

## Livestock Health Series

# Vibriosis

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Vibriosis is a disease that leads to reproductive inefficiency in cattle. This disease is caused by the bacteria *Campylobacter fetus* ssp. *venerialis*. Vibriosis is usually introduced when an infected cow or bull is purchased and added to the herd. The disease is transmitted venereally, so once a herd bull becomes infected from a carrier, it spreads the disease to the rest of the herd.

Vibriosis causes performance loss during the breeding season, leading to infertility and loss of early pregnancies. Typical clinical signs of this disease would include a high percentage of cows in the herd returning to heat during the breeding season. They may also show prolonged or irregular estrus periods.

Once an animal is infected with this organism, it localizes in the reproductive tract. In cows, the organism then creates a uterine infection called endometritis. This disease state can persist up to four months. Endometritis leads to problems with the implantation of the placenta on the uterine wall. Therefore, early pregnancies will fail and be reabsorbed without any outward signs of illness. Infrequently, cows may abort between four and eight months from a *Campylobacter* infection.

For treatment, antibiotics can be infused into the uterus to help aid and accelerate recovery. After recovering from an infection, cows will be resistant to reinfection due to their natural immune response.

This disorder is more prevalent in heifers and young cows because older animals tend to gain some inherent immunity if they have been exposed. Bulls typically show no clinical signs of the disease, which allows them to spread the disease undetected through the herd. Some bulls become infected with the disease and carry it for long periods, while other bulls mount an immune response and clear the disease.

Veterinarians can test bulls for the disease by swabbing the preputial cavity or performing a sheath wash. The collected material must then be sent to a diagnostic laboratory for culture.

Control of this disease can be accomplished by vaccination. Initially, the vaccine should be administered at 60 and 30 days ahead of breeding. After the initial vaccination and booster, only a single annual injection is required. Bulls, cows and heifers can be effectively vaccinated.

Consult with your veterinarian to develop the best herd health plan for your operation.

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