

Randall J Berrier ,DVM
Staff Veterinarian
Technical Service

CLA in Goats

Colorado Serum Company often gets a lot of correspondence regarding caseous lymphadenitis (CLA) in goats and questions about using our CLA vaccines (Case-Bac and Caseous D-T) in goats. There seems to be a lot of interest and misleading information regarding vaccinating goats against CLA. For more detailed information about CLA, the disease, please refer to our vet's corner from June 2001, (volume 1 - no.4).

Caseous lymphadenitis is caused by the bacterial organism *Corynebacterium pseudotuberculosis*. The two vaccines that Colorado Serum Company makes for CLA are licensed for use in sheep only. These two vaccines are also the only two commercially available vaccines for combating CLA in the United States. The vaccine (Case-Bac) is a combination bacterin/toxoid, while Caseous D-T also contains tetanus toxoid and *Clostridium perfringens* type D toxoid as well.

The main reason why Colorado Serum Company did not have a label for usage of these vaccines in goats is safety. Colorado Serum Company originally tested caseous vaccines in goats and noted varying levels of injection site reactions that went from no reactions to swellings about 14 inches in diameter. There would be associated lameness post-vaccination that would last anywhere from 1 to 30 days. All of these reactions would be unacceptable to USDA and therefore Colorado Serum Company never pursued a license in goats. Since Colorado Serum Company was unhappy with the safety profile of these vaccines in goats, we never pursued any further efficacy testing in goats. Over the years Colorado Serum Company has also received numerous calls from the field from people who have used this vaccine off label in goats. A fair percentage of vaccinated goats will develop a fever and become lethargic for a period of days. These goats will sometimes go off feed or have a reduction of feed intake. Milking does can have a decrease in milk production. Vaccinating pregnant animals can increase the risk factors. As in sheep, vaccinating goats that already have CLA will do absolutely no good and will only make the above-mentioned reactions worse. So you can see why we cannot recommend vaccinating goats with these vaccines.

However, all hope is not lost. There are other options for goat ranchers. First of all, I would strongly recommend having any suspect abscesses sampled by a veterinarian and submitted to a veterinary diagnostic lab to confirm if your herd has CLA. An article by Gezon, Bither, Hanson and Thompson in the Journal of the American Veterinary Medical Association 1991; 198:257-263, reported that over a 16 year period *Actinomyces pyogenes* was cultured 3 times more often than *C. pseudotuberculosis* in a particular goat herd with an ongoing history of internal and external abscesses. The point is - not every abscess in goats is CLA! If you confirm that you do indeed have CLA in your goat herd I would recommend not treating goats that have abscesses and either selling them or isolating them. Since there is no commercially available vaccine available for goats you may want to consider having an autogenous vaccine made from a sample of one of the abscesses that tested positive for CLA. Most autogenous products are whole-cell bacterins. It has been our experience that a bacterin/toxoid provides a much better immune response. I don't know how much protection goats are going to receive from an autogenous bacterin. You may want to try an autogenous caseous bacterin in a limited number of goats and determine if it works in your goat herd.

Hopefully this helped answer questions about using Colorado Serum Company Case-Bac and Caseous D-T vaccines in goats and why Colorado Serum Company can't recommend it. Currently, Colorado Serum Company is actively pursuing a safer vaccine for CLA that can be licensed for use in goats.

