Information about the Kentucky State University Cooperative Extension Program

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# Contagious Ecthyma (Sore Mouth/Orf /Scabby Mouth)

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#### Causes

Contagious Ecthyma is caused by a virus in the parapoxvirus family. It often affects young animals but may be seen in any age. It may infect sheep, goats or alpacas, but goats seem to have more severe symptoms. Different strains of the virus may also affect how severe the infections are. In 2011, USDA National Animal Health Monitoring System reported the prevalence may be as high as 43.7% on sheep farms in the United States.

The virus is spread through direct contact. Animals will develop lesions and crusts, which fall off, contaminating the environment. It has been

documented that the virus may live in crusts for more than 10 years. Due to this, once infections occur on your farm, you may continue to have outbreaks for years. The virus may also be spread from one animal to another through equipment, feed troughs or direct contact.

# **Symptoms**

The virus causes lesions or sores on areas where skin meets the mucous membranes, such as lips, mouth, eyelids and coronary bands of the hooves. However, lesions may also develop on dams' teats, hooves, and rarely on vulva or sheaths. The sores may start as small papules and then progress into blister-like sores, then into scabs. Secondary bacterial lesions may cause pustules or draining wounds. The sores are painful to the animal. Often they will not eat well if the sores are in or around the mouth. For sores on the teat, dams may refuse to let kids nurse, often developing into secondary mastitis. Animals may be lame if infection is on the foot. Lesions often resemble interdigital dermatitis.

#### **Treatment**

As mentioned earlier, sore mouth is caused by a virus. There are no approved antivirals for food animals, so the virus must run its course and should resolve in one to four weeks. Antibiotics may be used as topical or injectable treatments if secondary bacterial infection develops. Consult your herd veterinarian about severe infections.

Special care for the udder may be needed if the lesion is on a teat. If the doe/lamb will not let offspring nurse due to pain, she may need to be carefully milked or offspring be supplemented with a milk replacer. Certain ointments may help prevent secondary infections and soften the scab. Discuss treatment options with your veterinarian.

### **Prevention**

Biosecurity is very important in small ruminant farms for sore mouth and other contagious diseases. Below are precautionary measures that can be taken to avoid sore mouth infection in your herd.

- 1. Buy animals from reliable sources and ask farms that you buy from if sore mouth is present in their herd.
- 2. Never buy animals with visible sores on the mouth, teats or feet.
- 3. Once animals are purchased, isolate them away from the herd for 14 days before introducing to the herd/flock.
- 4. If you show animals, always keep show animals separate from the herd. While transporting animals with lesions is prohibited, the comingling at shows always increases the chance of bringing contagious diseases on to your farm.
- 5. For animals being shown, vaccine should be given at least one month before the show season to prevent infections that may prevent the animal from being able to compete. Infected animals should be isolated and treated when necessary. Cleaning and disinfecting equipment or feed troughs may also help minimize the spread of the virus.

A vaccine that may be given to pregnant does to increase kid immunity through antibodies in colostrum is available. The vaccine may also be given to young lambs/kids. The vaccine for sore mouth is a modified live vaccine, which means it is active and will cause a less severe lesion to build the animals immunity. A scab usually develops within few days at

the site the vaccine is applied, and this should resolve after one to two weeks. Be sure to follow directions on the label of the vaccine. If your herd/flock has never had sore mouth, the vaccine is NOT recommended as it will introduce the sore mouth virus onto your farm.

Sore mouth is a zoonotic disease, which means it can be transmitted from animals to people. It may develop on your skin after having direct contact with a lesion. This is usually visible on the human hand, since this is most likely exposed skin while handling animals. It becomes a painful sore that may take weeks to heal. If your animals have had sore mouth and you develop a lesion on your hand or elsewhere, contact your physician. Use gloves and personal protective equipment when tending to animals with suspected cases of sore mouth. Always wash your hands thoroughly after treating infected animals.



## References

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