

# Foot Rot

NC STATE EXTENSION

## Meat Goat Notes

### What is foot rot?

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Foot rot is a contagious disease of the hooves of goats and sheep that occur most often during persistent periods of rainy weather along with temperatures above 50°F.

### What are the symptoms of foot rot?

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The first symptoms of foot rot are limping, holding legs above the ground, reluctance to walk, and grazing on knees. The sole and the sidewall of the diseased foot appear ragged and rotten and have an extremely bad necrotic odor.

### What are the causes and transmission of foot rot?

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Foot rot is caused by the invasion of two anaerobic bacteria, *Fusobacterium necrophorum* (commonly found in the environment) and *Dichelobacter nodusus* (from the feet of infected animals). The disease is usually spread from infected carrier animals into the soil and then to the non-infected feet of healthy animals. Overgrown hooves will predispose an animal to foot rot. Wet soils, muddy pens and filth increase the possibility of disease outbreaks. Goats do not develop the condition as readily as sheep.

### How can I prevent foot rot in my herd?

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Hooves should be frequently monitored for excessive overgrowth of the sole and toes as regular trimming will help prevent foot rot and other foot problems. Trimming hooves during or following a period of rainy weather is easier as the hoof walls are softer. Providing rock piles and other structures with abrasive surfaces for climbing or playing will help goats to partially wear off excessive hoof growth.

Animals should be purchased from herds free of foot rot. Nonetheless, feet of purchased animals should be trimmed, carefully inspected for lesions and if any doubt exists, the animals should be run through a foot bath (see below under [“How should I treat foot rot”](#) for details) and quarantined for at least 2 weeks. Following the quarantine, the hooves of the purchased animals should then be reexamined before allowing them to mingle with the existing herd. Animals taken to shows, fairs and breeding stations should go through the same procedures.

Foot baths can be constructed of a variety of materials such as concrete, fiberglass, or plastic-lined wood. Foot baths should be made such that the ledge containing the foot bath solution is located outside the enclosure, or have round, smooth edges otherwise goats will try to stand on the ledge. The foot bath solution should be disposed of so as to prevent environmental contamination.

The best method of foot rot prevention is to remove animals from muddy, dirty and wet areas for about 4 weeks so the organisms present in the soil will die out or decrease in number.

## How can I control foot rot in my herd?

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With foot rot already existing on the farm, proper hoof care, prophylactic use of footbaths, culling goats with poor foot conformation, and selecting goats with apparent resistance to foot rot are control measures considered to offer long range benefits. Infected animals should be separated from non-infected animals, treated, and then be grazed on separate pastures. Severely infected animals and animals not responding to treatment should be culled. Trimming equipment should be disinfected between each animal affected with foot rot.

## How should I treat foot rot?

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Remove the dead, rotten foot tissue with shears or a sharp knife. Trim down until the healthy tissue is found. Some bleeding will occur. This is necessary to remove the diseased tissue.

After trimming their feet, the animals should be forced to walk through a zinc sulfate foot bath solution. Repeating the footbath treatment 2 to 4 times at weekly intervals may be necessary. Let animals stand in the foot bath solution for approximately 30 minutes, followed by another period in a dry lot to allow the solution to dry on hooves. Do not place the foot bath where goats are likely to drink from it.

The use of injectable antibiotics is highly effective and penicillin, erythromycin or oxytetracycline can be given under the advice of a veterinarian. For mild cases of foot rot or if animals limp and show early signs of foot rot, Koppertox can be used directly on the affected areas. KOPPERTOX IS NOT LABELED FOR ANIMALS THAT WILL BE SOLD FOR MEAT.

Treated animals should not be grazed on pastures that have not been free of infected animals for at least 14 days, and should not be turned back into muddy yards or wet and dirty areas. Hoof trimmings from infected animals should be removed or burned.

As a preventive measure, goats with foot rot should be given a tetanus antitoxin or a tetanus booster shot as the anaerobic environment of the affected feet may predispose and facilitate the development of tetanus.

## Foot Bath Mixtures - Solutions to Soak Infected Feet

ALWAYS READ LABELS FOR CORRECT CONCENTRATION.

Zinc sulfate solutions are mild and effective and are the solutions of choice: 1 part zinc sulfate to 9 parts water, or 10% weight (zinc sulfate) to 90% volume (water) ratio.

Copper sulfate solutions in the proportions described above for zinc sulfate solutions are also effective but will stain the hair or fleece blue-green and can be potentially toxic if ingested.

**COPPER SULFATE SOLUTIONS SHOULD NOT BE USED IN SHEEP.**

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