HEALTH PROGRAMS FOR RAISING DAIRY REPLACEMENTS

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Fifteen to 30 percent of potential livestock production is lost because of animal diseases. Surveys indicate that approximately 20 percent of dairy calves never reach adulthood. Calf diarrhea, respiratory diseases, and blackleg contribute to death losses. In addition, economic losses result from internal and external parasitism, ringworm, pinkeye and many other diseases.

The concept of preventive medicine had proven to be very successful. It has been said that "an ounce of prevention is worth bottles of cure". This concept in practice can save a dairyman or dairy calf raiser many dollars. While there is no magic formula for preventing diseases, the risk of diseases can be significantly reduced by a combination of good care, proper nutrition and sound disease prevention practices. The following practices are recommended for disease prevention and control.

RECOMMENDATIONS

1) Obtain healthy calves from a reliable source. Be sure that the calf has received adequate colostrum during the first 12-24 hours following birth. Specific antibodies and gamma globulin in colostrum help to reduce death losses by an average of 10 percent.

2) Group calves from the same source and avoid mixing calves from multiple sources together if possible. Also, group calves of the same age together for best performance. Avoid overcrowding.

3) Use individual pens that allow for good sanitation practices or facilities that are easy to clean and disinfect. Provide equipment that can be easily cleaned and sanitized.

4) Follow recommended feeding, management, and sanitation practices. Use quality milk replacers properly. Keep feeding utensils clean.

5) Protect calves against cold, damp weather, sudden temperature changes, drafts, and high humidity. Dampness places the animal under stress and promotes diseases.

6) Be sure that persons responsible for calf care are familiar with husbandry practices, can recognize simple signs of disease and are knowledgeable about simple treatment and control procedures.

7) Isolate sick animals immediately and identify the disease and specific disease agent if possible. A veterinarian may observe the signs, use diagnostic tests and laboratory examinations. Using a dead calf or sacrificing a sick animal for post mortem or laboratory examination can serve to prevent additional losses in the herd.
8) Select the most effective treatment. Antibiotics, sulfonamides, nitrofurans or other drugs may be needed. Electrolytes and fluids may help to reduce death losses. Early and proper treatment is essential. Work out a treatment regimen following the advice and recommendations of a veterinarian.

9) When infectious diseases occur, clean and disinfect calf pens, stalls, and surrounding areas. In some instances, vacating the premises for a short period may be desirable to break the disease cycle.

10) Prevent disease build-up. Calf diseases are often related to a high concentration of calves raised in the same lot or pasture. Overcrowding and continuous use can result in rapid build-up or accumulation of disease-producing organisms in the environment. It is not uncommon that facilities not previously used for calf raising will become a serious problem within 6 months or more because of disease build-up.

11) Deworm calves and heifers as needed beginning as early as 60 days of age in some herds but by 6 months of age in all herds depending on the severity of the problem. Continue deworming programs at 3 to 4 month intervals as needed until breeding age. Several good deworming agents are available.

12) Consider what vaccinations are needed to protect against specific diseases such as:
   a) Multiple bacterins, hyperimmune serum, or reovirus and/or coronavirus vaccines for calves.
   b) Brucellosis - 2 to 6 months of age.
   c) Blackleg - malignant edema - over 4 to 6 months of age.
   d) Infectious bovine rhinotracheitis (IBR or red nose) - usually after 4 to 6 months of age or prior to breeding if needed.
   e) Bovine virus diarrhea (BVD) - after 4 to 6 months of age or prior to breeding if needed.
   f) Leptospirosis - 3 to 6 weeks prior to breeding.
   g) Vibriosis - 3 to 6 weeks prior to breeding if natural service or clean up bulls are used.

There are several aspects to consider in vaccination. Seek the advice of a veterinarian for specific recommendations on the need for and use of vaccines.

**SUMMARY**

There is no simple solution to most disease problems when they occur. The first step is an accurate diagnosis. This can best be done with the aid of a veterinarian. In some instances, the services of a diagnostic laboratory will also be needed. Antibiotic sensitivity tests may be of value, particularly in treating the enteric diseases that produce diarrhea. However, the calf producer often waits too long before calling a veterinarian and he allows a persistent disease problem to exist in the herd for extended periods without employing a systemic method of identifying the problem. Regular supervision of the herd by a veterinarian plus the active cooperation of the owner constitutes good health insurance. Efforts in prevention that reduces the risk of diseases are the most effective method of reducing losses and insuring a healthy, profitable calf-raising enterprise.