

Treating Bovine Respiratory Disease

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Successful treatment of bovine respiratory disease (BRD), regardless of the circumstances, is a topic of interest to most cattlemen. Because treating BRD is as much an art as a scientific procedure, most animal producers would benefit from the expertise and knowledge of a veterinary practitioner. The veterinarian is a resource in establishing treatment protocol because of past experience and knowledge of drugs that are currently most effective in other herds.

Authorities agree that successful treatment of BRD depends on early recognition and treatment of infected cattle with an effective antimicrobial drug to minimize infection and damage to the lung by *Pasteurella* bacteria originating in the upper respiratory tract. This is important even if a virus is the primary infectious agent.

Depression, reduced appetite, separation from the group, and lowered head and ears are examples of subtle signs that must be observed and quickly evaluated. Significant elevations of rectal temperature and abnormal breathing are signs that may not always occur early in the disease process, but an increased respiratory rate usually accompanies a fever which can range from 105 to 108° F.

If a decision is made to medicate, the choice is between one of the "old standbys" or the more recent antimicrobials. The older drug choices to treat BRD are penicillin, erythromycin, tylosin, tetracycline, and the sulfas. Starting treatment with one of these and reserving the newer products for

animals that fail to respond is a good procedure for individuals that do not treat BRD on a regular basis. Drugs such as long acting tetracycline and penicillin or slow release sulfa have the added benefit of medicating for several days before repeat treatment may be needed. However, be sure to observe these animals at least daily to determine efficacy of the treatment.

A decision on whether the initial treatment was successful or an alternative drug is needed is often made at 48 hours post treatment. Some evidence of improvement in attitude of the animal is considered evidence of adequate response. Once again animal evaluation skills, acquired through experience, are important in making this decision. This is when the expertise of the veterinarian within a veterinary-client-patient relationship is needed to select the best product, dosage, and duration of treatment. Recently introduced antimicrobials that are approved for respiratory disease of cattle are ceftiofur (1988), tilmicosin (1992), and florfenicol (1996), which are available only by veterinary prescription. Choice of a proper drug use sequence is also determined partly by the need for compatible modes of action of the products.

Be aware that failure of some animals to respond can be the result of failure to identify and begin treatment early in the disease process. When an animal is detected with advanced respiratory disease, additional therapy is needed to reduce the harmful effects of inflammation and fever. This

(Turn to Page 19)

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