

6-21-2005

Cold Weather Health and Safety

Jill Webster Ph.D.
Utah State University

Follow this and additional works at: http://digitalcommons.usu.edu/extension_histall

Warning: The information in this series may be obsolete. It is presented here for historical purposes only. For the most up to date information please visit [The Utah State University Cooperative Extension Office](#)

Recommended Citation

Webster, Jill Ph.D., "Cold Weather Health and Safety" (2005). *All Archived Publications*. Paper 1161.
http://digitalcommons.usu.edu/extension_histall/1161

This Factsheet is brought to you for free and open access by the Archived USU Extension Publications at DigitalCommons@USU. It has been accepted for inclusion in All Archived Publications by an authorized administrator of DigitalCommons@USU. For more information, please contact dylan.burns@usu.edu.



Agricultural Health and Safety

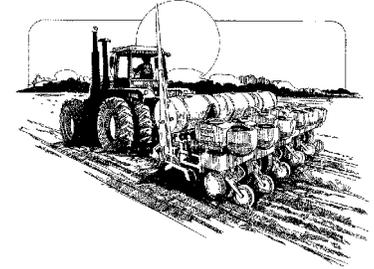
Fact Sheet AHS-05



Cold Weather Health and Safety

Jill Webster Ph.D.,

S. Christian Mariger, Graduate Assistant
Agricultural Systems Technology and Education



Farm and ranch work in cold weather can be life threatening. Cold related illnesses and injuries, such as hypothermia and frostbite, are serious on their own, but they can also increase the risk of other types of accidents. Even mild hypothermia (low body temperature) causes loss of coordination, and impairs the victim's judgment. Frostbite causes a loss in dexterity in the hands and feet, as well as serious discomfort. Both can affect the victim's ability to work safely. It is important to remember that hypothermia can occur in mild as well as severe weather.

Wind and moisture have a great impact on the body's ability to regulate temperature. In addition, the physical attributes of individuals determine their susceptibility to hypothermia. In general older people are at greater risk than the young, thin people more than stout people, men more than women. Other factors include illnesses such as diabetes, epilepsy, and hypothyroidism, all of which increase the risk of hypothermia. Hypothermia and frostbite are preventable and treatable in agriculture. Here are some tips on prevention.

- * Know the factors leading to hypothermia.
 - a) Temperature
 - b) Wind-chill
 - c) Moisture
 - d) Individual physical attributes

- * Dress appropriately (assume conditions will be colder and wetter than when you started)
 - a) Warm hat
 - b) Good gloves
 - c) Layers of insulating clothing
 - d) Extra dry clothing

- * Avoid caffeine, alcohol, tobacco, and other diuretics, depressants, or stimulants.

- * Eat a balanced diet, supplemented by carbohydrates throughout the day when working in cold conditions.

- * Drink plenty of fluids, the body is more efficient at regulating temperature if it is well hydrated. Warm drinks such as broth, herbal tea, or cocoa, also add warmth.

- * Avoid working to exhaustion in cold weather. Cold weather effects the amount of physical work an individual can do, and fatigue will increase the risk of hypothermia.

- * Use extreme care when handling fuels and solvents, especially gasoline, in cold weather. Rapid evaporation has a super cooling effect that can cause instant frostbite.

- * Avoid touching metal objects with bare hands.

* Avoid wet feet. Waterproof footwear can cause excessive foot perspiration and wet socks. Bring extra dry socks and change them if feet become wet, and use foot powder to prevent perspiration.

* Always keep cold weather emergency supplies in your vehicle during the winter months. Your kit should include blankets, matches or lighters, food, rain gear, and extra clothes.

Pertinent Literature

National Safety Council, How to Prevent Frostbite and Hypothermia. [On Line]
<http://www.nsc.org/lrs/lib/fs/health/frstbit.htm>.

Utah State University Extension is an affirmative action/equal employment opportunity employer and educational organization. We offer our programs to persons regardless of race, color, national origin, sex, religion, age or disability.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Robert L. Gilliland, Vice-President and Director, Cooperative Extension Service, Utah State University, Logan, Utah. (EP/05-99/DF)