

# Caseous Lymphadenitis

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## Disease Transmission and Clinical Signs

**Caseous Lymphadenitis (CL)** is a chronic, recurring disease caused by a bacterium, *Corynebacterium pseudotuberculosis*. The bacteria are shed in the pus of infected animals, and can survive for months on hay, shavings, soil, and shearing or barn equipment. The bacteria typically enter an animal through abraded skin or through mucous membranes; infection (in the form of an enlarged, non-painful abscess) may develop either at the site of bacterial entry, or the nearby lymph node. The bacteria can spread elsewhere in the body and cause internal abscesses. Abscesses may rupture and drain infectious pus. Infected animals may have visible lumps if the abscesses are external, may be thin despite adequate nutrition due to internal abscesses, or may show no clinical signs at all if abscesses are internal and not harming the animal. CL may enter a flock through the introduction of a "carrier" animal, one that is infected but does not have any signs of illness, and may be shedding bacteria from internal abscesses in body fluids. Testing the blood of new animals before they are introduced to a herd or flock can reduce the likelihood of introducing a carrier animal.

## Diagnosis

Diagnosis of CL infection can be made by submitting the pus from an abscess for aerobic bacterial culture. This can be done by soaking up pus with a Q-tip or tissue, putting it in a zip lock bag, and shipping it overnight on ice to a diagnostic laboratory. Finding *Corynebacterium pseudotuberculosis* in the pus confirms that the animal is



infected. Diagnosis of exposure can be made by submitting blood in a red-top tube for detection of antibodies to *C. pseudotuberculosis*. A positive test result indicates that the animal has been exposed to *C. pseudotuberculosis*, either from vaccination or from natural exposure to the bacteria at some point in its life. Although most infected sheep and goats will test positive, about 10-15 percent will test negative despite being infected. Lambs and kids should not be antibody tested before they are six months old, because circulating antibodies from their mothers make results difficult to interpret. Both aerobic bacterial culture and blood antibody testing can be performed at CAHFS.