Brucellosis in Goats

This disease results from infection by various species of Brucella. Six species occur in humans and animals. B. melitensis is the most important species in sheep and goats, and B. ovis causes infertility in rams.

Brucellosis is found worldwide but it is well controlled in most developed countries. The disease is still common in Africa, the Middle East, Central and Southeast Asia, South America and some Mediterranean countries. B. melitensis is rare in the United States, but B. ovis is seen in Australia, New Zealand and many other sheep-raising regions, including the United States.

Brucellosis is spread among animals by contact with the placenta, fetus, fetal fluids, and vaginal discharges from infected animals. Animals are infectious after either an abortion or full term birth. The organism is found in blood, urine, milk, and semen; it can be shed in milk and semen (which can be prolonged or lifelong). Brucella can be spread on equipment, clothing, etc. In conditions of high humidity, low temperatures and no sunlight, these organisms can live for several months in water, aborted fetuses, manure, wool, hay, equipment and clothes. The Brucella organism is killed by several hours of exposure to direct sunlight.

**Clinical signs:** Brucella abortus is found in cattle; and occasionally sheep, goats, and dogs. B. melitensis is the most important cause of brucellosis in sheep and goats. It can cause abortion, retained placenta, and swelling of the testicles. Abortions usually occur in late pregnancy in sheep, and during the fourth month of pregnancy in goats. In goats, mastitis and lameness may be seen. Arthritis is rare in sheep.

**Communicability:** Brucellosis is contagious to humans. Bacteria are present in milk, placenta, fetal fluids, fetus, vaginal discharges, semen, and urine. Ruminants and other animals can shed bacteria long-term or lifelong.
**Diagnosis:** By blood tests and culture of tissues listed above.

**Treatment:** There is no practical treatment that is successful. Long-term antibiotic treatment can eliminate B. ovis infections in valuable rams but the fertility may remain poor.

**This is a reportable disease.**