# Vet Call

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## Tips for detecting and handling foot rot

Foot rot in cattle is caused by injury to the skin between the claws or at the base of the foot, allowing bacteria to enter the skin and cause infection. The bacteria that cause foot rot are very common and are present in all feedlots and pastures. Exposure to manure, frozen rough ground or extreme drought can contribute to infection. Foot rot is usually a seasonal disease, occurring during periods of extreme moisture or severe drought and when muddy yards are frozen, resulting in rough conditions.

The first sign of foot rot is lameness, which may range from mild to so serious the animal is reluctant to move. Close examination of an infected hoof will reveal inflammation extending into the hock joint, with fluid coming from the hairless skin at the top of the cleft between the claws, along the coronary band or the bulbs of the heels. The injury often results from stones, glass, nails or other sharp objects. Individual medication is usually adequate.

**• Prevention**

Any management procedure that will eliminate hoof damage will contribute to the prevention of foot rot. Many of the problems can be avoided by thoroughly cleaning pens after cattle are removed and liberally spreading lime over the pen surface. Maximum drainage is an absolute essential to any feedlot arrangement and will aid in preventing constant contact with manure-laden mud or water.

Well-built and maintained mounds are good protection from foot rot. The mounds should be arranged so they receive maximum exposure to the sun and should be spread with lime occasionally. Frozen rough ground in lots can be corrected by spreading salt or fertilizer, which softens the frozen soil and also may counteract some organisms. Covering the frozen ground with straw also may be helpful in preventing foot injury. Concrete slabs placed around water fountains and feed bunks, where animals frequently congregate, are helpful in preventing contact with extremely muddy conditions.

The addition of ethylenediamine dihydroiodide (EDDI) in salt or feed is often suggested as a measure to prevent foot rot. The approved dosage for EDDI is 10 milligrams (mg)/head/day as an aid in preventing foot rot. Larger doses may result in irritation of the respiratory tract with signs similar to infectious bovine rhinotracheitis (IBR).

Spreading lime with 5-10% copper sulfate around water fountains and feedbunks may be helpful in preventing foot rot.

**• Treatment**

For individual animals, hoof care and trimming of infected tissue is an important aid to medication. Tetracyclines administered at adequate dosages and immediately following discovery of infection are usually effective as a treatment. Sulfonamides also have been extensively and successfully used.

Medication of herd problems are usually approached through water or feed. EDDI in the feed or salt may be of some help but is usually considered preventative at best. Use of feed-grade chlortetracycline at 2.2 mg/kilogram (kg) of animal weight for 7 days, followed by 1.1 mg/kg for 7 days, is usually effective. Use of lesser quantities will only prolong the medication period, lead to chronic incurable foot rot or will contribute to disease organisms by developing drug resistance.

When foot rot fails to respond to medication and terminates as an infectious arthritis, claw or hoof amputation may be utilized to correct the condition and make the animal suitable for marketing.

Foot rot is a long-standing problem in the cattle industry, but methods to prevent and treat the disease have not changed very much in the past few decades. Vigilance in the areas of pen sanitation and early detection and treatment are the best methods available for protection of your herd.

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