

April 4, 2011

Orf Fact Sheet

- 1. What is Orf disease? Orf, also known as sore mouth, contagious ecthyma or "scabby mouth," is a viral infection caused by a poxvirus and is an infection primarily of sheep and goats. Orf is commonly found throughout the world. Forty percent of sheep and goat operations in the United States reported Orf infecting their flocks in the previous three years.
- 2. What are the clinical signs for Orf? Early in the infection sores appear as blisters and then become crusty scabs. Sores are typically found on the lips, muzzle, and in the mouth. Sheep and goats may get similar sores/scabs on the lower legs and the teats, especially when ewes or does are nursing infected lambs or kids. Animals usually recover completely from Orf infections within a month. Young animals may have difficulty nursing/feeding and may require supplemental bottle or tube feeding. Nursing ewes may abandon their lambs, and older animals may also require nutritional support. Some breeds, such as the Boer goats, are particularly susceptible and severely affected by this condition.
- 3. What causes Orf in animals? Orf is caused by the Orf virus. The scabs of infected animals contain virus, can fall off, remain in the environment and serve as a source of infection to susceptible animals. A flock can become infected through contaminated bedding, feed or trucks, or by direct contact with infected animals (e.g. replacements brought onto the operation or at shows). Young animals will have the most visible disease because they have not likely been exposed to the virus before and because their immune systems are still developing.
- 4. Which animals can get Orf? Orf is generally found only in sheep and goats, although musk oxen and gazelles are occassionally infected.
- 5. **Are there other diseases of concern in sheep that could look like Orf?** Yes. Foot-and-mouth disease (FMD) is a serious animal disease that does resemble Orf and can affect sheep, goats, cattle, swine, and other "cloven-hoofed" animals.
- 6. What can I do to protect my animals from Orf? There are protective measures that may help lessen the risk of infection. These include:
 - a. Reduce the likelihood of mouth/muzzle cuts (e.g. remove thistle from grazing areas).
 - b. Quarantine new animals until Orf can be ruled out.
 - c. Avoid bringing animals with Orf to public events such as fairs and shows.
 - d. The Orf virus survives in soil, and carrier animals may not show symptoms; as a result it is difficult to prevent infection, but using the measures above may assist in prevention.



- e. Since Orf may be transmitted through saliva, some owners choose to assist the judges at shows by opening their own animal's mouth.
- 7. **Is there a vaccination for Orf?** There are several commercial live virus vaccines available.
- 8. What should I keep in mind when using a vaccine? Producers considering using an Orf vaccine product in their flock should consult a veterinarian. Use of a vaccine is only suggested for previously infected flocks since the vaccination will cause an orf infection in the animals and lead to contamination of the operation with virus-containing scabs. All Orf vaccines contain live virus which can cause infection in humans.
- 9. Can an animal become infected with Orf more than once? Yes, animals may become infected more than once in their lifetime but repeat infections usually occur after a year's time and are usually less severe.
- 10. Can people become infected with Orf? Yes, people can become infected with the virus that causes Orf. It is a common infection among sheppherds, veterinarians, and abattoir workers in areas producing sheep and goats. A person who comes into contact with virus from an infected animal or equipment (such as a harness that has rubbed the animal's sores) can become infected. People often develop sores on their hands. The sore may be painful and can last for 2 months. Infected people rarely infect other people. Sores usually heal without scarring.
- 11. Which activities are associated with the greatest risk of becoming infected with Orf? Since Orf is primarily an illness of sheep or goats, people who handle these animals are at greatest risk of infection. Specific activities that may put you at risk of infection include:
 - a. Bottle feeding, tube feeding, or shearing sheep or goats.
 - b. Petting or having casual contact with infected animals.
 - c. Handling infected equipment.
 - d. Working with animals when you have an open cut or skin sore.
 - e. Being bitten by an infected animal.
- 12. What should I do if I think I have become infected with Orf? Currently there is no approved treatment for Orf. However, the sores may be painful and may become infected with bacteria if not properly managed. If you are experiencing pain, fever, or notice that the sore is becoming rapidly larger or spreading, you should see your physician.
- 13. How can I protect myself and others from getting Orf? The virus that causes Orf is spread to people by touching infected animals and their equipment. Some animals may or



may not have visible sores but may still be able to spread the virus. The two ways to protect yourself and others include:

- a. Wear non-porous (i.e. rubber or latex) gloves when handling sheep or goats, especially when you have an open cut or sore and are handling the animals mouth/muzzle area.
- b. Practice good hand hygiene by washing with clean, warm water and soap for at least 20 seconds (or use a waterless alcohol-based hand rub when soap is not available and hands are not visibly soiled).
- 14. Should people with medical conditions work with animals infected with Orf? Most medical conditions do not affect the immune system enough to prevent your body from fighting off the Orf virus on its own. However, if you have an autoimmune disease (e.g. Lupus (SLE), rheumatoid arthritis), a transplanted organ, are taking chemotherapy for cancer or are taking corticosteroids (e.g. prednisone), you should talk to your primary care provider about potentially avoiding animal contact. People with these medical conditions have weakened immune systems and the Orf virus can cause a serious infection.
- 15. For more information about Orf: http://www.cdc.gov/ncidod/dvrd/orf_virus/

This fact sheet provides general information. Please contact your physician and/or veterinarian for specific clinical information related to you or your animal.