

One of the most common causes of lameness in cattle is due to foot rot. This is also arguably the most misdiagnosed, yet *overdiagnosed* lameness in cattle. To help prevent misdiagnosis of foot rot, we will look at how to detect it, discuss how it is caused, and explain various methods of treatment and prevention available. We will also discuss how this infection negatively affects cattle if it is not controlled in a timely manner.

Foot rot is best defined as a bacterial infection that creates a wound in the soft tissue between the claws of a hoof. In most cases, producers are able to detect this infection by noticing lameness in the affected animals of the herd. Swelling and reddening of the skin just above the hoof, between the toes, and at the bulb of the heel may occur before lameness sets in. A break in the skin of the soft tissue between the claws may be detected if you are able to examine the foot closely. These symptoms may be present in one or more affected feet at a time.

The main cause of foot rot is the introduction of bacteria into the foot through lesions or cuts that are present. Sharp sticks or rocks, and other rough surfaces may cause these cuts or abrasions. Foot wounds are likely to become prevalent after mowing a pasture- especially one with goatweed due to the large quantity of stubble that remains after the pasture is mowed. High temperatures and excess moisture are also known to cause lesions in the foot that allow access to bacterial infection.

Understanding the cause of foot rot is the first step in knowing how to prevent the infection from overtaking your herd. Foot rot causing bacteria cannot enter through normal, healthy skin, so it is important to minimize the amount of rough surfaces that the cattle are exposed to. Because this is not always the easiest or most feasible thing to do, other methods of prevention are available. To aid in prevention, producers may choose to add zinc methionine and/or organic iodide to the cattle's feed or mineral. Feeding low levels of chlorotetracycline may also be an effective source of prevention. If feeding prevention is not the best option for your operation a vaccine for prevention is available, however the cost effectiveness of this method of prevention has not been established.

Because prevention is not 100% effective, there is a possibility that some animals in your herd may contract foot rot. In mild cases, cattle may heal themselves in 7-10 days. More serious cases may require treatment with antibiotics such as LA 200, or Micotil. Treatment of the most severe cases may require a foot cleaning, trimming, and bandage. It is important that a severe infection is not left unattended, or the infection will travel to the joint, resulting in arthritis. For best results, treatment and preventive measures should take place under the direction and supervision of a veterinarian. Due to the often irreplaceable value of a herd sire, bulls with foot rot should be treated immediately to avoid unnecessary loss.

Foot rot may be seen in all classes of cattle. Unfortunately, long term immunity against it cannot be built. However, if you experienced a bad outbreak last year, you *will* have some level of protection this year. It is important to keep in mind that not all lameness in cattle is due to foot rot. Lameness may also be a result of other feet/hoof problems such as hairy heel, founder, abnormal hoof growth, or a puncture wound. For proper treatment, a thorough examination of the animals should be performed. Please contact us if you have any questions about the treatment or prevention of foot rot or lameness in your herd.