



## Orf Virus (Sore Mouth Infection)

### Infection in Animals

Sore mouth is principally found in sheep and goats. Other ruminants\* that may on occasion develop sore mouth include musk oxen and gazelles. In the United States, 40 percent of sheep operations reported sore mouth infections within their flock during 1998-2000, this according to a 2001 survey performed by the [United States Department of Agriculture Animal and Plant Health Inspection Service's National Animal Health Monitoring System \(USDA APHIS NAHMS\)](#) [↗](#).

### What are the signs of an orf virus infection?

- Sores are typically found on the lips, muzzle, and in the mouth.
- Early in the infection, sores appear as blisters that develop into crusty scabs.
- Sheep and goats may get sores on their lower legs and teats, especially when ewes or does are nursing infected lambs or kids. Young animals may have difficulty nursing and may require bottle or tube feeding. Nursing ewes or does with lesions on their udders may abandon their lambs, and older animals with oral lesions may also require nutritional support.

Except in rare cases, animals recover completely from sore mouth infections within a month. Particular breeds, especially Boer goats, may be especially susceptible and may have severe infections.

Animals can become infected more than once in their lifetime but repeat infections usually occur after a year's time and are generally less severe.



Sore mouth in sheep. Photo courtesy Edie Lederman, MD.

### What other diseases can look like sore mouth?

Foot-and-mouth disease (FMD) is a highly contagious and sometimes fatal viral disease that can affect sheep, goats, cattle, swine, and other cloven-hoofed animals. FMD can be confused with similar but less harmful diseases, including sore mouth. FMD has not occurred in the United States since 1929. If your animal(s) exhibit more severe symptoms than lesions in the oral cavity, teats, and lower legs such as excessive salivation or lameness immediately report it to your veterinarian, to state or federal animal disease control officials, or to your county agricultural agent.

### How do animals become infected?

Material from the lesions of an infected animal contains the virus. The virus can be transmitted to other animals through cuts or abrasions in the skin. The teats of ewes or does may become infected through nursing lambs or kids. Any direct contact between animals — muzzle to muzzle or skin to skin — can result in transmission of the virus between animals.

Orf virus is particularly hardy in scab material and can remain viable in the environment for months, possibly years. Pastures, bedding, feed and feed troughs, and buildings may become contaminated with orf virus from released scab or lesion material making it difficult to completely eliminate orf virus from the immediate environment once an infected animal is present.

### Is there a vaccine available?

There are commercially available preparations of live virus marketed as vaccines. Producers considering using an orf vaccine product in their flock should consult a veterinarian. Vaccination practices vary depending on breed and geographic location. Because the orf vaccine is a live virus preparation, its use is only suggested for flocks that have previously experienced orf virus infection or in which vaccine has previously been used.

# How can I protect my animals?

It can be difficult to prevent infection since orf virus survives in the environment. You can lessen the possibility of exposure by taking steps like these:

- Since animals with cuts or abrasions are most susceptible to infection reduce the likelihood of this by removing thistle or harsh brush from pastures.
- Disinfect buildings where animal husbandry is carried out and common feed troughs.
- Wash or disinfect your hands between touching infected animals and non-infected animals.
- Isolate new animals until sore mouth is ruled out.
- Open your own animal's mouth at public events such as fairs and shows.

## For more information

For more information on orf virus infections in sheep and goats, please contact your veterinarian or the veterinary extension service in your state or visit the [National Animal Health Monitoring System website](#)  concerning national studies on domestic livestock.

\* A ruminant is an even-toed, cloven-hoofed mammal belonging to the suborder Ruminantia that digests plant-based food using a four-chambered stomach. Aside from goats and sheep, this may include chevrotains, pronghorns, deer, giraffes, and

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