From past experience and some heart breaking problems of my own, I felt compelled to share this with women across the web who may be <u>pregnant and involved in the lambing barn</u>. With the agriculture population being such a small percentage today, articles and findings such as these are not published and hard to locate. My hope is that just maybe I can save another couple from a heart breaking tragedy, if I put this on my web site. Please note, this article is focusing on sheep, but there is nothing that can rule out other livestock as well. Bottom line is...if you are pregnant...STAY OUT OF THE LAMBING BARN!

Beware of Diseases Which May Infect Our Shepherds

International Sheep Letter
Published by Sheep World
P.O. Box 188
Pipestone, MN 56164
Oct/Nov 1994
Pipestone Vet Clinic

The following are a few diseases that we believe our shepherds need to be made aware of. Why? You may ask. The answer is because if your sheep have the disease then you as a shepherd or any other person in contact with the sheep are at risk of contracting the disease also. These diseases include Chlamydia, Toxoplasmosis, Salmonellosis, Cryptosporidiosis, and Orf (sore mouth). These are just a few of the more prevalent diseases which sheep may have and transfer to the shepherd.

Chlamydiosis is caused by Chlamydia psittaci. This agent is responsible for ovine chlamydial abortion. Whether sheep abort or deliver viable lambs, ewes with a placental chlamydial infection shed extremely large numbers of chlamydiae in the placenta and fluid discharges, creating infectious aerosois. Shepherds at high risk are those who lamb indoors and have chlamydia abortions occurring in their flock. Pregnant women should take special precautions since C. psittaci seems to have an affinity for the human placenta and provoke abortion or stillbirth. Clinically the people will experience respiratory illness, including pneumonia, muscle and joint pain general malaise and fever. It is recommended that pregnant women should avoid working with the sheep particularly during the lambing period. Chlyamidial infections respond well to early treatment with tetracycline or other appropriate antibiotics.

Toxoplasmosis is caused by Toxoplasma gondii. This agent can infect virtually all warm-blooded animals. About 30% of the world's human population have antibodies to this agent indicating a very high exposure level. T. gondii causes late term abortion in sheep. The main people at risk are pregnant female shepherds. If they receive their first exposure to this disease early in pregnancy the result is usually spontaneous abortion, stillbirth or severe disease to the unborn child. Maternal infection in later pregnancy most commonly results in subclinically infected infants whom may go on to develop more severe symptoms such as mental retardation. The general symptoms of Toxoplasmosis include malaise, fever and lymphadenopathy. Again it is recommended that the pregnant shepherd avoid working with

sheep during the lambing period. In addition to this, it is also recommended that when abortions occur that precautions should be taken, such as the wearing of gloves, hand washing and the use of disinfectants. The treatments for Toxoplasmosis infections in people include pyrimethamines and sulfonamides.

Salmonellosis is most frequently caused by Salmonella typyhimurium. In outbreaks the sheep are usually very depressed and have severe diarrhea and fever. Pregnant ewes will often abort. Mortality can often get quite high. Human infection results from contact with infected sheep and then contamination of ones oral cavity. The organism then grows in the intestinal tract and releases endotoxin which causes the symptoms. The symptoms occur in 8-72 hours after ingestion and include diarrhea, nausea, abdominal pain, prostration, chills, fevers, and vomiting.

Cryptosporidia is a protozoan species, which can also infect people. The most prominent sign in sheep as with any other species is diarrhea in infected lambs. The route of infection for people is through the ingestion of contaminated feces. The predominant symptoms are diarrhea, abdominal pain, vomiting, anorexia, and fever. The incubation period is 3-8 days and illness often begins with mild fever, nausea and anorexia. This is followed by diarrhea. The severity of the diarrhea usually diminished after the first week, however, it may last as long as 3-4 weeks. Human treatment for this disease is simply supportive treatment in attempt to maintain hydration. This disease is best prevented by practicing clean hygiene.

Orf (sore mouth) is caused by the Parapoxvirus. The lesions commonly found in sheep include blisters which soon become scab like around the mouth and nose of lambs. These lesions may also be found on the udders and feet of ewes. In people the lesions are most commonly found on the skin of the fingers or thumbs. These lesions are usually raised circular to oval and about 0.5-01.5 cm diameter. There is often enlarged regional lymph nodes and fever accompanying Orf. The lesions are painful. Repeat infections cause a raised hard semicircular nodule somewhat smaller and less inflamed. These lesions are usually itchy rather than painful. Lesions generally resolve in 4-8 weeks. Treatment for Orf in humans includes using tincture of iodine or ethyl ether.

B.R. Kerkaert, D.V.M.