread via body fluids. This misinformation was never resolved; people continued to post such claims when they found cases in the United States. Even with the CDC actively posting about Ebola’s transmission methods and with traditional news media professionals generating stories about the myths surrounding Ebola, people continued to believe that the virus was airborne.

This type of posting behavior—replacing accurate information with false material during a crisis—poses significant risks for organizations and individuals alike. For example, a major concern of social media users in Africa during the Ebola crisis was the false and dangerous home remedies that appeared. On August 8, 2014, two Nigerians died and 20 others were hospitalized after consuming large amounts of saltwater; potentially due to claims online that doing so would immunize against Ebola. The World Health Organization attempted to stop and correct Twitter users who made inaccurate claims about cures for Ebola (Sifferlin, 2014). For organizations facing a crisis, monitoring social media and responding to false information is critical. While it might not be possible to change opinions of social media users, tremendous good—often in the form of crisis management and image repair—can be accomplished through promptly correcting inaccurate information and replacing it with factual content. To do this effectively, as the CDC did, organizations must establish a social media presence on multiple channels and frequently engage with (and build) audiences. The CDC joined Twitter in May 2010. Long before the Ebola outbreak, it showed information about possible threats as well as resources for improving health. That
material appealed to people and built the CDC’s audience on Twitter. During the Ebola crisis, these followers not only valued the information they received but also frequently shared it with people in their personal networks, which increased the CDC’s reach and resulted in the organization’s increased ability to correct inaccurate information.

**Sharing New Information about the Crisis via Social Media**

Social media was also an effective tool in sharing real information about a crisis. The NTSB successfully distributed data about the cause and other details of the Asiana flight 214 crash with the public in real time; some people retweeted this information, amplifying its effects. During the crash investigation, a press conference was live streamed, and many of the key sound bites were live tweeted. This policy of transparency during the investigation made learning about the NTSB’s progress easy for social media users. The NTSB tweeted links to official reports and shared via social media all of the information it generated after the crash. Previously, such information would only have been available to news media and to members of the public who used government websites to search for official documents. In other cases, such as with H&R Block, individuals who had called the IRS and discussed their situations provided the most information to other Facebook users about the process and what they needed to do to resolve the delays. H&R Block was not proactive in providing information. This information vacuum was filled by third parties that communicated about the crisis and what was being done to solve the problem. As users posted what they had learned from the IRS, they became more credible than H&R Block in responding to others’ concerns.

In the Ebola case, social media users provided details about the first U.S. cases before traditional media reported the story. Social media makes it easy for individuals to
become “citizen journalists” by sharing videos, pictures, and other information with a media outlet. This trend will continue to grow. As mobile technologies improve, social media users will be able to share more news sooner than traditional media channels might be able to since many channels must go through gatekeepers before broadcasting or publishing news.

Organizing Protests

Organizing protests are a hallmark of social media users. Black Lives Matter provides strong examples of such activity. Members organized protests around the world after the deaths of the four individuals included in the study. For example, after the Ferguson, Missouri grand jury announced it would not pursue charges against Darren Wilson, social media users organized a Black Friday campaign that included boycotting shopping, holding die-ins in large malls and at retailers nationwide, and demonstrating outside of iconic shopping locations, such as in Macy’s in New York City. The use of social media allowed people to become involved in a cause they cared about without traveling to the site of the event. In addition to gatherings, social media users encouraged people to post specific images or colors as their profile pictures on all social media platforms as a form of protest and solidarity. Other users wore hoodies as a sign of unity, after the death of Trayvon Martin. These actions made it easy for a group of individuals who had similar beliefs but who were separated by time and space to connect and show camaraderie.

How Might Organizations Effectively Adapt Traditional Crisis Communication Plans to Use Them on Social Media during Future Crisis Events?

Using social media to communicate during crises will become increasingly common as organizations develop social media audiences, refine methods for crisis communication,
and determine the best and worst social media crisis communication practices.

Antenarratives, or tools of sensemaking, invite audiences to look at events with the perspective of the future, the present, or the past, providing a vehicle to understand how social media is used during crises. The results vary based on the situations and the ways groups attempt to make sense of events. This sensemaking process includes two major forces of antenarrative, as defined by Syed and Boje (2011). They are present in the antenarrative themes of the four case studies.

Antenarrative practices are all about movement and transition. Antenarrative provides a sort of bridge across narratives implanted in place that are stabilized (petrified, in Czarniawska’s concept). There are two forces of movement, one where narratives that are dominant get restoried, so that erased (neglected or marginalized) aspects of the past become the basis for a new living storability. The other force is renarrating, whereas narrative tends to do, the array of living stories is integrated, homogenized, and somewhat totalized into an overriding logic. Such logics are strategic, in that they focus attention, but overused— become stereotypic, leaving out the nuances, and the importance of the play of differences.

Restoried narratives of neglect or marginalization were important aspects for groups like the Black Lives Matter activist movement. Developing antenarrative themes that others could use to express their contempt for what was happening was a powerful, effective way for individuals to present a cohesive message. As Black Lives Matter began, the majority of #BlackLivesMatter posts were made by people who were angry or sad about the death of Trayvon Martin and contained stream-of-consciousness comments rather than the unified, thematic statements that would come later. Over time, Black Lives Matter creators developed demands and arguments that resonated with people following the movement on Twitter. Consequently, subsequent Tweets insisted on changes in police policies nationwide, highlighted the importance of all black lives, and brought attention to the deaths of black
people. Without the collective nature of this group and its common hashtag, people might have paid less attention to racial profiling and to police officers shooting black people.

Black Lives Matter has played a significant role in making race relations a prominent issue in the United States. After the election of President Barack Obama in 2008, two-thirds of Americans believed that race relations in the United States were generally good (Sack & Thee-Brenan, 2015). However, a July 2015 *New York Times/CBS News* poll found that six in 10 Americans believed race relations were generally bad and that nearly four in 10 thought the situation was getting worse. The current levels of dissatisfaction about race relations were higher than after the Los Angeles riots that followed the beating of Rodney King in 1991 (Sack & Thee-Brenan, 2015). Beliefs about the quality of racial relations in the United States have changed in addition to the antenarratives surrounding racism being restoried by social media users. The narrative of police brutality is not new; such claims were common after Rodney King’s beating and during the U.S. Civil Rights movement, when police beat nonviolent protest participants. Piven and Cloward (1977) document the roles the KKK played in local police departments in southern cities and the use of police violence and intimidation to block the goals of civil rights activists and laws.

Other powerful antenarratives of Black Lives Matter—including widespread incarceration, criminalization of racial profiling, and ending militarization of police—are also restoried. In other words, similar claims and narratives appeared before the Black Lives Matter movement, and social media users have effectively repurposed them to draw attention to problems connected to race relations in the United States. The hypervigilant behaviors of some social media users who use #BlackLivesMatter bring crimes and incidents that would otherwise not have received national attention to prominence via social media
posts. With this increased attention and changing views about the quality of race relations, Black Lives Matter users and their behaviors might be able to gather public support and political will to change elements of the prison system, adjust police tactics, and bring attention to the experience of black people. Social media has been and will continue to be a powerful means of building support for and drawing awareness to deep-seated issues surrounding race.

The second force of antenarrative, renarrating as defined by Syed and Boje (2011), was most visible in the case of the Ebola virus. Renarrating occurred in the messages the CDC generated and in the topics members of the public discussed. The CDC anticipated citizens would be concerned about Ebola transmission and about what was being done to stop the virus from spreading. Thus, the CDC provided a different medical topic for people to be concerned about by renarrating the seasonal flu, which took focus solely off Ebola and gave the public other dangers to consider. The CDC tweeted about the flu throughout October; these flu posts helped Twitter users generate similar messages on their individual feeds. While some social media users would continue to post that Ebola was now airborne and would quickly spread in the United States, they were quickly challenged by messages similar to what the CDC had tweeted about Ebola transmission.

Not only did the CDC provide information about Ebola, it also evaluated the flu as a more pressing concern to the United States population. Twitter was replete with messages about Ebola’s rarity in contrast to the flu’s prevalence during October 2014. Other users discussed how the seasonal flu kills more Americans each year than the number of lives the 2014 Ebola outbreak had claimed worldwide. The CDC posted 37 times about the dangers
of the flu being more significant than the dangers of Ebola to the United States public, and these posts reached 25,603,272 Twitter users.

While the CDC effectively handled many aspects of crisis communication via social media, it did make a misstep in sharing information about Ebola containment. The director of the CDC and a number of other medical experts had all commented about how creating a mandatory quarantine was not in the best interest of the United States public nor would it influence the eradication of Ebola at its source. These messages were shared not using the @CDCgov Twitter handle but via television interviews. As political figures began demanding that the federal government create mandatory quarantines, the public did not have the quick and easy access to resources to understand, create, and share arguments about quarantines using social media. The politicians who favored quarantines created positive, public views of quarantines as a method of stopping the spread of the Ebola virus. During October 2014, polls showed 80% of U.S. citizens wanted travelers from West Africa to the United States to undergo a mandatory quarantine (Blake, 2014). The development of appropriate information and material could have changed the way the public responded to the political rhetoric of implementing mandatory quarantines. The CDC’s use of social media effectively communicated about the dangers of the flu, the strength of medical infrastructure in the United States, and its own success in containing previous viral threats. These messages effectively ameliorated public panic about Ebola transmission and developed confidence in the CDC. However, the CDC was not effective in dealing with the rhetoric of political figures who used their positions to cause panic about the Ebola virus. The CDC generated several themes on which its content was based, but quarantine was not among them.
Antenarrative provides insights about how audiences interact with information and make sense of situations and events in the form of narratives. For organizations, monitoring antenarratives provides insight into the ways people are interpreting the crisis and the organization’s response to the crisis. Antenarratives can help organizations as they are responding to a crisis in the following ways:

- Provide guidance as to what additional information an organization should produce in order to help people make sense of the crisis situation.
- Show gaps in understanding by those reading and processing information.
- Reveal how a crisis event is unfolding for the public. This unfolding provides a possible forecast of what elements will be played up and played down by social media users, thus allowing the organization to effectively prepare and anticipate needs.

Using social media antenarratives and antenarrative clusters as a gauge for the organization’s response to crisis events will allow the organization to answer questions and concerns before they are asked. The anticipation of needs will allow organizations to deploy resources where there are needs and resolve the crisis event faster and more effectively.

**Best Social Media Crisis Communication Practices in the Case Studies**

The social media crisis communication of #BlackLivesMatter, CDC, H&R Block, and the NTSB demonstrate practices that other organizations could adopt. The best of these practices can improve social media presence and content, which could substantially enhance communication with key constituencies during and after a crisis. The discussion about best practices that appears at the beginning of this chapter provides longstanding crisis
communication tactics that I extended to include social media. However, social media crisis management requires unique best practices, which are outlined below.

**Preparing Extra-Institutional Surrogates**

Preparing extra-institutional surrogates is a critical component of success. This idea is closely connected to Fink’s (1986, 2013) concept of creating a reservoir of goodwill, which starts as an organization develops a reputation of integrity and trustworthiness. In adapting this concept to social media, a company must extend its reputation to a digital environment. First, an organization’s social media accounts should attract a large audience. Without an audience, the content developed by the organization will not develop goodwill. Content should include information critical for audiences; it should include a variety of formats such as videos, photos, text, and links to additional content. Second, the organization must ensure the information is honest and beneficial to the audience. Third, the organization must showcase its activities and its good works for the audience. This could include corporate sponsorship, donations, use of resources to benefit others, and activities to better others. Finally, the organization must be transparent with the audience on social media, even when it comes to small or simple issues, as those issues can quickly get blown out of proportion. All of these activities must be done long before a crisis event. The longer a social media channel is open, the more the audience will see the content as valuable. And the longer the track record of transparency, the more surrogates an organization can depend on during a crisis. Such surrogates can easily become an organization’s ambassadors during a crisis. By generating material that allows invested users to become involved in the process of communicating an organization’s messages, the organization can develop a habit of responding effectively during a crisis event. In two of the case studies, extra-institutional
surrogates worked in the crisis communication process. The first case, that of H&R Block, occurred as loyal customers attempted to defend the organization against other clients, who were upset about the tax-return delay they were experiencing. As loyal H&R Block Facebook users posted throughout the crisis, their comments mirrored the information the company produced. However, H&R Block did not recognize the power this group could bring to the company’s crisis response, and it did not provide content that this group could easily share.

The second case of the CDC responding to the Ebola cases in the United States, shows how carefully prepared messages can be shared and extend the organization’s reach. Beginning with its first tweet in 2010, the CDC had developed a following of users who were engaged in its content; many of them habitually retweeted its Twitter posts. Once the news of the Ebola outbreak broke, the CDC simply posted shareable information on Twitter. Its followers’ efforts caused the CDC’s messages to reach a potential audience of 360 million Twitter users.

Developing simple, straightforward communication that is easy for social media users to share is critical in working with extra-institutional surrogates. The more shareable an organization’s message is, the easier it is for social media users to amplify the content to others.

**Connecting to Larger Issues**

For organizations, it is important to understand the root of the crisis in order to address the situation effectively. By finding the exigence behind social media posts, the organization may be better able to mobilize and respond to the situation. In some cases, the exigence may not be the crisis event but rather stem from larger underlying social issues. This was explored by Keith Grant-Davie (1997) in discussing a sign at the entrance to the
Sherwood Hills resort and the subsequent community response. The outcry was actually not just about the sign: it was about westerners’ view about public and private land rights, protecting unspoiled scenic wilderness, and laws that value business interests over public interests. Addressing the real concern an audience has during a crisis will help resolve the situation faster and easier than fighting with an audience at the surface level of rhetorical concerns.

In ongoing or long-term crises, connecting small events to their larger causes is important. This has created an environment for organizations like Black Lives Matter to maintain a long-term social media presence. Had Black Lives Matter not developed a specific agenda and goals toward which to work, the hashtag would have been only about the deaths of Trayvon Martin, Michael Brown, Freddie Gray, and Sandra Bland. However, by connecting these deaths to the larger issues of equality and racism, Black Lives Matter made these people’s deaths another reason to solve social problems like police brutality, poverty, and a broken justice system. In addition to increasing the longevity of the organizations and their missions, both of these cases allowed for broad participation of social media users. For instance, Black Lives Matter is not bound by geographic, social, economic or other demographic factors because its goals are widely inclusive. Social media users who engage with #BlackLivesMatter may live in the inner city, be gay or transgender, have been victims of police brutality or racism, hold advanced degrees, work in professional settings, or be unemployed. Because of the organization’s goals, its users feel connected to the issues Black Lives Matter addresses.

Organizations should prepare to adopt this approach in their own crises; environmental groups that use social media to comment on specific events but that have not
banded together in a broader purpose could benefit from studying activist movements like Black Lives Matter. Environmental groups responding to calls for the Keystone pipeline could have used a hashtag to marshal the public against the pipeline, post pictures of oil spills, provide evidence of global warming, emphasize research that demonstrated that the pipeline was unnecessary, and identify politicians who received large campaign contributions from the oil lobby and who also supported the construction of the pipeline. Of course, these groups could have done—and perhaps did—such things without a hashtag, but the hashtag develops solidarity and power. Suddenly, important issues are connected to larger ones, including global warming, political transparency, and the effects of oil collection and production. Many groups could increase the number of people who are engaged with their social media content by simply broadening the issues and increasing the ways various groups can participate in the discussion.

**Evolving to Meet the Needs of the Audience**

Crisis communication requires careful planning and execution to be effective, but planning should be sufficiently fluid to adjust to the needs of the audience. This requires an organization to monitor social media channels to identify topics it’s not addressing but that are being widely discussed via social media. For example, during the Ebola outbreak, the CDC moved quickly from providing information about the first victim to providing information to calm public fears. The organization promptly developed question and answer forums on Twitter to answer common concerns about Ebola; this information was then widely retweeted during the month of October, which was intended to help reduce panic and fear. CDC communicators were wise to not only create open forums to respond to questions and concerns, but also to develop content to reduce these concerns across
multiple platforms. Similar content was shared by CDC spokespersons and appeared in television broadcasts and in print publications. The CDC was early in adopting social media as a tool for sharing news with the public; without such evolution to meet the needs of its audience, the CDC might have relied on traditional media, and its messages would not have been as widely shared as they were on social media.

While planning for crises can help organizations develop social media content they can use in a crisis, they should also be prepared to use social media to deal with the unexpected elements of crisis. The NTSB faced such a situation after one of its interns released false and racially insensitive names to a San Francisco television station as a prank. After the names appeared on a news broadcast, both the television station and the NTSB faced public criticism and claims of racism. The organization quickly adjusted from simply reporting about a crash to also being involved in a crisis it had created. The NTSB shared a public apology in traditional-media settings and on social media. Once the organization had addressed the problem by resolving that it would not happen again and offering an apology, the criticism and accusations about racism disappeared within a few days. While planning is critical for success in social media crisis communication, communication professionals still need to work on standby so they can revise or develop content that will help their organizations adapt to unexpected situations.

Including Social Media in Crisis Plans

Crisis communication planning frequently includes directions about who is in charge, how and by whom messages will be communicated, what strategies will be used to cope during and after crises, and what the likelihood of a particular crisis is. These plans might also include preparing press releases, hotline numbers, and dark website content, all of which
could go live within minutes to deal with the fallout of a crisis. However, social media is often sharing already prepared information; it is rarely a tool for two-way communication, as it was for the CDC in responding to the Ebola outbreak. For organizations preparing crisis communication, a well-monitored social media response is critical (Ulmer, Sellnow, & Seeger, 2011; Coombs, 2012; White, 2012; and Fink, 2013). The ability to respond quickly and accurately to concerns expressed on social media is crucial in delivering essential messages to key publics. Social media also removes an organization’s reliance on a third party (such as traditional news media) for spreading a message. Providing the public with unfiltered information can be advantageous for both the message’s sender and receivers. Additionally, this communication is instantly available for social media users to share with one another.

One of the biggest mistakes organizations can make in using social media as a crisis communication tool is not providing necessary resources in posts; 24 hour monitoring and engagement with social media channels is crucial and can be achieved by providing readers resources such as frequently asked questions and answers, updates, and links to related web content. In the case of H&R Block, too few monitors could not adequately update content and answer clients’ questions. Based on the responses to clients’ questions, only three people were answering and monitoring clients’ posts, and they quickly became overwhelmed. Consequently, they did not enforce community rules or respond to questions and concerns on a constant basis. The inclusion of social media in crisis communication plans should also result in the investment of specific resources needed to effectively respond to thousands of posts an hour. Without such resources, using social media could generate a perception that
the organization is not being transparent or listening to the concerns of those affected by the crisis, possibly causing even greater harm to the organization.

**Precise, Frequent Communicating**

Organizations should post material on social media that is precise in what it is communicating, as the message can be easily and repeatedly shared. As with all crisis information, the content’s wording should be carefully reviewed to ensure effective communication. Not only should messaging be precise, but the organization should be particular about what it is communicating. For example, the CDC was specific in its Ebola content and frequently used the same or similar wording in discussing virus transmission and recommending precautions to the public. Additionally, the CDC was precise in communicating about the more pressing concern of the flu. This allowed members of the U.S. public—who were fixated on the remote possibility of a widespread Ebola outbreak in the United States—to focus instead on something they could act upon.

The CDC frequently pushed similar messages at different times during the crisis in order to overcome the “river effect” of social media, so defined because the number of followers, friends, and subscriptions create a river of information. For users who have a limited number of people in their social network, the river is slow, and the likelihood of seeing a particular message communicated once is greater than it is among users with larger numbers of followers, friends, and subscriptions. Posting similar messages multiple times is a strategy an organization can use to ensure that members of its social media audience see its communication.
These four cases demonstrate crisis communication best practices, but they also show ineffective strategies that should be avoided in developing a crisis response.

**Changing Rhetorical Strategies Mid-Crisis**

As organizations allow extra-institutional surrogate involvement in the crisis communication process, the surrogates’ activity often increases. Developing content for these surrogates to share is a best practice, but when an organization changes its rhetorical strategy amid a crisis without preparing its surrogates, those once-loyal followers could become ambivalent or even angry about the organization. Consequently, even though changing strategy is usually an organization’s attempt at image repair, it often causes additional damage. For example, H&R Block first used the combined tactics of bolstering and scapegoating to deal with its mistakes in processing more than 600,000 tax returns. Social media users adopted these strategies themselves as they shared positive stories about H&R Block and blamed the IRS for delays. However, several weeks into the crisis, H&R Block CEO Bill Cobb assumed responsibility for the delays and admitted that the error occurred in H&R Block programming, not with the IRS. As a result, many users stopped defending H&R Block, while others began organizing a lawsuit against the company because of its error. Organizations that use surrogates in their communication must be prepared to face consequences if they feel the organization has manipulated them in resolving a crisis. Organizations often need to be straightforward and transparent with all aspects of the crisis, including surrogate communication, to avoid additional damage to the organization.
Infrequently Posting During a Crisis

Unlike traditional crisis communication responses, social media crisis communication requires constantly providing information, even if it is redundant information. During a typical traditional-media crisis response, the organization offers a statement that details what happened, what is being done to correct the problem, and what those affected should do. As new information becomes available, new announcements are offered to the press (typically on a daily basis), and the information is reported. This model does not work in social media crisis communication, though. Posting information multiple times a day helps ensure that users see it. Users who do not see an organization’s posts cannot share them, and without user interaction, social media intervention during a crisis is less effective.

Providing insufficient information can also lead to problems. Users often speculate about what is happening and generate posts about what they have “learned” about the situation that may or may not be accurate. For example, H&R Block posted six times during a three-month crisis, which did not satisfy users. Because of this, users began posting stories about negative interactions they’d had with H&R Block employees who did not know about the 8863-tax-delay issues. Others posted false information, including that H&R Block would offer refunds to everyone involved, while still others provided links to information about filing a lawsuit against H&R Block. These issues could have been resolved (or even prevented) through more frequent progress reports from H&R Block. This might have included information about what was being done to fix the problem, phone numbers to call to discuss the delay, and techniques for effectively working with the IRS in refund-delay situations. Having access to such information, H&R Block customers could have more easily determined what social media content was accurate and what was inaccurate.
While no formula exists to help organizations determine how often they should post information during crises, communication professionals should carefully monitor each post they make and examine the number of shares, likes, comments, retweets and other interactions with the post. Material that does not receive significant attention should be modified and reposted to capture the attention of social media users.

**Not Understanding the Limitations of a Social Media Platform**

Each social media platform has its own limitations: the number of words or characters that can be posted, photo requirements, link regulations, and accounts’ limits on followers before an upgrade becomes mandatory. As organizations determine what platforms they will use in crisis communication, they should consider limitations and strategize to compensate for them. For example, Twitter’s 140-character limit made it impossible to share detailed information about Asiana flight 214 pilots’ flight history. Some tweets insinuated that the pilot had only 43 hours of flight experience, when he actually had 43 hours of experience on a Boeing 777 but thousands more on other commercial jets. That information was too complex to communicate accurately in 140 characters, though. Facebook limits the number of shares, posts, and followers an account can have before it must upgrade to a professional level and pay for particular types of messaging options. Three of the four cases in this dissertation used Twitter because it provides flexibility for large audiences and widespread sharing. Organizations often adopt Twitter after they recognize some of the limitations of other platforms and their policies. Knowing—and regularly reviewing—the available platforms, their limitations, and their policies is critical for effective crisis communication.
Ineffective Monitoring of Social Media Channels

Whether or not an organization plans on using social media as a crisis communication tool, it still needs to effectively monitor social media. Monitoring provides a real time report about how people are responding to a crisis and what people are saying about those responses. In some cases, lack of monitoring can cause possible embarrassment, as happened with BP during the Gulf of Mexico oil spill. A group created a fake BP Twitter feed and posted negative comments about how the company was responding to the crisis, some of which appeared on broadcast news. Several days passed before BP found the false Twitter account and addressed what had been posted.

In other cases, monitoring can provide insight into secondary crisis events, such as the NTSB intern who confirmed racially insensitive names of the pilots of Asiana flight 214. Effective monitoring can reveal the real concerns surrounding a crisis, as happened with statements about how the Ebola virus is transmitted. All crisis communication plans should involve monitoring so that organizations can determine what is being said about them, the crises they’re facing, and their crisis responses.

Using Social Media as the Only Channel of Communication

While social media is an effective method of communicating with the public, it should not be the exclusive method during a crisis. Using only social media will alienate people who do not use it and can slow the reporting on the crisis. Communicating about an issue only via social media could also cause concerns about the transparency of the organization. During a crisis, members of the public might still feel a need to see a leader apologize in a news broadcast, hear a question and answer session with an organizational spokesperson, and watch critical, investigative reporting about what happened. Shrewd
professionals will see that their social media crisis communication should link to these traditional crisis communication strategies but not attempt to replace them. The CDC is an excellent example of this concept; the organization effectively used social media to communicate but was also well represented on news programs, in newspapers, and on blogs by CDC experts who were not CDC employees. These interview subjects frequently referred to the organization’s social media channels. In designing a crisis communication plan that involves social media, organizations must examine best and worst practices, learn from these issues, and use what they learn to develop strong responses to crisis situations they might face. Even after developing a crisis communication plan, an organization must monitor other groups’ social media use. If organizations are not regularly internally examining what is working well and what other organizations have done in responding via social media to a crisis, they could make significant mistakes in their communication.

**Implications for Future Research**

This research project has crossed scholarly boundaries to help technical communicators better understand the phenomenon of crisis communication via social media. While public relations and rhetorical scholars frequently examine crisis communication research, much of their work involves analyzing application of typologies and models and confirming whether an individual or organization applied concepts of crisis communication or image repair in statements and activities following a crisis. However, using technical communication lenses and tools to examine crisis communication provides insights not available in traditional communication scholarship. In fact, this study will have three major implications in my future research of crisis communication.
Social Media Changes the Role of the Public during a Crisis

Previous models of crisis communication largely ignore the rhetoric of citizens, activists, and people affected by the crisis. These models emphasize an organizational spokesperson’s statements and traditional media coverage. Social media, on the other hand, allows people marginalized in these models to have impacts similar to those of an organization communicating to the general public via traditional media. By using antenarrative analysis to understand the rhizomatic nature of social media, the collective sensemaking and storytelling of groups and individuals involved in the crisis is revealed. The process of exploring these cases showed that most of the organizations had not effectively planned or prepared for communicating about a crisis via social media. Moreover, there is currently no clear metric of success or failure for organizations that use social media during a crisis. Additionally, no research about the best practices of crisis communication via social media has been published. Applying user experience and informational architecture theory could provide insights for practitioners who develop web and ancillary content for organizations.

Understanding the Power of Applying Technical Communication Research Methods to Outside Areas

Technical communication provides powerful modalities by which to analyze problems and research areas. By combining the areas of big-data analysis and antenarrative research, I discovered new findings and insights in the established, well-researched field of crisis communication. Antenarrative analysis can shift the focus from the organization to individuals who are attempting to understand crisis events. Organizations must understand
that responding to a crisis is not as simple as writing a media release and holding press conferences. In the age of social media crisis communication, responses must occur at the individual level by addressing online critics’ concerns and answering individuals’ questions, not just those of the news media.

Most current crisis communication research focuses on how organizations should present messages, who should present them, and what steps should be taken to plan these messages before a crisis. However, antenarratives reframe crisis communication in terms of audience, not of what seems to be an organization’s best options. The other major benefit of using antenarrative analysis, as well as a big-data mining of social media, is to see what messages were communicated by organizations and how social media users were reacting and restorying those messages. Traditional crisis communication provides neither insight into the long-term consequences or benefits of selecting a specific rhetorical response, nor insight into how audiences perceive an organization’s or individual’s attempts at image repair. Antenarrative is a better tool for examining the audience in crisis communication than the traditional rhetorical perspective of crisis scholars.

**Big-Data Analysis is a Growing Trend in Technical Communication Scholarly Research**

Technical communicators like Gulbrandsen, 2012; McNely, 2012; Salvo, 2012 have all called for inclusion of big data both in the technical communication classroom and in scholarship. Big data is a natural extension of our discipline of technical communication, which encourages advocacy for audience, data design and presentation, and technical skills. The shift to big data might require new methodologies, but many existing ones could be repurposed or reimagined to move from small data sets to large samples. The use of
antenarrative analysis in this research project required no adaptation of previous scholarship. However, this type of scholarship required access to expensive, specialized software capable of conducting text analysis of large numbers of social media posts. Embracing this technology allowed examination of roughly 41 million posts in two months of work; previous technical communicators who have examined crisis or risk communication have been able to examine only several hundred posts. Reviewing millions of posts provided a better understanding of the phenomenon being studied. By incorporating big-data analysis techniques in both curriculum and scholarship, technical communicators can make their work even more relevant.

Conclusion

Crisis communication research is frequently claimed by public relations and mass communication scholarship but also belongs in that of technical communication. Bringing technical communication scholarship to crisis communication research allows new, exciting development of the application of common technical communication tools such as information architecture, audience advocacy, explanation of technical information, and rhetorical and situational analysis. Applying these concepts to crisis communication creates better content to meet the needs of a variety of audiences during a crisis event. Taking time to prepare and design information will help organizations clearly communicate with those affected by a crisis event by reducing confusion and misinterpretation. Crisis events frequently involve complex material; employing technical communicators can help lay audiences navigate content by employing an audience-centric approach, designing
information for multiple audiences, and ensuring information is effectively understood by employing usability testing.

Taking crisis research beyond typologies and cookie-cutter rhetorical criticism brings understanding to cases that could not be gained anywhere else. For example, applying antenarrative analysis allows researchers and organizations to understand how an audience is processing a crisis event on social media in real time. This type of understanding will help organizations craft more effective responses and understand what the major concerns of the social media public are. Additionally, antenarrative analysis can show organizations if a social media crisis communication campaign is working effectively.

Much of traditional crisis communication research focuses solely on the organization and effective presentation of information to the news media. With the proliferation of social media platforms, more research must be connected to understand how this complex network is able to process and communicate complex information. Being able to improve social media crisis communication will be helpful not only to organizations but also to those affected by the crisis. Improving communication with an audience may result in decreased panic and concern during health emergencies like Ebola. It will also increase governmental organizations’ transparency and thus improve the public’s confidence in the results of official investigations like those conducted by the NTSB.

Finally, this type of research can also be effective for organizations and pseudo-organizations in developing campaigns to realize change and improve living conditions, especially for marginalized groups. In the case of Black Lives Matter, understanding how to present narratives, generate antenarrative clusters, and connect a geographically and socioeconomically diverse group of people to fight for a cause is one the reasons the group
has experienced so much success. Without this framework #BlackLivesMatter could have vanished as quickly as it appeared on Twitter.

Technical communication scholars must continue to research crisis communication. Connecting research areas such as user design and experience, social justice, community building, and network theory with crisis communication research has significant potential to benefit both organizations and individual participants in crisis events. Technical communication scholars’ crossing borders to explore crisis communication can enrich both the researchers and the beneficiaries.
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Johnson, C. [87_cjohnson]. (2014, October 12). At @CDCgov, Dr. Frieden says 2d #Ebola case shows clearly a “breach in protocol” [Tweet]. Retrieved from http://twitter.com/87_cjohnson/status/52301206765813760


Johryn. [desperate_jo13]. RT @solbutterfly Help us get 71 ppl from Chicago to Ferguson as part of #BlackLivesMatter Labor Day call to action https://t.co/pAxApBCl1J@thewayoftheid [Tweet]. Retrieved from http://twitter.com/desperate_jo13/status/503253532171317251


Jones, E. [Extensor]. (2015, July 31). @margaretcho We are witnessing the genocide of African-Americans by police-if you do nothing to stop it, you have blood on your hands #BlackLivesMatter [Tweet]. Retrieved from http://twitter.com/Extensor/status/627279046183796736


KaliniuS. [KaliniuS]. (2014, October 23). @LondonTweeter1 @WhiteHouse @CDCgov mke no mistake, big pharma stands to gain billions of $ from the Ebola hysteria [Tweet]. Retrieved from https://twitter.com/KaliniuS/status/525362283955093506


Knox, B. [Bknox88]. (2014, September 29). DoctorYasmin statement from the #Dallas hospital where a suspected #Ebola #patient is in isolation. @CDCgov expects results 9/30 [Tweet]. Retrieved from http://twitter.com/Bknox88/status/516779434909913088


Kyle, D. [DrewKyle]. (2015, May 9). America isn’t racist but black men have only become a topic of discussion when people riot and burn s*** down.. #BlackLivesMatter [Tweet]. Retrieved from https://twitter.com/_DrewKyle/status/597050460147703809?ref_src=twsrc%5Etwfw


Law, S. [crimsonncreem13]. (2015, July 22). I will not be silenced. . . . I will continue the struggle until justice has been served not just for Sandra Bland but for all.#BlackLivesMatter [Tweet]. Retrieved from https://twitter.com/crimsonncreem13/status/623920938719932416?ref_src=twsrc%5Etwfw


Loyola Wellness. [LoyolaWellness]. (2014, October 30). A reminder from @CDCgov: #Flu & #Ebola have some similar symptoms, but flu is common, Ebola is very rare... [Tweet]. Retrieved from http://twitter.com/LoyolaWellness/status/527840394416246288


Mahlonie, T. W. [Taryn Woods Mahlonie]. (2013, March 7). I was just told by the IRS that h and r block tax “specialist” weren’t trained properly on the new program & for that 80 thousand returns with the education credit were submitted to them Friday. [Facebook status update]. Retrieved from https://www.facebook.com/hrblock

Manager William J. [will_is_trill]. (2015, April 10). We’ve been saying all along, #cops racial profile us. I’m so glad it’s all coming to light now. #BlackLivesMatter #FF [Tweet]. Retrieved from https://twitter.com/will_is_trill/status/586458871981547520?ref_src=twsrc%5Etfw

Mane Moves TV. [ManeMoves]. (2015, July 22). @audrelorde We need to be uplifting #IndiaClarke as we lift up #SandraBland #BlackTransLivesMatter [Tweet]. Retrieved from http://twitter.com/ManeMoves/status/624028225103110144


Marks, M. [michaelpmarks]. (2014, October 15). Breaking: @CDCGov says second health worker infected with #Ebola flew from Cleveland to Dallas w/ 132 others night before reporting symptoms [Tweet]. Retrieved from http://twitter.com/michaelpmarks/status/522406426137092096

Marrow, T. [terrimomaha]. (2014, October 2). Unless you have been in contact with a confirmed person, flu-like symptoms will most likely be flu #CDCChat [Tweet]. Retrieved from http://twitter.com/terrimomaha/status/517852457532416000


Mays, R. [RaqiyahMays]. (2015, April 27). The story isn’t about #BaltimoreRiots. It’s about #FreddieGray #policebrutality #Race #EnoughIsEnough the people are tired #BlackLivesMatter [Tweet]. Retrieved from https://twitter.com/RaqiyahMays/status/592810634707869697?ref_src=twsrc%5 Et two

Maze. [Mngk]. (2015, April 21). How is it that #Bates gets to go on vacation. He just killed #EricHarris! Why does he still have his passport? #BlackLivesMatter [Tweet]. Retrieved from https://twitter.com/Mngk/status/590669760121143297?ref_src=twsrc%5Etw fwo


Meredith. [meredithtodd97]. (2014, October 6). Here’s a reason to take ebola seriously, it is a virus that can mutate and become airborne at any time. Food for thought [Tweet]. Retrieved from http://twitter.com/meredithtodd97/status/519219916201664513


Michalek, L. [defendressofsan]. (2013, August 18). Trayvon Martin’s mother: Stop And frisk is racial profiling, just like what was done to Trayvon #racebaiting [Tweet]. Retrieved from http://twitter.com/defendressofsan/status/369176380623163392


Mr. Bentley. [KingBentley]. (2015, April 28). My future son could be Freddie Gray & Trayvon Martin & Tamir Rice & Mike Brown and others who been murdered by Police [Tweet]. Retrieved from https://twitter.com/KingBentley/status/593052953944129536?ref_src=twsrc%5Etfw


Muller, A. Y. [yung_akim]. (2014, October 6) RT @BreakingNews Spain says a Madrid hospital nurse has tested positive for Ebola; emergency protocol put into place [Tweet]. Retrieved from http://twitter.com/yung_akim/status/519196524207939584


Nantz, D. [debnantz]. (2014, October 11). RT @JakeLCrosby @slupkin @ABC Brian Hooker’s findings are confirmed by @CDCgov’s #CDCwhistleblower [Tweet]. Retrieved from http://twitter.com/debnantz/status/521128462401028096


NEGRODAMUS. [TheSkillz3000]. (2015, April 23). @Russian_Starr yes, we must march for black women, but we have to do something even more basic than that: value them. #blackwomenmatter [Tweet]. Retrieved from http://twitter.com/TheSkillz3000/status/59125239261556737


Nelson, S. A. [IAmSophiaNelson]. (2015, April 27). How many black men/women have to die before we get a grip that racial profiling & racial animus exists in law enforcement. #BlackLivesMatter [Tweet]. Retrieved from https://twitter.com/IAmSophiaNelson/status/592873394036731905?ref_src=twsrc%5Etfw


Oziohu. [ralbro007]. (2014, October 11). @IsimaOdeh: Dear England, don’t be stupid kindly remove Nigeria from your Ebola-infected countries list and put USA [Tweet]. Retrieved from https://twitter.com/ralbro007/status/520832985952948224?ref_src=twsrc%5Etfw

Pajor, S. [SamanthaPajor]. (2015, April 22). @TheBlackVoice w/o Black women, there wouldn’t have been a freedom movement (civil rights movement), Black Power Movement or #BlackLivesMatter movement [Tweet]. Retrieved from http://twitter.com/SamanthaPajor/status/591043013821878273


Parker, J. A. [JosephAParker]. (2015, May 1). RT @abroadus More than 100 students have walked out of Southwest High School as part of the #BlackLivesMatter movement. [Tweet]. Retrieved from http://twitter.com/JosephAParker/status/594176899057876992


Perez, M. [Michelle Battest Perez]. (2013, February 28). Thanks for posting this. I filed Jan 26 and was held until the 14 for ed credit. [Facebook status update]. Retrieved from https://www.facebook.com/hrblock


Philip, D. [Dariusphilip]. (2014, October 12). @WhiteHouse @HHSGov tell him to stop the lies! Ebola is a bioweapon engineered by @CDCgov patented and curable [Tweet]. Retrieved from https://twitter.com/Dariusphilip/status/521367113059950592


Plumer, B. [bradplumer]. (2014, October 4). One reason why there are so many Ebola false alarms is that the early symptoms just look a lot like the flu [Tweet]. Retrieved from http://twitter.com/bradplumer/status/518448655058362368


Quirino, B. A. [Mango_Queen]. (2013, July 12). @NTSB That was deeply offensive. You do not make fun of #Asian names or of any ethnicity esp in a tragedy.#Asiana214 [Tweet]. Retrieved from https://twitter.com/Mango_Queen/status/355889714852675585

Qurban. [theologicalmess]. (2015, April 27). #Baltimore will burn tonight. America will suffer the penalty of #injustice. This is what happens when #racism flourishes. #BlackLivesMatter [Tweet]. Retrieved from http://twitter.com/theologicalmess/status/592908265727643649

Rabinowitz, J. [AirlineFlyer]. (2013, July 7). Deborah Hersman, Chair of NTSB: 7 seconds prior to impact, a call to increase speed was made on the CVR [Tweet]. Retrieved from https://twitter.com/AirlineFlyer/status/353977945578143744


Reimer, C. [ChrisReimer]. (2014, October 19). The flu will kill thousands of us this winter. And there’s a shot that can help, & many of us won’t get it. But let’s freak about Ebola, k? [Tweet]. Retrieved from http://twitter.com/ChrisReimer/status/523992498268819457


Roberts, D. [DorothyERoberts]. (2015, July 30). Black women are race/sex/class segregated in lowest-paying jobs & paid less for same work. #BlackWomenMatter [Tweet]. Retrieved from [https://twitter.com/DorothyERoberts/status/626744391059808256](https://twitter.com/DorothyERoberts/status/626744391059808256)


Rubio, M. [marcorubio]. (2014, October 20). When Senate returns to session I will file bill to ban visas to those traveling from #Ebola impacted countries [Tweet]. Retrieved from [http://twitter.com/marcorubio/status/524318426182213632](http://twitter.com/marcorubio/status/524318426182213632)

Russell, B. [BenRussellNBC5]. (2014, October 15). @CDCgov says more Ebola cases in Dallas is an “eventuality”. The mayor of Dallas says “this may get worse before it gets better” [Tweet]. Retrieved from http://twitter.com/BenRussellNBC5/status/522460243062960129


Salkin, A. [allensalkin]. (2014, October 25). If Ebola mutates to become airborne and kills a billion people, we‘ll wish we‘d invested more in containing it while we could. [Tweet]. Retrieved from http://twitter.com/allensalkin/status/526064567341031424


Sandy. [tnacgal]. (2013, July 15). I really wanna thank the “intern” at the NTSB! Thats the best laugh I’ve had since Obama took office! [Tweet]. Retrieved from https://twitter.com/tnacgal/status/356895987270287360


Sarasua, M. [sarasuamaria]. (2014, October 26). This is why I agree with Donald Trump: They should ban flights from #Ebola infected countries from entering the U.S. [Tweet]. Retrieved from http://twitter.com/sarasuamaria/status/526545352841654272


Señorita Ana. [NerdyHBIC]. (2014, December 28). “RT @search4swag #AllLivesMatter is proof positive that white people don’t want black people to have nothing, not even a hashtag #BlackLivesMatter” [Tweet]. Retrieved from http://twitter.com/NerdyHBIC/status/549109529573879809

Serwer, A. [AdamSerwer]. (2014, October 23). Rand Paul worried about people with Ebola on flights “vomiting all over you” you know just like at cocktail parties [Tweet]. Retrieved from https://twitter.com/AdamSerwer/status/525382591126700033


Singh, K. [KimSinghNYC]. (2014, October 24). How are doctors and nurses contracting #ebola when they are fully covered? Especially if its “not airborne?”@CDCgov @CDCemergency @ABC7NY [Tweet]. Retrieved from http://twitter.com/KimSinghNYC/status/52477879497629696

Sister Krissy. [sisterkrissy]. (2014, April 27). @Oregonian seriously? Freddie Gray wasn’t “hurt” in police custody. He was killed. His spine was severed. #BlackLivesMatter [Tweet]. Retrieved from https://twitter.com/sisterkrissy/status/592833149123584000?ref_src=twsrc%5Etfw

Skolnik, M. [MichaelSkolnik]. (2013, June 9). The murder trial of George Zimmerman begins tmw. Although it may be hot in many parts of the nation, we will “wear” our hoodies for Trayvon! [Tweet]. Retrieved from https://twitter.com/michaelskolnik/status/343945731809357824

Smith, C. [ClintSmithIII]. (2015, July 22). This is a crucial moment for #BlackLivesMatter. Black women have been leading this since day one. We can’t allow their deaths to be ignored [Tweet]. Retrieved from https://twitter.com/ClintSmithIII/status/623877391941828608?ref_src=twsrc%5Etfw

Smith, E. [soundslikepuget]. (2013, July 14). #Asiana suing #KTVU = brilliant pr move. They’ve changed the dialog from incompetent aviators to incompetent journalists #Journalism #Avgeek [Tweet]. Retrieved from https://twitter.com/soundslikepuget/status/356612601096048643


Societal Obstacle. [laurenvoswinkel]. (2014, October 17). RT @reinagossett if all #BlackLivesMatter we must center black trans people facing & fighting the highest rates of criminalization #FergusonFridays [Tweet]. Retrieved from http://twitter.com/laurenvoswinkel/status/523195756434313217


Souza, R. [MsReneeSouza]. (2014, October 28). @CDCgov @CDCfraud 1.5 million children with autism is not genetics nor pollutants it’s terrorism with a biomedical weapon #warfare #vaccines [Tweet]. Retrieved from http://twitter.com/MsReneeSouza/status/527089578742910976

Specimen S. [booharee]. (2014, October 17). 7 countries asked if they are willing to replace Morocco as hosts of Africa Cup of Nations amid fears of Ebola #SSNHQ [Tweet]. Retrieved from http://twitter.com/booharee/status/52311966928320512

Spectrum at LSU. [SpectrumLSU]. (2015, April 23). @YouthBreakOUT Please support our NOLA trans march social media rally. Friday, April 24, 2015 at 3:00 PM #BlackTransLivesMatter [Tweet]. Retrieved from http://twitter.com/SpectrumLSU/status/591347299298779137


Sterling, V. [vplus]. (2014, October 10). Rand Paul to CNN: Govt makes people thing #Ebola isn’t very contagious; says he thinks the virus can be transmitted via coughs [Tweet]. Retrieved from https://twitter.com/vplus/status/520685847071698944


Strongheart, S. [Sweetlady Strongheart]. (2013, March 12). If was TRULY and H and R Block problem do you people really think that H and R Block would of given you great service for the last ten years or so ? [Facebook status update]. Retrieved from https://www.facebook.com/hrblock


Terry v. Ohio, 392 U.S. (1967)


Titus, J. M. [jmauricetitus]. (2014, November 18). RT @ColorOfChange “Black Cleveland woman w/ mental illness died after police used takedown” #BlackWomenMatter http://t.co/5RxNEUilSV via @clevelanddotcom [Tweet]. Retrieved from http://twitter.com/jmauricetitus/status/534735290993508352


Trump, D. J. [realDonaldTrump]. (2014a, October 2). The Ebola patient who came into our country knew exactly what he was doing. Came into contact with over 100 people. Here we go-I told you so! [Tweet]. Retrieved from https://twitter.com/realDonaldTrump/status/517805743056359424

Trump, D. J. [realDonaldTrump]. (2014b, October 4). This Ebola patient Thomas Duncan, who fraudulently entered the U.S. by signing false papers, is causing havoc. If he lives, prosecute! [Tweet]. Retrieved from https://twitter.com/realDonaldTrump/status/518424184008237056

Trump, D. J. [realDonaldTrump]. (2014c, October 9). The CDC chief just said Ebola is spreading faster than Aids. Marines are preparing for a pandemic drill. Stop all flights from West Africa! [Tweet]. Retrieved from https://twitter.com/realDonaldTrump/status/520319201534152704
Trump, D. J. [realDonaldTrump]. (2014d, October 28). All the governors are already backing off of the Ebola quarantines. Bad decision that will lead to more mayhem [Tweet]. Retrieved from https://twitter.com/realDonaldTrump/status/527110542008549376

Trump, D. J. [realDonaldTrump]. (2014e, October 22). If there is one more Ebola case in the U.S., a full travel ban will be instituted. This common sense move should have been done long ago! [Tweet]. Retrieved from https://twitter.com/realDonaldTrump/status/524836291964575744


Waidley, P. [Paula Waidley]. (2013, March 18). My only question is. . . why the heck are you updating on facebook and not calling people or emailing people who have an email address. [Facebook status update]. Retrieved from https://www.facebook.com/hrblock


Woodruff, C. [WoodruffCharles]. (2014, October 9). @thenewjimcrow @latimes #BlackLivesMatter #shawshooting Another young black teen shot dead by white
Words. [odammaodamma]. (2014, October 4). It was hoped that ebola virus could not survive in a highly concentrated salt surface. [Tweet]. Retrieved from https://twitter.com/odammaodamma/status/518502235538739202


Wray, Y. [YumaWray]. (2014, November 27). “The military is protecting Walmart in #Ferguson freedom to punch each other over #BlackFridayDeals is more important than #BlackLivesMatter”[Tweet]. Retrieved from http://twitter.com/YumaWray/status/538121093429473281


# APPENDIX A

## NATIONAL TRANSPORTATION SAFETY BOARD TWITTER POSTS

National Transportation Safety Board Twitter Posts with Photo Links

<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>URL</th>
<th>NTSB Twitter Post</th>
<th>Post Type</th>
<th>Post Focus</th>
<th>Retweets</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/7/13 1:30</td>
<td><a href="http://twitter.com/NTSB/status/353778111030124544">http://twitter.com/NTSB/status/353778111030124544</a></td>
<td>NTSB investigators conduct first site assessment of #Asiana214 in S.F. <a href="http://t.co/HakLNtYkwQ">http://t.co/HakLNtYkwQ</a></td>
<td>Photo</td>
<td>Wreckage</td>
<td>229</td>
</tr>
<tr>
<td>7/7/13 1:35</td>
<td><a href="http://twitter.com/NTSB/status/353779200567676928">http://twitter.com/NTSB/status/353779200567676928</a></td>
<td>Chairman Hersman and Investigator-in-Charge Bill English looking at interior damage to #Asiana214. <a href="http://t.co/OOOLz8jYic">http://t.co/OOOLz8jYic</a></td>
<td>Photo</td>
<td>Wreckage</td>
<td>177</td>
</tr>
<tr>
<td>7/7/13 5:06</td>
<td><a href="http://twitter.com/NTSB/status/353832345465413632">http://twitter.com/NTSB/status/353832345465413632</a></td>
<td>Chairman Hersman is interviewed on the investigation of #Asiana214 <a href="http://t.co/YycB5r4k25">http://t.co/YycB5r4k25</a></td>
<td>Photo</td>
<td>Interview</td>
<td>34</td>
</tr>
<tr>
<td>7/7/13 20:59</td>
<td><a href="http://twitter.com/NTSB/status/35072159049021504">http://twitter.com/NTSB/status/35072159049021504</a></td>
<td>NTSB Chairman briefs large crowd of media on the status of the Asiana Airlines plane crash #Asiana214 <a href="http://t.co/fHYvzpSWiB">http://t.co/fHYvzpSWiB</a></td>
<td>Photo</td>
<td>Press conference</td>
<td>22</td>
</tr>
<tr>
<td>7/7/13 21:00</td>
<td><a href="http://twitter.com/NTSB/status/3507254271098880">http://twitter.com/NTSB/status/3507254271098880</a></td>
<td>Chairman Hersman provides an investigation update to media on the Asiana Airlines plane crash #Asiana214 <a href="http://t.co/OvgAn6Mkbo">http://t.co/OvgAn6Mkbo</a></td>
<td>Photo</td>
<td>Press conference</td>
<td>34</td>
</tr>
<tr>
<td>7/9/13 15:43</td>
<td><a href="http://twitter.com/NTSB/status/35471580533581414">http://twitter.com/NTSB/status/35471580533581414</a></td>
<td>NTSB investigator Brian Murphy shows the depth of the debris field to NTSB team #Asiana214. <a href="http://t.co/MzBx4X0xrQ">http://t.co/MzBx4X0xrQ</a></td>
<td>Photo</td>
<td>Wreckage</td>
<td>39</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Link</td>
<td>Video/Photo/Press Conference</td>
<td>Detail</td>
<td>Category</td>
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<td>7/10/13</td>
<td>16:46</td>
<td><a href="http://twitter.com/NTSB/status/355095660955041792">http://twitter.com/NTSB/status/355095660955041792</a></td>
<td>Photo</td>
<td>Aerial view photo of damaged Asiana Airlines Flight 214 aircraft. #Asiana214 <a href="http://t.co/K4SB3NOMEb">http://t.co/K4SB3NOMEb</a></td>
<td></td>
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<tr>
<td>7/11/13</td>
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<td><a href="http://twitter.com/NTSB/status/355446374805946368">http://twitter.com/NTSB/status/355446374805946368</a></td>
<td>Photo</td>
<td>Photo of Asiana 214 debris field. All debris has been removed from runway and runway released to airport.#Asiana214 <a href="http://t.co/9kY91BYakZ">http://t.co/9kY91BYakZ</a></td>
<td>Wreckage</td>
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<tr>
<td>7/11/13</td>
<td>16:22</td>
<td><a href="http://twitter.com/NTSB/status/355452163620761600">http://twitter.com/NTSB/status/355452163620761600</a></td>
<td>Photo</td>
<td>Photo of charred cabin interior of Asiana flight 214. #Asiana214 <a href="http://t.co/PkvZz7JjD6">http://t.co/PkvZz7JjD6</a></td>
<td>Wreckage</td>
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<td>12/11/13</td>
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<td><a href="http://twitter.com/NTSB/status/410784685581926400">http://twitter.com/NTSB/status/410784685581926400</a></td>
<td>Photo</td>
<td>NTSB Senior Investigator Bill English describes accident sequence of events during opening presentations. #Asiana214 <a href="http://t.co/vOST9ssWyW">http://t.co/vOST9ssWyW</a></td>
<td>Hearing</td>
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<td>5/21/14</td>
<td>11:47</td>
<td><a href="http://twitter.com/NTSB/status/469172567895703552">http://twitter.com/NTSB/status/469172567895703552</a></td>
<td>Photo</td>
<td>Member Rosekind meets with @SFPD Chief Suhr and senior officials re June meeting on #Asiana214 report. <a href="http://t.co/8ct41q2roq">http://t.co/8ct41q2roq</a></td>
<td>Investigator</td>
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<td>6/24/14</td>
<td>9:22</td>
<td><a href="http://twitter.com/NTSB/status/481457278873120769">http://twitter.com/NTSB/status/481457278873120769</a></td>
<td>Photo</td>
<td>NTSB investigators answer questions about their findings on the #Asiana214 accident investigation. <a href="http://t.co/f40ixg1rx5">http://t.co/f40ixg1rx5</a></td>
<td>Hearing</td>
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National Transportation Safety Board Twitter Posts with Video Links

<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>URL</th>
<th>NTSB Twitter Post</th>
<th>Post Type</th>
<th>Post Focus</th>
<th>Retweets</th>
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<td><a href="http://twitter.com/NTSB/status/354737569638006785">http://twitter.com/NTSB/status/354737569638006785</a></td>
<td>NTSB releases new b-roll from the Asiana Airlines flight 214 accident scene. <a href="http://t.co/IrDbzhvlBz">http://t.co/IrDbzhvlBz</a> #Asiana214</td>
<td>Video</td>
<td>B-roll</td>
<td>75</td>
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<tr>
<td>7/9/13 20:50</td>
<td><a href="http://twitter.com/NTSB/status/354794676693372928">http://twitter.com/NTSB/status/354794676693372928</a></td>
<td>Video of NTSB's third media briefing on the Asiana Flight 214 crash is available at <a href="http://t.co/2ssmk4Y0lK">http://t.co/2ssmk4Y0lK</a> #Asiana214</td>
<td>Video</td>
<td>Press conference</td>
<td>49</td>
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<tr>
<td>7/10/13 21:29</td>
<td><a href="http://twitter.com/NTSB/status/355166958796288000">http://twitter.com/NTSB/status/355166958796288000</a></td>
<td>NTSB video of fourth press briefing on Asiana flight 214 is now available at: <a href="http://t.co/zj3RYw6i5E">http://t.co/zj3RYw6i5E</a> #Asiana214</td>
<td>Video</td>
<td>Press conference</td>
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<td><a href="http://twitter.com/NTSB/status/410918298625134592">http://twitter.com/NTSB/status/410918298625134592</a></td>
<td>Video of Chairman Hersman's media briefing regarding the Asiana investigative hearing is now available:<a href="http://t.co/ClaGtY5tp7">http://t.co/ClaGtY5tp7</a>. #Asiana214</td>
<td>Video</td>
<td>Hearing press conference</td>
<td>17</td>
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<tr>
<td>12/11/13 18:52</td>
<td><a href="http://twitter.com/NTSB/status/410950253181820928">http://twitter.com/NTSB/status/410950253181820928</a></td>
<td>Chairman Hersman's second media briefing regarding the Asiana investigative hearing is now available: <a href="http://t.co/CmNt4hSMzk">http://t.co/CmNt4hSMzk</a> #Asiana214</td>
<td>Video</td>
<td>Hearing press conference</td>
<td>20</td>
</tr>
<tr>
<td>6/24/14 7:37</td>
<td><a href="http://twitter.com/NTSB/status/481430850224263168">http://twitter.com/NTSB/status/481430850224263168</a></td>
<td>Watch the #Asiana214 Board Meeting live: <a href="http://t.co/XFHLEph0Cf">http://t.co/XFHLEph0Cf</a> webcast available in English, Korean and Mandarin.</td>
<td>Video</td>
<td>Hearing meeting</td>
<td>25</td>
</tr>
<tr>
<td>6/24/14 8:23</td>
<td><a href="http://twitter.com/NTSB/status/481442492316143616">http://twitter.com/NTSB/status/481442492316143616</a></td>
<td>#Asiana214 accident sequence animation <a href="http://t.co/nxO4VS7139">http://t.co/nxO4VS7139</a></td>
<td>Video</td>
<td>Animation</td>
<td>167</td>
</tr>
<tr>
<td>Date &amp; Time</td>
<td>URL</td>
<td>NTSB Twitter Post</td>
<td>Post Type</td>
<td>Post Focus</td>
<td>Retweets</td>
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<tr>
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<td>-----------</td>
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<tr>
<td>7/9/13 11:59</td>
<td><a href="http://twitter.com/NTSB/status/35466195401273344">http://twitter.com/NTSB/status/35466195401273344</a></td>
<td>NTSB holds media briefing on Asiana Flight 214 crash @ 2 pm PDT Holiday Inn, 275 South Airport Blvd, South San Francisco, 94080 #Asiana214</td>
<td>Update</td>
<td>Press conference</td>
<td>38</td>
</tr>
<tr>
<td>7/9/13 16:02</td>
<td><a href="http://twitter.com/NTSB/status/35472297132752899">http://twitter.com/NTSB/status/35472297132752899</a></td>
<td>Human performance group documented the seating on aircraft for survivability analysis. #Asiana214</td>
<td>Update</td>
<td>New findings</td>
<td>11</td>
</tr>
<tr>
<td>7/10/1 3:8:19</td>
<td><a href="http://twitter.com/NTSB/status/354968224934273024">http://twitter.com/NTSB/status/354968224934273024</a></td>
<td>NTSB holds media briefing on Asiana Flight 214 crash @ 2 pm PDT Holiday Inn, 275 South Airport Blvd, South San Francisco, 94080 #Asiana214</td>
<td>Update</td>
<td>Press conference</td>
<td>36</td>
</tr>
<tr>
<td>7/10/1 3:15:23</td>
<td><a href="http://twitter.com/NTSB/status/355074899771002880">http://twitter.com/NTSB/status/355074899771002880</a></td>
<td>Press briefing on Asiana Flight 214 has begun. #Asiana214</td>
<td>Update</td>
<td>Press conference</td>
<td>14</td>
</tr>
<tr>
<td>7/10/1 3:15:26</td>
<td><a href="http://twitter.com/NTSB/status/355075504409284609">http://twitter.com/NTSB/status/355075504409284609</a></td>
<td>Flying pilot was off duty on July 5th and at home #Asiana214</td>
<td>Update</td>
<td>New findings</td>
<td>19</td>
</tr>
<tr>
<td>7/10/1 3:15:28</td>
<td><a href="http://twitter.com/NTSB/status/355076120250556416">http://twitter.com/NTSB/status/355076120250556416</a></td>
<td>Flying pilot had 8 hrs of sleep prior to flight &amp; 6 hrs @ airport preparing for flight. #Asiana214</td>
<td>Update</td>
<td>New findings</td>
<td>30</td>
</tr>
<tr>
<td>7/10/1 3:15:31</td>
<td><a href="http://twitter.com/NTSB/status/355076848025219073">http://twitter.com/NTSB/status/355076848025219073</a></td>
<td>Instructor pilot had 8 hrs of rest the night before the flight &amp; reported for duty around 2:20 pm. #Asiana214</td>
<td>Update</td>
<td>New findings</td>
<td>23</td>
</tr>
<tr>
<td>7/10/1 3:15:36</td>
<td><a href="http://twitter.com/NTSB/status/355078042311335936">http://twitter.com/NTSB/status/355078042311335936</a></td>
<td>NTSB Chairman Hersman presented an overview of the radar plot for the accident airplane during the press briefing #Asiana214</td>
<td>Update</td>
<td>Press conference-new findings</td>
<td>12</td>
</tr>
<tr>
<td>7/10/1 3:15:40</td>
<td><a href="http://twitter.com/NTSB/status/355079101696049154">http://twitter.com/NTSB/status/355079101696049154</a></td>
<td>Survival factors group noted that seatbelts in business class on aircraft had a shoulder/lap belt &amp; travel class had lap only. #Asiana214</td>
<td>Update</td>
<td>Aircraft equipment</td>
<td>63</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>URL</td>
<td>Content</td>
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<td>7/10/1</td>
<td>3:15:42</td>
<td><a href="http://twitter.com/NTSB/status/355079510569398274">http://twitter.com/NTSB/status/355079510569398274</a></td>
<td>There were 8 exit doors on the aircraft - 4 on the left &amp; 4 on the right. #Asiana214</td>
<td>Update</td>
<td>16</td>
</tr>
<tr>
<td>7/10/1</td>
<td>3:15:46</td>
<td><a href="http://twitter.com/NTSB/status/355080539922898946">http://twitter.com/NTSB/status/355080539922898946</a></td>
<td>NTSB investigators interviewed 6 of the flight attendants. The remaining 6 have not been interviewed. #Asiana214</td>
<td>Update</td>
<td>18</td>
</tr>
<tr>
<td>7/10/1</td>
<td>3:15:50</td>
<td><a href="http://twitter.com/NTSB/status/355081611747917824">http://twitter.com/NTSB/status/355081611747917824</a></td>
<td>A senior flight attendant observed smoke &amp; fire outside the aircraft on the right side near row 10. #Asiana214</td>
<td>Update</td>
<td>24</td>
</tr>
<tr>
<td>7/10/1</td>
<td>3:15:59</td>
<td><a href="http://twitter.com/NTSB/status/355083798158913536">http://twitter.com/NTSB/status/355083798158913536</a></td>
<td>NTSB hopes to interview remaining flight attendants when possible as well as survivors to gather more information. #Asiana214</td>
<td>Update</td>
<td>13</td>
</tr>
<tr>
<td>7/10/1</td>
<td>3:16:00</td>
<td><a href="http://twitter.com/NTSB/status/355084093085589504">http://twitter.com/NTSB/status/355084093085589504</a></td>
<td>Salvage operations on runway will begin tonight. #Asiana214</td>
<td>Update</td>
<td>37</td>
</tr>
<tr>
<td>7/10/1</td>
<td>3:16:13</td>
<td><a href="http://twitter.com/NTSB/status/355087336029167616">http://twitter.com/NTSB/status/355087336029167616</a></td>
<td>NTSB’s fourth press briefing on Asiana flight 214 crash has concluded. #Asiana214</td>
<td>Update</td>
<td>9</td>
</tr>
<tr>
<td>7/11/1</td>
<td>3:15:35</td>
<td><a href="http://twitter.com/NTSB/status/355440267500851200">http://twitter.com/NTSB/status/355440267500851200</a></td>
<td>NTSB final press briefing on Asiana Flight 214 is underway. #Asiana214</td>
<td>Update</td>
<td>11</td>
</tr>
<tr>
<td>7/11/1</td>
<td>3:15:50</td>
<td><a href="http://twitter.com/NTSB/status/355443995469561858">http://twitter.com/NTSB/status/355443995469561858</a></td>
<td>The CVR and FDR groups are expected to complete their initial work in the NTSB laboratories today. #Asiana214</td>
<td>Update</td>
<td>20</td>
</tr>
<tr>
<td>7/11/1</td>
<td>3:16:40</td>
<td><a href="http://twitter.com/NTSB/status/355456494478692352">http://twitter.com/NTSB/status/355456494478692352</a></td>
<td>NTSB final press briefing on Asiana Flight 214 has concluded. #Asiana214</td>
<td>Update</td>
<td>10</td>
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<tr>
<td>12/11/1</td>
<td>5:54:54</td>
<td><a href="http://twitter.com/NTSB/status/410752192787021825">http://twitter.com/NTSB/status/410752192787021825</a></td>
<td>Investigative hearing into the Asiana flight 214 crash landing at SFO to get underway in 45 mins. #Asiana214</td>
<td>Update</td>
<td>21</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>URL</td>
<td>Type</td>
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<td>6/24/14</td>
<td>4:13</td>
<td><a href="http://twitter.com/NTSB/status/481440014413602817">http://twitter.com/NTSB/status/481440014413602817</a></td>
<td>Update</td>
<td>Acting Chairman Hart's opening remarks at #Asiana214 Board Meeting: <a href="http://t.co/uANYbRFBLY">http://t.co/uANYbRFBLY</a></td>
<td></td>
</tr>
<tr>
<td>6/24/14</td>
<td>8:46</td>
<td><a href="http://twitter.com/NTSB/status/481448184838119424">http://twitter.com/NTSB/status/481448184838119424</a></td>
<td>Update</td>
<td>#Asiana214 presentations by NTSB staff available at <a href="http://t.co/cVURqNHFJM">http://t.co/cVURqNHFJM</a></td>
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</tr>
<tr>
<td>7/16/14</td>
<td>4:11:43</td>
<td><a href="http://twitter.com/NTSB/status/48946264921411585">http://twitter.com/NTSB/status/48946264921411585</a></td>
<td>Update</td>
<td>NTSB report on #Asiana214 accident now available online at <a href="http://t.co/GFjX7Sz7cB">http://t.co/GFjX7Sz7cB</a></td>
<td></td>
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</table>
## APPENDIX B
### OUTBREAK HISTORY OF EBOLA

<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>Ebolavirus species</th>
<th>Cases</th>
<th>Deaths</th>
<th>Case fatality</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>Democratic Republic of Congo</td>
<td>Bundibugyo</td>
<td>57</td>
<td>29</td>
<td>51%</td>
</tr>
<tr>
<td>2012</td>
<td>Uganda</td>
<td>Sudan</td>
<td>7</td>
<td>4</td>
<td>57%</td>
</tr>
<tr>
<td>2012</td>
<td>Uganda</td>
<td>Sudan</td>
<td>24</td>
<td>17</td>
<td>71%</td>
</tr>
<tr>
<td>2011</td>
<td>Uganda</td>
<td>Sudan</td>
<td>1</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>2008</td>
<td>Democratic Republic of Congo</td>
<td>Zaire</td>
<td>32</td>
<td>14</td>
<td>44%</td>
</tr>
<tr>
<td>2007</td>
<td>Uganda</td>
<td>Bundibugyo</td>
<td>149</td>
<td>37</td>
<td>25%</td>
</tr>
<tr>
<td>2007</td>
<td>Democratic Republic of Congo</td>
<td>Zaire</td>
<td>264</td>
<td>187</td>
<td>71%</td>
</tr>
<tr>
<td>2005</td>
<td>Congo</td>
<td>Zaire</td>
<td>12</td>
<td>10</td>
<td>83%</td>
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<tr>
<td>2004</td>
<td>Sudan</td>
<td>Sudan</td>
<td>17</td>
<td>7</td>
<td>41%</td>
</tr>
<tr>
<td>2003 (Nov-Dec)</td>
<td>Congo</td>
<td>Zaire</td>
<td>35</td>
<td>29</td>
<td>83%</td>
</tr>
<tr>
<td>2003 (Jan-Apr)</td>
<td>Congo</td>
<td>Zaire</td>
<td>143</td>
<td>128</td>
<td>90%</td>
</tr>
<tr>
<td>2001-2002</td>
<td>Congo</td>
<td>Zaire</td>
<td>59</td>
<td>44</td>
<td>75%</td>
</tr>
<tr>
<td>2001-2002</td>
<td>Gabon</td>
<td>Zaire</td>
<td>65</td>
<td>53</td>
<td>82%</td>
</tr>
<tr>
<td>2000</td>
<td>Uganda</td>
<td>Sudan</td>
<td>425</td>
<td>224</td>
<td>53%</td>
</tr>
<tr>
<td>1996</td>
<td>South Africa</td>
<td>Zaire</td>
<td>1</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>1996 (Jul-Dec)</td>
<td>Gabon</td>
<td>Zaire</td>
<td>60</td>
<td>45</td>
<td>75%</td>
</tr>
<tr>
<td>1996 (Jan-Apr)</td>
<td>Gabon</td>
<td>Zaire</td>
<td>31</td>
<td>21</td>
<td>68%</td>
</tr>
<tr>
<td>1995</td>
<td>Democratic Republic of Congo</td>
<td>Zaire</td>
<td>315</td>
<td>254</td>
<td>81%</td>
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<tr>
<td>1994</td>
<td>Cote d'Ivoire</td>
<td>Tai Forest</td>
<td>1</td>
<td>0</td>
<td>0%</td>
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<tr>
<td>1994</td>
<td>Gabon</td>
<td>Zaire</td>
<td>52</td>
<td>31</td>
<td>60%</td>
</tr>
<tr>
<td>1979</td>
<td>Sudan</td>
<td>Sudan</td>
<td>34</td>
<td>22</td>
<td>65%</td>
</tr>
<tr>
<td>1977</td>
<td>Democratic Republic of Congo</td>
<td>Zaire</td>
<td>1</td>
<td>1</td>
<td>100%</td>
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Ebola virus disease, 2015

APPENDIX C

CENTERS FOR DISEASE CONTROL AND PREVENTION TWEETS @CDCGOV

<table>
<thead>
<tr>
<th>Date</th>
<th>Sent Post</th>
<th>Post URL</th>
<th>Retweet Count</th>
<th>Potential Impressions</th>
</tr>
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<tbody>
<tr>
<td>09/29/2</td>
<td>@InfectiousJK CA cases had wider variety of neuro illness. CO cluster is similar to some of CA cases. Don’t know yet of any specific link.</td>
<td><a href="http://twitter.com/CDCgov/status/516605796046897153">http://twitter.com/CDCgov/status/516605796046897153</a></td>
<td>3</td>
<td>11363</td>
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<tr>
<td>09/29/2</td>
<td>@JDA81 The WHO recommends for children and adults to lower daily sodium to &lt;2,000 mg. <a href="http://t.co/TD2njYm2DF">http://t.co/TD2njYm2DF</a></td>
<td><a href="http://twitter.com/CDCgov/status/516607056447815680">http://twitter.com/CDCgov/status/516607056447815680</a></td>
<td>1</td>
<td>678</td>
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<tr>
<td>09/29/2</td>
<td>#CDCintheField from Kerton: Getting screened by a healthcare worker for symptoms of fever before entering a building. <a href="http://t.co/HEwenW2RzJ">http://t.co/HEwenW2RzJ</a></td>
<td><a href="http://twitter.com/CDCgov/status/516618704835313664">http://twitter.com/CDCgov/status/516618704835313664</a></td>
<td>18</td>
<td>402151</td>
</tr>
<tr>
<td>09/29/2</td>
<td>CDC’s Hepatitis Risk Assessment takes ~5 minutes &amp; gives personal #hepatitis testing &amp; vaccination recommendations <a href="http://t.co/S5tMGUOkvy">http://t.co/S5tMGUOkvy</a></td>
<td><a href="http://twitter.com/CDCgov/status/516633988985739009">http://twitter.com/CDCgov/status/516633988985739009</a></td>
<td>36</td>
<td>425721</td>
</tr>
<tr>
<td>09/29/2</td>
<td>#CDCintheField from Kerton: At local office before departing to main hospital to collect data for new #Ebola cases. <a href="http://t.co/oEGvPlajy6">http://t.co/oEGvPlajy6</a></td>
<td><a href="http://twitter.com/CDCgov/status/51663488933294080">http://twitter.com/CDCgov/status/51663488933294080</a></td>
<td>21</td>
<td>392686</td>
</tr>
<tr>
<td>09/29/2</td>
<td>The new &amp; improved <a href="http://t.co/794sJk0eHb">http://t.co/794sJk0eHb</a> Spanish homepage just launched! Now accessible on your mobile devices. <a href="http://t.co/g8Ybr6wcQI">http://t.co/g8Ybr6wcQI</a></td>
<td><a href="http://twitter.com/CDCgov/status/51667945726633984">http://twitter.com/CDCgov/status/51667945726633984</a></td>
<td>44</td>
<td>447377</td>
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<tr>
<td>09/30/2</td>
<td>RT @DrFriedenCDC Nigeria #Ebola outbreak not quite over but great response. Strong emergency ops, #polio eradication experience key <a href="http://t.co/tbRAWBb1P">http://t.co/tbRAWBb1P</a></td>
<td><a href="http://twitter.com/CDCgov/status/516974366094274560">http://twitter.com/CDCgov/status/516974366094274560</a></td>
<td>0</td>
<td>369206</td>
</tr>
<tr>
<td>09/30/2</td>
<td>RT @CDCMMWR Importation of #Ebola from Guinea to Senegal was met with a rapid containment response. <a href="http://t.co/EGxOQYfALW">http://t.co/EGxOQYfALW</a></td>
<td><a href="http://twitter.com/CDCgov/status/516983574508371968">http://twitter.com/CDCgov/status/516983574508371968</a></td>
<td>0</td>
<td>369206</td>
</tr>
<tr>
<td>09/30/2</td>
<td>RT @CDCMMWR New report provides updated data on the #Ebola outbreak in West Africa. <a href="http://t.co/w1kXjQMNko">http://t.co/w1kXjQMNko</a> <a href="http://t.co/5N9ruMYTwq">http://t.co/5N9ruMYTwq</a></td>
<td><a href="http://twitter.com/CDCgov/status/516987540617039872">http://twitter.com/CDCgov/status/516987540617039872</a></td>
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<td>369206</td>
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<tr>
<td>Date</td>
<td>Time</td>
<td>Text</td>
<td>URL</td>
<td>Replies</td>
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<tr>
<td>-------</td>
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<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>09/30</td>
<td>10:42</td>
<td>quickly to enforce coordination of their national and state #Ebola response. <a href="http://t.co/JsHApLiCim">http://t.co/JsHApLiCim</a> <a href="http://t.co/cK00G4Vdsp">http://t.co/cK00G4Vdsp</a></td>
<td><a href="http://twitter.com/CDCgov/status/516991567551537152">http://twitter.com/CDCgov/status/516991567551537152</a></td>
<td>0</td>
</tr>
<tr>
<td>09/30</td>
<td>10:58</td>
<td>RT @DrFriedenCDC Nigeria’s extensive response to a single case of #Ebola shows control is possible with rapid, focused interventions <a href="http://t.co/tbRaWBB1P">http://t.co/tbRaWBB1P</a></td>
<td><a href="http://twitter.com/CDCgov/status/516995503087947776">http://twitter.com/CDCgov/status/516995503087947776</a></td>
<td>0</td>
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<tr>
<td>09/30</td>
<td>12:03</td>
<td>RT @DrFriedenCDC .@CDCMMWR reports on successful response to 1st confirmed case of #Ebola in Senegal. <a href="http://t.co/zAgWFUTRtS">http://t.co/zAgWFUTRtS</a></td>
<td><a href="http://twitter.com/CDCgov/status/517011903508672512">http://twitter.com/CDCgov/status/517011903508672512</a></td>
<td>0</td>
</tr>
<tr>
<td>09/30</td>
<td>12:59</td>
<td>Take a break from your busy day &amp; let us know how we’re doing. Complete our survey: <a href="http://t.co/3MDk4gmBdF">http://t.co/3MDk4gmBdF</a> .</td>
<td><a href="http://twitter.com/CDCgov/status/517026082823077889">http://twitter.com/CDCgov/status/517026082823077889</a></td>
<td>35</td>
</tr>
<tr>
<td>09/30</td>
<td>15:43</td>
<td>RT @DrFriedenCDC CDC &amp; @TexasDSHS confirm 1st #Ebola case diagnosed in US. Hospitalized patient recently returned from W. Africa.</td>
<td><a href="http://twitter.com/CDCgov/status/517067136687439872">http://twitter.com/CDCgov/status/517067136687439872</a></td>
<td>0</td>
</tr>
<tr>
<td>09/30</td>
<td>16:26</td>
<td>RT @DrFriedenCDC Local public health officials in TX have begun identifying close contacts of #Ebola patient for further monitoring. <a href="http://t.co/LDw6XPQrUO">http://t.co/LDw6XPQrUO</a></td>
<td><a href="http://twitter.com/CDCgov/status/5170781043143232834">http://twitter.com/CDCgov/status/5170781043143232834</a></td>
<td>0</td>
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<tr>
<td>09/30</td>
<td>16:37</td>
<td>US patient did not exhibit symptoms of #Ebola during flights from W. Africa; Ebola only contagious if the person is experiencing symptoms.</td>
<td><a href="http://twitter.com/CDCgov/status/5170807225654408">http://twitter.com/CDCgov/status/5170807225654408</a></td>
<td>391</td>
</tr>
<tr>
<td>09/30</td>
<td>16:54</td>
<td>CDC recognizes that even a single case of #Ebola diagnosed in US raises concerns, but we’ve been preparing to respond <a href="http://t.co/wjPNZ4ROTZ">http://t.co/wjPNZ4ROTZ</a></td>
<td><a href="http://twitter.com/CDCgov/status/517085066867269632">http://twitter.com/CDCgov/status/517085066867269632</a></td>
<td>574</td>
</tr>
<tr>
<td>09/30</td>
<td>17:23</td>
<td>#Ebola is spread by direct contact w/bodily fluids of a sick person or exposure to contaminated objects, like needles <a href="http://t.co/LV1LoWYBki">http://t.co/LV1LoWYBki</a></td>
<td><a href="http://twitter.com/CDCgov/status/517092377373802752">http://twitter.com/CDCgov/status/517092377373802752</a></td>
<td>3891</td>
</tr>
<tr>
<td>09/30</td>
<td>17:24</td>
<td>#Ebola is not spread through casual contact or through the air.</td>
<td><a href="http://twitter.com/CDCgov/status/517092552034762752">http://twitter.com/CDCgov/status/517092552034762752</a></td>
<td>567</td>
</tr>
<tr>
<td>09/30</td>
<td>17:45</td>
<td>We know how to stop #Ebola: thorough case finding, isolating sick people &amp; contact tracing: <a href="http://t.co/P8x87A6Kyn">http://t.co/P8x87A6Kyn</a></td>
<td><a href="http://twitter.com/CDCgov/status/517097876976324608">http://twitter.com/CDCgov/status/517097876976324608</a></td>
<td>186</td>
</tr>
<tr>
<td>09/30</td>
<td>19:34</td>
<td>RT @WhiteHouse President Obama receives an update from @DrFriedenCDC on the diagnosed #Ebola case in Dallas: <a href="http://t.co/Cn45X01hMf">http://t.co/Cn45X01hMf</a> <a href="http://t.co/1skypZ6ky">http://t.co/1skypZ6ky</a></td>
<td><a href="http://twitter.com/CDCgov/status/517125449735229441">http://twitter.com/CDCgov/status/517125449735229441</a></td>
<td>0</td>
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<tr>
<td>Date</td>
<td>Time</td>
<td>Tweet</td>
<td>URL</td>
<td>Likes</td>
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<tr>
<td>09/30/2014</td>
<td>19:40</td>
<td>RT @WhiteHouse Get the facts on #Ebola, and what we're doing to respond <a href="http://t.co/56PQFaDrTD">http://t.co/56PQFaDrTD</a> <a href="http://t.co/08u3hJCxTY">http://t.co/08u3hJCxTY</a></td>
<td><a href="http://twitter.com/CDCgov/status/517127001950662657">http://twitter.com/CDCgov/status/517127001950662657</a></td>
<td>0</td>
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<tr>
<td>09/30/2014</td>
<td>19:40</td>
<td>RT @WhiteHouse America has the best doctors and public health infrastructure in the world, and we are prepared to respond to #Ebola: <a href="http://t.co/56PQFaDrTD">http://t.co/56PQFaDrTD</a></td>
<td><a href="http://twitter.com/CDCgov/status/517126910770683904">http://twitter.com/CDCgov/status/517126910770683904</a></td>
<td>0</td>
</tr>
<tr>
<td>10/01/2014</td>
<td>10:45</td>
<td>CDC confirmed 1st #Ebola case in US. Join #CDCchat tomorrow at 4PM ET to get answers to your questions.</td>
<td><a href="http://twitter.com/CDCgov/status/517354657929105408">http://twitter.com/CDCgov/status/517354657929105408</a></td>
<td>196</td>
</tr>
<tr>
<td>10/01/2014</td>
<td>11:55</td>
<td>RT @DrFriedenCDC Bottom line on #Ebola in US: we will stop it in its tracks. CDC has 9 person team doing thorough contact tracing &amp; followup.</td>
<td><a href="http://twitter.com/CDCgov/status/517372280348094464">http://twitter.com/CDCgov/status/517372280348094464</a></td>
<td>0</td>
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<tr>
<td>10/01/2014</td>
<td>12:00</td>
<td>RT @DrFriedenCDC We need to do everything for this person who is fighting for his life. We know how to stop #Ebola &amp; we will stop it here.</td>
<td><a href="http://twitter.com/CDCgov/status/517373541642424320">http://twitter.com/CDCgov/status/517373541642424320</a></td>
<td>0</td>
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<tr>
<td>10/01/2014</td>
<td>12:21</td>
<td>We have had a plan in place for months in the event of a patient with possible #Ebola in the US.</td>
<td><a href="http://twitter.com/CDCgov/status/517378739051978752">http://twitter.com/CDCgov/status/517378739051978752</a></td>
<td>231</td>
</tr>
<tr>
<td>10/01/2014</td>
<td>12:24</td>
<td>@indigotrust Please try again, the link is working.</td>
<td><a href="http://twitter.com/CDCgov/status/517379521499394048">http://twitter.com/CDCgov/status/517379521499394048</a></td>
<td>0</td>
</tr>
<tr>
<td>10/01/2014</td>
<td>12:25</td>
<td>@Meditaz165 Any US hospital following CDC’s infection control recommendations can safely manage a patient w/ #Ebola.</td>
<td><a href="http://twitter.com/CDCgov/status/517379888937172994">http://twitter.com/CDCgov/status/517379888937172994</a></td>
<td>12</td>
</tr>
<tr>
<td>10/01/2014</td>
<td>12:25</td>
<td>@SaharaPeters CDC has protocols in place to protect against further spread of disease.</td>
<td><a href="http://twitter.com/CDCgov/status/517379802878468096">http://twitter.com/CDCgov/status/517379802878468096</a></td>
<td>8</td>
</tr>
<tr>
<td>10/01/2014</td>
<td>12:25</td>
<td>@AndrewWPL #Ebola is spread through direct contact w/body fluids (blood, urine, feces, saliva, &amp; other secretions) of an infected person.</td>
<td><a href="http://twitter.com/CDCgov/status/517379679377170433">http://twitter.com/CDCgov/status/517379679377170433</a></td>
<td>1</td>
</tr>
<tr>
<td>10/01/2014</td>
<td>12:26</td>
<td>@acomisp #Ebola is spread through direct contact w/body fluids (blood, urine, feces, saliva, &amp; other secretions) of an infected person.</td>
<td><a href="http://twitter.com/CDCgov/status/517380149994876928">http://twitter.com/CDCgov/status/517380149994876928</a></td>
<td>18</td>
</tr>
<tr>
<td>10/01/2014</td>
<td>12:26</td>
<td>@sas20160 #Ebola is spread through direct contact w/body fluids (blood, urine, feces, saliva, &amp; other secretions) of an infected person.</td>
<td><a href="http://twitter.com/CDCgov/status/51739995644469248">http://twitter.com/CDCgov/status/51739995644469248</a></td>
<td>8</td>
</tr>
<tr>
<td>10/01/2014</td>
<td>12:28</td>
<td>US has had international travelers who got deadly viruses similar to #Ebola, and none spread the disease to others here.</td>
<td><a href="http://twitter.com/CDCgov/status/517380428882518016">http://twitter.com/CDCgov/status/517380428882518016</a></td>
<td>123</td>
</tr>
<tr>
<td>10/01/2014</td>
<td>13:31</td>
<td>CDC &amp; @WHO do not recommend stopping travel between countries with #Ebola outbreaks &amp; other countries.</td>
<td><a href="http://twitter.com/CDCgov/status/517396487987535">http://twitter.com/CDCgov/status/517396487987535</a></td>
<td>58</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Text</td>
<td>Link</td>
<td>Retweets</td>
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<td>10/01/2</td>
<td>13:54</td>
<td>CDC has issued guidance that people exposed to Ebola should not board commercial airplanes.</td>
<td><a href="http://twitter.com/CDCgov/status/517402250109804344">Link</a></td>
<td>115</td>
</tr>
<tr>
<td>10/01/2</td>
<td>14:10</td>
<td>CDC is helping authorities in #Ebola-affected countries to screen travelers boarding flights for illness or exposure to Ebola.</td>
<td><a href="http://twitter.com/CDCgov/status/517406139466936320">Link</a></td>
<td>58</td>
</tr>
<tr>
<td>10/01/2</td>
<td>14:27</td>
<td>CDC guidance on monitoring &amp; movement outlines public health actions for people who have been exposed to #Ebola: <a href="http://t.co/9CZHCdAyrI">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/51740407578107906">Link</a></td>
<td>60</td>
</tr>
<tr>
<td>10/01/2</td>
<td>14:42</td>
<td>Anyone with recent travel to countries with #Ebola outbreaks should monitor their symptoms for 21 days.</td>
<td><a href="http://twitter.com/CDCgov/status/517406139466936320">Link</a></td>
<td>135</td>
</tr>
<tr>
<td>10/01/2</td>
<td>14:54</td>
<td>Find out how CDC uses contact tracing as a tool to prevent the spread of #Ebola. <a href="http://t.co/BNybuZhRex">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517410407578107906">Link</a></td>
<td>309</td>
</tr>
<tr>
<td>10/01/2</td>
<td>15:22</td>
<td>Get answers to your questions on 1st #Ebola case in US from CDC experts TOM 10/2, 4PM ET. Use #CDCchat to participate <a href="http://t.co/qBTh2zECAA">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517424336391897089">Link</a></td>
<td>285</td>
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<tr>
<td>10/01/2</td>
<td>16:19</td>
<td>RT @DrFriedenCDC CDC now has 10 people deployed to Texas to assist with the investigation of US #Ebola case. <a href="http://t.co/fj85BH3a2S">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517417364691116034">Link</a></td>
<td>0</td>
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<tr>
<td>10/02/2</td>
<td>08:15</td>
<td>CDC experts will answer questions today at 4PM ET on 1st US case of #Ebola. Use #CDCchat to participate <a href="http://t.co/BNybuZhRex">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/51740407578107906">Link</a></td>
<td>490</td>
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<tr>
<td>10/02/2</td>
<td>08:31</td>
<td>@Pochassic #Ebola is spread through direct contact w/body fluids of an infected person. <a href="http://t.co/fZYiwa0wH5">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517417364691116034">Link</a></td>
<td>0</td>
</tr>
<tr>
<td>10/02/2</td>
<td>08:32</td>
<td>There is no evidence that mosquitoes or other insects can transmit #Ebola virus. <a href="http://t.co/FbKhpR5uU">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517417364691116034">Link</a></td>
<td>0</td>
</tr>
<tr>
<td>10/02/2</td>
<td>08:32</td>
<td>There is no evidence that mosquitoes or other insects can transmit #Ebola virus. <a href="http://t.co/FbKhpR5uU">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517417364691116034">Link</a></td>
<td>0</td>
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<tr>
<td>10/02/2</td>
<td>08:53</td>
<td>CDC experts will answer questions today at 4PM ET on 1st US case of #Ebola. Use #CDCchat to participate. <a href="http://t.co/BNybuZhRex">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517417364691116034">Link</a></td>
<td>0</td>
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<tr>
<td>10/02/2</td>
<td>10:49</td>
<td>#Ebola healthcare workers wear protective gear to protect themselves from bodily fluids not because #Ebola is airborne. <a href="http://t.co/FbKhpR5uU">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517417364691116034">Link</a></td>
<td>0</td>
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<tr>
<td>10/02/2</td>
<td>08:32</td>
<td>@yoopermoma #Ebola Facts: A person infected with #Ebola virus is not contagious until symptoms appear. <a href="http://t.co/51O4bHHTYU">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517683650763452416">Link</a></td>
<td>0</td>
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<tr>
<td>10/02/2</td>
<td>08:32</td>
<td>@yoopermoma #Ebola Facts: A person infected with #Ebola virus is not contagious until symptoms appear. <a href="http://t.co/51O4bHHTYU">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517683650763452416">Link</a></td>
<td>0</td>
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<tr>
<td>10/02/2</td>
<td>08:53</td>
<td>@spellingwitch Ebola virus dried on surfaces such as doorknobs and countertops can survive for several hours: <a href="http://t.co/FbKhpR5uU">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517683650763452416">Link</a></td>
<td>0</td>
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<tr>
<td>10/02/2</td>
<td>08:53</td>
<td>@spellingwitch Ebola virus dried on surfaces such as doorknobs and countertops can survive for several hours: <a href="http://t.co/FbKhpR5uU">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/517683650763452416">Link</a></td>
<td>0</td>
</tr>
<tr>
<td>10/02/2</td>
<td>10:49</td>
<td>#Ebola healthcare workers wear protective gear to protect themselves from bodily fluids not because #Ebola is airborne.</td>
<td><a href="http://twitter.com/CDCgov/status/517683650763452416">Link</a></td>
<td>0</td>
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<tr>
<td>10/02/2</td>
<td>08:32</td>
<td>Infographic: Learn how contact tracing can stop the spread of #Ebola:</td>
<td><a href="http://twitter.com/CDCgov/status/517683650763452416">Link</a></td>
<td>0</td>
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<td>Time</td>
<td>Username</td>
<td>Message</td>
<td>URL</td>
<td>Retweets</td>
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<td>11:20</td>
<td></td>
<td><a href="http://t.co/JZmgS3Nnj6">http://t.co/JZmgS3Nnj6</a></td>
<td>517725705350963 200</td>
<td></td>
</tr>
<tr>
<td>10/02/2 014 11:36</td>
<td>@leonardkl</td>
<td>The chat will be today at 4PM ET. Use #CDCchat to participate.</td>
<td><a href="http://twitter.com/CDCgov/status/517729771581865">http://twitter.com/CDCgov/status/517729771581865</a> 984</td>
<td>9</td>
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<tr>
<td>10/02/2 014 14:00</td>
<td></td>
<td>Today's #CDCchat is focused on general Ebola questions and CDC's response.</td>
<td><a href="http://twitter.com/CDCgov/status/517766151305449">http://twitter.com/CDCgov/status/517766151305449</a> 472</td>
<td>17</td>
</tr>
<tr>
<td>10/02/2 014 14:00</td>
<td></td>
<td>Welcome to today's #CDCchat on Ebola. Thanks for joining us! We know</td>
<td><a href="http://twitter.com/CDCgov/status/517760005565964">http://twitter.com/CDCgov/status/517760005565964</a> 288</td>
<td>48</td>
</tr>
<tr>
<td>10/02/2 014 14:01</td>
<td></td>
<td>We will be using #CDCchat for today's discussion. Please include it in  each of your tweets.</td>
<td><a href="http://twitter.com/CDCgov/status/517766336731414">http://twitter.com/CDCgov/status/517766336731414</a> 529</td>
<td>18</td>
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<tr>
<td>10/02/2 014 14:02</td>
<td></td>
<td>Our experts are here to answer your questions about Ebola and the 1st confirmed case in the US. #CDCchat</td>
<td><a href="http://twitter.com/CDCgov/status/51776663200132">http://twitter.com/CDCgov/status/51776663200132</a> 480</td>
<td>31</td>
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<tr>
<td>10/02/2 014 14:02</td>
<td></td>
<td>We have CDC experts joining today's #CDCchat on @CDCEmergency,</td>
<td><a href="http://twitter.com/CDCgov/status/517766584501534">http://twitter.com/CDCgov/status/517766584501534</a> 720</td>
<td>15</td>
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<tr>
<td>10/02/2 014 14:02</td>
<td></td>
<td>@DrFriedenCDC, @CDCTravel, @CDC_NCEZID, &amp; @CDCGlobal</td>
<td><a href="http://twitter.com/CDCgov/status/51776472584941">http://twitter.com/CDCgov/status/51776472584941</a> 568</td>
<td>6</td>
</tr>
<tr>
<td>10/02/2 014 14:02</td>
<td></td>
<td>If you have a question and want to participate in the chat, be sure your tweets are not protected. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517766884268445">http://twitter.com/CDCgov/status/517766884268445</a> 696</td>
<td>10</td>
</tr>
<tr>
<td>10/02/2 014 14:03</td>
<td></td>
<td>This is CDC #DiseaseDetective Kelsey Mirkovic. I recently returned from the field. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51776717207435">http://twitter.com/CDCgov/status/51776717207435</a> 776</td>
<td>57</td>
</tr>
<tr>
<td>10/02/2 014 14:04</td>
<td>@NJRIII</td>
<td>@NJRIII #Ebola is not spread through casual contact. Practice your</td>
<td><a href="http://twitter.com/CDCgov/status/517767102930100">http://twitter.com/CDCgov/status/517767102930100</a> 224</td>
<td>27</td>
</tr>
<tr>
<td>10/02/2 014 14:04</td>
<td>@iAmTattalicious @iAmTattalicious</td>
<td>#Ebola is only contagious after symptoms are present. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517767091018289">http://twitter.com/CDCgov/status/517767091018289</a> 152</td>
<td></td>
</tr>
<tr>
<td>10/02/2 014 14:04</td>
<td>@StevenGAdvocate @StevenGAdvocate</td>
<td>#Ebola is a rare and deadly disease caused by infection with one of the Ebola virus strains #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51776974609563">http://twitter.com/CDCgov/status/51776974609563</a> 648</td>
<td>14</td>
</tr>
<tr>
<td>10/02/2 014 14:04</td>
<td></td>
<td>Let's get started – our experts are ready to answer your questions. We'll do our best to get to them all. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/5177697449715150">http://twitter.com/CDCgov/status/5177697449715150</a> 848</td>
<td>13</td>
</tr>
<tr>
<td>10/02/2 014 14:05</td>
<td>@Apodamndaca @Apodamndaca</td>
<td>#Ebola cannot survive on a surface for 6 days unless in body fluid. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517766005565964">http://twitter.com/CDCgov/status/517766005565964</a> 288</td>
<td>63</td>
</tr>
<tr>
<td>10/02/2 014 14:04</td>
<td>@Tpharvey24 @Tpharvey24</td>
<td>Please see</td>
<td><a href="http://twitter.com/CDCgov/status/517766584501534">http://twitter.com/CDCgov/status/517766584501534</a> 720</td>
<td>17</td>
</tr>
<tr>
<td>Time</td>
<td>User</td>
<td>Tweet</td>
<td>URL</td>
<td>Favorite</td>
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<tr>
<td>14:05</td>
<td>[@StevenGAdvocate]</td>
<td>our Communication materials. <a href="http://t.co/TqvEkmgKWT">http://t.co/TqvEkmgKWT</a> #CDCchat</td>
<td>/CDCgov/status/51776738777880064</td>
<td>19</td>
</tr>
<tr>
<td>14:05</td>
<td>[@StevenGAdvocate]</td>
<td>Bats are the most likely reservoir. #CDCchat</td>
<td><a href="http://twitter.com/CDCgov/status/51776737439325952">http://twitter.com/CDCgov/status/51776737439325952</a></td>
<td>45</td>
</tr>
<tr>
<td>14:05</td>
<td>[@Apodamndaca]</td>
<td>#Ebola is only contagious after symptoms are present. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517767342873661440">http://twitter.com/CDCgov/status/517767342873661440</a></td>
<td>39</td>
</tr>
<tr>
<td>14:05</td>
<td>[StevenGAdvocate]</td>
<td>Ebola was first discovered in 1976 near the Ebola River in what is now the Democratic Republic of the Congo. #CDCchat</td>
<td><a href="http://twitter.com/CDCgov/status/517767241623171072">http://twitter.com/CDCgov/status/517767241623171072</a></td>
<td>41</td>
</tr>
<tr>
<td>14:08</td>
<td>[@doctorschannel]</td>
<td>All contacts will be followed for 21 days &amp; watched for signs, symptoms of #Ebola. If found they will be isolated. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517768121432965121">http://twitter.com/CDCgov/status/517768121432965121</a></td>
<td>23</td>
</tr>
<tr>
<td>14:09</td>
<td>[@ElaineSchattner]</td>
<td>#Ebola is transmitted through contact with the body fluids from an infected person so possible but unlikely. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517768444864102401">http://twitter.com/CDCgov/status/517768444864102401</a></td>
<td>25</td>
</tr>
<tr>
<td>14:11</td>
<td>[@PastorJack_]</td>
<td>There is no treatment at this time. Supportive care is being given in the US and in Africa. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517768781050183680">http://twitter.com/CDCgov/status/517768781050183680</a></td>
<td>61</td>
</tr>
<tr>
<td>14:13</td>
<td>[@MyBronyNinja]</td>
<td>#Ebola has been found in semen for up to 3 mos. It doesn't survive long outside of body, depends on the environment. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517769340486438912">http://twitter.com/CDCgov/status/517769340486438912</a></td>
<td>79</td>
</tr>
<tr>
<td>14:13</td>
<td>[@mloxton]</td>
<td>Body fluids include but are not limited to-vomit, feces, saliva, sweat, vaginal fluid, semen, &amp; breast milk. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517769256579399681">http://twitter.com/CDCgov/status/517769256579399681</a></td>
<td>12</td>
</tr>
<tr>
<td>14:16</td>
<td>[@sallyeastman1]</td>
<td>It is possible but would not survive long after the fluid evaporated. @CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51777026125099008">http://twitter.com/CDCgov/status/51777026125099008</a></td>
<td>13</td>
</tr>
<tr>
<td>14:17</td>
<td>[@JimWhiteGNV]</td>
<td>Sudden onset is often seen. Patients will become very ill. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517770309970440192">http://twitter.com/CDCgov/status/517770309970440192</a></td>
<td>43</td>
</tr>
<tr>
<td>14:18</td>
<td>[@gentleglide]</td>
<td>In current the outbreak, about 1 in 2 are dying from #Ebola. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517770709532438328">http://twitter.com/CDCgov/status/517770709532438328</a></td>
<td>9</td>
</tr>
<tr>
<td>14:19</td>
<td>[@GetSocialHealth]</td>
<td>In both the US and in Africa supportive care is being given. Hopefully lesson can be learned from both. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517770831695708160">http://twitter.com/CDCgov/status/517770831695708160</a></td>
<td>60</td>
</tr>
<tr>
<td>Time</td>
<td>User</td>
<td>Tweet</td>
<td>Link</td>
<td>Retweets</td>
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<tr>
<td>14:20</td>
<td>@CDCemergency</td>
<td>Coughing and sneezing are not common symptoms of #Ebola. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51771084046012417">CDCgov/status/51771084046012417</a></td>
<td></td>
</tr>
<tr>
<td>014</td>
<td>10/02/2</td>
<td>@wolfiemouse @wolfiemouse Unless you have been in contact with a confirmed person, flu-like symptoms will most likely be flu #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517772181343064064">CDCgov/status/517772181343064064</a></td>
<td>42</td>
</tr>
<tr>
<td>014</td>
<td>14:24</td>
<td>@daisymoo @daisymoo If person w/#Ebola sneezes on someone &amp; saliva/mucus contacts person’s eyes, nose, mouth, the disease may be spread. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517772020038524928">CDCgov/status/517772020038524928</a></td>
<td>99</td>
</tr>
<tr>
<td>014</td>
<td>10/02/2</td>
<td>@carson_angela @carson_angela #Ebola is spread through direct contact with the blood or body fluids of a person who is sick with Ebola. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517772439531835392">CDCgov/status/517772439531835392</a></td>
<td>24</td>
</tr>
<tr>
<td>014</td>
<td>14:25</td>
<td>@JensEmjens @JensEmjens Yes, the Ebola virus is present in sweat. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517772402311589888">CDCgov/status/517772402311589888</a></td>
<td>77</td>
</tr>
<tr>
<td>014</td>
<td>10/02/2</td>
<td>@Bk2008Karcher @Bk2008Karcher The Ebola virus is present in sweat so that is possible. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517772556192198656">CDCgov/status/517772556192198656</a></td>
<td>33</td>
</tr>
<tr>
<td>014</td>
<td>10/02/2</td>
<td>@CindyMStroud @CindyMStroud #Ebola on dry surfaces can survive for several hrs. Virus in body fluids can survive up to several days at room temp #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517772943984975872">CDCgov/status/517772943984975872</a></td>
<td>149</td>
</tr>
<tr>
<td>014</td>
<td>10/02/2</td>
<td>@phobiageek @phobiageek Almost 100% of patients present w/ fever as first symptom. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517772811121983489">CDCgov/status/517772811121983489</a></td>
<td>44</td>
</tr>
<tr>
<td>014</td>
<td>10/02/2</td>
<td>@g8ernursemimi @g8ernursemimi Not after contact has been made. If a case is suspected or confirmed, PPE should be worn. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517773454331101184">CDCgov/status/517773454331101184</a></td>
<td>5</td>
</tr>
<tr>
<td>014</td>
<td>10/02/2</td>
<td>@zEMbia @zEMbia Alcohol-based hand sanitizer and chlorine can kill #Ebola. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517773782195658754">CDCgov/status/517773782195658754</a></td>
<td>129</td>
</tr>
<tr>
<td>014</td>
<td>10/02/2</td>
<td>@nursefriendly @nursefriendly #Ebola only transmitted thru contact w/ body fluids from an infected person; a cough is unlikely to spread #Ebola #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517774191119319041">CDCgov/status/517774191119319041</a></td>
<td>47</td>
</tr>
<tr>
<td>014</td>
<td>10/02/2</td>
<td>@annmariepoli @annmariepoli There is no treatment &amp; similar supportive care is being given is being given in both countries. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517774424427491329">CDCgov/status/517774424427491329</a></td>
<td>4</td>
</tr>
<tr>
<td>014</td>
<td>10/02/2</td>
<td>@zEMbia Experimental vaccines and treatments for #Ebola are under development. For more information, see @NIH. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517774553477832704">CDCgov/status/517774553477832704</a></td>
<td>5</td>
</tr>
<tr>
<td>014</td>
<td>10/02/2</td>
<td>@twirlandswirl @twirlandswirl #Ebola only transmitted thru contact w/ body</td>
<td><a href="http://twitter.com/CDCgov/status/">CDCgov/status/</a></td>
<td>46</td>
</tr>
<tr>
<td>Time</td>
<td>User</td>
<td>Tweet</td>
<td>URL</td>
<td>Retweets</td>
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<tr>
<td>14:35</td>
<td>[524x696] fluids from an infected person; unlikely to spread from a sneeze #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517774958463041536">http://twitter.com/CDCgov/status/517774958463041536</a></td>
<td>69</td>
<td>1681825</td>
</tr>
<tr>
<td>10/02/2 014 14:36</td>
<td>@BrentFitness @BrentFitness #Ebola is only transmitted thru contact w/ body fluids from an infected person; unlikely to spread via droplets #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517775245235994624">http://twitter.com/CDCgov/status/517775245235994624</a></td>
<td>52</td>
<td>1648863</td>
</tr>
<tr>
<td>10/02/2 014 14:36</td>
<td>@mmitanfans .@mmitanfans The test for #Ebola only works when a person is symptomatic. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517775223207305920">http://twitter.com/CDCgov/status/517775223207305920</a></td>
<td>194</td>
<td>1870180</td>
</tr>
<tr>
<td>10/02/2 014 14:38</td>
<td>@lauramjbee .@lauramjbee @CDCemergency #Ebola can be killed with alcohol-based hand sanitizer and household beach. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517775699495878656">http://twitter.com/CDCgov/status/517775699495878656</a></td>
<td>56</td>
<td>82967</td>
</tr>
<tr>
<td>10/02/2 014 14:40</td>
<td>@Scott___R .@Scott___R #Ebola on-dried on surfaces can survive for several hours. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517776234911379457">http://twitter.com/CDCgov/status/517776234911379457</a></td>
<td>77</td>
<td>170376</td>
</tr>
<tr>
<td>10/02/2 014 14:41</td>
<td>@Scott___R .@Scott___R #Ebola in body fluids can survive up to several days at room temperature. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51777635227195585">http://twitter.com/CDCgov/status/51777635227195585</a></td>
<td>56</td>
<td>120780</td>
</tr>
<tr>
<td>10/02/2 014 14:42</td>
<td>@ShusontheHill .@ShusontheHill There is no treatment for #Ebola. Fluids &amp; supportive care are given. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517776674797387776">http://twitter.com/CDCgov/status/517776674797387776</a></td>
<td>13</td>
<td>468149</td>
</tr>
<tr>
<td>10/02/2 014 14:42</td>
<td>@changeonething .@changeonething It is possible, but very unlikely to spread thru cough/sneeze. See <a href="http://t.co/1Bl3TuSWUO">http://t.co/1Bl3TuSWUO</a> for more information. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517776534774759424">http://twitter.com/CDCgov/status/517776534774759424</a></td>
<td>57</td>
<td>1730844</td>
</tr>
<tr>
<td>10/02/2 014 14:45</td>
<td>@sallyeastman1 .@sallyeastman1 Yes. #Ebola can be transmitted in saliva. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51777399950614528">http://twitter.com/CDCgov/status/51777399950614528</a></td>
<td>59</td>
<td>182114</td>
</tr>
<tr>
<td>10/02/2 014 14:47</td>
<td>@reciklaje .@reciklaje People who recover from #Ebola infection are immune for at least 10 years, possibly longer. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51777824653266944">http://twitter.com/CDCgov/status/51777824653266944</a></td>
<td>76</td>
<td>113226</td>
</tr>
<tr>
<td>10/02/2 014 14:48</td>
<td>@BushGene .@BushGene Contact tracing has been effective in ending all past outbreaks. <a href="http://t.co/0fVN64qAd9n">http://t.co/0fVN64qAd9n</a> #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51778181827620864">http://twitter.com/CDCgov/status/51778181827620864</a></td>
<td>18</td>
<td>17426</td>
</tr>
<tr>
<td>10/02/2 014 14:48</td>
<td>@reciklaje .@reciklaje We don't know if people who recover are immune for life or if they can become infected w/ a diff. species of #Ebola. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51778087128625152">http://twitter.com/CDCgov/status/51778087128625152</a></td>
<td>28</td>
<td>32967</td>
</tr>
<tr>
<td>10/02/2 014 14:49</td>
<td>@Bk2008Karcher .@Bk2008Karcher It is possible, but very unlikely. See <a href="http://t.co/1Bl3TuSWUO">http://t.co/1Bl3TuSWUO</a> for more information. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51778546434260992">http://twitter.com/CDCgov/status/51778546434260992</a></td>
<td>7</td>
<td>20631</td>
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<tr>
<td>Time</td>
<td>User</td>
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<td>URL</td>
<td>Retweets</td>
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<tr>
<td>10/02/2014 14:50</td>
<td>@Ms_Lathrop @Ms_Lathrop</td>
<td>For information about diagnosis, please see <a href="http://t.co/f4ZkC8mjZu">http://t.co/f4ZkC8mjZu</a> #CDCchat</td>
<td><a href="http://twitter.com/CDCgov/status/51777865329629440">http://twitter.com/CDCgov/status/51777865329629440</a></td>
<td>9</td>
</tr>
<tr>
<td>10/02/2014 14:51</td>
<td>@jpguidonYAZ @jpguidonYAZ</td>
<td>It is thought that animals infected the first person, followed by human to human transmission. <a href="http://t.co/qBzmqeUeZ">http://t.co/qBzmqeUeZ</a> #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517779005341446145">http://twitter.com/CDCgov/status/517779005341446145</a></td>
<td>25</td>
</tr>
<tr>
<td>10/02/2014 14:55</td>
<td>@andreatjm @andreatjm</td>
<td>It's only spread by direct contact w/ an object contaminated by body fluids of a person infected w/ #Ebola. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51779825118154752">http://twitter.com/CDCgov/status/51779825118154752</a></td>
<td>20</td>
</tr>
<tr>
<td>10/02/2014 14:56</td>
<td>We're nearing the end of our time today. Please send final comments and questions. #CDCChat</td>
<td></td>
<td>9</td>
<td>389877</td>
</tr>
<tr>
<td>10/02/2014 14:57</td>
<td>@MarcEvansImages @MarcEvansImages</td>
<td>There is no evidence that mosquitos or other insects can transmit Ebola virus. <a href="http://t.co/Ibl3TuSWUO">http://t.co/Ibl3TuSWUO</a> #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517780303419830272">http://twitter.com/CDCgov/status/517780303419830272</a></td>
<td>45</td>
</tr>
<tr>
<td>10/02/2014 14:58</td>
<td>@DatsTheWay2Go @DatsTheWay2Go</td>
<td>#Ebola Can live on dry surfaces for hours and in body fluids for several days. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517780808531472385">http://twitter.com/CDCgov/status/517780808531472385</a></td>
<td>90</td>
</tr>
<tr>
<td>10/02/2014 14:59</td>
<td>@Vinothini440 @Vinothini440</td>
<td>There is no treatment for #Ebola. The disease can be very serious for pregnant women &amp; the fetus. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517780862289850368">http://twitter.com/CDCgov/status/517780862289850368</a></td>
<td>25</td>
</tr>
<tr>
<td>10/02/2014 15:00</td>
<td>@marc_2127 @marc_2127</td>
<td>#Ebola can enter through broken skin or unprotected mucus membranes. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/517781198203256833">http://twitter.com/CDCgov/status/517781198203256833</a></td>
<td>59</td>
</tr>
<tr>
<td>10/02/2014 15:01</td>
<td>Visit the Texas Department of State Health Services website for more information on #Ebola. <a href="http://t.co/5eS6cWneFG">http://t.co/5eS6cWneFG</a></td>
<td></td>
<td>38</td>
<td>466305</td>
</tr>
<tr>
<td>10/02/2014 15:01</td>
<td>For more information and updates on #Ebola, visit CDC's website: <a href="http://t.co/xHhdDh58qr">http://t.co/xHhdDh58qr</a>. #CDCChat</td>
<td></td>
<td>87</td>
<td>1493056</td>
</tr>
<tr>
<td>10/02/2014 15:02</td>
<td>Thank you to our experts, and to all of you for joining us this important discussion today! #CDCChat</td>
<td></td>
<td>8</td>
<td>391971</td>
</tr>
<tr>
<td>10/02/2014 15:03</td>
<td>We'll post the #Storify from today's #CDCChat later today or tomorrow morning.</td>
<td></td>
<td>32</td>
<td>474346</td>
</tr>
<tr>
<td>10/03/2014 07:02</td>
<td>@nursefriendly</td>
<td>Ebola on dry surfaces can survive for several hrs. Virus in body fluids can survive up to several days at room temp.</td>
<td><a href="http://twitter.com/CDCgov/status/518023293744742400">http://twitter.com/CDCgov/status/518023293744742400</a></td>
<td>15</td>
</tr>
<tr>
<td>10/03/2014</td>
<td>We will do contact tracing thru concentric</td>
<td><a href="http://twitter.com/CDCgov/status/518023293744742400">http://twitter.com/CDCgov/status/518023293744742400</a></td>
<td>30</td>
<td>1983518</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Tweet</td>
<td>URL</td>
<td>Retweets</td>
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<td>---------------------------------------------------------------------</td>
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<tr>
<td>10/03/2014</td>
<td>07:31</td>
<td>circles – working w/ people who had most exposure to #Ebola patient &amp; working out from there.</td>
<td>/CDCgov/status/518030636095680897</td>
<td>58</td>
</tr>
<tr>
<td>10/03/2014</td>
<td>07:31</td>
<td>Over the next several days, CDC will work systematically to identify high risk, low risk, &amp; no risk contacts of Dallas #Ebola patient.</td>
<td><a href="http://twitter.com/CDCgov/status/518030539128074241">http://twitter.com/CDCgov/status/518030539128074241</a></td>
<td></td>
</tr>
<tr>
<td>10/03/2014</td>
<td>07:32</td>
<td>Very unlikely more than few people have had close contact that transmits #Ebola – but want to make sure we have completely contained virus.</td>
<td><a href="http://twitter.com/CDCgov/status/51803084020575296">http://twitter.com/CDCgov/status/51803084020575296</a></td>
<td>40</td>
</tr>
<tr>
<td>10/03/2014</td>
<td>08:01</td>
<td>If any contact develops a fever or other #Ebola symptoms, that person is isolated, tested &amp; treated, &amp; the tracing cycle starts again.</td>
<td><a href="http://twitter.com/CDCgov/status/518038236539932672">http://twitter.com/CDCgov/status/518038236539932672</a></td>
<td>60</td>
</tr>
<tr>
<td>10/03/2014</td>
<td>08:01</td>
<td>Contact tracing = finding everyone who comes in direct contact w/ sick #Ebola patient &amp; checking for signs of illness every day for 21 days.</td>
<td><a href="http://twitter.com/CDCgov/status/518038104276746240">http://twitter.com/CDCgov/status/518038104276746240</a></td>
<td>52</td>
</tr>
<tr>
<td>10/03/2014</td>
<td>08:02</td>
<td>Contact tracing finds new cases quickly so they can be isolated, stopping further spread of #Eboa.</td>
<td><a href="http://twitter.com/0JY69n">http://twitter.com/0JY69n</a></td>
<td>49</td>
</tr>
<tr>
<td>10/03/2014</td>
<td>08:44</td>
<td>RT @DrFriedenCDC We will stop #Ebola in its tracks here in the US. Here’s why: <a href="http://t.co/Z1YNorX1y">http://t.co/Z1YNorX1y</a> @CNNOPinion</td>
<td><a href="http://twitter.com/CDCgov/status/5180488588132908288">http://twitter.com/CDCgov/status/5180488588132908288</a></td>
<td>0</td>
</tr>
<tr>
<td>10/03/2014</td>
<td>09:33</td>
<td>What you need to know about the unexplained cases of weakness/paralysis in Colorado children.</td>
<td><a href="http://twitter.com/K5LT66EiU9xq">http://twitter.com/K5LT66EiU9xq</a></td>
<td>87</td>
</tr>
<tr>
<td>10/03/2014</td>
<td>11:12</td>
<td>RT @DrFriedenCDC Impt to remember, as 1st US #Ebola case grabs headlines: We must be relentless in stopping spread in W. Africa. <a href="http://t.co/Z1YNorX1y">http://t.co/Z1YNorX1y</a></td>
<td><a href="http://twitter.com/CDCgov/status/51806128209030656">http://twitter.com/CDCgov/status/51806128209030656</a></td>
<td>0</td>
</tr>
<tr>
<td>10/03/2014</td>
<td>11:34</td>
<td>RT @DrFriedenCDC CDC has been ready for 1st US #Ebola case, working w/ health depts enhancing surveillance &amp; lab capacity <a href="http://t.co/Z1YNorX1y">http://t.co/Z1YNorX1y</a> @CNNOPinion</td>
<td><a href="http://twitter.com/CDCgov/status/518091624715653120">http://twitter.com/CDCgov/status/518091624715653120</a></td>
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<tr>
<td>10/03/2014</td>
<td>11:35</td>
<td>RT @DrFriedenCDC The only way to protect the health security of America &amp; world is stopping #Ebola’s spread in W. Africa <a href="http://t.co/Z1YNorX1y">http://t.co/Z1YNorX1y</a> @CNNOPinion</td>
<td><a href="http://twitter.com/CDCgov/status/518092027561779200">http://twitter.com/CDCgov/status/518092027561779200</a></td>
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<tr>
<td>10/03/2014</td>
<td>13:07</td>
<td>@260rda1025 US citizens have the right to return to the US.</td>
<td><a href="http://twitter.com/CDCgov/status/518115135546990592">http://twitter.com/CDCgov/status/518115135546990592</a></td>
<td>0</td>
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<tr>
<td>10/03/2014</td>
<td>13:07</td>
<td>@Tzynya It is safe to go to public places. #Ebola poses no significant risk to the</td>
<td><a href="http://twitter.com/CDCgov/status/">http://twitter.com/CDCgov/status/</a></td>
<td>1</td>
</tr>
<tr>
<td>Time</td>
<td>Author</td>
<td>Tweet</td>
<td>URL</td>
<td>Retweets</td>
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<tr>
<td>13:49</td>
<td>U.S.</td>
<td>[10/03/2014] Briefing with Senior Admin Officials on U.S. Government Response to #Ebola. Watch live at 4:30pm EST: <a href="http://t.co/JIfuaU8Gsx">link</a>.</td>
<td>518125602071904256</td>
<td>0</td>
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<tr>
<td>13:53</td>
<td></td>
<td>CDC experts answered questions yesterday on #Ebola in #CDCChat. Now available on Storify. Get the facts: <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518128917014921217</td>
<td>105</td>
</tr>
<tr>
<td>14:02</td>
<td></td>
<td>CDC experts answered questions yesterday on #Ebola in #CDCChat. Now available on Storify. Get the facts: <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518128917014921217</td>
<td>105</td>
</tr>
<tr>
<td>14:47</td>
<td>RT @HHSMedia</td>
<td>&quot;We've been working for many months to ensure that the United States is protected...&quot; - @SecBurwell on #Ebola</td>
<td>518140376579055520</td>
<td>0</td>
</tr>
<tr>
<td>14:47</td>
<td>RT @HHSMedia</td>
<td>CDC experts answered questions yesterday on #Ebola in #CDCChat. Now available on Storify. Get the facts: <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518140376579055520</td>
<td>0</td>
</tr>
<tr>
<td>14:50</td>
<td>RT @HHSMedia</td>
<td>CDC experts answered questions yesterday on #Ebola in #CDCChat. Now available on Storify. Get the facts: <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518140376579055520</td>
<td>0</td>
</tr>
<tr>
<td>14:50</td>
<td>@NIAIDNews Fauci:</td>
<td>Fauci: We are aggressively working to develop and test a vaccine to prevent #Ebola infection and therapeutics to treat it. <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518141162050568192</td>
<td>0</td>
</tr>
<tr>
<td>14:50</td>
<td>@NIAIDNews NIAID Dir.</td>
<td>Anthony Fauci: Proven ways to control #Ebola: patient isolation, infection control practices, and contract tracing/monitoring <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518141111997752153</td>
<td>0</td>
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<tr>
<td>14:50</td>
<td>@SecBurwell We remain focused on working w/partners on ground to stop epidemic at source &amp; taking precautions to prevent #ebola from spreading further. <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518167883508375552</td>
<td>0</td>
<td>377777</td>
</tr>
<tr>
<td>16:37</td>
<td>@davidmendoza829 CDC has protocols in place to protect against further spread of disease. <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518190611615465472</td>
<td>2</td>
<td>796</td>
</tr>
<tr>
<td>16:08</td>
<td>@zachperkins5 CDC has protocols in place to protect against further spread of disease. <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518190862820737025</td>
<td>3</td>
<td>1091</td>
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<tr>
<td>18:13</td>
<td>@sassyandcowgirl There is no evidence that mosquitos or other insects can transmit Ebola virus. <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518192161612132352</td>
<td>27</td>
<td>228287</td>
</tr>
<tr>
<td>18:14</td>
<td>@sassyandcowgirl Only mammals (ex. humans, bats, monkeys and apes) have shown the ability to become infected with and spread Ebola virus. <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518192309096415232</td>
<td>8</td>
<td>22472</td>
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<tr>
<td>18:19</td>
<td>@jdizzle954 US citizens have the right to return to the US. <a href="http://t.co/B6AfRGw9N">link</a></td>
<td>518193644558639</td>
<td>7</td>
<td>3342</td>
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<td>Date/Time</td>
<td>Text</td>
<td>URL</td>
<td>Retweets</td>
<td>Likes</td>
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<tr>
<td>10/04/2 014 12:30</td>
<td>RT @DrFriedenCDC We can stop #Ebola in its tracks in US with strong infection control and contract tracing.</td>
<td><a href="http://twitter.com/CDCgov/status/518468264343896064">http://twitter.com/CDCgov/status/518468264343896064</a></td>
<td>0</td>
<td>379796</td>
</tr>
<tr>
<td>10/04/2 014 12:55</td>
<td>RT @DrFriedenCDC We are working hand in hand with local public health authorities in Dallas to protect the American public from #Ebola.</td>
<td><a href="http://twitter.com/CDCgov/status/518474531938500608">http://twitter.com/CDCgov/status/518474531938500608</a></td>
<td>0</td>
<td>379796</td>
</tr>
<tr>
<td>10/04/2 014 13:06</td>
<td>RT @DrFriedenCDC Contact tracing finds new cases quickly so they can be isolated, stopping further spread of #Ebola.</td>
<td><a href="http://twitter.com/CDCgov/status/51847208340692993">http://twitter.com/CDCgov/status/51847208340692993</a></td>
<td>0</td>
<td>379796</td>
</tr>
<tr>
<td>10/04/2 014 13:20</td>
<td>RT @DrFriedenCDC We are monitoring contacts of the confirmed #Ebola patient closely.</td>
<td><a href="http://twitter.com/CDCgov/status/518480762535149370">http://twitter.com/CDCgov/status/518480762535149370</a></td>
<td>0</td>
<td>379796</td>
</tr>
<tr>
<td>10/04/2 014 13:44</td>
<td>RT @DrFriedenCDC Our #1 priority is safety of Americans. We will continue to evaluate possible improvements to provide continued safety.</td>
<td><a href="http://twitter.com/CDCgov/status/518486899041005268">http://twitter.com/CDCgov/status/518486899041005268</a></td>
<td>0</td>
<td>379796</td>
</tr>
<tr>
<td>10/04/2 014 14:30</td>
<td>RT @TexasDSHS Health Commissioner Dr. David Lakey: Texas Health System Well Prepared to Deal with #Ebola Threat</td>
<td><a href="http://twitter.com/CDCgov/status/51886070039786498">http://twitter.com/CDCgov/status/51886070039786498</a></td>
<td>0</td>
<td>381017</td>
</tr>
<tr>
<td>10/05/2 014 14:31</td>
<td>Please follow @TexasDSHS for local updates on #Ebola</td>
<td><a href="http://twitter.com/CDCgov/status/518861010741264385">http://twitter.com/CDCgov/status/518861010741264385</a></td>
<td>94</td>
<td>2120121</td>
</tr>
<tr>
<td>10/05/2 014 16:16</td>
<td>#Ebola is spread by direct contact with body fluids of a sick person or exposure to contaminated objects, like needles.</td>
<td><a href="http://twitter.com/CDCgov/status/518887443211517952">http://twitter.com/CDCgov/status/518887443211517952</a></td>
<td>498</td>
<td>911795</td>
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<tr>
<td>10/05/2 014 16:42</td>
<td>Ebola is not spread through casual contact or through the air.</td>
<td><a href="http://twitter.com/CDCgov/status/518894046501412864">http://twitter.com/CDCgov/status/518894046501412864</a></td>
<td>768</td>
<td>981561</td>
</tr>
<tr>
<td>10/06/2 014 08:27</td>
<td>RT @CDC_NCEZID Read our new fact sheet and find out what you need to know about #Ebola</td>
<td><a href="http://twitter.com/CDCgov/status/51913821595189248">http://twitter.com/CDCgov/status/51913821595189248</a></td>
<td>0</td>
<td>382053</td>
</tr>
<tr>
<td>10/06/2 014 08:49</td>
<td>@ImGrantOkay Experimental vaccines &amp; treatments developed for #Ebola have not been fully tested for safety or effectiveness.</td>
<td><a href="http://twitter.com/CDCgov/status/519137361956192256">http://twitter.com/CDCgov/status/519137361956192256</a></td>
<td>1</td>
<td>273</td>
</tr>
<tr>
<td>10/06/2 014 08:49</td>
<td>@ImGrantOkay There is no FDA-approved vaccine or medicine available for #Ebola.</td>
<td><a href="http://twitter.com/CDCgov/status/519137324635262977">http://twitter.com/CDCgov/status/519137324635262977</a></td>
<td>7</td>
<td>1654</td>
</tr>
<tr>
<td>10/06/2 014 08:51</td>
<td>@cstevens0034 #Ebola healthcare workers wear protective gear to protect themselves from bodily fluids not because #Ebola is airborne.</td>
<td><a href="http://twitter.com/CDCgov/status/519137926358823905">http://twitter.com/CDCgov/status/519137926358823905</a></td>
<td>11</td>
<td>10253</td>
</tr>
<tr>
<td>10/06/2 014 08:51</td>
<td>@cstevens0034 #Ebola healthcare workers wear protective gear to protect themselves from bodily fluids not because #Ebola is airborne.</td>
<td><a href="http://twitter.com/CDCgov/status/519137926358823905">http://twitter.com/CDCgov/status/519137926358823905</a></td>
<td>11</td>
<td>10253</td>
</tr>
<tr>
<td>10/06/2 014 08:51</td>
<td>RT @USATODAY When a person is diagnosed with Ebola, contact tracing is</td>
<td><a href="http://twitter.com/CDCgov/status/">http://twitter.com/CDCgov/status/</a></td>
<td>0</td>
<td>382053</td>
</tr>
<tr>
<td>Time</td>
<td>User</td>
<td>Tweet</td>
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<td>12:10</td>
<td></td>
<td>critical. The process: <a href="http://t.co/59bUfAHJqy">link</a> (Getty) 519187940355100672</td>
<td></td>
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</tr>
<tr>
<td>10/06/2014 12:50</td>
<td>@xxKiMmErZxx</td>
<td>Only mammals (ex., humans, bats, monkeys and apes) have shown the ability to become infected with and spread Ebola virus. <a href="http://twitter.com/CDCgov/status/519198118899089408">link</a> 15 25372</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/06/2014 12:50</td>
<td>@xxKiMmErZxx</td>
<td>There is no evidence that mosquitos or other insects can transmit Ebola virus. <a href="http://twitter.com/CDCgov/status/519198029560434408">link</a> 9 5388</td>
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<tr>
<td>10/07/2014 08:16</td>
<td>CDC</td>
<td>CDC experts will continue the discussion &amp; answer questions on #Ebola on 10/8, 3PM ET. Use #CDCchat to participate. <a href="http://twitter.com/CDCgov/status/519491416406634496">link</a> 350 3751321</td>
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<tr>
<td>10/07/2014 09:15</td>
<td>@xxKiMmErZxx</td>
<td>Join @CDC tobacco Free to raise awareness about the #20million people who have died because of smoking. <a href="http://t.co/FP8zHa0KVI">link</a> 31 416186</td>
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<tr>
<td>10/07/2014 11:07</td>
<td>CDC</td>
<td>7,000 people a day visit the emergency dept. for crash injuries. States: Take action to protect lives! #VitalSigns <a href="http://t.co/OwbHtYrmVm">link</a> 30 435530</td>
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<tr>
<td>10/07/2014 12:13</td>
<td>RT @CDCMMWR</td>
<td>Bamboo hand washing stations are being used in Liberia to help combat the spread of #Ebola. <a href="http://t.co/EAx87Gppa">link</a> <a href="http://t.co/i0FQsIshpQ">link</a> 0 383959</td>
<td></td>
<td></td>
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<tr>
<td>10/07/2014 12:33</td>
<td>RT @WhiteHouse</td>
<td>&quot;We’re doing everything we can to make sure the American people are safe.&quot; — Obama <a href="http://t.co/0RT8S8yZoB">link</a> 0 383959</td>
<td></td>
<td></td>
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<tr>
<td>10/07/2014 13:04</td>
<td>CDC</td>
<td>CDC just released a new #VitalSigns Digital Press Kit with current info &amp; resources. <a href="http://t.co/9xqVuZ5nPI">link</a> 21 401424</td>
<td></td>
<td></td>
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<tr>
<td>10/07/2014 14:53</td>
<td>RT @DrFriedenCDC</td>
<td>What CDC is doing to prepare America's hospitals, healthcare facilities, and providers for #Ebola: <a href="http://t.co/rgf45o4NvL">link</a> 0 383959</td>
<td></td>
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<tr>
<td>10/07/2014 15:31</td>
<td>RT @DrFriedenCDC</td>
<td>CDC working throughout US health care system &amp; with health care workers to prepare for Ebola. Here’s how <a href="http://t.co/rgf45o4NvL">link</a> 0 383959</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/07/2014 18:40</td>
<td>RT @DrFriedenCDC</td>
<td>None of contacts of Dallas #Ebola patient showing symptoms or fever. Will continue to monitor. <a href="http://t.co/rgf45o4NvL">link</a> 0 383959</td>
<td></td>
<td></td>
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<tr>
<td>10/07/2014 18:41</td>
<td>RT @DrFriedenCDC</td>
<td>We’re working closely with health depts across US to incorporate lessons learned from Dallas into state &amp; local HDs. <a href="http://t.co/rgf45o4NvL">link</a> 0 383959</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/07/2014 08:16</td>
<td>RT @DrFriedenCDC</td>
<td>We’re beginning to see signs of progress in W. Africa. <a href="http://t.co/rgf45o4NvL">link</a> 0 383959</td>
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<td>Time</td>
<td>Text</td>
<td>URL</td>
<td>Likes</td>
<td>Retweets</td>
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<td>18:41</td>
<td>Changes in caregiving &amp; burial practices, contact tracing helping to slow spread.</td>
<td>519648655884554 240</td>
<td></td>
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<tr>
<td>10/08/2 014 08:03</td>
<td>Car crash injuries are costly, but they can be prevented. Find ways to protect yourself &amp; your loved ones.</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 519850456420720 640</td>
<td>19</td>
<td>419314</td>
</tr>
<tr>
<td>10/08/2 014 09:53</td>
<td>Join our #CDCchat at 3PM today as CDC #DiseaseDetectives continue to answer your questions on #Ebola.</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 519875251854852 097</td>
<td>210</td>
<td>4753884</td>
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<tr>
<td>10/08/2 014 10:40</td>
<td>Car crash injuries are costly, but they can be prevented. Find ways to protect yourself &amp; your loved ones.</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 519889971206189 056</td>
<td>21</td>
<td>50439</td>
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<tr>
<td>10/08/2 014 10:44</td>
<td>Travel grants are now available for CDC's #Ebola Training Course:</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 519891178963537 312</td>
<td>70</td>
<td>2019677</td>
</tr>
<tr>
<td>10/08/2 014 11:01</td>
<td>CDC is training eligible US clinicians helping with #Ebola. See if you qualify:</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 519895311679250 433</td>
<td>95</td>
<td>2127504</td>
</tr>
<tr>
<td>10/08/2 014 12:30</td>
<td>Get answers to your questions on #Ebola from CDC’s experts in 30 minutes Use #CDCchat to participate.</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 519917860882513 920</td>
<td>74</td>
<td>581648</td>
</tr>
<tr>
<td>10/08/2 014 13:00</td>
<td>Welcome to today’s #CDCchat on #Ebola. Thanks for joining us! We know you have many questions about Ebola &amp; the 1st confirmed US case.</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 519925385413541 889</td>
<td>28</td>
<td>466481</td>
</tr>
<tr>
<td>10/08/2 014 13:01</td>
<td>We will be using #CDCchat for today’s discussion. Please include it in each of your tweets.</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 519925660375339 009</td>
<td>16</td>
<td>841264</td>
</tr>
<tr>
<td>10/08/2 014 13:02</td>
<td>If you have a question and want to participate in the chat, be sure your tweets are not protected. #CDCchat</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 519925923605676 022</td>
<td>17</td>
<td>409565</td>
</tr>
<tr>
<td>10/08/2 014 13:04</td>
<td>Our experts are here to answer your questions on the response to #Ebola in the 1st US confirmed case &amp; the epidemic in W. Africa. #CDCchat</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 519926299822129 154</td>
<td>37</td>
<td>448997</td>
</tr>
<tr>
<td>10/08/2 014 13:04</td>
<td>We have CDC experts joining today’s #CDCchat on @CDCEmergency, @DrFriedenCDC, @CDCTravel, @CDC_NCEZID, &amp; @CDCGlobal</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 519926214958809 088</td>
<td>20</td>
<td>435499</td>
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<tr>
<td>10/08/2 014 13:05</td>
<td>Nearly 1000 CDC staff members have provided logistics, staffing, communication, analysis, management, and more for the response. #CDCchat</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 51992637119688 704</td>
<td>22</td>
<td>445896</td>
</tr>
<tr>
<td>10/08/2 014 13:05</td>
<td>This is #DiseaseDetective Rebecca Merrill recently returned from deployment in Liberia. Happy to be here &amp; answer your Qs! #CDCChat</td>
<td><a href="http://twitter.com">http://twitter.com</a> /CDCgov/status/ 51992610200637 441</td>
<td>15</td>
<td>461166</td>
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<td>Date</td>
<td>Time</td>
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<tr>
<td>10/08/2014</td>
<td>13:06</td>
<td>@rowrow333 @rowrow333 #Ebola survives w/in the body &amp; in bodily fluids so not affected by external weather temperatures/patterns. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519926854736957440">http://twitter.com/CDCgov/status/519926854736957440</a></td>
<td>31</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:07</td>
<td>Disease detectives are in W Africa to assist with the response, including surveillance, contact tracing, laboratory testing. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519927162124922881">http://twitter.com/CDCgov/status/519927162124922881</a></td>
<td>18</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:09</td>
<td>CDC staff are setting up an emergency response structure and providing training and education in the affected countries. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519927476441853952">http://twitter.com/CDCgov/status/519927476441853952</a></td>
<td>28</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:10</td>
<td>@BibiGreat @BibiGreat Low risk bc must have cut for virus to enter &amp; have bodily fluid present while shaking hand or kissing. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519927894542675970">http://twitter.com/CDCgov/status/519927894542675970</a></td>
<td>21</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:12</td>
<td>@rheumatics @rheumatics The power of including survivors in response effort is growing to both care for patients &amp; eliminate stigma #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519928397829783552">http://twitter.com/CDCgov/status/519928397829783552</a></td>
<td>10</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:13</td>
<td>@Kaiti lyn B @Kaiti lyn B Ebola has been found in sweat. It’s very low risk and not commonly thought as a body fluid that would transmit Ebola. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519928604260855809">http://twitter.com/CDCgov/status/519928604260855809</a></td>
<td>65</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:14</td>
<td>@smleyt @smleyt CDC &amp; other government agencies are increasing screening at all ports of entry to minimize a repeat scenario #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519928735425105920">http://twitter.com/CDCgov/status/519928735425105920</a></td>
<td>20</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:17</td>
<td>@couldabeenagm @couldabeenagm Currently there has been no report of dog to human transmission or showing symptoms of #Ebola #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519929632788082688">http://twitter.com/CDCgov/status/519929632788082688</a></td>
<td>51</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:17</td>
<td>@Eskaya rP @Eskaya rP CDC is working with AVMA/USDA and other partners to develop guidance for the US pet population. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519929482279677953">http://twitter.com/CDCgov/status/519929482279677953</a></td>
<td>21</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:19</td>
<td>@ChiefPressler @ChiefPressler #Ebola is not spread w/ a flu virus, but can show similar symptoms so may appear alike in earlier stages. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51993033063100416">http://twitter.com/CDCgov/status/51993033063100416</a></td>
<td>27</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:20</td>
<td>@ebolaspain @ebolaspain Those who have a history w/ #Ebola contact should see a doctor at first sign of symptoms. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51993092301043712">http://twitter.com/CDCgov/status/51993092301043712</a></td>
<td>22</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:20</td>
<td>@debNdallasTX @debNdallasTX NIH and FDA are leading the effort to develop and test vaccines and new treatments. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519930351511437312">http://twitter.com/CDCgov/status/519930351511437312</a></td>
<td>17</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:21</td>
<td>@SHC_BCP_DR @SHC_BCP_DR Specific mortality rate unknown bc surveillance data incomplete, but mortality rate falls w/in typical range of 40-70% #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519930680562958336">http://twitter.com/CDCgov/status/519930680562958336</a></td>
<td>18</td>
</tr>
<tr>
<td>10/08/2014</td>
<td>13:22</td>
<td>@Animal_Nurse @Animal_Nurse #Ebola can survive on fomites for two</td>
<td><a href="http://twitter.com/CDCgov/status/519930680562958336">http://twitter.com/CDCgov/status/519930680562958336</a></td>
<td>69</td>
</tr>
</tbody>
</table>
393

<table>
<thead>
<tr>
<th>Time</th>
<th>User(s)</th>
<th>Tweet</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:22</td>
<td>519930947303911</td>
<td>hours on dry surfaces, but longer if in bodily fluids. #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:22</td>
<td>@CTCanines @CTCanines</td>
<td>There have been no reports of pets becoming sick with #Ebola or of playing a role in transmission of Ebola to humans. #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:24</td>
<td>@BeanTownBeauti @BeanTownBeauti</td>
<td>Studies have shown this #Ebola strain is not mutating rapidly, but this strain can survive short time on fomites #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:24</td>
<td>@soysoberania @soysoberania</td>
<td>#Ebola can be spread by preparing or eating bushmeat. Don't prepare or eat bushmeat. #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:27</td>
<td>@J_weezz @J_weezz</td>
<td>If person w/#Ebola sneezes &amp; saliva/mucus contacts person’s eyes/nose/mouth, disease may be spread <a href="http://t.co/2pbt7c1wZB">http://t.co/2pbt7c1wZB</a> #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:29</td>
<td>@dawnbandit1 @dawnbandit1</td>
<td>W/out #Ebola symptoms is not contagious. If symptoms start on airplane risk low unless contact made w/bodily fluids. #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:30</td>
<td>@owenmp @owenmp</td>
<td>#Ebola can be detected in semen and breast milk after a patient has recovered. #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:32</td>
<td>@MamaSweet222 @MamaSweet222</td>
<td>#Ebola has not mutated to become airborne. Currently transmitted thru bodily fluids (common blood, urine, feces) #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:33</td>
<td>@FrehwotNG @FrehwotNG</td>
<td>#Ebola is not spread thru the air &amp; currently spread thru bodily fluids (most common urine, blood, feces) #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:34</td>
<td>@quijano_ricardo @quijano_ricardo</td>
<td>People who recover from #Ebola infection develop antibodies that last for at least 10 years, possibly longer. #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:36</td>
<td>@DrMcInnisDIT @DrMcInnisDIT</td>
<td>It is not transmitted thru mosquitos because not the natural host. Bats most likely host. #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:36</td>
<td>@Ryan_2ka @Ryan_2ka</td>
<td>#Ebola is killed with hospital-grade disinfectants (such as household bleach). #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:38</td>
<td>@sept151965 @sept151965</td>
<td>A standard #Ebola test can be run on transfused blood prior to transfusion to diagnose #Ebola status. #CDCChat</td>
</tr>
<tr>
<td>10/08/2014 13:40</td>
<td>@NoahhhBallard @NoahhhBallard</td>
<td>Until <a href="http://twitter.com">http://twitter.com</a></td>
</tr>
<tr>
<td>Time</td>
<td>User</td>
<td>Message</td>
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<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>13:40</td>
<td>a person becomes symptomatic, they are not shedding the virus and so they aren't contagious. #CDCchat</td>
<td><a href="http://twitter.com/CDCgov/status/5199349196233136">http://twitter.com/CDCgov/status/5199349196233136</a></td>
</tr>
<tr>
<td>13:41</td>
<td>@MsSW9 @MsSW9 #Ebola has been well studied since initially discovered in 1976. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/51993570792702713">http://twitter.com/CDCgov/status/51993570792702713</a></td>
</tr>
<tr>
<td>13:43</td>
<td>@Phantomyoda13 @Phantomyoda13 There are several tests for #Ebola. Please see our diagnosis page for more information. <a href="http://t.co/f4ZkC8mjZu">http://t.co/f4ZkC8mjZu</a> #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519936124853424128">http://twitter.com/CDCgov/status/519936124853424128</a></td>
</tr>
<tr>
<td>13:43</td>
<td>@jthurgood1 @jthurgood1 Fluids of a dead person are extremely contagious &amp; #Ebola virus lives in bodily fluids on surfaces for very long time. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519936093412917248">http://twitter.com/CDCgov/status/519936093412917248</a></td>
</tr>
<tr>
<td>13:45</td>
<td>@TerranceOmar @TerranceOmar #Ebola is transmitted through vomit &amp; saliva if entered through eyes, mouth, nose or cuts on skin #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519936603071217666">http://twitter.com/CDCgov/status/519936603071217666</a></td>
</tr>
<tr>
<td>13:47</td>
<td>@Casllie @Casllie #Ebola patient recovery unpredictable &amp; can be supported by medical intervention (infection control/administered IVs). #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519937166353637376">http://twitter.com/CDCgov/status/519937166353637376</a></td>
</tr>
<tr>
<td>13:47</td>
<td>@scrivenlking @scrivenlking Read our new factsheet to find out what you need to know about #Ebola. <a href="http://t.co/ybuUuxx1xB">http://t.co/ybuUuxx1xB</a></td>
<td><a href="http://twitter.com/CDCgov/status/519937025806729216">http://twitter.com/CDCgov/status/519937025806729216</a></td>
</tr>
<tr>
<td>13:50</td>
<td>@macb0530 @macb0530 *Case counts updated in conjunction with the WHO updates. #CDCchat</td>
<td><a href="http://twitter.com/CDCgov/status/519937881054658560">http://twitter.com/CDCgov/status/519937881054658560</a></td>
</tr>
<tr>
<td>13:50</td>
<td>@jq_321 @jq_321 Health systems should be prepared to mount a collaborative response to sudden outbreaks of any nature &amp; preparedness key #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519937845625364480">http://twitter.com/CDCgov/status/519937845625364480</a></td>
</tr>
<tr>
<td>13:52</td>
<td>@joeolsen23 @joeolsen23 Scientists continue to explore this &amp; current mutation rate is extremely slow &amp; unlikely. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519938369582034945">http://twitter.com/CDCgov/status/519938369582034945</a></td>
</tr>
<tr>
<td>13:55</td>
<td>We're nearing the end of our time today. Please send final comments and questions. #CDCchat</td>
<td><a href="http://twitter.com/CDCgov/status/519939241070305280">http://twitter.com/CDCgov/status/519939241070305280</a></td>
</tr>
<tr>
<td>13:55</td>
<td>@couldabeenagm @couldabeenagm CDC provides guidance &amp; support to state health depts. who adapt &amp; refine them for their needs. #CDCChat</td>
<td><a href="http://twitter.com/CDCgov/status/519939147210170368">http://twitter.com/CDCgov/status/519939147210170368</a></td>
</tr>
<tr>
<td>13:58</td>
<td>@VitD3Sue @VitD3Sue It can take weeks, even months, for patients bodies to completely recover. #CDCchat</td>
<td><a href="http://twitter.com/CDCgov/status/51993984949052672">http://twitter.com/CDCgov/status/51993984949052672</a></td>
</tr>
<tr>
<td>13:58</td>
<td>@AmplyHigh @AmplyHigh If you have</td>
<td><a href="http://twitter.com/CDCgov/status/51993984949052672">http://twitter.com/CDCgov/status/51993984949052672</a></td>
</tr>
<tr>
<td>Time</td>
<td>Text</td>
<td>URL</td>
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<tr>
<td>13:59</td>
<td>a fever above 101.5, general joint pain &amp; tiredness, headaches, then eventually vomiting &amp; diarrhea #CDCChat</td>
<td><a href="https://twitter.com/CDCgov/status/519940282536984576">CDCgov/status/519940282536984576</a></td>
</tr>
<tr>
<td>14:00</td>
<td>For more information and updates on #Ebola, visit CDC’s website: <a href="http://t.co/xHHdDh58qr">http://t.co/xHHdDh58qr</a> . #CDCChat</td>
<td><a href="https://twitter.com/CDCgov/status/519940536309141504">CDCgov/status/519940536309141504</a></td>
</tr>
<tr>
<td>14:01</td>
<td>Visit the Texas Department of State Health Services website for more information on #Ebola. <a href="https://t.co/5eS6cWncFG">https://t.co/5eS6cWncFG</a> #CDCChat</td>
<td><a href="https://twitter.com/CDCgov/status/519940626138546176">CDCgov/status/519940626138546176</a></td>
</tr>
<tr>
<td>14:02</td>
<td>@Mr_Makayi .@Mr_Makayi #Ebola on dry surfaces such as doorknobs and countertops can survive for several hours #CDCChat</td>
<td><a href="https://twitter.com/CDCgov/status/519941036031094784">CDCgov/status/519941036031094784</a></td>
</tr>
<tr>
<td>14:03</td>
<td>Thank you to our experts, and to all of you for joining us this important discussion today! #CDCChat</td>
<td><a href="https://twitter.com/CDCgov/status/519941223113850880">CDCgov/status/519941223113850880</a></td>
</tr>
<tr>
<td>14:03</td>
<td>Sorry we were unable to answer all Qs submitted, but we will post a Storify of #CDCchat &amp; invite you to check it out to see Qs answered.</td>
<td><a href="https://twitter.com/CDCgov/status/51994150984396800">CDCgov/status/51994150984396800</a></td>
</tr>
<tr>
<td>14:05</td>
<td>@hornets_girl .@hornets_girl Symptoms are fever (101.5°F), severe headache, muscle pain, diarrhea, vomiting, stomach pain, unexplained bleeding/bruising</td>
<td><a href="https://twitter.com/CDCgov/status/519941700278820864">CDCgov/status/519941700278820864</a></td>
</tr>
<tr>
<td>14:56</td>
<td>RT @DrFriedenCDC #Ebola needs to be top of mind for healthcare workers to rapidly ID, diagnose &amp; isolate patients. Must consider travel history.</td>
<td><a href="https://twitter.com/CDCgov/status/519984785889169409">CDCgov/status/519984785889169409</a></td>
</tr>
<tr>
<td>16:57</td>
<td>RT @DrFriedenCDC Entry screening is a layered approach that, when used with other public health measures, can strengthen our efforts to battle #Ebola.</td>
<td><a href="https://twitter.com/CDCgov/status/519984932052303872">CDCgov/status/519984932052303872</a></td>
</tr>
<tr>
<td>16:58</td>
<td>RT @DrFriedenCDC Enhanced entry screening at 5 airports will cover over 94% of travelers from #Ebola-affected countries.</td>
<td><a href="https://twitter.com/CDCgov/status/519985332117581824">CDCgov/status/519985332117581824</a></td>
</tr>
<tr>
<td>16:58</td>
<td>RT @DrFriedenCDC Saturday CDC &amp; @CustomsBorder will begin entry screening at JFK; 4 add’l airports next week: Newark, Dulles, Chicago O’Hare, &amp; Atlanta.</td>
<td><a href="https://twitter.com/CDCgov/status/51998536814002176">CDCgov/status/51998536814002176</a></td>
</tr>
<tr>
<td>16:59</td>
<td>RT @DrFriedenCDC Staff at other airports remain trained &amp; ready to assess &amp; respond to ill travelers, robust public health system there as a safety net.</td>
<td><a href="https://twitter.com/CDCgov/status/519985466624729088">CDCgov/status/519985466624729088</a></td>
</tr>
<tr>
<td>08:53</td>
<td>RT @NewsHour Meet the disease detectives tracking #Ebola at the #CDC <a href="http://t.co/VrUw1kq19">http://t.co/VrUw1kq19</a></td>
<td><a href="https://twitter.com/CDCgov/status/520225560812072960">CDCgov/status/520225560812072960</a></td>
</tr>
<tr>
<td>08:55</td>
<td>RT @CBSEveningNews Using Twitter to inoculate the public against ignorance about Ebola: <a href="http://t.co/NKDOnawLV2">http://t.co/NKDOnawLV2</a></td>
<td><a href="https://twitter.com/CDCgov/status/5202259611332280">CDCgov/status/5202259611332280</a></td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Tweet</td>
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<tr>
<td>10/09/2014</td>
<td>10:36</td>
<td>Interactive, hands-on, &amp; in-person CDC training for health workers re: #Ebola</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>11:08</td>
<td>@nursefriendly A person infected with #Ebola virus is not contagious until symptoms appear.</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>11:14</td>
<td>@Vance Gregory There have been no reports of pets becoming sick with #Ebola or of playing a role in transmission of Ebola to humans.</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>11:15</td>
<td>@MrSamuelColt #Ebola on dry surfaces can survive for several hrs. Virus in body fluids can survive up to several days at room temp.</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>11:16</td>
<td>@MrSamuelColt #Ebola is killed with EPA-registered hospital disinfectants.</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>11:23</td>
<td>@mikesrails #Ebola has not mutated to become airborne. Currently transmitted thru bodily fluids (common blood, urine, feces, etc)</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>11:26</td>
<td>@SmittytheYankee We do not shut our borders to countries affected by #Ebola; didn’t w/ SARS or pandemic H1N1 flu.</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>11:27</td>
<td>@SmittytheYankee Imposing quarantine on entire nations would backfire and fuel the #Ebola epidemic.</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>14:04</td>
<td>@md_ruthramo Please see @USAID’s website for volunteer info for medical professionals:</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>14:29</td>
<td>@ImKingShawn We believe doctors may have unknown exposures outside of #Ebola treatment units in general medical clinics.</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>14:30</td>
<td>@rashad0221 #Ebola on dry surfaces can survive for several hours. Virus in body fluids can survive up to several days at room temp.</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>14:33</td>
<td>@MamaSweet222 Humanitarian aid must continue &amp; flights must continue to transport teams and supplies to control the outbreak.</td>
</tr>
<tr>
<td>10/09/2014</td>
<td>14:33</td>
<td>@womenofteal #Ebola on dry surfaces can survive for several hours. Virus in</td>
</tr>
<tr>
<td>Time</td>
<td>Tweet</td>
<td>Source</td>
</tr>
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<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>14:34</td>
<td>body fluids can survive up to several days at room temp.</td>
<td><a href="http://twitter.com/CDCgov/status/520311419557134337">Twitter Link</a></td>
</tr>
<tr>
<td>10/09/2014 14:35</td>
<td>@Bukshizzle Imposing quarantine on entire nations would backfire and fuel the #Ebola epidemic.</td>
<td><a href="http://twitter.com/CDCgov/status/520311653561552896">Twitter Link</a></td>
</tr>
<tr>
<td>10/09/2014 14:35</td>
<td>@Bukshizzle We do not shut our borders to countries affected by #Ebola; didn’t w/ SARS or pandemic H1N1 flu.</td>
<td><a href="http://twitter.com/CDCgov/status/520311614609039360">Twitter Link</a></td>
</tr>
<tr>
<td>10/09/2014 15:13</td>
<td>RT @CDCtravel Entry screening offers important benefits. It’s one public health tool to help slow down &amp; reduce further spread of #Ebola.</td>
<td><a href="http://twitter.com/CDCgov/status/520321144230932480">Twitter Link</a></td>
</tr>
<tr>
<td>10/09/2014 15:13</td>
<td>RT @CDCtravel Entry screening has 2 goals: ID travelers who may be sick w/ or exposed to #Ebola &amp; ensure travelers are directed to health care they need.</td>
<td><a href="http://twitter.com/CDCgov/status/520321126489014272">Twitter Link</a></td>
</tr>
<tr>
<td>10/09/2014 15:20</td>
<td>Parents, share this pic w/ kids &amp; protect against respiratory illnesses caused by EV-D68 <a href="http://t.co/McPm2HIuSP">http://t.co/McPm2HIuSP</a> <a href="http://t.co/Z0Nfre9ujA">http://t.co/Z0Nfre9ujA</a></td>
<td><a href="http://twitter.com/CDCgov/status/520322997866221569">Twitter Link</a></td>
</tr>
<tr>
<td>10/09/2014 15:30</td>
<td>EV-D68 infections usually end in the fall. And flu season starts! Protect your child &amp; yourself with #flu vaccine. <a href="http://t.co/RWUMcvAO9O">http://t.co/RWUMcvAO9O</a></td>
<td><a href="http://twitter.com/CDCgov/status/520325500859056128">Twitter Link</a></td>
</tr>
<tr>
<td>10/09/2014 15:40</td>
<td>Kids w/ #asthma at risk for severe respiratory symptoms caused by #EVD68. Make sure they follow asthma action plan <a href="http://t.co/X5treq5UpM">http://t.co/X5treq5UpM</a></td>
<td><a href="http://twitter.com/CDCgov/status/520327935702867968">Twitter Link</a></td>
</tr>
<tr>
<td>10/10/2014 07:45</td>
<td>Children are most likely to get enteroviruses like #EVD68. Parents, make sure kids follow these prevention tips. <a href="http://t.co/TDaCYR6Rhuq">http://t.co/TDaCYR6Rhuq</a></td>
<td><a href="http://twitter.com/CDCgov/status/520570715259408384">Twitter Link</a></td>
</tr>
<tr>
<td>10/10/2014 08:00</td>
<td>Follow these steps to protect kids, esp those w/ asthma, from EV-D68 &amp; other viruses that cause respiratory illness <a href="http://t.co/McPm2HIuSP">http://t.co/McPm2HIuSP</a></td>
<td><a href="http://twitter.com/CDCgov/status/520575905954275328">Twitter Link</a></td>
</tr>
<tr>
<td>10/10/2014 08:05</td>
<td>RT @DrFriedenCDC Why I don’t support a travel ban to combat #Ebola outbreak <a href="http://t.co/0mKfK1j60">http://t.co/0mKfK1j60</a> @fxnopinion</td>
<td><a href="http://twitter.com/CDCgov/status/520570715259408384">Twitter Link</a></td>
</tr>
<tr>
<td>10/10/2014 09:42</td>
<td>33% of adults older than 80 injured in car crashes are hospitalized. Prevent these serious crash injuries #VitalSigns <a href="http://t.co/OxwBHyrmVm">http://t.co/OxwBHyrmVm</a></td>
<td><a href="http://twitter.com/CDCgov/status/520600256309100544">Twitter Link</a></td>
</tr>
<tr>
<td>10/10/2014 09:57</td>
<td>RT @DrFriedenCDC Closing borders may drive #Ebola patients underground, make addressing outbreak harder. Not the answer <a href="http://t.co/0mKfK1j60">http://t.co/0mKfK1j60</a> @fxnopinion</td>
<td><a href="http://twitter.com/CDCgov/status/520600256309100544">Twitter Link</a></td>
</tr>
<tr>
<td>10/10/2014 10:05</td>
<td>RT @CDCtravel Entry screening is most effective for ppl who would be at greatest risk— travelers who have been in Ebola-affected countries.</td>
<td><a href="http://twitter.com/CDCgov/status/520600173100507136">Twitter Link</a></td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Text</td>
</tr>
<tr>
<td>------------</td>
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<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10/10/2014</td>
<td>10:05</td>
<td>RT @CDCtravel Entry screening can ID ppl who are infected AND showing symptoms.</td>
</tr>
<tr>
<td>10/10/2014</td>
<td>10:25</td>
<td>CDC #DiseaseDetectives answered questions Wednesday on #Ebola in #CDCchat. Check out our new storify &amp; get the facts <a href="http://t.co/krG5w97g55">http://t.co/krG5w97g55</a></td>
</tr>
<tr>
<td>10/12/2014</td>
<td>08:23</td>
<td>Texas reports positive test for #Ebola in a healthcare worker. CDC doing confirmation testing today. <a href="http://t.co/TpQxwANk2C">http://t.co/TpQxwANk2C</a></td>
</tr>
<tr>
<td>10/12/2014</td>
<td>08:24</td>
<td>This is understandably disturbing news for the patient, the patient’s family &amp; colleagues &amp; the greater Dallas community.</td>
</tr>
<tr>
<td>10/12/2014</td>
<td>08:25</td>
<td>CDC &amp; Texas will continue ongoing contact tracing, health monitoring of contacts &amp; immediate isolations if symptoms develop.</td>
</tr>
<tr>
<td>10/12/2014</td>
<td>08:30</td>
<td>#Ebola is spread by direct contact w/ body fluids of a sick person or exposure to contaminated objects, like needles. <a href="http://t.co/ZvHZ349CTM">http://t.co/ZvHZ349CTM</a></td>
</tr>
<tr>
<td>10/12/2014</td>
<td>08:32</td>
<td>#Ebola is not spread through casual contact or through the air. <a href="http://t.co/Ayyq3gs9NVf">http://t.co/Ayyq3gs9NVf</a></td>
</tr>
<tr>
<td>10/12/2014</td>
<td>10:52</td>
<td>RT @DrFriedenCDC I am deeply concerned that a healthcare worker in Texas has tested preliminarily positive for #Ebola.</td>
</tr>
<tr>
<td>10/12/2014</td>
<td>10:56</td>
<td>RT @DrFriedenCDC #Ebola infections in health workers occur when there is a breach in protocol. CDC will be investigating how this may have occurred.</td>
</tr>
<tr>
<td>10/12/2014</td>
<td>10:57</td>
<td>RT @DrFriedenCDC #Ebola CDC 4 key activities: caring for patient safely, ID contacts, ID &amp; monitor potential HCW exposures, full investigation of how this occurred.</td>
</tr>
<tr>
<td>10/12/2014</td>
<td>10:57</td>
<td>RT @DrFriedenCDC CDC will continue to ramp up education and training of health care workers so they can safely &amp; effectively care for #Ebola patients.</td>
</tr>
<tr>
<td>10/12/2014</td>
<td>10:57</td>
<td>RT @DrFriedenCDC Health workers caring for #Ebola patients can do so safely, but it requires meticulous adherence to infection control procedures.</td>
</tr>
<tr>
<td>10/12/2014</td>
<td>10:58</td>
<td>RT @DrFriedenCDC We will break the chain of #Ebola transmission infections through meticulous contact tracing, isolation &amp; adherence to protocol.</td>
</tr>
<tr>
<td>10/12/2014</td>
<td>08:23</td>
<td>RT @DrFriedenCDC CDC lab tests confirm that the healthcare worker at <a href="http://twitter.com/CDCgov/status/52134392184754856">http://twitter.com/CDCgov/status/52134392184754856</a></td>
</tr>
<tr>
<td>Time</td>
<td>TX</td>
<td>Message</td>
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<tr>
<td>-------</td>
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<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>14:36</td>
<td>TX</td>
<td>Texas Presbyterian Hospital is positive for #Ebola. <a href="http://t.co/uAa9QNFzID">http://t.co/uAa9QNFzID</a></td>
</tr>
<tr>
<td>10/13/2014 12:09</td>
<td>TX</td>
<td>RT @DrFriedenCDC Stopping #Ebola is hard. We are working together with healthcare providers, health depts., and partners to make it safer &amp; easier.</td>
</tr>
<tr>
<td>10/13/2014 12:09</td>
<td>TX</td>
<td>RT @DrFriedenCDC My thoughts are w/ Dallas healthcare worker who contracted #Ebola while providing care. Her safe &amp; quality care is now our primary focus.</td>
</tr>
<tr>
<td>10/13/2014 12:10</td>
<td>TX</td>
<td>RT @DrFriedenCDC We will not wait for investigation results. We are immediately addressing issues &amp; making care for #Ebola patients safer &amp; easier.</td>
</tr>
<tr>
<td>10/13/2014 12:10</td>
<td>TX</td>
<td>RT @DrFriedenCDC The enemy is a virus and there is no blame to place on anyone on the frontlines of the #Ebola fight.</td>
</tr>
<tr>
<td>10/13/2014 12:10</td>
<td>TX</td>
<td>RT @DrFriedenCDC Health workers are on the frontlines of the #Ebola fight. We all take responsibility for their preparedness &amp; safety.</td>
</tr>
<tr>
<td>10/13/2014 12:11</td>
<td>TX</td>
<td>RT @DrFriedenCDC CDC continues to work hard w/ many others to reduce #Ebola risk to Americans by ending outbreak in W. Africa. More:</td>
</tr>
<tr>
<td>10/13/2014 12:11</td>
<td>TX</td>
<td>RT @DrFriedenCDC CDC will double down on training, outreach and assistance to partners, health depts., and hospitals.</td>
</tr>
<tr>
<td>10/13/2014 12:11</td>
<td>TX</td>
<td>RT @DrFriedenCDC CDC continues contact tracing of index patient contacts, newly diagnosed HCW contact &amp; HCWs who cared for index patient</td>
</tr>
<tr>
<td>10/14/2014 09:56</td>
<td>TX</td>
<td>Medical volunteers get trained by CDC before going to help with #Ebola: <a href="http://t.co/jGjCZDgF">http://t.co/jGjCZDgF</a> <a href="http://t.co/SzwmoiFX5s">http://t.co/SzwmoiFX5s</a></td>
</tr>
<tr>
<td>10/14/2014 11:03</td>
<td>TX</td>
<td>Many children in US have gotten sick w/ respiratory illnesses caused by enterovirus-D68. Learn more:</td>
</tr>
<tr>
<td>10/14/2014 12:01</td>
<td>TX</td>
<td>Use seat belts on every trip, no matter how short. Motor vehicle crash injuries are preventable. #VitalSigns</td>
</tr>
<tr>
<td>10/14/2014 14:09</td>
<td>TX</td>
<td>@calopoco Studies show #Ebola virus stays in bone marrow months after death. Corpses’ very contagious bc virus stays on skin.</td>
</tr>
<tr>
<td>10/14/2014 14:09</td>
<td>TX</td>
<td>CDC experts will answer questions on #Ebola in a live Q&amp;A, 10/15, 4PM ET.</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Tweet</td>
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<td>-------</td>
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<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>10/14</td>
<td>2</td>
<td>Follow our CDC Facebook page to participate <a href="http://t.co/zGLDfse9ij">http://t.co/zGLDfse9ij</a></td>
</tr>
<tr>
<td>16:30</td>
<td></td>
<td>New EV-D68 lab test helps CDC process specimen backlog; case numbers will rise but doesn’t mean situation worse. <a href="http://t.co/KlsvdTBH5">http://t.co/KlsvdTBH5</a></td>
</tr>
<tr>
<td>10/14</td>
<td>2</td>
<td>@SmallRedOne EV-D68 has been confirmed across US, mostly in severe cases. There are likely millions of mild cases. <a href="http://t.co/KlsvdTBH5">http://t.co/KlsvdTBH5</a></td>
</tr>
<tr>
<td>16:52</td>
<td></td>
<td>Texas reports positive test for #Ebola in one additional healthcare worker. CDC is doing confirmation testing. <a href="http://t.co/7pn8bKafpp">http://t.co/7pn8bKafpp</a></td>
</tr>
<tr>
<td>10/15</td>
<td>2</td>
<td>CDC is already taking active steps related to hospital preparedness for #Ebola treatment. <a href="http://t.co/ZmSqbeEhlk">http://t.co/ZmSqbeEhlk</a></td>
</tr>
<tr>
<td>05:00</td>
<td></td>
<td>CDC is asking all 132 passengers on Frontier Airlines flight 1143 from CLE to DFW on 10/13 to call 1-800-CDC-INFO: <a href="http://t.co/FVa0P8pipM">http://t.co/FVa0P8pipM</a></td>
</tr>
<tr>
<td>09:46</td>
<td></td>
<td>2nd health worker exhibited no #Ebola signs/symptoms on Frontier Airlines flight 1143 on 10/13, but passengers should contact 1-800-CDC-INFO</td>
</tr>
<tr>
<td>10/15</td>
<td>2</td>
<td>CDC is asking all 132 passengers on Frontier Airlines flight 1143 from CLE to DFW on 10/13 to call 1-800-CDC-INFO: <a href="http://t.co/FVa0P8pipM">http://t.co/FVa0P8pipM</a></td>
</tr>
<tr>
<td>05:02</td>
<td></td>
<td>2nd health worker exhibited no #Ebola signs/symptoms on Frontier Airlines flight 1143 on 10/13, but passengers should contact 1-800-CDC-INFO</td>
</tr>
<tr>
<td>09:46</td>
<td></td>
<td>2nd TX health worker confirmed to have tested positive for #Ebola &amp; traveled by air 10/13 before reporting symptoms: <a href="http://t.co/FVa0P8pipM">http://t.co/FVa0P8pipM</a></td>
</tr>
<tr>
<td>12:12</td>
<td></td>
<td>RT @DrFriedenCDC 2nd Texas health worker #Ebola case is very concerning. My thoughts are w/patient &amp; their family.</td>
</tr>
<tr>
<td>12:23</td>
<td></td>
<td>RT @DrFriedenCDC CDC working closely w/Texas hospital &amp; staff around the clock. Intensive efforts underway to train &amp; retrain staff on #Ebola preparedness.</td>
</tr>
<tr>
<td>13:20</td>
<td></td>
<td>To help avoid catching &amp; spreading EV-D68, parents &amp; children can follow basic steps to stay healthy <a href="http://t.co/9wHz6Da74">http://t.co/9wHz6Da74</a></td>
</tr>
<tr>
<td>13:37</td>
<td></td>
<td>@lunaflor11 Case numbers refer to the number of people who have been confirmed to have EV-D68 infection.</td>
</tr>
<tr>
<td>13:39</td>
<td></td>
<td>If your child has asthma, take CDC-recommended steps to prepare in case he or she catches EV-D68. <a href="http://t.co/9wHz6Da74">http://t.co/9wHz6Da74</a></td>
</tr>
<tr>
<td>10/16</td>
<td>2</td>
<td>RT @SecBurwell Additional steps like @CDCgov #Ebola response teams &amp; more educational efforts are underway b/c homeland preparedness remains top</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>User</td>
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</tr>
<tr>
<td>10/16/2014</td>
<td>10:30</td>
<td>@SecBurwell</td>
</tr>
<tr>
<td>10/16/2014</td>
<td>11:27</td>
<td>@WhiteHouse</td>
</tr>
<tr>
<td>10/16/2014</td>
<td>11:28</td>
<td>@WhiteHouse</td>
</tr>
<tr>
<td>10/16/2014</td>
<td>11:28</td>
<td>@Kate254</td>
</tr>
<tr>
<td>10/16/2014</td>
<td>14:00</td>
<td>@Aldough1</td>
</tr>
<tr>
<td>10/16/2014</td>
<td>14:08</td>
<td>@WhiteHouse</td>
</tr>
<tr>
<td>10/16/2014</td>
<td>14:35</td>
<td>@WhiteHouse</td>
</tr>
<tr>
<td>10/16/2014</td>
<td>15:01</td>
<td>JackyBeeR</td>
</tr>
<tr>
<td>10/16/2014</td>
<td>15:17</td>
<td>BigSamDecatur</td>
</tr>
<tr>
<td>10/16/2014</td>
<td>15:18</td>
<td>CDCgov</td>
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401
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Tweet</th>
<th>Likes</th>
<th>Retweets</th>
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</thead>
<tbody>
<tr>
<td>10/16/2</td>
<td>15:18</td>
<td>many states. Parents, keep following prevention steps <a href="http://t.co/aN17n2PjD3">http://t.co/aN17n2PjD3</a></td>
<td>522859168701906944</td>
<td>1</td>
</tr>
<tr>
<td>10/16/2</td>
<td>014</td>
<td>@ann_davenport_Here is a link to the map: <a href="http://t.co/aN17n2PjD3">http://t.co/aN17n2PjD3</a></td>
<td><a href="http://twitter.com/CDCgov/status/522859444146016256">http://twitter.com/CDCgov/status/522859444146016256</a></td>
<td>689</td>
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<tr>
<td>10/16/2</td>
<td>17:54</td>
<td>#Ebola virus is spread through direct contact with the blood or bodily fluids of a person who is sick with #Ebola. <a href="http://t.co/KApMgs2Xa0">http://t.co/KApMgs2Xa0</a></td>
<td><a href="http://twitter.com/CDCgov/status/522898331631357952">http://twitter.com/CDCgov/status/522898331631357952</a></td>
<td>306</td>
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<tr>
<td>10/16/2</td>
<td>19:05</td>
<td>CDC is now also asking passengers on Frontier Airlines flight 1142 DFW to CLE on 10/10 to call 1-800-CDC-INFO. <a href="http://t.co/Bki70FxoVh">http://t.co/Bki70FxoVh</a></td>
<td><a href="http://twitter.com/CDCgov/status/522916258610937856">http://twitter.com/CDCgov/status/522916258610937856</a></td>
<td>185</td>
</tr>
<tr>
<td>10/16/2</td>
<td>19:06</td>
<td>Based on new info related to 2nd Dallas HCW who tested positive for Ebola, CDC is expanding passenger notification <a href="http://t.co/Bki70FxoVh">http://t.co/Bki70FxoVh</a></td>
<td><a href="http://twitter.com/CDCgov/status/522916449833476096">http://twitter.com/CDCgov/status/522916449833476096</a></td>
<td>69</td>
</tr>
<tr>
<td>10/17/2</td>
<td>014</td>
<td>#Ebola is not spread through casual contact, air, water or any food grown or legally purchased in US. <a href="http://t.co/HUSZfHhxxc">http://t.co/HUSZfHhxxc</a></td>
<td><a href="http://twitter.com/CDCgov/status/523099981734248448">http://twitter.com/CDCgov/status/523099981734248448</a></td>
<td>485</td>
</tr>
<tr>
<td>10/17/2</td>
<td>014</td>
<td>@ladykayaker Adults can get infected w/ EV-D68; usually mild to no symptoms. People w/ asthma are at higher risk for serious illness. <a href="http://t.co/DxeSlNhwKE">http://t.co/DxeSlNhwKE</a></td>
<td><a href="http://twitter.com/CDCgov/status/523124641687425024">http://twitter.com/CDCgov/status/523124641687425024</a></td>
<td>1</td>
</tr>
<tr>
<td>10/17/2</td>
<td>014</td>
<td>Get the facts about #Ebola. Here's what you need to know about when a person can spread the disease to others. <a href="http://t.co/DxeSlNhwKE">http://t.co/DxeSlNhwKE</a></td>
<td><a href="http://twitter.com/CDCgov/status/523127477456351234">http://twitter.com/CDCgov/status/523127477456351234</a></td>
<td>708</td>
</tr>
<tr>
<td>10/17/2</td>
<td>014</td>
<td>#Enterovirus season usually ends in late fall. See if EV-D68-like illnesses are already declining in your state <a href="http://t.co/PzJxBYJlJC">http://t.co/PzJxBYJlJC</a></td>
<td><a href="http://twitter.com/CDCgov/status/523141552097726464">http://twitter.com/CDCgov/status/523141552097726464</a></td>
<td>62</td>
</tr>
<tr>
<td>10/17/2</td>
<td>014</td>
<td>We put together your most common questions about Ebola. Our first #EbolaFact is about sneezing. <a href="http://t.co/tkPqHyr4S">http://t.co/tkPqHyr4S</a></td>
<td><a href="http://twitter.com/CDCgov/status/52316429505277952">http://twitter.com/CDCgov/status/52316429505277952</a></td>
<td>527</td>
</tr>
<tr>
<td>10/17/2</td>
<td>014</td>
<td>@itsmepanda1 #Ebola can enter through broken skin or unprotected mucus membranes.<a href="http://t.co/VcvMgVZqgs">http://t.co/VcvMgVZqgs</a></td>
<td><a href="http://twitter.com/CDCgov/status/523166163216662528">http://twitter.com/CDCgov/status/523166163216662528</a></td>
<td>7</td>
</tr>
<tr>
<td>10/17/2</td>
<td>014</td>
<td>@sweetbethinator #Ebola is spread through direct contact w/body fluids (blood, urine, etc) of an infected person. <a href="http://t.co/VcvMgVZqgs">http://t.co/VcvMgVZqgs</a></td>
<td><a href="http://twitter.com/CDCgov/status/52316648444249089">http://twitter.com/CDCgov/status/52316648444249089</a></td>
<td>0</td>
</tr>
<tr>
<td>10/17/2</td>
<td>014</td>
<td>@sweetbethinator #Ebola is spread through direct contact w/body fluids (blood, urine, etc) of an infected person. <a href="http://t.co/VcvMgVZqgs">http://t.co/VcvMgVZqgs</a></td>
<td><a href="http://twitter.com/CDCgov/status/523166879079485440">http://twitter.com/CDCgov/status/523166879079485440</a></td>
<td>13</td>
</tr>
</tbody>
</table>
Ebola on dry surfaces can survive for several hrs. Virus in body fluids can survive up to several days at room temp. [link]

Unless you have been in contact with a confirmed person, flu-like symptoms will most likely be flu. [link]

In Africa, preparing bushmeat (wild animals hunted for food) has been a source of infection. [link]

Our next #EbolaFact is about how long the virus lives on surfaces, a common question about Ebola. [link]

Ebola on dry surfaces can survive for several hrs. Virus in body fluids can survive up to several days at room temp. [link]

Ebola is killed with EPA-registered hospital disinfectants. [link]

Ebola is not contagious until symptoms appear [link]

Sanitary sewage handling processes in the U.S. are designed to inactivate infectious agents, like Ebola. [link]

Yes, Ebola has been found in [link]
<table>
<thead>
<tr>
<th>Time</th>
<th>Username</th>
<th>Tweet</th>
<th>URL</th>
<th>Retweets</th>
<th>Replies</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:46</td>
<td>@brittmweeter2</td>
<td>Currently, routine testing for Ebola is not available for pets. More info about Ebola &amp; pets:</td>
<td><a href="http://twitter.com/CDCgov/status/523516197086978048">http://twitter.com/CDCgov/status/523516197086978048</a></td>
<td>2</td>
<td>14464</td>
</tr>
<tr>
<td>10:49</td>
<td>@KenTenTen</td>
<td>Direct contact = body fluids from infected person touched someone’s eyes, nose, or mouth or an open cut, wound, or abrasion.</td>
<td><a href="http://twitter.com/CDCgov/status/523516485508288512">http://twitter.com/CDCgov/status/523516485508288512</a></td>
<td>7</td>
<td>19449</td>
</tr>
<tr>
<td>10:50</td>
<td>@JDummy2</td>
<td>Ebola is only spread through direct contact w/body fluids (blood, urine, feces, saliva, &amp; other secretions) of an infected person.</td>
<td><a href="http://twitter.com/CDCgov/status/523516877142256640">http://twitter.com/CDCgov/status/523516877142256640</a></td>
<td>5</td>
<td>16413</td>
</tr>
<tr>
<td>10:52</td>
<td>@MandySkogeo</td>
<td>Ebola is spread through droplets. If person w/ Ebola sneezes &amp; saliva/mucus contacts person’s eyes/nose/mouth, it may be spread</td>
<td><a href="http://twitter.com/CDCgov/status/523520255059019937">http://twitter.com/CDCgov/status/523520255059019937</a></td>
<td>53</td>
<td>40034</td>
</tr>
<tr>
<td>11:05</td>
<td>@ChiaraSoprano1 @MandySkogeo</td>
<td>Ebola on dry surfaces can survive for several hrs.; in body fluids can survive up to several days at room temp.</td>
<td><a href="http://twitter.com/CDCgov/status/523520482457706496">http://twitter.com/CDCgov/status/523520482457706496</a></td>
<td>30</td>
<td>39335</td>
</tr>
<tr>
<td>12:00</td>
<td>EV-D68-like illnesses now low or declining in many states. But people should continue to follow preventive steps.</td>
<td><a href="http://t.co/McPm2HqTKL">http://t.co/McPm2HqTKL</a></td>
<td></td>
<td>54</td>
<td>479365</td>
</tr>
<tr>
<td>12:25</td>
<td>Is it safe to fly in the US? New FAQ answers questions about Dallas &amp; Ohio flights of health worker w/ #Ebola:</td>
<td><a href="http://t.co/deDrO1kJg8">http://t.co/deDrO1kJg8</a></td>
<td></td>
<td>112</td>
<td>243105</td>
</tr>
<tr>
<td>12:29</td>
<td>@SauITBawls305 @DrNancyNBCNEWS</td>
<td>Our latest #EbolaFact answers that: <a href="https://t.co/123KKDHbzb">https://t.co/123KKDHbzb</a></td>
<td><a href="http://t.co/123KKDHbzb">http://t.co/123KKDHbzb</a></td>
<td>1</td>
<td>1956</td>
</tr>
<tr>
<td>12:36</td>
<td>@youngkso</td>
<td>Available evidence shows people who recover from Ebola develop antibodies that last for at least 10 yrs, possibly longer.</td>
<td><a href="http://t.co/McPm2HqTKL">http://t.co/McPm2HqTKL</a></td>
<td>23</td>
<td>25944</td>
</tr>
<tr>
<td>14:20</td>
<td>RT @HHSgov &quot;We know how to fight this disease.&quot; —President Obama on the U.S. response to #Ebola:</td>
<td><a href="http://t.co/XHe1sUFn3x">http://t.co/XHe1sUFn3x</a></td>
<td></td>
<td>0</td>
<td>413331</td>
</tr>
<tr>
<td>11:17</td>
<td>RT @WhiteHouse &quot;The United States will continue to help lead the global response in West Africa.&quot; —President Obama on #Ebola:</td>
<td><a href="http://t.co/shrnrch3Zxg">http://t.co/shrnrch3Zxg</a></td>
<td></td>
<td>0</td>
<td>414664</td>
</tr>
<tr>
<td>11:17</td>
<td>RT @HHSgov The #Ebola virus is NOT spread through: casual contact, air, water, food grown or legally purchased in U.S. <a href="http://t.co/DaRfxXyyK">http://t.co/DaRfxXyyK</a></td>
<td><a href="http://t.co/52388560584379042">http://t.co/52388560584379042</a></td>
<td></td>
<td>0</td>
<td>414664</td>
</tr>
<tr>
<td>11:59</td>
<td>Today's #EbolaFact is about whether pets can transmit Ebola.</td>
<td><a href="http://t.co/thGPYfEKcd">http://t.co/thGPYfEKcd</a></td>
<td></td>
<td>209</td>
<td>1093744</td>
</tr>
</tbody>
</table>
The outbreak in West Africa is the Ebola-Zaire strain. 

Our medical experts tell us that the best way to stop this disease is to stop it at its source." — Obama on #Ebola: 

http://t.co/sbnrchi3Zxg

Our medical experts tell us that the best way to stop this disease is to stop it at its source." — Obama on #Ebola: 

http://t.co/sbnrchi3Zxg

Healthcare prof: Learn about protection at work w/ #EbolaTraining on 10/21. Hosted by @PQCNews & @GNYHA. Register: 

http://t.co/pZ9NpSa9Bg

Contact tracing is one of most important tools CDC uses to prevent the spread of #Ebola. 

http://t.co/H9OpXo5xyh

@YacPics #Ebola can enter through broken skin or unprotected mucus membranes. 

http://t.co/iH9OpXo5xyh

@YacPics #Ebola is spread through direct contact w/ body fluids (blood, urine, feces, saliva, & other secretions) of an infected person. 

http://t.co/pZ9NpSa9Bg

Our next #EbolaFact is about the incubation period for Ebola. 

http://t.co/pZ9NpSa9Bg

#EbolaFact: After healthcare worker w/ Ebola traveled by air, many asked if it was safe to fly in the US. 

http://t.co/769ZXXvazu

@imarydaughters No, sewage handling processes in the US are designed to inactivate infectious agents, like Ebola. 

http://t.co/769ZXXvazu

Tuesday, 10/21: #Ebola educational session for healthcare workers hosted by @PQCNews & @GNYHA. 

#EbolaTraining

http://t.co/sbnrchi3Zxg
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Tweet</th>
<th>Retweets</th>
<th>Replies</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/20</td>
<td>15:36</td>
<td>RT @WhiteHouse If you've got questions about #Ebola, read what we're doing to respond &amp; keep Americans safe: [link]</td>
<td>0</td>
<td>416233</td>
</tr>
<tr>
<td>10/20</td>
<td>19:05</td>
<td>RT @DrFriedenCDC Today we issue tightened guidance for U.S. healthcare workers on personal protective equipment (PPE) for Ebola [link]</td>
<td>0</td>
<td>416233</td>
</tr>
<tr>
<td>10/20</td>
<td>19:11</td>
<td>RT @DrFriedenCDC CDC PPE guidance provides increased margin of safety to better protect healthcare workers caring for Ebola patients. [link]</td>
<td>0</td>
<td>416233</td>
</tr>
<tr>
<td>10/20</td>
<td>19:18</td>
<td>RT @DrFriedenCDC CDC &amp; partners will ramp up training offerings for healthcare workers to reiterate all aspects of safe care recommendations. [link]</td>
<td>0</td>
<td>416233</td>
</tr>
<tr>
<td>10/21</td>
<td>06:07</td>
<td>Tues. 10/21 at 10am: #Ebola educational session for healthcare workers hosted by @PQCNews &amp; @GNYHA. #EbolaTraining [link]</td>
<td>38</td>
<td>454460</td>
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<tr>
<td>10/21</td>
<td>06:08</td>
<td>Watch the #Ebola healthcare worker training live on @GNYHA site at 10am today: [link]</td>
<td>112</td>
<td>2935978</td>
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<tr>
<td>10/21</td>
<td>07:13</td>
<td>RT @GNYHA Health care workers gather for #EbolaTraining in NYC. Watch the live stream at [link]</td>
<td>0</td>
<td>417448</td>
</tr>
<tr>
<td>10/21</td>
<td>08:15</td>
<td>Follow @CDC_eHealth TODAY at 1pm ET for live tweeting of #CDCGrandRounds session. [link]</td>
<td>45</td>
<td>995412</td>
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<tr>
<td>10/21</td>
<td>08:44</td>
<td>.@Medscape is also live streaming the #Ebola education session for healthcare workers [link]</td>
<td>48</td>
<td>466808</td>
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<tr>
<td>10/21</td>
<td>09:29</td>
<td>RT @GNYHA #Ebola protocols are being reviewed by @CDCgov at #EbolaTraining, Watch now at [link]</td>
<td>0</td>
<td>417448</td>
</tr>
<tr>
<td>10/21</td>
<td>09:53</td>
<td>RT @GNYHA The #EbolaTraining will be archived and available for viewing by tomorrow morning at [link]</td>
<td>0</td>
<td>417448</td>
</tr>
<tr>
<td>Time</td>
<td>Tweet</td>
<td>URL</td>
<td>Reply Count</td>
<td>Like Count</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
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<tr>
<td>10:07</td>
<td>RT @DrFriedenCDC Innovative response by Firestone health officials may have limited spread of #Ebola in Liberia. <a href="http://twitter.com/CDCgov/status/52459292838235392">Link</a></td>
<td>0</td>
<td>417448</td>
<td></td>
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<tr>
<td>10:08</td>
<td>RT @DrFriedenCDC Innovation in private sector offers lessons for interrupting Ebola spread. How Firestone stopped #Ebola: <a href="http://twitter.com/CDCgov/status/524593016871596034">Link</a></td>
<td>0</td>
<td>417448</td>
<td></td>
</tr>
<tr>
<td>10:31</td>
<td>Have a question for #CDCGrandRounds on how pharmacists can improve our nation's health? Reply to this tweet or email <a href="mailto:grandrounds@cdc.gov">grandrounds@cdc.gov</a> <a href="http://twitter.com/CDCgov/status/524598797611611136">Link</a></td>
<td>9</td>
<td>930356</td>
<td></td>
</tr>
<tr>
<td>10:33</td>
<td>Tune in to #CDCGrandRounds webcast in 30 mins to learn the impact pharmacists can have in public health. <a href="http://twitter.com/CDCgov/status/524599376942235648">Link</a></td>
<td>27</td>
<td>948822</td>
<td></td>
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<tr>
<td>10:59</td>
<td>@CDCgov Follow @CDC_eHealth on Twitter to participate in #CDCGrandRounds at 1PM. <a href="http://twitter.com/CDCgov/status/524605958698565632">Link</a></td>
<td>6</td>
<td>14058</td>
<td></td>
</tr>
<tr>
<td>10:59</td>
<td>@CDCgov Follow @CDC_eHealth on Twitter to participate in #CDCGrandRounds at 1PM. <a href="http://twitter.com/CDCgov/status/524605958698565632">Link</a></td>
<td>6</td>
<td>14058</td>
<td></td>
</tr>
<tr>
<td>11:02</td>
<td>@_Carolina_DJ Thank you for your interest. Please email your questions to <a href="mailto:dpaid@cdc.gov">dpaid@cdc.gov</a> or call 1-404-639-3286, 09:00-18:00 EDT <a href="http://twitter.com/CDCgov/status/524606693276418048">Link</a></td>
<td>1</td>
<td>1098</td>
<td></td>
</tr>
<tr>
<td>11:12</td>
<td>T1. Ebola virus is spread through direct contact w/ blood or body fluids of a person who is sick w/Ebola #abcDrBchat <a href="http://twitter.com/CDCgov/status/524609158214332416">Link</a></td>
<td>228</td>
<td>1684406</td>
<td></td>
</tr>
<tr>
<td>11:19</td>
<td>T2. There have been 3 confirmed cases of Ebola in the US. Visit CDC website for the latest case counts: <a href="http://twitter.com/CDCgov/status/52461095835091457">Link</a></td>
<td>72</td>
<td>2313727</td>
<td></td>
</tr>
<tr>
<td>11:23</td>
<td>T3. Last night, CDC issued tighter guidance for US healthcare workers on PPE: <a href="http://twitter.com/CDCgov/status/524611900144107520">Link</a></td>
<td>72</td>
<td>2245597</td>
<td></td>
</tr>
<tr>
<td>11:26</td>
<td>T4. Signs of #Ebola: fever, headache, muscle pain, diarrhea, vomiting, stomach pain, unexplained bleeding #abcDrBchat <a href="http://twitter.com/CDCgov/status/524612630858960896">Link</a></td>
<td>132</td>
<td>679550</td>
<td></td>
</tr>
<tr>
<td>11:58</td>
<td>T11. For the latest updates on #Ebola, including updated case counts, visit the CDC website: <a href="http://twitter.com/CDCgov/status/524620691099119618">Link</a></td>
<td>43</td>
<td>547766</td>
<td></td>
</tr>
<tr>
<td>12:07</td>
<td>Our next #EbolaFact is about the symptoms of Ebola. <a href="http://twitter.com/CDCgov/status/524622981465907200">Link</a></td>
<td>119</td>
<td>517420</td>
<td></td>
</tr>
</tbody>
</table>
10/21/2
13:30  Our next #EbolaFact is about the level of #Ebola virus in the body & how it directly relates to contagiousness. http://t.co/OmLJzGQGPo 147 599012

10/21/2
15:40  Enhanced PPE guidance is centered on 3 principles to increase healthcare worker safety http://t.co/TZXWUBag3k http://t.co/fwPbswJ4WU 173 1296280

10/22/2
07:50  @nursefriendly Studies show corpses very contagious for weeks, potentially months, because #Ebola virus can survive. http://twitter.com/CDCgov/status/524920828631461888 16 227617

10/22/2
08:34  @rahtid Visit http://t.co/w5NpOoRE3l http://twitter.com/CDCgov/status/524931749567279104 0 0

10/22/2
08:37  @JWeber2349 There have been no reports of pets becoming sick with #Ebola or of playing a role in transmission of Ebola to humans. http://twitter.com/CDCgov/status/524932592299433984 3 933

10/22/2
09:49  Our next #EbolaFact is about whether mosquitoes spread Ebola. http://t.co/DX31pPDZWl 131 1146083

10/22/2
10:20  @ChiaraSoprano1 Currently there has been no report of dog to human transmission or showing symptoms of #Ebola http://twitter.com/CDCgov/status/524958436333977600 1 5284

10/22/2
11:30  #EbolaFact: No cure for #Ebola, but @NIH @DeptofDefense & other fed partners are working on a vaccine. http://t.co/IBftmce3NX 161 2164907

10/22/2
12:35  RT @DrFriedenCDC CDC announces new active monitoring system to further protect Americans from #Ebola. http://t.co/VSxmh Herm 0 418730

10/22/2
13:16  RT @DrFriedenCDC Beginning active post-arrival monitoring in 6 states, working closely with CDC: NY, PA, MD, VA, NJ & GA: http://t.co/VSSxmh Herm 0 418730

10/22/2
13:16  RT @DrFriedenCDC Active monitoring program will require daily contact with all travelers returning to US from #Ebola-affected countries for 21 days. http://twitter.com/CDCgov/status/525002663751340032 0 418730

10/22/2
13:24  RT @DrFriedenCDC CDC will provide technical support & resources to assist state & local health departments w/ active monitoring. http://twitter.com/CDCgov/status/525004696420122624 0 418730

10/22/2
13:30  CDC has enhanced personal protective equipment guidance for healthcare workers caring for patients w/ #Ebola http://t.co/qXbUhzUpbB 98 764047

10/22/2
13:46  RT @DrFriedenCDC Active monitoring program is another step to protect families, communities & health workers http://twitter.com/CDCgov/status/525010413545848 0 418730
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Tweet</th>
<th>URL</th>
<th>RTs</th>
<th>Favorites</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/22/2014</td>
<td>14:06</td>
<td>RT @DrFriedenCDC We can’t get to zero risk in U.S. until we stop the Ebola epidemic at its source in Liberia, Sierra Leone &amp; Guinea.</td>
<td><a href="http://twitter.com/CDCgov/status/52501524963710568">Link</a></td>
<td>0</td>
<td>418730</td>
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<tr>
<td>10/22/2014</td>
<td>14:31</td>
<td>PPE is only 1 aspect of safe care to patients w/ Ebola. Learn the 5 pillars of safety for healthcare workers <a href="http://t.co/7ZWUWBZg3k">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/525021585485611009">Link</a></td>
<td>93</td>
<td>524529</td>
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<tr>
<td>10/22/2014</td>
<td>17:15</td>
<td>RT @CDCtravel Why was a nurse w/ Ebola allowed to travel? Is it safe to fly? How long does Ebola live on surfaces? Get answers: <a href="http://t.co/l0j8Tbse5h">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/525063026748055552">Link</a></td>
<td>0</td>
<td>418730</td>
</tr>
<tr>
<td>10/22/2014</td>
<td>17:16</td>
<td>RT @CDCtravel Our staff at other airports remain trained &amp; ready to respond to any reports of ill travelers—part of our normal public health safety net.</td>
<td><a href="http://twitter.com/CDCgov/status/525063049078509368">Link</a></td>
<td>0</td>
<td>418730</td>
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<tr>
<td>10/22/2014</td>
<td>17:47</td>
<td>RT @CDCtravel Now all passengers to US from Liberia, Sierra Leone or Guinea required to fly into airports w/ enhanced screening: <a href="http://t.co/TdlysWWw7r">Link</a></td>
<td><a href="http://twitter.com/CDCgov/status/525070918748040096">Link</a></td>
<td>0</td>
<td>418730</td>
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<tr>
<td>10/23/2014</td>
<td>07:50</td>
<td>@PAebly People who recover from Ebola infection develop antibodies that last for at least 10 years, and possibly longer.</td>
<td><a href="http://twitter.com/CDCgov/status/525283044220211201">Link</a></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10/23/2014</td>
<td>07:56</td>
<td>@itsmepanda1 Currently there has been no report of dog to human transmission or showing symptoms of Ebola</td>
<td><a href="http://twitter.com/CDCgov/status/525284730972147713">Link</a></td>
<td>0</td>
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<td>10/23/2014</td>
<td>07:57</td>
<td>@itsmepanda1 CDC is working with AVMA/USDA and other partners to develop guidance for the US pet population.</td>
<td><a href="http://twitter.com/CDCgov/status/525284792041218048">Link</a></td>
<td>2</td>
<td>1144</td>
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<tr>
<td>10/23/2014</td>
<td>07:58</td>
<td>@shadowcass1 CDC is working with AVMA/USDA and other partners to develop guidance for the US pet population.</td>
<td><a href="http://twitter.com/CDCgov/status/525285172330389504">Link</a></td>
<td>0</td>
<td>0</td>
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<tr>
<td>10/23/2014</td>
<td>07:58</td>
<td>@shadowcass1 Currently there has been no report of dog to human transmission or showing symptoms of Ebola</td>
<td><a href="http://twitter.com/CDCgov/status/525285018093240320">Link</a></td>
<td>2</td>
<td>2524</td>
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<tr>
<td>10/23/2014</td>
<td>08:06</td>
<td>Facilities need to ensure all healthcare providers practice &amp; understand how to appropriately use PPE for Ebola</td>
<td><a href="http://twitter.com/IhHdKCe8nd">Link</a></td>
<td>54</td>
<td>687168</td>
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<td>10/23/2014</td>
<td>09:45</td>
<td>RT @WhiteHouse Get the latest on our comprehensive effort to respond to Ebola and keep Americans safe</td>
<td><a href="http://twitter.com/CDCgov/status/525312035132035072">Link</a></td>
<td>0</td>
<td>420564</td>
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<tr>
<td>10/23/2014</td>
<td>10:02</td>
<td>Our next #EbolaFact is about whether a person can spread #Ebola without symptoms.</td>
<td><a href="http://twitter.com/CDCgov/status/525316248981499904">Link</a></td>
<td>135</td>
<td>557322</td>
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<td>Date</td>
<td>Time</td>
<td>Username</td>
<td>Tweet</td>
<td>URL</td>
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<td>--------------------------------------------------------------------------------------------</td>
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<tr>
<td>10/23/2014</td>
<td>12:26</td>
<td>@lawpb1</td>
<td>Symptoms may appear anywhere from 2 to 21 days after exposure, although 8-10 days is most common. [link]</td>
<td>[link]</td>
<td>1</td>
</tr>
<tr>
<td>10/23/2014</td>
<td>13:17</td>
<td>@stevenfoster4</td>
<td>Signs of #Ebola incl fever, headache, muscle pain, diarrhea, vomiting, stomach pain, or unexplained bleeding.</td>
<td>[link]</td>
<td>2</td>
</tr>
<tr>
<td>10/23/2014</td>
<td>13:56</td>
<td>-</td>
<td>#Ebola is spread by direct contact w/ body fluids of a sick person or exposure to contaminated objects, like needles. [link]</td>
<td>[link]</td>
<td>266</td>
</tr>
<tr>
<td>10/23/2014</td>
<td>14:33</td>
<td>-</td>
<td>Health workers, do you know when to think #Ebola, evaluate the patient &amp; consult w/public health? New fact sheet: [link]</td>
<td>[link]</td>
<td>96</td>
</tr>
<tr>
<td>10/23/2014</td>
<td>14:38</td>
<td>@sharm629</td>
<td>#Ebola on dry surfaces can survive for several hrs. Virus in body fluids can survive up to several days at room temp.</td>
<td>[link]</td>
<td>4</td>
</tr>
<tr>
<td>10/23/2014</td>
<td>14:40</td>
<td>@Ahneman16</td>
<td>Yes, the website should be updated with this version soon.</td>
<td>[link]</td>
<td>0</td>
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<tr>
<td>10/23/2014</td>
<td>14:48</td>
<td>@Beccastclair</td>
<td>#Ebola is spread through direct contact w/body fluids (blood, urine, feces, saliva, &amp; other secretions) of an infected person</td>
<td>[link]</td>
<td>5</td>
</tr>
<tr>
<td>10/23/2014</td>
<td>15:01</td>
<td>-</td>
<td>New EV-D68 map continues to indicate reduced EV-D68-like illnesses. Only 1 state reported increasing activity. [link]</td>
<td>[link]</td>
<td>41</td>
</tr>
<tr>
<td>10/23/2014</td>
<td>15:30</td>
<td>-</td>
<td>New EV-D68 map shows 34 states &amp; DC report low/declining illnesses. Parents, keep following prevention steps. [link]</td>
<td>[link]</td>
<td>48</td>
</tr>
<tr>
<td>10/23/2014</td>
<td>19:03</td>
<td>@beefwhiskey</td>
<td>#Ebola on dry surfaces can survive for several hrs. Virus in body fluids can survive up to several days at room temp.</td>
<td>[link]</td>
<td>15</td>
</tr>
<tr>
<td>10/23/2014</td>
<td>19:13</td>
<td>@MarlyRN</td>
<td>Healthcare workers wear protective gear to protect themselves from large amounts of bodily fluids, not because Ebola is airborne. [link]</td>
<td>[link]</td>
<td>6</td>
</tr>
<tr>
<td>10/23/2014</td>
<td>20:19</td>
<td>-</td>
<td>New York City reports positive test for #Ebola in volunteer international aid worker. CDC doing confirmation testing [link]</td>
<td>[link]</td>
<td>237</td>
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<td>10/23/2014</td>
<td>20:20</td>
<td>-</td>
<td>The #Ebola patient remains in isolation at Bellevue Hospital in New York City. [link]</td>
<td>[link]</td>
<td>127</td>
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</tbody>
</table>
CDC team determined earlier this week that
Bellevue Hospital has been trained in proper protocols & is well prepared to treat #Ebola patients.

Healthcare worker returned through JFK Airport on Oct. 17, participated in enhanced screening for all returning travelers from W. Africa.

Patient didn't have fever or other symptoms of illness during screening; reported fever to health officials for 1st time today.

3 members of CDC’s Ebola Response Team will arrive in New York City tonight; CDC Ebola experts already in NYC to offer immediate support.

CDC in close communications w/ New York City Health Department & Bellevue Hospital, is providing technical assistance & resources.

#Ebola is spread by direct contact w/ body fluids of a sick person or exposure to contaminated objects, like needles. http://t.co/tsSjZ8g8nb

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<tr>
<th>Time</th>
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<tr>
<td>10:05</td>
<td>#Ebola virus is not contagious until symptoms appear. <a href="http://t.co/5104bHtYtU">http://t.co/5104bHtYtU</a></td>
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<td>10:06</td>
<td>@GlenBrown15 How easily the infection is spread from one person to another is directly related to the level of virus in the body. <a href="http://twitter.com/CDCgov/status/526042191832305664">http://twitter.com/CDCgov/status/526042191832305664</a></td>
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<td>10:10</td>
<td>@QamarSaid1 There is no FDA-approved vaccine for Ebola. @NIH &amp; @DeptOfDefense have both begun human testing on investigational vaccines. <a href="http://twitter.com/CDCgov/status/526043143737974784">http://twitter.com/CDCgov/status/526043143737974784</a></td>
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<td>10:17</td>
<td>@nik_repka You'd have to touch body fluids on an object &amp; touch eyes/nose/mouth or a cut in the skin, or object would have to puncture skin. <a href="http://twitter.com/CDCgov/status/526044766006706176">http://twitter.com/CDCgov/status/526044766006706176</a></td>
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<td>10:46</td>
<td>@EbolaPhone Ooops! Sorry about that. Here is correct link: <a href="http://t.co/Y2y0pizBpp">http://t.co/Y2y0pizBpp</a></td>
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<td>10:47</td>
<td>@johndory49 @NottsPolitics Our case counts follow @WHO's. And sorry - gave you a bad link before. This is correct: <a href="http://t.co/Y2y0pizBpp">http://t.co/Y2y0pizBpp</a></td>
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<td>11:42</td>
<td>Air, food &amp; water do not carry #Ebola virus, but body fluid droplets can. New CDC Fact Sheet: <a href="http://t.co/v1TaKNId23">http://t.co/v1TaKNId23</a></td>
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<td>13:38</td>
<td>@beogbu There is no evidence that mosquitoes or other insects can transmit Ebola virus. <a href="http://t.co/bmdet0XF6A">http://t.co/bmdet0XF6A</a></td>
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<td>13:40</td>
<td>@jirsmepanda1 New CDC #Ebola fact sheet explains difference between infections spread through the air v. by droplets <a href="http://t.co/v1TaKNIld23">http://t.co/v1TaKNIld23</a></td>
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<td>@dqdebra New CDC #Ebola fact sheet explains difference between infections spread through the air v. by droplets <a href="http://t.co/v1TaKNIld23">http://t.co/v1TaKNIld23</a></td>
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<td>12:44</td>
<td>RT @WhiteHouse &quot;Patients can beat this disease. We can beat this disease. But we have to stay vigilant.&quot; —President Obama on #Ebola: <a href="http://t.co/TcRItxNsR8B">http://t.co/TcRItxNsR8B</a></td>
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<td>RT @WhiteHouse &quot;The best way to stop this disease...is to stop it at its source in West Africa.&quot; —President Obama on #Ebola: <a href="http://t.co/TcRItxNsR8B">http://t.co/TcRItxNsR8B</a></td>
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<td>10/28/2</td>
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**Additional Tweets:**
- Catching the flu once (or more than once) does not give you immunity against all seasonal flu viruses. http://twitter.com/CDCgov/status/527086697168011264
- CDC issues revised Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure http://t.co/JTVyxF4ZHHz
- New Fact Sheet explains updates to CDC guidance on monitoring symptoms & controlling movement to stop spread of Ebola http://t.co/6iE8CWZWZhX
- @itsmepanda1 CDC and FDA closely monitor the safety of seasonal flu vaccines licensed for use in the United States. http://twitter.com/CDCgov/status/527086662095220736
- New CDC #Ebola guidance defines 4 risk levels based on degree of exposure & recommended public health actions: http://t.co/6iE8CWZWZhX
- RT @DrFriedenCDC CDC is working with ministries of health and other partners to control & stop #Ebola in http://twitter.com/CDCgov/status/5271245089569660
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<th>Date</th>
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<td>10/28/2014 10:14</td>
<td>RT @DrKhassabCDC Info for emergency depts managing patients with possible Ebola: Identify, isolate, inform [link]</td>
<td>[link] <a href="http://twitter.com/CDCgov/status/527131422625382400">http://twitter.com/CDCgov/status/527131422625382400</a></td>
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<td>10/28/2014 14:37</td>
<td>#CDCintheField from Patrick: recording observations during #Ebola Treatment Unit site selection assessment in Liberia [link]</td>
<td>[link] <a href="http://twitter.com/CDCgov/status/527197401590005760">http://twitter.com/CDCgov/status/527197401590005760</a></td>
<td>16</td>
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<td>10/28/2014 15:09</td>
<td>#EbolaFact: Ebola virus is spread through direct contact with blood or body fluids of a person who is sick w/ Ebola. [link]</td>
<td>[link] <a href="http://twitter.com/CDCgov/status/527205474211749888">http://twitter.com/CDCgov/status/527205474211749888</a></td>
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<td>10/28/2014 15:27</td>
<td>@colt45mag If person w/#Ebola sneezes &amp; saliva/mucus contacts person’s eyes/nose/mouth, disease may be spread [link]</td>
<td>[link] <a href="http://twitter.com/CDCgov/status/527210075115749376">http://twitter.com/CDCgov/status/527210075115749376</a></td>
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<td>10/28/2014 15:57</td>
<td>RT @WhiteHouse &quot;The best way to protect Americans is to stop the outbreak at its source.&quot; —President Obama on stopping #Ebola in West Africa [link]</td>
<td>[link] <a href="http://twitter.com/CDCgov/status/527217515446169602">http://twitter.com/CDCgov/status/527217515446169602</a></td>
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<td>10/29/2014 10:16</td>
<td>RT @PHEgov 10/31/14 @ 3PM ET: Join ASPR, @CDCgov, &amp; HHS partners for a webinar on preparing healthcare systems for #Ebola. [link]</td>
<td>[link] <a href="http://twitter.com/CDCgov/status/527494276159381504">http://twitter.com/CDCgov/status/527494276159381504</a></td>
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<td>10/29/2014 10:51</td>
<td>#EbolaFact: Ebola is not spread through casual contact, air, water or any food grown or legally purchased in US. [link]</td>
<td>[link] <a href="http://twitter.com/CDCgov/status/527503093416853504">http://twitter.com/CDCgov/status/527503093416853504</a></td>
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<td>10/29/2014 11:35</td>
<td>@TheKidCT If person w/#Ebola sneezes &amp; saliva/mucus contacts person’s eyes/nose/mouth, disease may be spread [link]</td>
<td>[link] <a href="http://twitter.com/CDCgov/status/527514190144344066">http://twitter.com/CDCgov/status/527514190144344066</a></td>
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<td>10/29/2014 12:54</td>
<td>CDC team in Liberia paused to watch President Obama's address from CDC HQ in Atlanta. #CDCintheField [link]</td>
<td>[link] <a href="http://twitter.com/CDCgov/status/527533862914887681">http://twitter.com/CDCgov/status/527533862914887681</a></td>
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<td>10/29/2014 13:33</td>
<td>#EbolaFact: Here’s what you need to know about when a person can spread the disease to others. [link]</td>
<td>[link] <a href="http://twitter.com/CDCgov/status/527543653489987584">http://twitter.com/CDCgov/status/527543653489987584</a></td>
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<td>10/29/2014 13:55</td>
<td>RT @WhiteHouse &quot;The best way to protect Americans from #Ebola is to stop the outbreak at its source.&quot; —President</td>
<td>[link] <a href="http://twitter.com/CDCgov/status/5275494103735500">http://twitter.com/CDCgov/status/5275494103735500</a></td>
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<td>10/29/2</td>
<td>14:01</td>
<td>RT @WhiteHouse &quot;It's critical that we remain focused on the facts and on the science.&quot; —President Obama on #Ebola: <a href="http://t.co/ibwxdQROQK">http://t.co/ibwxdQROQK</a></td>
<td><a href="http://twitter.com/CDCgov/status/527550876572200960">http://twitter.com/CDCgov/status/527550876572200960</a></td>
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<td>10/29/2</td>
<td>14:04</td>
<td>#Flu and Ebola have some similar symptoms, but flu is common, Ebola is very rare. <a href="http://t.co/QTmauZZdUF">http://t.co/QTmauZZdUF</a> #getafluvax</td>
<td><a href="http://twitter.com/CDCgov/status/527551547002339329">http://twitter.com/CDCgov/status/527551547002339329</a></td>
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<td>570882</td>
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<td>10/29/2</td>
<td>14:21</td>
<td>@njtonysmiles #Ebola symptoms may appear anywhere from 2 to 21 days after exposure to ebolavirus, although 8-10 days is most common.</td>
<td><a href="http://twitter.com/CDCgov/status/527558884856406016">http://twitter.com/CDCgov/status/527558884856406016</a></td>
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<td>10/29/2</td>
<td>14:30</td>
<td>RT @HHSgov The @CDCgov has updated #Ebola monitoring guidance. Learn more: <a href="http://t.co/KXpimkkNHo">http://t.co/KXpimkkNHo</a></td>
<td><a href="http://twitter.com/CDCgov/status/527558031606046720">http://twitter.com/CDCgov/status/527558031606046720</a></td>
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<td>10/30/2</td>
<td>07:59</td>
<td>New @Medscape #Ebola Q&amp;A w/ CDC’s Dr. Srinivasan addresses clinician concerns as flu season begins. Watch here: <a href="http://t.co/F59nj6W89h">http://t.co/F59nj6W89h</a></td>
<td><a href="http://twitter.com/CDCgov/status/527822045997178880">http://twitter.com/CDCgov/status/527822045997178880</a></td>
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<td>Clinicians: CDC’s Dr. Srinivasan shares tips for treating potential #Ebola patients as flu season begins: <a href="http://t.co/F59nj6W89h">http://t.co/F59nj6W89h</a></td>
<td><a href="http://twitter.com/CDCgov/status/527839221273624576">http://twitter.com/CDCgov/status/527839221273624576</a></td>
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<td>10/30/2</td>
<td>10:03</td>
<td>#CDCintheField from Jonathan: Visiting new #Ebola Treatment Unit in Liberia. It has since opened &amp; is now operational</td>
<td><a href="http://twitter.com/CDCgov/status/5278532040438746112">http://twitter.com/CDCgov/status/5278532040438746112</a></td>
<td>71</td>
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<td>10/30/2</td>
<td>11:39</td>
<td>New CDC National Health Report highlights successes &amp; challenges in fighting our nation’s most common health problems</td>
<td><a href="http://twitter.com/CDCgov/status/527877376160849920">http://twitter.com/CDCgov/status/527877376160849920</a></td>
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<td>10/30/2</td>
<td>12:07</td>
<td>RT @HHSgov A reminder from @CDCgov: #Flu &amp; #Ebola have some similar symptoms, but flu is common, Ebola is very rare. <a href="http://t.co/0lJ2WNDV5">http://t.co/0lJ2WNDV5</a> #getafluvax</td>
<td><a href="http://twitter.com/CDCgov/status/527884611922427904">http://twitter.com/CDCgov/status/527884611922427904</a></td>
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<td>10/30/2</td>
<td>13:14</td>
<td>Miwako &amp; Jonathan trained staff at Liberian hospital that closed due to 22 #Ebola infections in HCWs. #CDCintheField</td>
<td><a href="http://twitter.com/CDCgov/status/5279013043254320104">http://twitter.com/CDCgov/status/5279013043254320104</a></td>
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<td>7 of America’s 10 leading causes of death are chronic diseases- the most common, costly &amp; preventable health problems</td>
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<td>Watch @Medscape step-by-step guide to putting on &amp; taking off PPE as recommended in new CDC #Ebola guidance: <a href="http://t.co/3dwlQQsuW">http://t.co/3dwlQQsuW</a></td>
<td><a href="http://twitter.com/CDCgov/status/52792811773876240">http://twitter.com/CDCgov/status/52792811773876240</a></td>
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<td>07:47</td>
<td>Learn all about PPE including preparing equipment, role of trained observer in safe PPE process &amp; more:</td>
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<td>10/31/2014</td>
<td>10:57</td>
<td>Contact tracing supervisors use these motorcycles for transportation through communities in Liberia. #CDCintheField <a href="http://t.co/RZpu9Y934y">http://t.co/RZpu9Y934y</a></td>
<td>38</td>
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<td>10/31/2014</td>
<td>11:17</td>
<td>RT @SecBurwell Proud to join the President &amp; recognize our American health care workers &amp; their efforts to stop #ebola outbreak. <a href="https://t.co/SuDY1Emvz7">https://t.co/SuDY1Emvz7</a></td>
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<td>10/31/2014</td>
<td>13:42</td>
<td>CDC Drs. Alison &amp; Neil give training to help stop spread of Ebola among healthcare workers in Liberia. #CDCintheField <a href="http://t.co/Q2NrYbujom">http://t.co/Q2NrYbujom</a></td>
<td>33</td>
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APPENDIX D

SANDRA BLAND ARREST TRANSCRIPT

State Trooper Brian Encinia: Hello ma’am. We’re the Texas Highway Patrol and the reason for your stop is because you failed to signal the lane change. Do you have your driver’s license and registration with you?

What’s wrong? How long have you been in Texas?

Sandra Bland: Got here just today.

Encinia: OK. Do you have a driver’s license? (Pause) OK, where you headed to now? Give me a few minutes. (Bland inaudible)

(Encinia returns to his car for several minutes, then approaches Bland again.)

Encinia: OK, ma’am. (Pause.) You OK?

Bland: I’m waiting on you. This is your job. I’m waiting on you. When’re you going to let me go?

Encinia: I don’t know, you seem very really irritated.

Bland: I am. I really am. I feel like it’s crap what I’m getting a ticket for. I was getting out of your way. You were speeding up, tailing me, so I move over and you stop me. So yeah, I am a little irritated, but that doesn’t stop you from giving me a ticket, so [inaudible] ticket.

Encinia: Are you done?

Bland: You asked me what was wrong, now I told you.

Encinia: OK.

Bland: So now I’m done, yeah.

Encinia: You mind putting out your cigarette, please? If you don’t mind?

Bland: I’m in my car, why do I have to put out my cigarette?

Encinia: Well you can step on out now.

Bland: I don’t have to step out of my car.

Encinia: Step out of the car.

Bland: Why am I ...

Encinia: Step out of the car!

Bland: No, you don’t have the right. No, you don’t have the right.

Encinia: Step out of the car.

Bland: You do not have the right. You do not have the right to do this.

Encinia: I do have the right, now step out or I will remove you.

Bland: I refuse to talk to you other than to identify myself. [crosstalk] I am getting removed for a failure to signal?

Encinia: Step out or I will remove you. I’m giving you a lawful order.

Get out of the car now or I’m going to remove you.

Bland: And I’m calling my lawyer.

Encinia: I’m going to yank you out of here. (Reaches inside the car.)

Bland: OK, you’re going to yank me out of my car? OK, alright.

Encinia (calling in backup): 2547.

Bland: Let’s do this.

Encinia: Yeah, we’re going to. (Grabs for Bland.)

Bland: Don’t touch me!

Encinia: Get out of the car!

Bland: Don’t touch me. Don’t touch me! I’m not under arrest-- you don’t have the right to take me out of the car.

Encinia: You are under arrest!


Encinia (to dispatch): 2547 county fm 1098 (inaudible) send me another unit. (To Bland) Get out of the car!

Get out of the car now!
Bland: Why am I being apprehended? You're trying to give me a ticket for failure ...
Encinia: I said get out of the car!
Bland: Why am I being apprehended? You just opened my--
Encinia: I'm giving you a lawful order. I'm going to drag you out of here.
Bland: So you're threatening to drag me out of my own car?
Encinia: Get out of the car!
Bland: And then you're going to [crosstalk] me?
Encinia: I will light you up! Get out! Now! (Draws stun gun and points it at Bland.)
Bland: Wow. Wow. (Bland exits car.)
Encinia: Get out. Now. Get out of the car!
Bland: For a failure to signal? You're doing all of this for a failure to signal?
Encinia: Get over there.
Bland: Right. yeah, let's take this to court, let's do this.
Encinia: Go ahead.
Bland: For a failure to signal? Yup, for a failure to signal!
Encinia: Get off the phone!
Bland: (crosstalk)
Encinia: Get off the phone! Put your phone down!
Bland: I'm not on the phone. I have a right to record. This is my property, Sir?
Encinia: Put your phone down right now. Put your phone down!
(Bland slams phone down on her trunk.)
Bland: For a f****** failure to signal. My goodness. Y'all are interesting. Very interesting.
Encinia: Come over here. Come over here now.
Bland: You feelin' good about yourself?
Encinia: Stand right here. Stand right there.
Bland: You feelin' good about yourself? For a failure to signal? You feel real good about yourself don't you? You feel good about yourself don't you?
Encinia: Turn around. Turn around. Turn around now. Put your hands behind your back.
Bland: Why am I being arrested?
Encinia: Turn around ...
Bland: Why can't you ...
Encinia: I'm giving you a lawful order. I will tell you.
Bland: Why am I being arrested?
Encinia: Turn around!
Bland: Why won't you tell me that part?
Encinia: I'm giving you a lawful order. Turn around ...
Bland: Why will you not tell me what's going on?
Encinia: You are not complying.
Bland: I'm not complying 'cause you just pulled me out of my car.
Encinia: Turn around.
Bland: Are you f****** kidding me? This is some bull...
Encinia: Put your hands behind your back.
Bland: 'Cause you know this straight bulls**. And you're full of s**. Full of straight s**. That's all y'all are is some straight scared cops. South Carolina got y'all bitch a**es scared. That's all it is. F****** scared of a female.
Encinia: If you would've just listened.
Bland: I was trying to sign the f****** ticket-- whatever.
Encinia: Stop moving!
Bland: Are you f****** serious?
Encinia: Stop moving!
Bland: Oh I can't wait 'til we go to court. Ooh I can't wait. I cannot wait 'til we go to court. I can't wait. Oh I can't wait! You want me to sit down now?
Encinia: No.
Bland: Or are you going to throw me to the floor? That would make you feel better about yourself?
Encinia: Knock it off!
Bland: Nah that would make you feel better about yourself. That would make you feel real good wouldn’t it? Pussy a**, F****** pussy. For a failure to signal you’re doing all of this. In little a** Prairie View, Texas. My God they must have ...

Encinia: You were getting a warning, until now you’re going to jail.

Bland: I’m getting a-- for what? For what?

Encinia: You can come read.

Bland: I’m getting a warning for what? For what!?

Encinia: Stay right here.

Bland: Well you just pointed me over there! Get your mind right.

Encinia: I said stay over here. Stay over here.

Bland: Ooh I swear on my life, y’all are some pussies. A pussy-a** cop, for a F****** signal you’re gonna take me to jail.

Encinia (to dispatch, or an officer arriving on scene): I got her in control she’s in some handcuffs.

Bland: For a F****** ticket. What a pussy. What a pussy. You’re about to break my F****** wrist!

Encinia: Stop moving.

Bland: I’m standing still! You keep moving me, goddammit.

Encinia: Stay right here. Stay right there.

Bland: Don't touch me. F****** pussy -- for a traffic ticket (inaudible).

(Door slams)

Encinia: Come read right over here. This right here says 'a warning.' You started creating the problems.

Bland: You asked me what was wrong!

Encinia: Do you have anything on your person that's illegal?

Bland: Do I feel like I have anything on me? This a F****** maxi dress.

Encinia: I’m going to remove your glasses.

Bland: This a maxi dress. (Inaudible) F****** a**holes.

Encinia: Come over here.

Bland: You about to break my wrist. Can you stop? You’re about to f****** break my wrist! Stop!!!

Encinia: Stop now! Stop it! If you would stop resisting.

Female officer: Stop resisting ma’am.

Bland: (cries) For a F****** traffic ticket, you are such a pussy. You are such a pussy.

Female officer: No, you are. You should not be fighting.

Encinia: Get on the ground!

Bland: For a traffic signal!

Encinia: You are yanking around, when you pull away from me, you’re resisting arrest.

Bland: Don’t it make you feel real good don’t it? A female for a traffic ticket. Don’t it make you feel good Officer Encinia? You're a real man now. You just slammed me, knocked my head into the ground. I got epilepsy, you motherf*****.

Encinia: Good. Good.

Bland: Good? Good?

Female officer: You should have thought about it before you started resisting.

Bland: Make you feel real good for a female. Y’all strong, y’all real strong.

Encinia: I want you to wait right here.

Bland: I can’t go anywhere with your F****** knee in my back, duh!

Encinia: (to bystander): You need to leave! You need to leave!

(Bland continues screaming, but much of it is inaudible)

Encinia: For a warning you’re going to jail.

Bland: Whatever, whatever.

Encinia: You’re going to jail for resisting arrest. Stand up.

Bland: If I could, I can’t.

Encinia: OK, roll over.

Bland: I can’t even F****** feel my arms.

Encinia: Tuck your knee in, tuck your knee in.

Bland: (Crying): Goddamn. I can’t [muffled].

Encinia: Listen, listen. You’re going to sit up on your butt.

Bland: You just slammed my head into the ground and you do not even care ...
Female officer: Listen to how he is telling you to get up.
Bland: I can't even hear.
Female officer: Yes you can.
Encinia: Sit up on your butt.
Bland: He slammed my f****** head into the ground.
Encinia: Sit up on your butt.
Bland: What the hell.
Encinia: Now stand up.
Bland: All of this for a traffic signal. I swear to God. All of this for a traffic signal. (To bystander.) Thank you for recording! Thank you! For a traffic signal-- slam me into the ground and everything! Everything! I hope y'all feel good.
Encinia: This officer saw everything.
Female officer: I saw everything.
Bland: And (muffled) No you didn't. You didn't see everything leading up to it ...
Female officer: I'm not talking to you.
Bland: You don't have to.
Encinia: 2547 county. Send me a first-available, for arrest.
Female officer: You okay? You should have Tess check your hand.
Encinia: Yeah, I'm good.
Encinia: She started yanking away and then she kicked me, so I took her straight to the ground.
Female officer: And there you got it right there... I'll search it for you if you want.
Female officer: Yeah.
Second male: I know one thing for sure, it's on video.
Female officer: Yeah.
Second male: You hurt?
Encinia: No.
Encinia (to female officer): Did you see her when we were right here?
Female officer: Yeah, I saw her cause that's where I (inaudible).
Encinia: This is when she pulled with the cuffs.
Paramedic: Your ring got you there?
Encinia: I had the chain, well, not the chain, but
Paramedic: You got the two loops?
Encinia: She didn't kick me too hard but she still kicked me though.
Paramedic: Not through the skin, but you got a nice scratch. I'm a paramedic, that's why I know.
Encinia: I know that, that's why I made you look.
Paramedic: Did she do that?
Encinia: Yeah that's her.
Paramedic: Yeah that's cut through the skin.
Encinia: I wrapped it around her head and got her down.
Encinia (on radio): This is a traffic stop, had a little bit of a incident.
(Silence for several minutes.)
Encinia (apparently to a supervisor): I tried to de-escalate her. It wasn't getting anywhere, at all. I mean I tried to put the Taser away. I tried talking to her and calming her down, and that was not working.”
CURRICULUM VITAE

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BIOGRAPHY

Adam R. Bair is an assistant chair of the Business Management Department at Brigham Young University-Idaho, where in 2005, he became the first member of his family to earn a bachelor’s degree. His higher-education trajectory continued at Southern Utah University, where he earned a master’s degree in professional communication in 2008 and then at Utah State University, where he earned his PhD in the theory and practice of professional communication in 2016.

While pursuing advanced degrees, Bair taught courses about business, interpersonal, journalistic, organizational, and technical communication, in both classroom and online settings. He currently teaches the professional-communication course he developed in a hybrid format to accounting, business management, communication, computer information technology, economics, and healthcare administration students.

In his role in the BYU-Idaho Business Management Department, Bair oversees accreditation and assessments. Prior to receiving his current position, Bair worked as a technical writer in the transportation industry and in internal university research projects.

EDUCATION
Ph.D.  Theory and Practice of Professional Communication  
Utah State University, Logan, UT  
Graduated May 2016

M. A.  Professional Communication  
Southern Utah University, Cedar City, UT  
Graduated May 2008

B. S.  Communication  
Brigham Young University-Idaho, Rexburg, ID  
Graduated April 2005

TEACHING EXPERIENCE

Faculty Member, Business Management Department, Brigham Young University-Idaho (Fall 2013-present)  
Directed writing instruction for Accounting, Business Management, Computer Information Technology, and Economics Departments

Instructor, English Department, Utah State University (Fall 2011-Spring 2013)  
Taught general-education composition classes  
Developed and taught curriculum for technical writing emphasis  
Conducted online instructor certification program

Remote Adjunct Faculty Member, BYU-Idaho Online Department (Spring 2012-Summer 2013)  
Taught a group dynamics course for three semesters

Adjunct Faculty Member, BYU-Idaho (Winter 2006-Spring 2007, Summer 2008-Spring 2011)  
Taught multiple sections of communication research, group dynamics, interpersonal communication, persuasion, practicum, public speaking, senior capstone, and writing for communication.

Graduate Teaching and Research Assistant, SUU (Fall 2007-Winter 2008)  
Taught introductory communication courses in, interpersonal communication, group communication, and public speaking  
Advised students about degree requirements and communication careers

TEACHING
Brigham Young University-Idaho, Rexburg, ID

Business Management Department
- Business 220: Business Writing
- Business 320: Advanced Writing in Professional Contexts
- Business 449B: Senior Writing Capstone

Communication Department
- Comm 102: Public Speaking
- Comm 111: Writing for Communication Careers
- Comm 150: Interpersonal Theory and Practice
- Comm 280: Communication Research Fundamentals
- Comm 350: Group Dynamics
- Comm 352: Persuasion
- Comm 499: Communication Senior Project

Utah State University

- English 1010: Introduction to Writing: Academic Prose
- English 2010: Intermediate Writing: Research Writing in a Persuasive Mode
- English 3080: Introduction to Technical Communication
- English 3400: Professional Writing
- English 3460: Modern Rhetorical Theory
- English Online Instructor Certification Program

Southern Utah University

- Comm 1010: Introduction to Communication

PROFESSIONAL EXPERIENCE

- Developed National Transportation Safety Board training materials
- Designed error-proofing measures to ensure that processes are completed in accordance with organizational policy

Executive Administrator, Institutional Review Board, BYU-Idaho January 2010-August 2011
- Reviewed, approved student research for compliance to federal law
- Generated random subject samples for students, faculty, and administrators
- Collected, cleaned, and analyzed data for 20 university projects

Curriculum Development Manager, BYU-Idaho January 2009-August 2009
- Developed six online courses in three disciplines
- Collaborated with faculty teams to create, design, and execute integrated curriculum

Business Manager, Scroll, BYU-Idaho June 2006-June 2007
Managed a $500,000+ annual newspaper operation
Conducted accounting, billing, budgeting, invoicing, and payroll-preparation services
 Supervised advertising representatives, coordinated bids and purchasing, and directed day-to-day office operations
Modified aspects of the organization to increase revenue by 12 percent and decrease operating expenses by 30 percent

VOLUNTEER EXPERIENCE

President, BYU Management Society, BYU-Idaho Chapter August 2009-August 2010
Developed a marketing campaign that increased chapter membership by 30 percent
Worked with chapter board members to win a 2009 and 2010 Dean’s Chapter of Excellence Award

Volunteer, World Trade Center Disaster October 2001-February 2002
Volunteered at the Lower Manhattan Red Cross Center for 20 to 35 hours a week, filing victims’ claims, supporting and listening to them, and working with other volunteers to ensure the Red Cross Center was a place of refuge

CONFERENCE PAPERS


AWARDS, HONORS, AND ACKNOWLEDGMENTS

BYU-Idaho Outstanding Faculty Award, 2009
Outstanding Graduate Paper, Utah Communication Conference, 2008
First Place, Scholar Presentation, National Communication Conference, 2007
BYU-Idaho Communication Department Man of the Year, 2005
National Honorable Mention, PRSSA Bateman Competition, 2005
College of Business and Communication Student Advisory Board, 2003-2004
Member of Golden Key International Honour Society
Eagle Scout