

WHAT IS IT

Foot rot is usually a sporadic infection of the soft tissues of the foot in dairy and beef cattle. Foot rot lameness can range from mild to severe lameness and usually has a sudden onset.

HOW TO RECOGNIZE IT

Foot rot is recognized by the sudden onset of lameness accompanied by the symmetrical swelling of the lower leg above the claw. Depending on the stage of the disease the interdigital skin splits open and putrid, foul-smelling discharge is noticeable. In more severe cases, loose pieces of necrotic tissue can be easily removed from the interdigital space.

PATHOGENESIS

The most common bacteria associated with foot rot are *Fusobacterium necrophorum* subspecies *necrophorum*, *Dichelobacter nodosus*, *Trueperella pyogenes*, *Porphyromonas levii*, and *Prevotella intermedia*. The bacteria are all gram negative anaerobes that are present in the GI system of cattle and as a result are also found in their environment. To cause disease there has to be a defect in the interdigital skin to allow opportunistic invasion by these bacteria. The bacteria then work synergistically to cause inflammation and necrosis of the soft tissues in the lower leg.

HOW TO PREVENT IT

The key focus for preventing foot rot is on preventing skin damage. Skin damage typically occurs due to things such as rocks, sharp edges, cables etc. in the animals environment. Skin damage can also occur due to chronic wetting of the foot in muddy or wet and dirty environments. On dairy farms the use of footbaths with a range of disinfectants is used as an aid to clean and disinfect the interdigital skin. Currently, there are no pharmaceutical products labelled with a claim to prevent foot rot.

HOW TO TREAT IT

Foot rot should be treated with systemic antibiotics according to label directions. There is typically no need to remove necrotic tissue or apply bandages. Treated animals should visually improve within 2-3 days. If animals do not respond the diagnosis should be re-evaluated. In severe cases the infection can spread to tendons and joints resulting in a very severe lameness that is unresponsive to regular systemic antibiotic treatment.