FACT SHEET

VIBRIOSIS

stock sense
health | welfare | biosecurity

Victorian Farmers Federation

CLINICAL SIGNS OF VIBRIOSIS

- Reduced fertility
- High rate of return to service
- Cows/heifers may display vaginal discharge in the early stages of infection
- Occasional abortions around 2-5 months of gestation
- Extended calving pattern

WHAT IS VIBRIOSIS?

Vibriosis, or campylobacteriosis, is an infectious venereal disease of cattle. It is a common cause of poor reproductive performance in beef herds and is spread by bulls that otherwise appear healthy.

Conception rates in newly infected herds can drop to as low 40% initially but do recover somewhat, with chronically affected herds having a conception rate of 65-75%. Heifers tend to be worst affected by the disease.

Infected bulls act as asymptomatic carriers, spreading the disease to heifers or cows that they serve. The infected bull's fertility is unaffected and they show no external signs. Most herds are thought to be infected by introduction of infected bulls.

The infection affects the cow or heifer, causing inflammation of the vagina and uterus. The diseased uterus is unable to sustain a pregnancy resulting in the loss of the developing embryo.

The females generally return to service at varying times, leading to an extended calving pattern. Eventually, after several cycles, most cows eliminate the infection and re-joining results in normal pregnancy. Occasionally the disease results in permanent infertility.

DIAGNOSIS

Bulls: a veterinarian may collect a sample from the prepuce for laboratory testing. Testing of older bulls is more reliable.

Cows/heifers: testing of aborted material is most reliable, if available. Alternatively, testing for antibodies in the vaginal mucus is possible.

TREATMENT & MANAGMENT

Treatment of affected bulls should be carried out in consultation with your vet and will usually involve a vaccination, sometimes in combination with antibiotic treatment.

The decision to vaccinate all or some females in infected herds will depend on the level of infection and the likely response. Initially all cows, heifers and bulls are vaccinated with replacement heifers and bulls vaccinated in the second year and bulls only from the third year on.

Young bulls tend to recover within 4-6 weeks, whereas older bulls often become permanently infected. Most infected bulls fully recover and throw off infection after vaccination.

As the disease is spread by natural service, the use of artificial insemination is a highly effective control measure.

Securing perimeter fencing to prevent contact with stray bulls is also important in reducing the spread of disease.

In uninfected herds, routine vaccination of all bulls with Zoetis' Vibrovax® is the most practical method for prevention. Bulls will require 2 injections, 4-6 weeks apart initially followed by annual boosters, best given 4 weeks prior to joining.

Vaccination of heifers is often unnecessary, providing all bulls have been vaccinated. If exposure to unvaccinated bulls cannot be controlled, then vaccinating heifers may need to be considered.

In the case of leasing or agisting bulls, to protect your herd it is advised you only use vaccinated bulls. It is always good practice to ask for a cattle health statement or enquire into the health history of animals when purchasing new stock or agisting livestock on your property.

Speak to your veterinarian about diagnosis and an effective vaccination program if you suspect Vibriosis is a problem in your herd. In many cases the vaccine acts as the prevention and treatment for this disease.

For further information, please Stock Sense on 1300 020 163 or stocksense@vff.org.au

TAKE HOME MESSAGES:

- Vibriosis, or campylobacteriosis, is one of the most important infectious venereal diseases of cattle in Australia.
- It is a common cause of reduced reproductive performance in beef herds.
- Vaccinating all bulls with Zoetis' Vibrovax® is the most practical method of prevention.

FURTHER LINKS

Zoetis – Vibriosis FAQs

https://www.zoetis.com.au/_locale-assets/faq/faqs-vibriosis.pdf

Meat & Livestock Australia - Vibriosis

https://www.mla.com.au/research-and-development/animal-health-welfare-and-biosecurity/diseases/reproductive/vibriosis/

NSW DPI – Vibriosis of Cattle

http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0009/110043/vibriosis-of-cattle.pdf

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