Utah State University
DigitalCommons@USU

All Archived Publications | Archived USU Extension Publications

1-1-1997

Updating Your Herd Health Plan

Clell V. Bagley

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
Bagley, Clell V., "Updating Your Herd Health Plan" (1997). *All Archived Publications.* Paper 96.
http://digitalcommons.usu.edu/extension_histall/96

This Article 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 becky.thoms@usu.edu.

Utah State University Extension
electronic publishing

Animal Health
Fact Sheet

UPDATING YOUR HERD HEALTH PLAN

Clell V. Bagley, DVM, Extension Veterinarian
Utah State University, Logan UT 84322-5600

July 1997 AH/Beef/18

Animal health is not sold in a bottle, syringe or sack. It comes as a result of proper management. The increased concentration and movement of cattle and demands for greater production necessitate an improved level of management to maintain cattle health.

Management includes five basic, cyclical steps: 1) setting objectives (goals), 2) gathering information, 3) planning (decision making), 4) action (doing it), and 5) evaluation. This process is then recycled repeatedly. The process is the same for health management. If you have a plan that is working well, procedures should not be added nor deleted until given careful consideration, especially for costs and benefits.

A herd health program is more than just a vaccination schedule and should include all the management plans and procedures to be used to produce healthy cattle. However, a vaccination schedule is an important part of the plan and raises some of the first questions. A very important question is, "For which diseases should I vaccinate?" The answer varies for different types of operations and is further complicated by the variety of brand names and combinations of products that are available. The program should gradually change as new products and information become available.

The basic procedure in planning which vaccines to use is to review the diseases for which vaccines are available and then ask a series of questions about each one (why, how, when, what, where and who?). If you don't have all the information you need, call your veterinarian to ask questions and then do some reading until you understand and can make a knowledgeable decision. Only then should you begin to consider which combination or brand of vaccine to use. A list of diseases and a series of suggested questions follow:

Diseases (or agents) for which vaccines are available:

1. Blackleg
2. Malignant edema
3. Black's disease
4. Enterotoxemia (C & D)
5. Redwater
6. Infectious Bovine Rhinotracheitis (IBR)
7. Parainfluenza-3 (PI3)
8. Bovine Virus Diarrhea (BVD)
9. Bovine Respiratory Syncytial Virus (BRSV)
10. Pasteurella hemolytica
11. Hemophilus somnus
12. Brucellosis (Bangs)
13. Vibriosis (Campylobacter)

14. Leptospirosis (1-5 strains)
15. Rota/Corona virus
16. E. coli (Scours)
17. Pinkeye
18. Trichomoniasis
19. Warts
20. Anthrax
21. Salmonella
22. Anaplasmosis

Questions to ask about each disease or agent:

1. Why should I be interested in vaccinating for this disease (or agent)?
    a. Previous or current problems?
    b. Potential for problems (high, medium, low)?

2. How good are the vaccines which are available?
    a. How much protection do they give?
    b. How expensive is the vaccine?
    c. Is the benefit likely worth the cost?

3. When should I vaccinate?
    a. When are the cattle already being handled?
    b. When do I want the highest immunity?
    c. How long will the immunity last?
    d. How many doses are required initially?
    e. Is an annual booster needed?

4. What kind of vaccine should I use (killed, MLV, Intranasal (IN), etc.)?

5. Where will I confine the cattle for vaccination?

6. Who will do the vaccination?

General Guidelines for Vaccination:

1. Follow closely the written directions for the specific vaccine use.

2. If two doses are recommended initially (usually 2–4 weeks apart) don't count on very much protection until 7–14 days after the second dose has been given.

3. Types of vaccine:
    a. Bacterin—a suspension of killed bacterial cells. Usually two doses are required initially, followed by a booster annually.
    b. Attenuated bacteria—altered bacterial cells which reproduce after injection into the animal, but do not cause disease. Usually only one dose is required initially.
    c. Modified Live Virus (MLV)—a live, but altered growth of viral agent, that will replicate after injection, but not cause disease.
    d. Inactivated (killed) virus vaccine—a suspension of inactivated viral particles. Usually two doses are required initially.

4. Calves vaccinated under 6 months of age (initially) should receive a booster again after 6 months of age.

5. Adjuvant—a chemical added to the vaccine to slow its absorption and thus increase the immune response. Aluminum hydroxide and oil are commonly used for this purpose. Oil produces a longer lasting immunity but also some lumps at the injection site.

6. To incorporate the maximum antibodies (protection) into colostrum for transfer to the calf, give the final (or booster) vaccine at least 4 weeks prior to calving.

7. The mixing of the diluent and the freeze-dried portions of MLV vaccines should be done near the time of use. Otherwise, the virus may become inactivated and be unable to replicate. Keep these vaccines out of direct sunlight and heat.

8. When giving MLV vaccines, don't use syringes or needles that may be contaminated with any chemical residues (disinfectants and cleaners). These chemicals may inactivate the viral agent.

9. Some MLV vaccines for IBR may cause abortions, while BVD may cause fetal defects. Check the label directions prior to using any vaccine on pregnant cows.

10. When killed vaccines are used on weaner calves, they must be vaccinated prior to weaning to provide protection at weaning. If the first dose is given at weaning and the second dose 2 weeks later, the calves will not have much protection until 3–4 weeks after weaning. By then, the period of greatest threat has passed.

A list of procedures to consider for inclusion in a herd health plan is listed on the next page, along with the beginning formation of a calendar. Review the procedures and select dates for those procedures desired. Plan ahead for each specific item for the most efficient benefit and use, and integrate the procedures together. Plan ahead for ordering and purchasing needed supplies and equipment. It usually works best to develop a one-sheet table which includes all the classes of cattle, such as calves, cows, first calf heifers and bulls. It can list down the left side the dates when it is planned that cattle will be worked and across the top, the classes of cattle. Then for each date listed, put down the procedures which need to be done to that class of cattle on that date. It is important to make it specific for the operation and for the products selected for use. For example:

DATE	CALVES	COWS	HEIFERS	BULLS
May 1 Branding Time				

HERD HEALTH PROGRAM (CALENDAR)

PROCEDURES TO IMPLEMENT	DATES/ACTIVITIES
A. Vaccination	January February March 1. Begin calving April May 1 Brand/castrate/dehorn Vaccinate calves for BL, ME and intranasal, IBR PI3. Vaccinate cows for vibrio, lepto & redwater. 20 Bulls in June July August 20 Consider early weaning in drought years September October 15 Wean and ship calves, vaccinate replacement heifers for IBR, PI3, BRSV, and BVD (MLV). Pregnancy test cows November Vaccinate cows for E. coli December
B. Calf Procedures 1. Dehorning 2. Castration 3. Implanting 4. Tagging 5. Creep feeding 6. Weaning	
C. Reproduction 1. Breeding soundness exam 2. Trich testing 3. Pregnancy test 4. AI 5. Heat synchronization 6. Calf removal 7. Record body condition scores	
D. Parasite Control 1. External Lice, Grubs, Flies 2. Internal Roundworms, Liver fluke, Tapeworms, Coccidiosis	
E. Culling 1. Age 2. Condition 3. Calf weaning weight 4. Lameness	
F. Grazing 1. Onto range or pasture 2. Change range or pasture 3. Off range or pasture 4. Fields	
G. Feeding 1. Hay 2. Grain 3. Energy block	

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/DF/07-97)