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Campylobacteriosis in Ewes (Vibrionic Abortion)

One of the major causes of ovine abortion is campylobacteriosis (formerly vibriosis). *Campylobactre fetus* subspecies *fetus* and *Campylobactre jejuni* are the bacteria responsible for the disease. They are small, motile, gram-negative rods that normally require special microscopic techniques to confirm or identify their presence.

Pregnant ewes that become infected may lose weight and appear unthrifty. Diarrhea may be present. They usually abort late in their pregnancy. They may also deliver stillborn or weak lambs. In unvaccinated flocks, the abortion rate may reach 70% of the ewes. The aborted fetus is autolyzed (already showing signs of decomposition). This is in contrast to a fresh fetus in Chlamydial/Enzootic Abortion of Ewes (EAE), which is another common cause of ovine abortion. The placenta is often hemorrhagic (bloody), necrotic (decomposition), and edematous (swollen, leathery). Following the abortion, the ewe may develop an infection of the uterus (metritis) and require additional medical attention. Mortality in the ewes may exceed 5%. Surviving ewes may become carriers.

This disease is very contagious and spreads rapidly among the remaining ewes unless very strict hygiene is practiced. The fetus, placenta, birth fluids, vaginal discharge, and feces from the ewe are all sources of infection. If the water or feeding areas become contaminated with these materials, the abortion rate can be very high. Isolate the aborting ewes immediately and consult with your veterinarian on recommended treatment, proper disposal of the aborted fetus/placenta, and disinfection procedures. The veterinarian may also want to perform a necropsy or take samples for an accurate diagnosis.

Prevent the disease from spreading by limiting access to the aborted materials by wild birds and wild or domestic mammals, which can carry the bacteria to other lots or ranches. Provide feed in bunks off the ground to reduce fecal contamination (a potential source of the bacteria). Take measures to assure that the water supply and drinking area does not become contaminated with feces, aborted material, or vaginal discharges. The use of separate boots, coveralls, and plenty of disinfection is highly recommended and cannot be stressed enough. Additionally, these organisms are infectious for man and will cause a very serious enteritis. Cleanliness is absolutely essential.

This disease can be controlled with the use of a vaccine like **CAMPYLOBACTER FETUS BACTERIN**, Ovine Origin from Colorado Serum Company. Vaccinate all incoming and unvaccinated ewes thirty days prior to breeding season and again sixty to ninety days later. Follow up with a booster every year at the onset of breeding season. While some immunity is obtained following an outbreak, immunity against one strain of *Campylobactre* is not cross-protective against the other strain. This false sense of security combined with the presence of carrier ewes can result in further abortion storms. It is equally important to realize, that campylobacteriosis tends to be cyclical. Two to three good years might lull a rancher into reducing his vaccination program, only to suffer abortion losses as the next lambing season approaches. Consult with your veterinarian for the program that best fits your needs.

