



BATTLING BOVINE TUBERCULOSIS



By Dee Ellis, DVM, MPA,
State Veterinarian/Executive
Director of the Texas Animal
Health Commission

I was asked recently which livestock disease that the Texas Animal Health Commission (TAHC) manages concerns me the most. Obviously, every species group would have their own answer based on their health and economic concerns, but there is one disease I see at the head of the pack—bovine tuberculosis (TB).

There are a number of factors that led me to that conclusion, including (1) public health implications, (2) ongoing reservoir in Mexican origin cattle, (3) ongoing low-level presence in U.S. dairy cattle, (4) economic impact of an infected herd, (5) wildlife reservoir in Michigan and (6) decreased support by the U.S. Department of Agriculture (USDA), who traditionally drove the train on the tracks to the theoretical eradication destination.

For these reasons, I don't believe eradication of TB from the U.S. cattle population is realistic. The new business model for global livestock trade includes the acceptance of risk. This is a fact. It is also a given that the state animal health agencies are charged with mitigating the disease risk and allowing economic viability of the commodity groups with fewer and fewer federal dollars.

Because we have so many different types of cattle and risk factors here, we have worked with our cattle industries to develop one of the most stringent mitigation practices of any state to help prevent TB spread in Texas.

On the dairy side, that class of animal has a mandatory identification requirement to aid in traceability if an infected herd is found. Texas also requires a TB test of any sexually intact dairy cattle entering the state. Even one-day-old calves headed to our numerous calf ranches are required to be tested when they are two-months-old, which is the earliest you can run the skin test on a calf. Calf ranch facilities are emerging processes through which dairies outsource their heifers for someone else to raise until they are ready to move home at milking time. Baby bull calves are also

raised there until they can enter normal feeding channels. Both bull and heifer calves are routinely removed from their mother at one day of age. We currently have more than 100,000 calves managed on a daily basis by Texas facilities that are not the original home of the calf. They are at summer camp until they grow up and go home or go to the feedlot.

Unfortunately, these facilities are at enhanced risk for disease transmission due to the concentration of animals. Texas is the first state to develop an inspection process in which TAHC staff routinely visits with these facilities to ensure compliance with ID and entry rules. Our field staff helps them understand and implement good biosecurity processes to prevent TB introduction. An example of risk recently was when a TB-infected dairy in another state was determined to have sold unpasteurized colostrum to calf ranches that spread the disease to a number of calves there.

Although there are 500 times as many Mexican feeders as roping cattle in Texas, they are actually at less risk of transmitting TB than the roping steers because the ranchers who raise this class of animal do not normally mix them with breeding cattle. A Mexican feeder normally enters Texas at weaning age, grazes grass, wheat or oats for about six months and then enters a feedlot until "fat." We focus our mitigation efforts on this class of animal at the end of their feeding lives to ensure they don't come into contact with breeding animals being temporarily fed there. When performing inspections at feedyards, if TAHC inspectors find fence-line feeding of Mexican animals besides sexually intact animals, the management of the facility is immediately consulted. The Texas cattle feeder industry has been very cooperative and proactive in helping prevent disease transmission from this class of animal through education efforts to their industry. TB-positives on feeders are occasionally found during post-mortem inspection at Texas slaughter plants (12 cases last year), but we have only one documented case

in many years in which TB spread out of feeder channels to a Texas breeding herd.

For rodeo cattle, such as team roping and bulldogging steers, the Professional Rodeo Cowboy Association requires those animals to be of Mexican origin due to desirable genetics for the needed athleticism. Many of these animals are raised in the Mexican state of Chihuahua south of El Paso, so naturally Texas is home to many M-branded rodeo steers. Because these animals come from a high-risk state, live longer than a Mexican feeder-type animal (four years versus two on average) and are more likely to come in contact with breeding animals like bucking bulls or roping calves, we believe this class of animal is at the highest risk of transmitting TB on an individual animal basis. To minimize this risk, the TAHC requires a post-entry test 60 days after arrival from Mexico by a Texas veterinarian, an annual re-test as long as they are competing here and an entry permit to come to Texas. To be clear, roping steers may be "fed" at the end of their lives, but they are not "feeder" cattle.

There is one last TB disease prevention system that I am proud to say we have in Texas—you, the veterinary practitioner. Texas veterinarians have been strong partners in ensuring that the caudal fold skin test is run properly to find the expected rate of responders. Further, we have more accredited TB-free herds managed by veterinarians than any other state. Finally, the guidance and counseling given by veterinarians to the owners of dairy cattle selling raw or organic milk in Texas is exemplary.

I want to thank Texas veterinary practitioners for all your hard work and also to remind you of the importance of continued vigilance in helping our ranchers understand some of the riskiest biosecurity practices, such as co-mingling Mexican feeders with breeders, feeding unpasteurized colostrum or drinking raw milk from cows that have not been tested for TB (and brucellosis) annually. [TV](#)