



ZOONOTIC DISEASES

Zoonotic Diseases are those diseases that can be transferred from animals to humans. Shepherds can expose themselves to any of a handful of diseases that occur in sheep. Generally speaking these diseases are rarely life threatening to the shepherd, however a number of them can cause abortion in pregnant women or are of particular concern for persons who are immuno-suppressed.

Pregnant women: Nearly all of the infective causes of ovine abortion can cause abortion in humans, of particular concern are Chlamydia, Campylobacter, and Toxoplasma. All of these are capable of spreading from sheep to humans and capable of causing abortion in pregnant women. This is the reason that we recommend that pregnant women stay out of the lambing barn. Aborted fetus, placenta, uterine fluid, and other body fluids from the ewe are considered infective and should be avoided by pregnant women. This includes coveralls, towels, and equipment contaminated by any of the above.

Soremouth (contagious ecthyma, orf): The virus that causes soremouth is capable of causing painful pox lesions in humans. Skin is a barrier to infection by the virus, but any break in the shepherd's skin such as a scratch or cut that comes in contact with a soremouth lesion can result in human infection. Simply wearing gloves when handling sheep with soremouth will prevent infection. Gloves should also be worn when vaccinating sheep for soremouth as it is a live vaccine.

Ringworm: Skin fungi that affect sheep are also capable of affecting humans. Transmission from sheep to humans is by contact with the lesion in sheep or by contact with grooming supplies such as brushes and clippers. The lesions in humans are similar to those of sheep. Any reddened, raised, scaly lesion of the skin is suspect of ringworm. Persons with a suppressed immune system or those on immuno-suppressive drugs are those most at risk of acquiring ringworm. Ringworm is common in slick shorn show wethers and children that handle and show these lambs are at risk.

Diarrhea organisms: Cryptosporidia is a common cause of diarrhea in baby lambs in the first few month of life. Salmonella can be a cause of diarrhea in growing lambs as well. Transmission from sheep to humans is by contact with infected manure. Simple hand washing is effective in preventing transmission. Young children are more susceptible than adults to infection. This is because the immune system in young children is not as strong as adults and young children are less likely to wash their hands. The sheep barn is as good of a place as any to teach young children good sanitation practices.

Although tetanus is not directly transmitted from sheep to humans the typical barnyard environment is contaminated with the *Clostridia tetani* bacteria. Any barnyard worker should be current on their tetanus vaccination, as skin punctures are common hazards of working in a barnyard setting.

Additionally, Brucellosis, Tularemia, Anthrax and Q-Fever (*Coxiella burnetii*) are zoonotic diseases. Because these diseases are uncommon the likelihood of human infection is low.