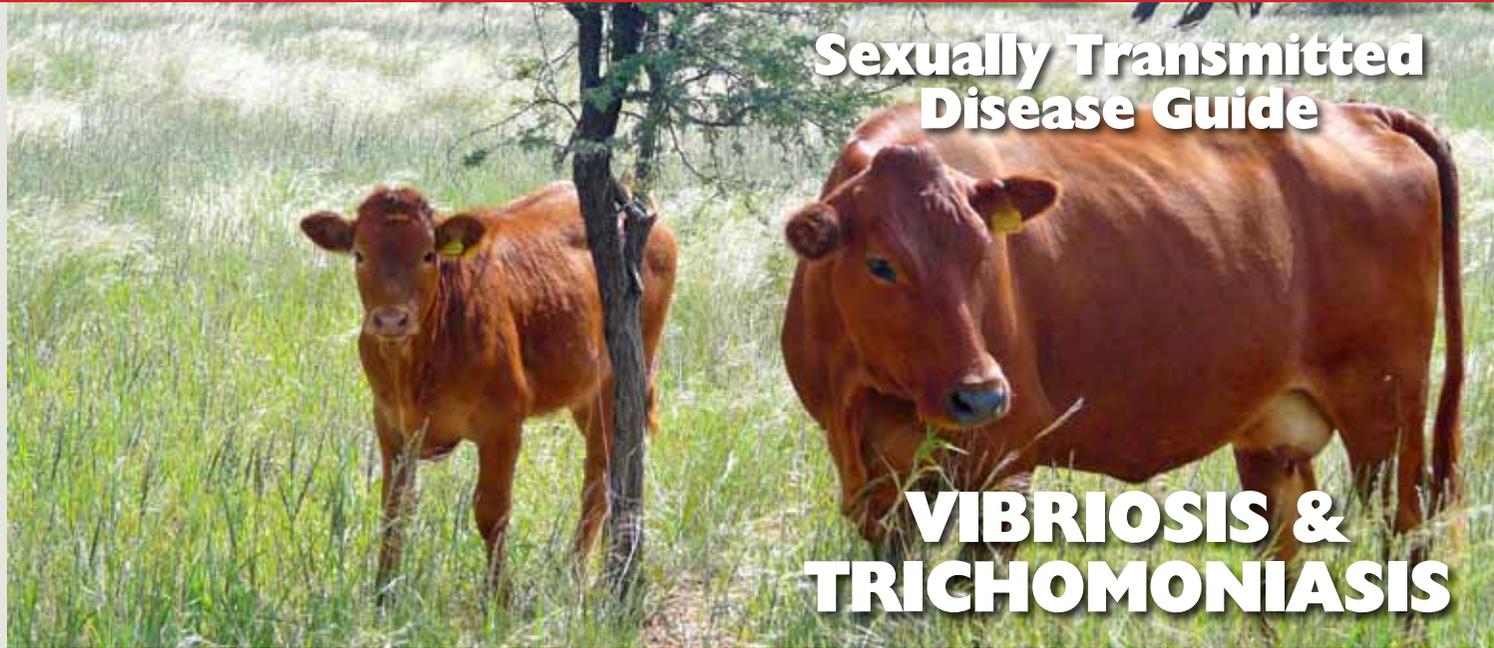




Disease Prevention Checklist for Cattle

Vibriosis

- Annual vaccinations for bulls and cows
- Revaccinate half-way through mating season
- Biosecurity and screening of new bulls



Trichomoniasis

- Eliminate infection by culling all bulls and replace with virgin bulls
- Test mature bulls for trich before exposing to cows
- Pregnancy check cows in a timely manner after breeding season to identify a potential problem
- Purchase virgin heifers and cows from a reputable source
- Keep fences intact to prevent accidental contact with potentially infected cattle

For more information on venereal livestock diseases and how to protect your livestock effectively, please contact your nearest state veterinarian or private veterinarian.



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PROTECT YOUR LIVESTOCK NOW!

Detecting and managing sexually transmitted (venereal) disease can be difficult and counter-productive. This cattle venereal disease guide compiled by the Meat Board of Namibia with the support of the Agricultural Unions, could help producers to identify whether venereal disease is affecting the breeding potential of their cattle herds.



Meat Board of Namibia

As reproductive efficiency is one of the most important economic factors in beef enterprises, production losses due to **Vibriosis (Campylobacter foetus)** and **Trichomoniasis (Tritrichomonas foetus)** can mean the difference between success and failure. Therefore an increased awareness among producers is necessary to protect cattle herds against these diseases. It is clinically difficult to distinguish between Vibriosis and Trichomoniasis infections in herds.

VIBRIOSIS

(Bovine Genital Campylobacteriosis)

Vibriosis in cattle is an infectious bacterial disease of the genital tract causing infertility, a prolonged calving season and occasional abortions.



Transmission and Clinical Signs

This venereal disease is commonly spread by infected bulls when they mate susceptible cows and heifers. It is also transmitted by contaminated instruments, bedding, or by artificial insemination using contaminated semen. Vibriosis is somewhat self-limiting as most cattle recover within a year. Individual bulls vary in their susceptibility to infection; some become permanent carriers, while others appear to be resistant to infection. In young bulls (under 3-4 years of age), infection tends to be transient, with transmission relying on sexual contact with a non-infected cow within a matter of minutes to days after the initial breeding of an infected cow. Re-infection can readily occur. In bulls older than 3-4 years of age, chronic infections can occur. In cows, the duration of the carrier state is also variable, some clean the infection rapidly whereas others can carry *C. foetus* for up to two years.

Repeat breeding activity is generally seen in animals that were assumed to be pregnant and irregular oestrus cycles are common. Varying degrees of vaginal inflammation and uterine infection are present but may be unrecognized.

Diagnosis and Symptoms

Identifying Vibriosis is difficult because of the absence of clinical signs. The disease is insidious and often remains unrecognized in herds, causing continuing production losses. Typical symptoms are abortion, poor conception rates, long calving intervals and uterine infections.

Campylobacteriosis and trichomoniasis are similar syndromes, and investigations should be directed at both diseases. The investigation is generally directed at the bull and the organisms can be identified with sheath washings or sheath scrapings. The aspirate of the sheath washing or scraping is submitted to the laboratory and is examined using a fluorescent antibody test and culture. For maximum accuracy, bulls should be sampled twice – one week apart.

Treatment and Control

Vibriosis is best controlled by vaccination, which renders animals highly resistant to infection. Vaccination should start as soon as genital campylobacteriosis is diagnosed. Infected cows and cows at risk should be vaccinated. Although cows may remain carriers, fertility is greatly improved. In routine use, the vaccine should be given once four weeks before breeding starts. Re-vaccinate halfway through the breeding season. Bulls are vaccinated for the same reason as cows, but are given twice the dosage for cows, three weeks apart.



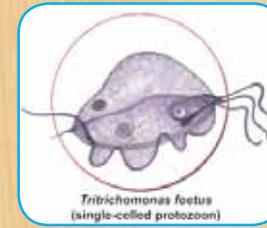
TRICHOMONIASIS

Trichomoniasis is a venereal disease of cattle that causes infertility, extended calving intervals and occasional abortions in cows and heifers. It is caused by *Tritrichomonas foetus*, a small motile protozoan found only in the reproductive tract of the bull and cow.

Transmission

T. Foetus is found in the genital tracts of cattle. When cows are bred naturally by infected bulls, 30%-90% become infected. Bulls of all ages can remain infected indefinitely, but this is less likely in younger males. Cows eventually clear themselves of infection and the uterus is usually normal 2-6 months after infection.

Their immunity is however not long lasting and reinfection does occur. Transmission can also occur when the semen from infected bulls is used for artificial insemination.



Clinical signs

Disease organisms transferred to the cow's vagina from the bull during breeding migrate up to the uterus and cause uterine infection (Pyometra). Recently infected cows develop a mild white sticky discharge from the vulva which can last for up to two months.

The most common sign of Trichomoniasis is infertility. This results in repeat breeding and cows will come into heat when they should be pregnant. Poor pregnancy test results will present very often. Abortion may occur in early or late in pregnancy.

Diagnosis

Trichomoniasis can be suspected in any breeding cattle if there is a history of reproductive failure characterized by repeated returns to service, a lower than expected pregnancy rate, a wide range of gestational ages and cases of early abortion and Pyometra. Clinical signs are similar to those of Vibriosis, therefore diagnosis of the disease can be confirmed microscopically by isolating *T. Foetus*. Diagnostic efforts are directed at bulls because they are the most likely carriers. This is done by sheath scrapes.



Prepuce sampling in a bull

Treatment and control

No vaccines are available for its prevention. Various imidazoles (a class of antifungal and antibacterial drugs effective against a wide range of bacteria and fungi) have been used to treat bulls, but none is both safe and effective. Control consists of eliminating the infection from the bull battery by culling all bulls and replacing them with virgin bulls or by testing and culling positive bulls. Reinfection is prevented by exposing only the uninfected (clean) bulls to uninfected (clean) cows. Clean cows are assumed to be those with calves at foot and virgin heifers.