Johne's Disease

Johne's disease (also called paratuberculosis) is a fatal gastro-intestinal disease of sheep, goats, and other ruminants. It is caused by the bacterium *Mycobacterium avium* sub-species paratuberculosis (MAP). While common in dairy cow herds, the prevalence of Johne's on US Sheep and goat farms is not known, due to lack of testing and reporting.

Johne's disease usually enters a flock/herd when an infected, but healthy-looking, sheep or goat is purchased. Johne's is highly contagious, spread primarily by the fecal-oral route, mostly from adults to young animals. Unfortunately, sheep/goats shed the bacteria before they are visible sick. Johne's can also be transmitted across the placenta and through milk and colostrum.

Diagnosis is usually based on necropsy. Bacterial culture on live animals is not very reliable in sheep. The bacteria is more easily cultured in goat feces. Blood tests can be used to detect antibodies to the bacteria. False negatives are more common than false positives.

It can take infected animals months or years to show signs of Johne's. The most consistent clinical sign in sheep and goats is chronic weight loss despite a good appetite (wasting). The intestines become thick and less efficient at absorbing nutrients. Although profuse diarrhea is common in cattle with Johne's disease, it is not with goats or sheep, < 20%. The majority of signs of Johne's infection are invisible.

Keep Johne's off your farm by maintaining a closed flock/herd. Purchase animals from flocks/herds that have tested negative for Johne's. Practice good manure management. Separate young animals from adults when possible. Test and cull for Johne's.

Johne's disease is often mistaken for other problems such as intestinal parasitism, chronic malnutrition, environmental toxins, cancer, and caseous lymphadenitis—particularly in sheep thought to have internal abscesses.

Crohn's disease in humans is similar to Johne's disease in animals both clinically and pathologically. Johne's may or may not be zoonotic. Scientific studies argue convincingly both ways.

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