



Don't Introduce Trichomoniasis to Your Herd

One infected cow can infect the entire herd

What is Cattle Trichomoniasis?

Cattle Trichomoniasis or “trich” is a sexually transmitted disease of cattle caused by the organism *Tritrichomonas foetus*.

Transmission

The trich organism is found on the surface of an infected bull's penis and on the inside of the prepuce. An infected bull will not show symptoms but will physically transmit the organism to female cattle during the breeding process. In a 1976 study, 19 out of 20 (95%) heifers became infected with trich after a single breeding process with a 3 year-old naturally infected bull.¹

How Trichomoniasis Affects Female Cattle

Clinical indications of the presence of trich in female cattle include reduced pregnancy rates, changes in pregnancy pattern (shift towards more late calving cows), pus in the uterus (pyometras)² and higher rates of abortion throughout the pregnancy.

While it is commonly stated that most cows and heifers can clear trich infections with 120 or more days of sexual rest, recent studies have shown trich infected female cattle can become pregnant and have abortions 120 days after conception.^{3,4}

Female Immunity and Clearing the Disease

Unlike bulls, trich infected females will show an immune response to the presence of the trich organism in their reproductive tract. Antibodies are produced both within the reproductive tract and blood which helps in the clearance of the infection in many exposed females.⁵ The immunity to trich is short-lived and cattle that have previously cleared the infection can become re-infected if exposed to trich during a following breeding.

It is important to note, infected female cattle can remain infected throughout their pregnancy, deliver a live calf⁶ and be a potential threat in spreading the disease in the next breeding season.

Trichomoniasis Testing for Female Cattle

No blood test is commercially available for trich infected cattle, however female cattle can be sampled using similar collection materials as are used in bulls. Sampling of cervicovaginal mucus (clear) and purulent vaginal discharges (cloudy or white) are considered to be the samples of choice.² The diagnostic sensitivity of these samples is less than that found in testing preputial smegma samples from bulls.^{7,8}

Herd Management

Since testing is not found to be the most accurate way of identifying trich in female cattle, reliance on clinical indications of the presence of trich is needed. The best method of surveillance is to know the disease status of the bulls in each breeding pasture group (trich test bulls before and immediately following the breeding season).

While there is no approved treatment for trich, there is currently one vaccine available that has been proven to reduce the shedding of *T. foetus*. Studies have shown that vaccinating cattle prior to breeding increases calf crop in trich infected herds.

Producers interested in vaccination consultation or testing their herd are encouraged to contact their private veterinarian or a veterinarian on the [TAHC Bovine Trichomoniasis Certified Veterinarian](#) list.

Herds that exhibit high levels of biosecurity, keep excellent pasture records, while monitoring reproduction rates are not as likely to be severely impacted by bovine trichomoniasis.

Additional Trich Resources

Texas A&M AgriLife Extension: www.beef.tamu.edu

TAHC Cattle Trichomoniasis Brochure: http://www.tahc.texas.gov/news/brochures/TAHCBrochure_Trichomoniasis.pdf

TrichConsult: <http://www.trichconsult.org>

What can I do to keep my herd trich-free?

- **Develop a preventative herd health plan with your veterinarian that includes testing of bulls, record keeping and a vaccination schedule.**
- **Educate yourself and others about the disease.**
- **Know the breeding and calving history of your purchases.**

References

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8. Kittel DR, Campero C, Van Hoosten KA, et al. Comparison of diagnostic methods for detection of active infection with *Tritrichomonas foetus* in beef heifers. *J Am Vet Med Assoc* 1998; 213:519-522

Information provided by the
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