## FACT SHEET: HOOF CARE & MANAGEMENT IN DAIRY CATTLE FIJI

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## WHAT IS FOOT ROT?

Foot rot is an infection of hooves that initiates foot swelling with redness, bad odour and deteriorated hoof condition in cattle feet causing severe lameness and mobility problems.

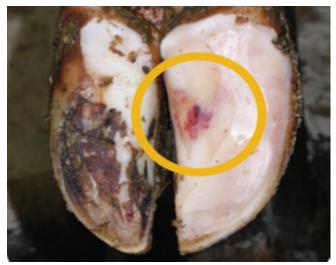


Figure 1.0 Initial Foot Rot Infection in cattle

## **CAUSES OF FOOT ROT**

- Foot rot condition is caused by the bacteria known as Fusobacterium necrophorum which is readily found within the environmental conditions.
- Movement of cattle from wet conditions to dry conditions causes the hoof skin to become cracked, giving bacteria F. necrophorum to invade and a chance to enter into tissues of the hoof leading to primary and then secondary infection.
- Lack of minerals such as zinc, selenium and copper may also contribute to foot rot. These minerals are present in the soil, pasture and supplementary feeds.
- Poor stockman ship skills is a critical cause of foot rot as well. If not detected at early stages, it can lead to very serious stages later after development of infection.

#### **SIGNS OF FOOT ROT**

- 1. Movement of animals are abnormal which gives indication to assess the feet and the hooves immediately.
- 2. Swelling and foul smell from the hoof.
- 3. Frequent limping and very slow in moving around

the facilities

4. High body temperature.

#### **EFFECTS OF FOOT ROT**

- Reduced feed intake due to poor mobility and grazing within paddocks.
- Loss of body weight and body conditioning score
- Reduced metabolism leading to lower milk production.
- Severe foot rot cases are difficult to treat and
- recover.
- Incurrence of additional cost if preventative measures are not taken for hoof care.

#### HOW TO PREVENT FOOT ROT

- Have routine foot checks scheduled for all classes of animals.
- Ensure farm facilities have smooth surface areas.
- Keep stockyard clean, dry, disinfected and comfortable at all times.
- Follow proper nutrition guidelines and feed balanced rations.
- Install a foot bath as it removes irritants, hardens the hoof and prevents infections.
- Treat with antibiotics as recommended by the officials from the Ministry of Agriculture.

# HOW TO PREVENT AND TREAT FOOT ROT AND WHAT IS A FOOT BATH?

A footbath is one of the most important practices used on farms to prevent lameness and to maintain hoof health. When used properly and paired with a disinfectant, a footbath can prevent and control foot rot on dairy farms.

## **STEPS OF FOOT BATH**

- 1. Before the cows move into the milking area, clean their hooves with high pressure water to remove any foreign materials from hooves.
- 2. Ensure the foot dip trough is cleaned properly without presence of algae and other waste waters.
- 3. While the cows are being milked, foot dip solution such as copper sulfate and formalin can be prepared in the foot bath tub according to the product dilution recommendations. (Dilution is usually 2% to 5%).
- 4. Once the cows are moving out after milking, allow them to work slowly ensuring all the four hooves are dipped in prepared solutions. Hooves should be dipped into the solution for at least

10 seconds. While cows are walking, take note of any abnormalities in locomotion. This can be later examined for further treatments and attention.

- 5. While cows are walking, take note of any abnormalities in locomotion. This can be later examined for further treatments and attention.
- 6. Solution can be re-used till it gets dirty with cattle faeces. This will depend on the number of cows being treated.
- 7. Based on progressive locomotion assessment, repeat the process to ensure recovery of hooves.

For foot bathing to be successful, an effective antimicrobial product such as copper sulphate, Formalin can be used and is available locally. The above product is available at all the Animal Health and Production clinics and other livestock commercial supplies. Please do not hesitate to contact us for more information.



A cow having footbath in formalin solution