

Vib Shield® L5

Campylobacter Fetus-Leptospira Canicola-Grippotyphosa-Hardjo-Icterohaemorrhagiae-Pomona Bacterin

For use in healthy cattle as an aid in the prevention of disease caused by *Campylobacter fetus*, *Leptospira canicola*, *grippotyphosa*, *hardjo*, *icterohaemorrhagiae*, and *pomona*.

Product Numbers

- Vib Shield® L5
127 - 20 mL - 10 doses
- 128 - 100 mL - 50 doses

- **One Dose Protection** — Vib Shield L5 is adjuvanted with a highly refined aluminum hydroxide. Inactivation and adjuvant adherence are accomplished with a process which enhances potency and syringeability. This bacterin requires only one dose prior to breeding.
- **Less Stress** — One dose protection eliminates repeated roundups and extra stress on livestock. In addition to less stress on the livestock, Vib Shield L5 means less cost due to the savings of time and labor.
- **Convenient** — Just one injection two to four weeks prior to breeding takes care of reproductive diseases that upset breeding schedules.



Vib Shield® L5

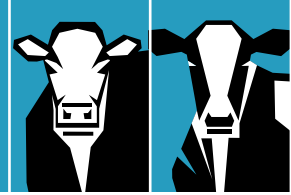
ADJUVANT: Aluminum hydroxide

DIRECTIONS: Shake well before using. Administer 2 mL intramuscularly 2-4 weeks prior to breeding.

PRECAUTIONS: Store out of direct sunlight at 2°-7° C (35°-45° F). DO NOT FREEZE. Use entire contents when first opened. Do not vaccinate within 21 days prior to slaughter. Anaphylactic reactions may occur. Symptomatic treatment: Epinephrine. Contains penicillin, streptomycin, and thimerosal as preservatives.



Customer Service
(800) 843-3386



Technical disease information

Campylobacteriosis

Bovine genital Campylobacteriosis, previously known as Vibriosis, is a venereal disease of cattle caused by *Campylobacter fetus*. This disease is spread from bull to cow and cow to bull during breeding. It can also be spread through artificial insemination if the pipette or semen is contaminated.

Infection with *Campylobacter* 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 percent. Definite 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 L5** can significantly improve conception rates. **See Figure 1.**

In a severe pre-breeding 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 *Campylobacter (Vibrio) fetus*. This demonstrates protection against varied challenges like those most likely to occur in your herd.

Leptospirosis

Due to better and more utilized diagnostics, leptospirosis is gaining renewed notoriety as a reproductive disease. The most significant serovars of *Lepto.* associated with reproductive problems in U.S. cattle include *Lepto. pomona* and the *hardjo* serovar. *Hardjo* is further classified as *Leptospira interrogans* serovar *hardjo* (type: hardjo-prajitno) or *Leptospira borgpetersenii* serovar *hardjo* (type: hardjo-bovis). Clinical signs can include infertility, abortion of fetuses at four 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 percent or more are sometimes seen when *Lepto. pomona* strikes in the last trimester of gestation.

Figure 1: Results from *Campylobacter (Vibrio) fetus* challenge study

