



MONTANA
STATE UNIVERSITY

EXTENSION

MontGuide

Bovine Trichomoniasis: Fact Sheet for Montana Cattle Producers

by Dr. Rachel L. Endecott, MSU Extension Beef Cattle Specialist; and
Dr. Tahnee Szymanski, Montana Department of Livestock Staff Veterinarian

Trichomoniasis is a venereal disease of cattle which can cause severe reproductive and economic losses in test-positive herds. Producers can implement best management practices to prevent trichomoniasis in their herds.

MT201210AG new 10/12

TRICHOMONIASIS, COMMONLY REFERRED TO AS

“trich,” is a venereal disease of cattle caused by the protozoan parasite, *Trichomonas fetus*. When passed to cows, trich can lead to repeat breeding, extended calving, early and occasional late-term abortion, and a high percentage of open cows at pregnancy check. Economic losses to the U.S. beef industry from reduced conception rates, lower weaning weights, and increased culling exceed \$100 million annually.

Montana has designated areas with a high risk for trich exposure called Trichomoniasis Epizootic Areas (Trich EA), where testing is required for all non-virgin bulls sold, loaned or leased within or from the Trich EA. Outside of the EA, testing is required for non-virgin bulls from multiple sources going to a common pasture for breeding and for non-virgin bulls imported into Montana.

This Frequently Asked Questions guide provides information about the disease and testing procedure, and describes Montana trichomoniasis regulations.

How do I know if my herd has trich?

The only way to confirm a trich infection is through testing at a certified laboratory.

How does trich affect bulls?

Bulls become infected by breeding infected cows, after which the organism lives on the tissue lining of the penis and sheath. Infected bulls show no symptoms and suffer no adverse health effects, but the disease cannot be treated and bulls remain persistently infected.

How does trich affect cows?

Infected cows and heifers, like bulls, show virtually no outward signs of the disease. In infected cows, the protozoa live in the vagina, cervix, uterus, placenta and fetus. Cows become infected when bred by infected bulls.

Cows generally clear the disease with an extended period (120 days) of sexual rest, but can become reinfected. Some cows may remain chronically infected and still be able to deliver a normal calf; this condition is rare and should be closely monitored, as such animals can continue be a source of infection to bulls from one breeding season to the next.

Does trich affect the meat of an infected animal?

No, the parasite only affects the reproductive tract.

Can trich be treated?

There is no effective, FDA-approved treatment for trichomoniasis at this time.

What can I do to prevent trich in my herd?

Prevention of the disease can be achieved by following relatively simple and inexpensive management practices combined with a herd health plan specific to your operation. A few tips for prevention include:

- Work with your veterinarian to develop a reproductive herd health plan.
- Have a defined breeding period.
- Keep fences in good repair to prevent accidental contact with potentially infected cattle.
- Replacement heifers should either be pregnant or less than six months of age.
- Do not retain open females that failed to breed the year before.
- Replacement bulls should be known virgins, or have a negative test, before they enter a herd.
- Test older bulls annually.
- Pregnancy check to identify problems early.

Can I vaccinate against trich?

There is a vaccine available that helps cows clear, but does not prevent, infection. Vaccinating bulls will neither clear nor prevent trich infection.

What are the requirements for testing bulls?

Montana requires that all non-virgin bulls sold, loaned or leased within, or bulls going from a designated Trichomoniasis Epizootic Area (Trich EA) be tested. Further, non-virgin bulls from multiple sources going to a common pasture for breeding and non-virgin bulls imported into Montana also need to be tested. Livestock owners may also want to consider testing bulls between breeding season.

What is a Trichomoniasis Epizootic Area (Trich EA)?

A Trich EA is an area, as defined in Administrative Rule of Montana 32.3.111, determined to have a higher risk of exposure to trichomoniasis. At this time, the entirety of Glacier, Pondera, Yellowstone and Big Horn counties are included in the Trich EA.

How are trich tests conducted?

The official test for trichomoniasis is three negative weekly cultures or a single negative PCR (DNA) test performed by a trich-accredited veterinarian.

Are pooled tests acceptable for the Montana program?

Trich tests can be pooled at the veterinarian's request. Individual samples must be submitted; the lab can then combine up to five bulls per pool. Samples from affected herds and from ongoing epidemiological investigations will continue to be run as single samples.

How long is a negative trich test valid?

A negative trich test is valid for 60 days, or until a bull mingles with female cattle, whichever comes first.

What are the trichomoniasis requirements for animals entering Montana?

All non-virgin bulls imported into Montana are required to have a negative official trichomoniasis test prior to importation. Exemptions to the test requirement are bulls shipped directly to a livestock market or slaughter facility, bulls for exhibition or rodeo purposes, bulls imported to a CSS (certified semen services) bull stud, and bulls that are part of an approved seasonal grazing operation.

What are the requirements for cattle grazing in common?

Because grazing in common is a higher risk practice, all non-virgin bulls from herds grazing in common are required to test on an annual basis. An annual test exemption may be granted following the submission and approval of a written herd health plan to the state veterinarian's office.

Do bulls moving directly to a sale barn need a trich test?

No, but non-virgin bulls originating from the Trich EA without proof of an official negative trich test will be restricted to sale for slaughter only.

Does Montana have any restrictions on open cows?

Open cow restrictions apply only to trich-positive herds in Montana. These animals are restricted to slaughter channels only unless they are verified to be more than 120 days bred or more than 120 days away from any bulls.

What are the identification requirements for bulls undergoing trichomoniasis testing?

A Montana trich tag or other approved official ID tag must be placed in the ear of all bulls at the time of their first official test.

What is the definition of a virgin bull?

Sexually intact bulls less than 12 months of age are considered to be virgin bulls in Montana. Additionally, bulls 12 to 24 months of age with a signed affidavit from the owner attesting to virginity may be considered virgin.

How does an owner write up an "affidavit" for a virgin bull 12 to 24 months of age?

The owner must individually list in writing each bull being certified as virgin, and sign and date the document, which must include an official identification number, description and brand. A "Virgin Bull Statement" form is also available from MDOL personnel or on the department's website at <http://liv.mt.gov>.

What happens when a bull tests positive for trich?

Positive bulls may not be kept in the breeding herd and are restricted to slaughter channels only. If the bull is not sent directly to slaughter through a market, a "V" brand on the right tail head is applied by MDOL for entry into a licensed trich-approved feedlot. All other non-virgin bulls in the herd are required to have three negative weekly PCR tests performed before they will be cleared as negative bulls.

What happens to cows or heifers from a positive herd?

All females exposed to positive bulls will be quarantined until they are confirmed to be 120 days pregnant or 120 days away from any bulls on the premises. There are no restrictions on virgin heifers. Slaughter is also an option.

What should I do if I have trich in my herd?

If trich has been diagnosed in your herd, you will be notified by your veterinarian. Additionally, MDOL will contact you within 72 hours of the diagnosis. MDOL will work with you and your local veterinarian to conduct an epidemiological investigation to determine the source of infection/exposure. Your cooperation is critical to determine what other herds may have been exposed to a positive herd, to determine the location and extent of the exposure, and to assist MDOL in eliminating the disease from your area.

Will I be notified if my herd has been exposed to trich?

Yes. Owners or managers of exposed herds – herds that have had potential contact with test-positive animals through direct mingling or cross-fence contact within the past 12 months – will be notified by MDOL or a designated agent.

Are there penalties for noncompliance with the new trich rules?

Yes. Administrative rule 32.3.508 establishes penalties for persons in violation of current trich regulations. Penalties can include a fine of up to \$500 and expenses for any related investigations. Persons in violation of trich rules may also be charged with a misdemeanor (MCA 81-2-113) and could be subject to civil liability (MCA 81-2-114).

Do other states require trich testing?

All states bordering Montana require trich testing; please call the animal health authority in each state for specific rules. A listing of state veterinarian offices can be found on MDOL's web site at <http://liv.mt.gov/liv/Brucecellosis/vets.asp>.

For more information on trichomoniasis, please contact:

Montana Department of Livestock
Animal Health Division
P.O. Box 202001
Helena, MT 59620-2001
406-444-2043
www.mt.gov/liv

Best Trichomoniasis Management Practices for Common Grazing Pastures

- Use only virgin bulls or bulls less than 4 years old that have been tested annually.
- Replacement bulls should be known virgins or have a negative test before they enter a herd.
- Test older bulls annually.
- Replacement heifers should either be pregnant or less than six months of age.
- Do not retain open females that failed to breed the year before.
- Avoid purchasing open or short-bred cows (less than 120 days) to mix with your herd.
- Allow only virgin heifers or pairs onto common grazing pastures, or cows that have been away from the bull more than 120 days.
- Define your breeding season; limit it to 60 to 90 days if possible.
- Know the disease status and herd health programs of all herds mixing with yours.
- Work with your veterinarian to determine the reproductive health of your herd, especially by pregnancy checking females and testing all bulls for trich and other reproductive diseases.
- Good fences make good neighbors. Keep fences in good repair to prevent accidental contact with potentially infected cattle.



To order additional publications, please contact your county or reservation MSU Extension office, visit our online catalog at www.msuextension.org/store or e-mail orderpubs@montana.edu

Copyright © 2012 MSU Extension

We encourage the use of this document for nonprofit educational purposes. This document may be reprinted for nonprofit educational purposes if no endorsement of a commercial product, service or company is stated or implied, and if appropriate credit is given to the author and MSU Extension. To use these documents in electronic formats, permission must be sought from the Extension Communications Coordinator, 135 Culbertson Hall, Montana State University, Bozeman MT 59717; E-mail: publications@montana.edu

The U.S. Department of Agriculture (USDA), Montana State University and Montana State University Extension prohibit discrimination in all of their programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital and family status. Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Douglas L. Steele, Vice President of External Relations and Director of Extension, Montana State University, Bozeman, MT 59717.