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Chlamydial Abortion of Sheep and Goats

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Chlamydial abortion of sheep and goats is a disease seen with increasing frequency in Idaho. It can cause abortion losses as high as 30 percent in newly infected sheep flocks, even higher in goats.

This disease, also called enzootic abortion of ewes (EAE) and ovine viral abortion, was first described and characterized as a specific disease by researchers in Scotland in 1950. It was reported in the United States in 1958 and was found in Idaho by University of Idaho scientists in 1959.

The first report of chlamydial abortion in goats came from Germany in 1959. The disease was reported in a dairy goat herd in California in 1968, and was diagnosed by the authors in an Idaho herd in February 1976. With the increase in dairy goat numbers in Idaho, we can expect the disease will be found more frequently in goats in the future.

Effects of the Disease

Chlamydial abortion has been studied more extensively in sheep than in goats, but similarities very likely exist. In either sheep or goats, the disease causes abortion, stillbirth and weak lambs or kids. All ages of ewes and does are susceptible although the 2- and 3-year-old animals are most commonly affected. An individual ewe aborts only once but latent infections and carrier states apparently occur. A susceptible ewe exposed to the organism in one lambing season may retain the infection and abort in the following lambing season.

The rate of abortion in newly infected flocks can be severe — as high as 30 percent in sheep and even higher in goats. In sheep flocks where the infection has continued for a number of years, the abortion rate is usually about 5 percent.

Transmitting the Organism

The organism that causes chlamydial abortion is a bacterium that can propagate only on living tissue. Transmission of the organism from infected to susceptible animals is known to occur at lambing time and at the time of abortion.

Infected ewes and does shed large numbers of the chlamydial organisms in aborted fetuses and placentas and also in subsequent vaginal discharges. The organisms can remain viable for several days, especially in colder weather. Discharged into the environment, they contaminate feed and water or attach to dust particles and fluid droplets, and thus make their way into the digestive tracts and respiratory systems of susceptible animals.

Crowding in pens and buildings during lambing helps the disease spread.

Control and Treatment

Good management practices are the most effective methods now available to minimize chlamydial abortion losses. These include isolating ewes or does that have aborted and careful sanitation to control spread of the transmitting organism.

Artificial immunization is possible and will provide lasting immunity, but no vaccine is now commercially available in the United States. Chlortetracycline at the rate of 80 mgm per head per day has effectively controlled the disease if it is administered during pregnancy. However, once abortions have started in the flock, the antibiotic feeding is ineffective.

Consult a veterinarian before using antibiotic or other therapy for any suspected disease problem. Other causes of abortion exist in both sheep and goats, so aborted fetuses and placentas must be examined in a laboratory before an accurate diagnosis is possible.

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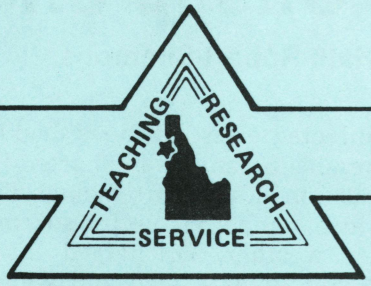

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