



# Vet Call

► by **Bob Larson, DVM, University of Missouri-Columbia**

## Health programs for beef herds

*Veterinarians are vitally important for the healthy and profitable production of beef animals. Besides a veterinarian's value in diagnosing and treating sick cattle, he or she can have great value in preventing disease and ensuring optimum production and reproduction in beef cattle herds.*

### A complete health plan

In my job as a state Extension veterinarian, I have the opportunity to talk to producers and visit many farms and ranches that are experiencing health or reproduction problems. The most common similarity among these ranches is that they do not have routine veterinary visits and veterinary involvement in management decisions. Complete health plans should be established between veterinarians and producers to accomplish at least the following goals:

- Establish a biosecurity plan to minimize the introduction of disease-causing germs onto your farm by developing a vaccination protocol, an isolation plan for new or returning cattle, and a traffic flow and visitor restriction plan to reduce the likelihood of introducing infectious disease.
- Establish a sanitation plan to minimize the spread of disease-causing germs found in manure between animals by means of feed-handling equipment (front-end loaders, feed wagons, etc.), feeding areas and living areas.
- Establish a parasite control program to effectively and efficiently use dewormers and pasture management for internal parasite control. Use sanitation and fly and lice control products to minimize economic loss due to external parasites.
- Establish a program to optimize the use of performance-promoting products such as growth-promoting implants in growing cattle.
- Establish a program to minimize calving difficulty in first-calf heifers by proper replacement heifer selection, nutrition and sire selection.
- Establish a method to evaluate the herd's performance (records) in the

areas of: pregnancy rates, death percentage, growth rates (weaning or other weights) and nutritional needs [use of body condition scores (BCS)].

- Establish proper antibiotics and other drugs to use in the herd as well as proper injection sites, injection routes [subcutaneous (sub-Q), intramuscular (IM), intravenous (IV), etc.], dosages and any withdrawal times to be observed.

### Development, management

Two areas that form the foundation of good herd health and production are proper heifer development and proper calving management. Good heifer development is critical to ensure that heifers calve within a selected calving period and with minimum calving difficulty. Calving difficulty directly causes a significant amount of calf death loss and also contributes to calves that later die from scours, navel ill or pneumonia because they did not stand up and begin nursing soon after birth. Herds with heifer development problems may exhibit low heifer pregnancy percentages, excessive calving difficulty and/or low pregnancy percentages to the second breeding season. Heifer development problems usually are due to inadequate nutrition (at any time from weaning to becoming pregnant with the second calf), breeding to bulls that have poor calving ease characteristics or not successfully getting heifers bred in a short breeding season.

Another important factor that affects calf sickness and death loss is the amount of exposure to disease-causing germs. Any procedure that concentrates large numbers of cattle in a small area increases

environmental contamination and, consequently, increases the potential for outbreaks of calf disease. Systems in which calving cows are dispersed in large calving pastures are generally considered superior. The most common reason that producers confine heifers or cows into a small area for calving is the perceived need to assist cows

that have calving difficulty, but proper heifer development will reduce that need. Even in large pastures, cows will tend to congregate around feed and water sources, and these areas may become heavily contaminated.

If supplemental hay and grain are fed, they should be provided at locations that are separate and distant from water sources. This practice will encourage cow dispersal and minimize contamination and mud in one area of the pasture. If bales are used, they should be spread over the calving pasture, and the feeding location should be changed daily. In areas of the country with minimal snowfall, winter pasture can be stockpiled. Use of grazing

rather than hay feeding encourages cow dispersal and minimizes contamination. If the herd forage plan includes feeding hay, consider feeding hay in early to mid-gestation and saving stockpiled pasture for the actual calving season.

### Move your cattle

The risk and severity of disease will typically increase as the calving season progresses. This is common in beef herds because of the effect of the calf as a germ amplifier. Calves that are exposed to low numbers of disease-causing germs early in the calving season will typically have mild or no disease. Calves born later in the calving season are exposed to escalating numbers of disease-causing germs from the other calves and tend to have more severe disease risk.

To reduce this amplifying effect, it is necessary to have a plan for cattle movement throughout the calving season, which requires several pastures. To ensure that beef calves are born in a sanitary environment, the herd should not be fed throughout the winter in the same pasture or area in which calves will be born. The pregnant cow herd should be moved to the calving pasture one to two weeks prior to the start of calving. Every one to two weeks, all the pregnant cows should be moved to new pastures, with

CONTINUED ON PAGE 96



**Complete health plans should be established between veterinarians and producers.**

## VET CALL

CONTINUED FROM PAGE 95

the cow-calf pairs left in the pasture where the calf was born. By starting new calving pastures every one to two weeks, no calf is exposed to any calf more than two weeks older than itself — effectively eliminating the buildup of disease-causing germs within a calf group.

Alternately, a cow or heifer and her calf can be moved from a single calving pasture to a nursery pasture within 24 hours of calving. Cow-calf pairs should be added to

a single nursery pasture for one to two weeks. Thereafter, the rancher should begin adding pairs to a second pasture. If enough pastures do not exist or cannot be created with two-strand electric fence, fewer nursery pastures can be used, but the difference in age between the oldest and youngest calf in a nursery pasture should never exceed 30 days, and smaller differences are preferable. Calves that develop diarrhea should be moved immediately to an area away from healthy calves, treated and not returned until all the calves in the group are at low risk for developing diarrhea (for instance, at more

than 30 days of age or at time of summer turnout).

The actual program implemented on each individual ranch will be similar, but will have differences based on particular circumstances. By developing a complete herd-health program with your veterinarian, the costs of disease and production loss can be minimized.



**E-MAIL:** [larsnr@missouri.edu](mailto:larsnr@missouri.edu)