

Trichomoniasis Testing in Cattle

June 2009

This paper provides a brief overview of Trichomoniasis, a venereal disease in cattle. While Kansas does not have a formal testing program for breeding animals sold within the state, many surrounding plains states do, including Nebraska, Oklahoma, Colorado, South Dakota, Texas and Wyoming. Currently, Kansas Farm Bureau does not have any policy regarding Trichomoniasis testing.

Background

Trichomoniasis is a venereal disease caused by the protozoan parasite *Tritrichomonas foetus*. Protozoa live in the sheath of infected bulls, with no ill effects on the bull's health. When passed to cows, Trichomoniasis (trich) can lead to embryonic death, irregular estrous cycles, and repeat breeding. Many states have passed Trichomoniasis testing laws where positive trich tests are reportable to the State Veterinarian's Office.

Infected bulls are usually the chief problem; the bull becomes infected from a cow and then spreads the disease to other cows during the breeding season. Most cows will clear themselves of the infection within three months of initial infection but they may lose their fetus during that time. After infection, cows have a two to six month immunity and then can become re-infected. Bulls more than 4 years old often become infected permanently.

States with Testing Rules (date enacted if known)

Wyoming	1999/2000
South Dakota	2005
North Dakota	7/2007
Montana	11/2007
Nebraska	8/2008
Oklahoma	3/2009
Texas	4/2009
Louisiana	5/2009
Colorado	
New Mexico	
Arkansas	2009 (120-day pilot)

Testing Requirements – Normally, non-virgin bulls over 12 months of age and virgin bulls over 24 months of age that are imported into a state, as well as bulls that are sold, loaned, or leased within the state require testing. Bulls must test negative 3 times at no less than 1 week intervals (culture test), with no breeding between testing and time of sale/loan/lease. In some states, an alternative, one-time complete bull herd PCR (polymerase chain reaction) test may be conducted where all bulls must test negative. In most states, a virgin bull is defined as a sexually intact male bovine less than 12 months of age or a sexually intact male bovine 12 to 24 months of age accompanied by a signed affidavit as having had no potential breeding contact with sexually intact female cattle.

Testing Procedures – For the culture test, a fluid sample is obtained from the inside of the bull's sheath and is inoculated into culture media to identify the presence or absence of the protozoa. Three negative tests are needed because assurance that the bull is truly negative increases with each progressive test. For the PCR test, the laboratory is testing for the presence or absence of the protozoa's DNA, and only one test is required. However, exporters of bulls should be aware that the accepted testing method may vary from state to state.

Exceptions to Testing Requirements – Bulls shipped to a licensed livestock market or state veterinarian-approved feedlot who are destined for harvest are normally exempt from the testing rule, as are bulls transported from the ranch directly to a licensed slaughtering establishment. Bulls transported through a state with no intent to unload do not require testing, nor do bulls imported for exhibition or rodeo

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purposes that are held in confined facilities. Non–virgin bulls from out of state that are destined for a Certified Semen Sales collection facility are also exempt.

Positive Test Results - Test–positive bulls are individually identified (possibly with a "V" brand on their right tailhead) and are subject to an immediate hold order until shipped to licensed livestock market, feedlot, or slaughtering establishment. After positive animals are identified, an epidemiological investigation will be conducted to identify other animals or herds potentially exposed to the test–positive animal or herd. An exposed herd notification is issued to appropriate owners and managers, and exposed herds may be subject to a hold order and testing.

States Discussing/Planning Testing Rules

Missouri – Rules are pending, currently under public comment.

Iowa – Potential rules are being discussed.

States without Testing Rules

Kansas

Minnesota

Discussion

With Kansas quickly becoming one of the few plains states without a formal Trichomoniasis testing rule, our state runs the risk of becoming a “dumping ground” for questionable bulls.

Question: Should Kansas implement a Trichomoniasis testing law whereby positive Trichomoniasis tests are reportable to the Kansas Animal Health Department?

Question: If so, should Kansas Farm Bureau develop and implement policy supporting a Trichomoniasis testing law?