

Texas Bovine Trichomoniasis Control Program:
Facts for Cattle Owners
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Bovine trichomoniasis (Trich) is a **venereal disease** caused by the protozoan, *Tritrichomonas foetus*. Because Trich has no visible symptoms in bulls and few, if any, visible symptoms in cows and heifers, it is best to prevent exposure to the disease rather than try to control or eradicate it. The primary production and/or economic impact of trich is on cows, because the disease causes infertility and abortions and often extends the breeding and calving season.

Bulls

Bulls become infected by breeding infected cows. The protozoa reside in the crypts or microscopic folds on the surface of the bull's penis and internal prepuce. The infected bull will show no symptoms.

Laboratory tests can determine whether a bull is infected. Only a certified, accredited veterinarian may collect samples from the bull's penis and internal prepuce and submit them to a certified laboratory for analysis. Two different tests are available:

- RT-PCR (Real Time-Polymerase Chain Reaction) or
- Culture

Infected bulls must be sold for slaughter because **there is no effective treatment for the disease**. Remaining bulls in the herd must be held and isolated from female cattle until they test negative.

Cows and heifers

Cows and heifers become infected when bred to infected bulls. The protozoa reside in the vagina, cervix, uterus, placenta and fetus. Infected cows and heifers show few if any visible symptoms. An extended period of sexual rest (120-150 days) will allow most cows to rid themselves of the infection. However, this immunity is short-lived and a cow can become re-infected. Cows can be vaccinated to help reduce the severity of the disease in an infected herd.

The infection can be transmitted only by sexual intercourse and not by the environment. Bovine trichomoniasis is **not** transmitted to people.

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Texas has implemented new measures to control the spread of trichomoniasis. Under these new regulations, bovine trichomoniasis becomes a reportable disease.

Texas Bovine Trichomoniasis Control Program	
Effective January 1, 2016	
Breeding Bulls Entering Texas	
Age & Experience of Bull	Protocol
<p>All breeding bulls 12 months of age and older must have a negative PCR Trich test prior to entry. Texas will not accept negative culture tests for trichomoniasis.</p> <p>Age will be determined by birth date recorded on breed registration papers or according to the best judgment of the inspecting veterinarian.</p> <p>Negative tests are valid for 60 days provided bulls remain separated from female cattle. Test results may be transferred within that time if accompanied by the original signature of the consignor.</p>	<p>Must be officially identified with at least one of the following:</p> <ul style="list-style-type: none"> - a breed registry tattoo or brand - a USDA metal ear tag (Bang's tag) - official 840 bangle or RFID ear tag - official trichomoniasis ear tag from the state of origin
<p>Out-of-state breeding bulls are exempt from a trichomoniasis test if they come from a Certified Semen Service (CSS) artificial insemination facility, where they are isolated from female cattle. The bulls must be accompanied by documents with an original signature by a veterinarian or manager of the facility.</p> <p>Untested out-of-state bulls are allowed entry into Texas if consigned directly to a Trich certified feedlot facility and accompanied by a permit issued by an accredited veterinarian from the state of origin.</p>	<p>Must be officially identified with at least one of the following:</p> <ul style="list-style-type: none"> - a breed registry tattoo or brand - a USDA metal ear tag (Bang's tag) - official 840 bangle or RFID ear tag - official trichomoniasis ear tag from the state of origin

Texas Bovine Trichomoniasis Control Program

Effective January 1, 2016

Applies to Breeding Bulls in Texas

(any bulls offered for sale, lease, exchange or otherwise change of possession for breeding)

*No test or certification is required for bulls marketed as "slaughter only."

Age & Experience of Bull	Protocol
<p>Virgin bulls 18 months old or younger</p> <p>Age determined by:</p> <ol style="list-style-type: none">1. Birth date recorded on breed registration papers or2. Not more than 2 central permanent incisors that show wear <p>(Virgin status can be extended to 30 months if the breeder and an accredited veterinarian certify on the breeder's certificate that the facility in which the bull is raised and held allowed no contact with female cattle.)</p> <p>A virgin certificate is valid for 60 days provided that the bull is kept separate from female cattle. A virgin certificate may also be transferred within that time frame with the original signature of the consignor.</p>	<p>a. Must be officially identified with at least one of the following:</p> <ul style="list-style-type: none">- a breed registry tattoo or brand- a USDA metal ear tag (Bang's tag)- official 840 bangle or RFID ear tag <p>b. Can be certified as a virgin bull only if it has not been commingled with female cattle and is accompanied by a breeder's certificate signed by the breeder, and has this information included on the veterinary inspection certificate.</p>
<p>Non-virgin breeding bulls and all bulls more than 18 months old</p> <p>Untested, non-virgin Texas bulls may be sold and moved to a trichomoniasis certified feedlot prior to slaughter.</p> <p>Negative tests are valid for 60 days provided bulls remain separated from female cattle.</p>	<p>a. Must be officially identified with at least one of the following:</p> <ul style="list-style-type: none">- a breed registry tattoo or brand- a USDA metal ear tag (Bang's tag)- official 840 bangle or RFID ear tag <p>b. Must have no contact with female cattle during the test period</p> <p>Test options are:</p> <ul style="list-style-type: none">- one negative RT-PCR test or- three consecutive negative culture tests not less than 7 days apart <p>c. Bull must be accompanied by an official trichomoniasis test document, and a certificate of veterinary</p>

	<p>inspection.</p> <p>d. Infected bulls must be reported and restricted to movement to slaughter only.</p> <p>Remaining bulls in the herd will be held and isolated from female cattle until tested negative:</p> <p>Test options are:</p> <ul style="list-style-type: none"> - two negative RT-PCR tests not less than 7 days apart or - three consecutive negative culture tests not less than 7 days apart
<p>Texas beef producers may purchase and relocate untested bulls in Texas for interstate movement under a Texas Animal Health Commission-issued hold order/permit to a location away from female cattle, where the bull is to be tested for Trich.</p>	

Eradication Protocol

A "Control Herd Plan" option allows large cattle operations up to three years to eradicate Trich from their herd. The enrolled herds are allowed to test once per year (preferably prior to the breeding season) instead of two or more times as normally required, but in exchange they must consult with a veterinarian and enter into a plan designed to remove the disease from the herd. In the interim (and until their quarantine is released), all bulls leaving the herd must be sold for slaughter or fed for slaughter in an approved feedyard.

The Texas Animal Health Commission (TAHC) will allow an approved laboratory to "pool" individually submitted samples (up to five samples) for PCR testing, to count as on of the two tests normally required to release a herd from quarantine. Pooled samples will still not be allowed for change of ownership testing. This change was designed as a cost saving measure for producers and must be approved in advance by TAHC regional management in consultation with the owner or veterinarian.

Commission veterinarians will notify producers by letter when an infected bull is identified on an adjacent premise. Neighbors will not be required to test, only informed of the infection on an adjacent property.

Summary

Bovine trichomoniasis enters a herd or ranch only via infected bulls, cows or heifers. Again, an infected bull can transmit the disease to a cow or an infected cow can transmit the disease to a bull. You can avoid this disease by practicing sound biosecurity principles.

1. Maintain good fences, thereby controlling movement and commingling of cattle.
2. Purchase only virgin bulls and heifers, preferably from the original breeder.
3. Keep the bull battery as young as possible, because older bulls harbor the protozoa more easily.
4. Consider artificial insemination as a way to avoid introducing trich. Reputable semen companies repeatedly test bulls for numerous diseases, including trich, to ensure that the semen is not contaminated.
5. Implement a defined breeding season. Trich may go undetected in a continuous mating system.
6. Identify herd sires and record breeding group to which each bull is exposed.
7. Consider keeping bulls in the same breeding groups for several breeding seasons. Should a false negative (infected) bull be in the battery, this practice prevents spread of the infection to uninfected groups.
8. Consider small (but not necessarily single) sire groups (versus large, multiple-sire herds to avoid infecting a large number of bulls in a single season.
9. Avoid purchasing open or short-bred (less than 120 days) cows.
10. If you purchase replacement cows, do not commingle them with the existing herd during the first breeding season.

Annual Review by Texas Animal Health Commission

The Texas Trichomoniasis control program is subject to annual review and adjustment by the Texas Animal Health Commission. Industry input is solicited and recommended changes are submitted to the Texas Animal Health Commission for further review, analysis and consideration for adoption.

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