

## **Vibriosis**

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Despite a very effective vaccine being available to prevent vibriosis it remains a common cause of poor fertility in beef herds in this area. *Vibrio*, also known as bovine venereal campylobacteriosis, is a venereal disease of cattle caused by a bacteria. The bug does not survive outside the reproductive tract of cattle. Bulls have the potential to remain infected persistently without showing any signs of infection. In cows and heifers, infection causes early loss of pregnancy, altered oestrous cycles, delayed conception and occasionally abortion. Aside from this there are no other signs of infection.

When vibrio is first introduced into a herd the earliest sign may be a large number of heifers and cows returning to the bull. These returns to service are usually longer than the normal oestrous interval of 18 to 21 days. Pregnancy rates in herds where infection has recently been introduced are usually very low. While in herds where the infection has been present for some time pregnancy rates will be better, but still well below that expected in a non-infected herd.

Most cows eventually develop immunity to the disease and subsequently hold a pregnancy. However, a small percentage of cows, less than 1 or 2%, may remain permanently infertile. A small number of cows may also abort as a result of vibrio infection.

Swabs taken from the vagina of a sample of heifers and cows in the herd may be used to confirm a diagnosis of vibrio in a herd. Testing of bulls may also be used, using material collected from the prepuce of bulls. In cases where abortion has occurred, samples from the foetus can be used to confirm a diagnosis.

Factors which may increase the risk of vibrio in a herd include:

- Year round joining
- Use of hired or shared unvaccinated bulls
- Poor boundary fencing

To avoid vibrio ensure all bulls are vaccinated with Vibrovax. Previously unvaccinated bulls should receive two doses 4 to 6 weeks apart, preferably with the second dose given shortly before joining. Bulls should receive a booster every 12 months. Local reactions to the vibrio vaccine are quite common, with many animals developing a lump at the injection site. The smallest vaccine pack size currently available is sufficient for 10 bull doses and this is often more than what is required for smaller herds. Consider sharing a pack with neighbours; this may have the added benefit of protecting your herd from infected straying stock. In herds where vibrio has been diagnosed, vaccination of bulls and females may be used to control the disease. Additional management practises such as a restricted joining period, culling empty cows and using young bulls may also help in control of vibrio.