Contagious Ecthyma (Orf) in Sheep and Goats

Introduction

Contagious Ecthyma (CE), also known as orf, contagious pustular dermatitis, or sore mouth, is perhaps the most commonly encountered skin disease in sheep and goats in Newfoundland. This disease is seen in virtually every place in the world that raises these animals. Every breed and age are susceptible, although young animals are more easily infected.

In addition to causing disease in sheep and goats it also has the ability to spread to the hands and arms of people handling infected animals.

This factsheet is one of many on the common infectious diseases of animals and will outline the causes, treatments and means of prevention for this disease.

The Cause and Appearance of the Disease

CE is caused by a virus from the pox family. Within two to three days of contacting the virus, the first signs of the disease can be seen. By eleven days, scabs are evident which may stay for a week or two. The virus may be passed directly between animals or indirectly by objects that animals contact. The virus is very hardy and live virus has been found in dried scabs up to twelve years after they have been shed.

CE is most commonly seen on the lips and mouth of infected animals, but lesions may also occur on the udder and between the toes. The disease begins with water filled blebs that eventually become pustules. When the pustules break, raised brown scabs form over the resulting wounds. If a number of pustules are found close to each other, large scabs result. It is usually at this stage of the disease that farmers notice that they have a problem. If there is no further infection of the lesions, the disease will clear up in one to four weeks. Animals that contact the disease usually develop a strong immunity and will not be re-infected for at least one year.

Effect on a flock

CE is an extremely infectious disease with up to 90 percent of a flock showing signs. Most animals will have only mild loss of condition because of unwillingness to eat from the painful condition of their mouths. Young lambs and kids are more at risk to serious consequences. They may be abandoned by mothers when they become lame from foot lesions or refuse to drink because of their sore mouths. In very rare cases, it is possible for the lesions to extend down from the mouth into the trachea and lungs and cause death in adult animals.

Treatment

It is important to realize that like all diseases caused by viruses, CE cannot be treated with antibiotics. If infected animals are kept clean, the disease will clear up in one to four weeks without treatment. However, it is possible for the sores of CE to be infected a second time by bacteria or insects. To prevent this, many farmers will treat CE lesions with an antibiotic spray or cream. Vaseline and iodine mixed together will fill this purpose. If insects are a problem at the time of infection, insect repellants applied around, but not on the lesions, may be helpful.
Prevention

Vaccines are available commercially and may also be made from the lesions. They have had little or no use in this province. Problems with vaccination include a less than excellent immunity that results and the possibility of the vaccine causing the disease in flocks that have not encountered the disease before.

Infection in humans

When dealing with infected animals, it is important to realize that CE can be passed to humans. When people get CE, signs are first seen three to seven days after handling diseased animals. Lesions are usually seen on the hands or arms and pass through the same forms as seen in sheep and goats. If the lesions are not infected, they will heal in two to four weeks and leave no scars.

If someone handling infected sheep or goats develops such wounds it is important to see a family doctor and to let them know that you are working with infected animals.

More Information

Anyone wishing more information on Contagious Ecthyma, other farm animal diseases or husbandry practices can contact any of the Regional Veterinarians at the provincial Natural Resources (Agrifoods Branch) offices.

Further factsheets are also available through these offices or on our website.

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