

SHOULD I BE CONCERNED ABOUT CONTAGIOUS ABSCESSSES IN MY SMALL RUMINANT HERD?

by Beth Johnson, DVM

Corynebacterium pseudotuberculosis infection, also known as Caseous Lymphadenitis (CL) is a bacterial disease which infects sheep and goats. The bacteria prefers to set up shop in the lymph nodes of sheep and goats, resulting in a walled off abscess of caseous material within the lymph node. As we all know, lymph nodes are present throughout the body; therefore, this bacteria can infect both external and internal lymph nodes resulting in unthriftiness, loss of milk and meat production, premature culling and is responsible for many sudden deaths. When the abscesses are present within internal lymph nodes, the kidney, liver, gastrointestinal tract, lungs and even brain tissue may be affected. Animals become infected by exposure to infectious exudate from a draining abscess or contact with an inanimate object, i.e. feed troughs, in the environment which have been contaminated by the exudate from a draining abscess.



Caseous lymphadenitis in the parotid lymph node.

The Kentucky Sheep and Goat Check-Off Program began

in 2010 and collects \$.50 for every \$100 worth of sheep and goats sold in the Commonwealth. According to Kentucky law, Check-Off funds must be used for the purpose of promoting the increased use and sale of sheep and goats.

TO DATE, CHECK-OFF HAS PROVIDED:

- **\$50,000 in New Farmer Recruitment loans** have been given to 25 new/beginning producers in Kentucky since 2012
- **\$50,000** given for special projects to help producers increase marketing efforts throughout the state since 2012
- **\$10,000** spent in promotion of sheep & goat products in 2018

KY Sheep & Goat Check-Off Sponsors the Try Something Different Tonight marketing campaign

of people who tasted lamb and goat products: **26,000**
of people who have learned about products and cooking techniques: **5 million**

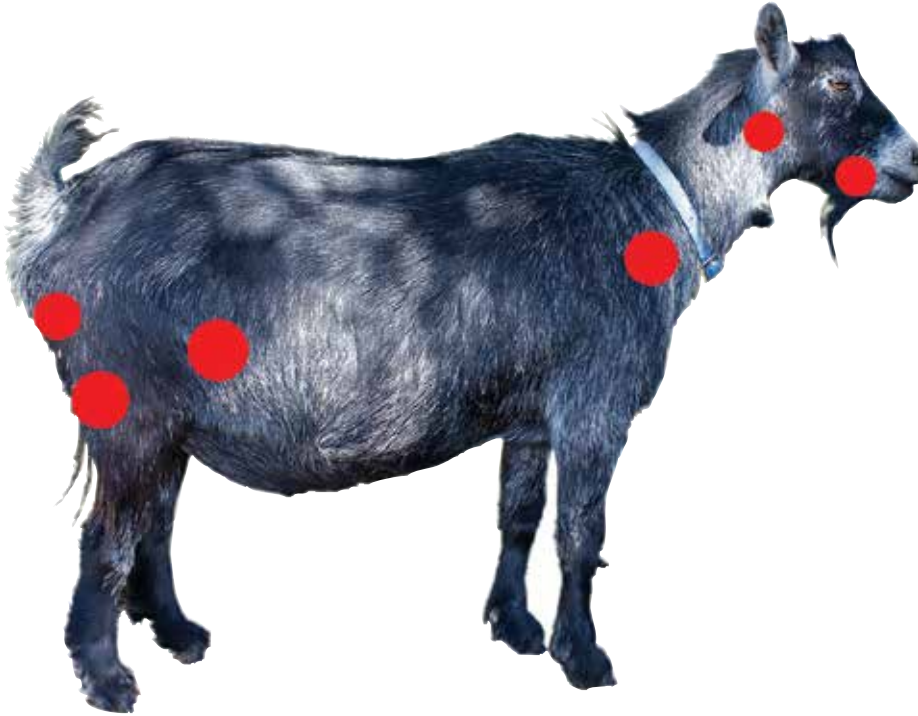


To learn more about the Kentucky Sheep and Goat Check-off Program visit

www.kysheepandgoat.org/Check_Off.html

KY Sheep & Goat
CHECK-OFF

Abcess locations in goats



Treatment:

When a sheep or goat develops an external abscess, it should be isolated from the herd as soon as possible and monitored for the abscess to “ripen”. The abscess will continue to grow and develop until it becomes mature enough to lance and flush. When the hair or wool starts to fall out over the abscess, the abscess will usually rupture on its own within a few days. Unfortunately, the producer does not notice many abscesses, especially under the ear, until they see the drainage. It is better to lance the abscess and flush out with a disinfectant and apply a disinfectant spray over the wound which will speed up recovery. Abscesses should be lanced in an area that can be thoroughly cleaned and disinfected and all exudate gathered and properly disposed of in a safe and biosecure method. The recovering sheep or goat should be placed in a quarantine pen until the abscess is completely healed to reduce the risk of exposure to the rest of the herd.

Control:

Once a herd is infected with CL, the producer should attempt to control the risk of infection through the use of quarantining infected animals and lancing or surgically removing the abscesses. Vaccination of the susceptible animals and culling diseased animals should also be a form of reducing the incidence of disease within the herd.

Vaccination:

There is a vaccine approved for use in sheep, Case-bac®, and a conditionally licensed vaccine for goats, Corynebacteria pseudotuberculosis bacterin®. One should not use the sheep approved vaccine in goats. Administration of the vaccines should follow manufacturer’s directions. I have recommended vaccinating kids and lambs at 2 months of age followed by a booster in 2-4 weeks. Booster CL vaccinations should be given every 6-12 months to maintain protection against this bacterial infection. The vaccine should be administered to both young and adult sheep and goats. One must remember that once an animal is vaccinated it will probably test positive on serological testing for CL. Therefore vaccination for CL is not recommended in herds selling replacement animals to individuals requesting a negative serological test. As with all vaccinations, protection is not 100% effective, so the producer must combine good biosecurity, treatment and vaccination to control this disease.

Testing:

To confirm the presence of Corynebacteria pseudotuberculosis, CL, in a herd, it is highly recommended that all exudate from external abscesses be submitted for bacteriological culture to confirm that it is *C. pseudotuberculosis*. There is also a serological test to detect

antibodies to an endotoxin produced by the bacteria. Interpretation of a positive serological test **does not** confirm infection. What it **does** confirm is that the sheep or goat has been exposed to the bacteria. Serological testing is more useful to confirm the presence of caseous lymphadenitis in a herd rather than an individual animal.

Biosecurity:

As with all infectious diseases, such as foot rot, infectious keratoconjunctivitis (aka Pinkeye), abscesses and even parasitic infections, a producer should quarantine all new animal additions for a period of thirty (30) days. During this time, a fecal exam and/or serological testing can be performed on the new sheep or goat to test for internal parasites and other infectious disease and response to treatment if necessary. If a serological test for CL is performed and the initial test is negative a second test should be performed in 30 days to confirm negative status.

“Is it important to control this disease within a herd?” If you are selling replacement animals, your main emphasis should be to provide the purchaser with an animal that you are proud to say came from your herd/flock. If that sheep or goat develops an abscess either internally or externally and contaminates the new owner’s herd, or becomes infected internally and dies prematurely, do you think it is important? I addressed this issue with a client years ago that had purchased a mature buck for quite a bit of change and the buck developed an abscess in its brain tissue and had to be euthanized. Prior to having this happen, they had told me several times that CL was just a disease you had to live with and was not a huge concern!

Dr. Beth Johnson is a Staff Veterinarian in the Kentucky Department of Agriculture and has 40 years of experience raising and treating small ruminants. Her family farms in Parksville, KY where she raises Gelbvieh cattle and Boer goats.