



## The Horn Diseases

(incl. sole ulcers, white line lesions, double soles)  
(Laminitis)

Horn diseases are painful, with pain levels ranging between moderate and severe. Most of the time, the back hooves are affected. In acute cases of laminitis, the claws are often warm and the animal stands and walks uncomfortably and will often lie down. Slow movement, with an arched back, is also common. In later stages, the claws grow flatter and show 'growth rings' on the hoof wall, indicating a history of laminitis.

### CAUSES

The herd's environment is one of the principal causes of horn diseases. Lack of space, inadequate housing, narrow alleyways, 90 degree turning corners, and excessive walking and standing time are considered factors. Laminitis can also be caused by the release of bacterial toxins into the laminae during dietary disturbances, ill health and other types of stress, especially around calving. Imbalanced rations, milk fever, mastitis and metritis should be addressed to avoid lameness. Environmental stress and metabolic problems result in poor horn production. Improper, inadequate and infrequent trimming creates an imbalance of weight distribution between the claws. This imbalance causes pressure points that are detrimental to proper horn production.

### PREVENTION AND MANAGEMENT

It is important to pay attention to your herd's comfort environment. Make sure you have enough space and comfortable accommodation for the animals. Minimize standing time to allow for a maximum laydown time. Ensure that rations are well balanced, especially in the pre-calving period, to avoid metabolic problems. Schedule two or three trimming sessions per year for preventive hoof care management. In cases of laminitis, it is important to restore the claw to its normal form and balance between the two digits, by trimming all four feet.

Following on the back...

## The Horn Diseases

### OVERVIEW

Combat the possible factor(s) that contribute to laminitis problems :

- Practice preventive balancing of the claws (2-3 trimming sessions per year).
- Consult your veterinarian at regular intervals for proper health management and treatment.
- Contact your nutritionist to ensure proper balancing of the rations.
- Reduce excessive waiting and standing for all animals.
- Avoid slippery and overly rough floors, to maintain a stress free walking environment.
- Allow time for exercise off of concrete flooring to stimulate blood flow in the laminae.
- Ensure enough stalls for proper rest and avoid overcrowding.
- Avoid excessive weight to reduce calving problems and to avoid putting extra weight on the claws



# Hoof Disease Chart

Hoof problems in cattle

Use Hoof-Fit Gel for Digital Dermatitis



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## Heel Erosion-Stable Foot Rot

(Interdigital Dermatitis)  
(Infectious)

Interdigital Dermatitis is like a wet eczema and has a characteristic bad odour. Infections in the interdigital skin (particularly the bulb area) cause extra blood circulation in the bulb area, which in turn triggers extra horn formation. The extra horn formation leads to V-shaped splits in the bulb area. This disorder is seen most frequently when the animals are housed inside and exposed to wet conditions.

### CAUSES

A chronic bacterial infection caused by *Bacteroides nodosus*.

### PREVENTION

- Avoid overcrowding of facilities.
- Ensure dry bedding and proper ventilation to achieve a fresh barn climate.
- Maintain clean alleys to keep feet clean & dry. The use of alley scrapers is recommended.
- Be sure to have a footbath and/or spray program in place.

### MANAGEMENT

- Have all cows regularly trimmed. (2–3 times a year).
- Trim hooves to remove excess horn and ridges.
- Contact us to discuss a spraying protocol and foot bath schedule that fits your herd's requirements.



## Hairy Warts-Mortellaro Disease

(Digital Dermatitis)  
(Infectious)

Digital Dermatitis (DD) is an inflammation of the skin around the cow's hoof. DD is most commonly found on the hind feet—at the back of the hoof, between the bulbs of the heels—but the disease can spread around the foot and into the cleft between the claws. Digital dermatitis is a very painful condition that results in lameness and subsequent reductions in food intake, milk yield and fertility.

The acute stage of digital dermatitis is recognized by the 'strawberry' appearance, with or without long hairs. The chronic lesions of DD will be a more grayish colour, with a proliferative wart appearance.

### CAUSES

The *Treponema* bacteria (Spirochete), often in combination with various environmental factors, are a possible cause of Digital Dermatitis.

### PREVENTION

- Maintain clean alleys to keep feet clean & dry. The use of alley scrapers is recommended.
- Purchase 'clean' animals and know where they came from. Quarantine, examine and treat new arrivals, especially heifers.
- Avoid overcrowding of facilities.
- Ensure dry bedding and proper ventilation to achieve a fresh barn climate.
- Prevent zinc and magnesium deficiencies.
- Be sure to have a footbath and/or spray program in place.

### MANAGEMENT

- After trimming, apply Hoof-Fit Gel and a wrap to the affected hoof. If necessary, repeat this procedure after 3 days.
- Have all cows regularly trimmed (2–3 times a year).
- Contact us to discuss a spraying protocol and foot bath schedule that fits your herd's requirements.



## Foot Rot / Foul Foot

(Necrotic Pododermatitis)  
(Infectious)

The sudden onset of lameness is usually accompanied by a fever and production loss. The skin between the claw and above the foot is swollen, painful and warm to the touch. The swelling is centred on the foot.

### CAUSES

This condition is caused by two bacteria, *Fusobacterium necrophorum* and *Bacteroides melaninogenicus*, which are found in most housing facilities. The bacteria enter the skin via small wounds between the claws and subsequently cause inflammation.

### PREVENTION

- Maintain clean alleys to keep feet clean & dry. The use of alley scrapers is recommended.
- Avoid small stones, uneven floors and overcrowding of facilities.
- Ensure dry bedding and proper ventilation to achieve a fresh barn climate.
- Be sure to have a footbath and/or spray program in place.

### MANAGEMENT

- Consult a veterinarian for treatment of severe cases. This infection occurs deep within the foot, so prescription drug might be needed.
- Have all cows trimmed 2 to 3 times a year.
- Contact us to discuss a spraying protocol and foot bath schedule that fits your herd's requirements.