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dairy guidelines

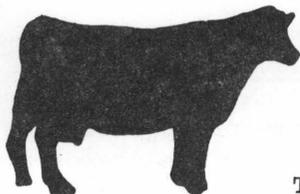
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DAIRY HERD IMMUNIZATION PROGRAM



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In discussing vaccination-immunization programs for dairy animals, it must be emphasized that this is just a part of a complete herd health program. To insure animal health, a complete herd health program must include the control of infectious diseases, proper nutrition, and the proper control of the environment in which animals are reared or housed. Also, any health program should be developed with the advice and help of your local veterinarian. He is the person trained in livestock disease control and is the person that is most aware of the problems in your local area.

Understanding that there will be variations between herds and areas in diseases that should be included in an immunization program, the following schedule outlines a program against some diseases which occur over the entire state.

Calves - at Birth

1. Dip navel cord with iodine.
2. Inject, intramuscularly, with vitamin A and D.
3. Vaccinate with intranasal vaccine for IBR-PI3.

Infectious bovine rhinotracheitis (IBR) is a viral disease that may cause respiratory infections, encephalitis (brain infection), conjunctivitis, abortion, and reproductive tract infections. It is prevented by the use of vaccines. There are modified live virus (MLV) products for intranasal (IN) or intramuscular (IM) use and killed virus products for intramuscular (IM) use. Do not use any of these products unless you have discussed the precautions regarding their use with a veterinarian.

Parainfluenza type 3 (PI-3) is a viral disease causing primarily respiratory problems in cattle. It is considered to be a secondary factor in many "shipping fever" outbreaks. There are also MLV/IN and IM products and killed virus products for use in immunization programs.

4. Vaccinate with pasteurized vaccines. Repeat at two week intervals for 3-5 injections. The pasteurized organisms are bacteria that are responsible for a good number of our respiratory infections in cattle. It has been shown that repeated vaccinations are necessary to get the best protection.

Heifers at 2 to 4 Months

1. Vaccinate for "Bangs," or Brucellosis.

This is a bacterial disease, commonly referred to as "Bangs," that affects several species of animal including cattle and man. It affects cattle primarily by causing abortions. There are federal-state programs for the eradication of this disease because of animal losses and the human health

hazard. There is no treatment for adult animals but it can be prevented by vaccinating heifer calves between 2-6 months of age.

2. Vaccinate for clostridial diseases (Blackleg, malignant edema).

These are diseases caused by the organisms Clostridium chauvoei and C. septicum. These are organisms that live in the ground and may enter a calf through wounds, ingestion, and navel cords. These organisms produce toxins in the animal's body that are rapidly fatal. Prevention is by the use of a vaccine (killed bacteria) in the young animal. Repeated doses are indicated. It may be necessary to vaccinate for other strains also.

Heifers - 5-8 Months

1. Repeat clostridial vaccine.
2. Vaccinate for IBR, BVD, AND PI3.

Bovine virus diarrhea (BVD) affects cattle by causing abortions, diarrhea, chronic digestive disturbances, weak calves at birth, fetal anomalies, conjunctivitis, dermatitis, and nervous signs. The only vaccines available are MLV products for IM use. Do not use these products without discussing their use with a veterinarian.

3. Deworm

Heifers - Breeding Age

1. Vaccinate for IBR, BVD, AND PI3 at least 3 weeks prior to breeding.
2. Vaccinate for Leptospirosis (5 strains) after 6 months of age--at times when adult cows are vaccinated.

"Lepto" is a bacterial disease of cattle caused by the organism Leptospira. There are 3 strains, hardjo, pomona, and grippotyphosa, that are primarily involved and animals should be routinely immunized against these. Two other strains, canicola and icterohemorrhagiae, may become important in certain herds. These diseases cause abortions, infertility, weak calves, systemic infections, and death in some animals.

Cows

1. Vaccinate the entire herd for Leptospirosis (5 strains) every 6 months.
2. Vaccinate for IBR, BVD, and PI3 when cows are open (between 3 weeks post-calving and 3 weeks before breeding).

Environmental Considerations

The initiation and success of a herd health program must be accompanied by housing facilities that remove the stress from the animal. Lack of adequate ventilation to remove moist, foul-smelling, and bacteria and virus laden air is the greatest contributor to the problem. Naturally ventilated buildings are most appropriate for Virginia conditions. Open sided buildings designed and oriented to take full advantage of sun exposure and to prevent drafts directly on the animal are best. Open ridge vents and air intakes well distributed in many small openings along the ceiling allow for best air movement and without drafts on the animals. Promoting dryness of bedding through ventilation and frequent cleaning is also important.

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