

Tech Specs

Vib Shield®

Vib Shield® Plus L5

Protection Against Pathogens That Cause Reproductive and Leptospirosis Diseases

Keep cattle healthy and avoid costly reproductive losses.

PROVEN ONE-DOSE PROTECTION

Adjuvanted with Xtend® SP for higher and longer-lasting immune stimulation.

- Holds the antigens for slow release into the animal's system
- When challenged with *C. fetus*, 80% of heifers vaccinated with Vib Shield Plus L5 conceived while 43% of non-vaccinated heifers failed to conceive (Figure 1)¹

LESS STRESS

- Approved one-dose protection eliminates repeated roundups and extra stress on livestock
- No booster required for endemic areas

CONVENIENT

- Single 2 mL dose at pre-breeding takes care of reproductive diseases that disrupt breeding schedules

VIB SHIELD PLUS L5

INDICATIONS: This product has been shown to be effective for the vaccination of healthy cattle against disease caused by *Campylobacter fetus*, *Leptospira canicola*, *grippotyphosa*, *hardjo*, *icterohaemorrhagiae* and *pomona*. This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity for *C. fetus* is at least 12 months. The duration of immunity for the other antigens in this product has not been established. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

ADJUVANT: Xtend SP

DIRECTIONS: Shake well before using. Administer 2 mL intramuscularly in the neck 2 to 4 weeks prior to breeding. Historically, annual revaccination has been recommended for this product. The need for annual booster vaccinations has not been established for this product; consultation with a veterinarian is recommended.

PRECAUTIONS: Store out of direct sunlight at 2° to 8°C (35° to 46°F). DO NOT FREEZE. This product has not been tested in pregnant animals. Use entire contents when first opened. Do not mix with other products, except as specified on this label. In case of human exposure, contact a physician. Do not vaccinate within 60 days prior to slaughter. Transient swelling may occur at the site of injection. Milk reduction and transient depression may be observed in lactating dairy cows for 3 to 6 days following vaccination. Anaphylactic reactions may occur. Symptomatic treatment: Epinephrine. Contains thimerosal as preservative.

VLN/PCN: 196/2863.07



TECHNICAL DISEASE INFORMATION

CAMPYLOBACTERIOSIS

Bovine genital campylobacteriosis, previously known as vibriosis, is a venereal disease of cattle caused by *Campylobacter (Vibrio) fetus*. This disease is spread from bull to cow and cow to bull during breeding. It can also be spread through artificial insemination if semen or pipettes are contaminated.

Infection with *C. fetus* is subclinical and restricted to the reproductive mucous membranes of breeding bulls and cows. Uterine infections usually destroy the embryo at its earliest stages. However, in some instances the embryo survives, becomes infected and is aborted in the second trimester of pregnancy. The presence of the disease should be suspected when conception rates for a herd drop below 90%. Definitive diagnosis can be made by identifying the organism in the mucus from the cow's reproductive tract or in preputial fluid from the infected bull.

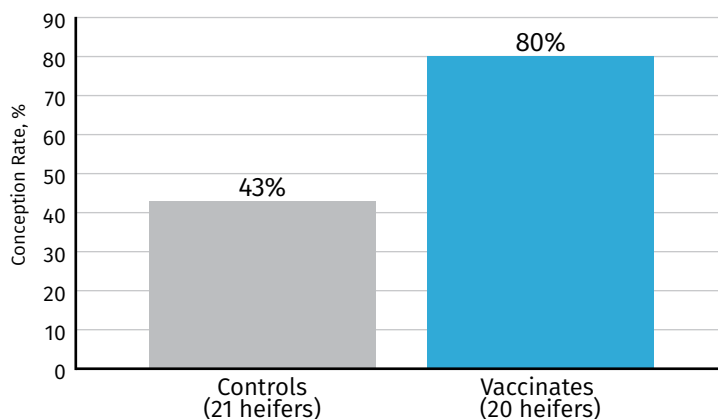
Research shows that vaccination with the *Vibrio* component of Vib Shield® Plus L5 can significantly improve breeding performance. As noted in Figure 2, one dose of Vib Shield Plus L5 significantly increased circulating antibodies to *C. fetus*.

These titers confer excellent immunity in the face of challenge. In a severe prebreeding challenge, nearly twice as many heifers became pregnant in the vaccinated group, as shown in Figure 1. These animals were challenged with two different strains of *C. fetus*. This demonstrates protection against the varied challenges most likely to occur in a herd.

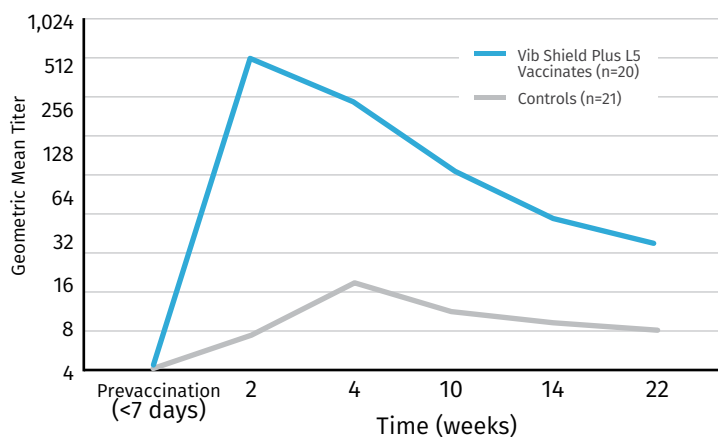
LEPTOSPIROSIS

Leptospirosis is found worldwide but is more common in warm, wet climates. The most significant serovars of *Leptospira* associated with reproductive problems in U.S. cattle include *L. pomona* and serovar Hardjo. *L. Hardjo* is further classified as *L. interrogans* serovar Hardjo type Hardjo-prajitno or *L. borgpetersenii* serovar Hardjo type Hardjo-bovis. Clinical signs can include infertility, abortion of fetuses at 4 months or older and weak calves at birth. Low rates of abortion that often go unnoticed are seen with the Hardjo serovars. High abortion rates of 50% or more are sometimes seen when *L. pomona* hits in the last trimester of gestation.²

— FIGURE 1. RESULTS FROM *C. FETUS* CHALLENGE STUDY¹ —



— FIGURE 2. POST-VACCINATION *C. FETUS* TITERS¹ —



To learn more about Vib Shield, contact your herd health veterinarian, Elanco sales representative or technical consultant, or visit Elanco.us

The label contains complete use information, including cautions and warnings. Always read, understand and follow the label and use directions.

¹ Elanco Animal Health. Data on file.

² Anderson M. Diagnosis of infectious causes of bovine abortion. AABP Proc. 2004;90-7.