

Heifer Vaccination Protocol

- ✓ **Tri-Shield First Response:** Birth
- ✓ **Triangle 10-HB:** Pre-Breeding, Booster Pre-Calving
- ✓ **Bar Somnus-2P™:** Pre-Breeding
- ✓ **Bovilis Guardian:** 5 Month Pregnancy, Booster Pre-Calving

Cow Vaccination Protocol (Plus Heifer Protocol)

- ✓ **Triangle 10-HB:** Booster Pre-Calving (2 year old, Cows at Dry Off)
- ✓ **Bovilis Guardian:** Booster Pre-Calving
- ✓ **ENDOVAC-Dairy:** Dry Off
- ✓ **Preponse HM Cattle Vaccine:** 2 times annually (June, November)
- ✓ **Vira Shield® 6:** Dry Off

Vaccination Description:

Tri-Shield First Response, In newborn/neonatal calves, First Defense Tri-Shield is a one-time preventative treatment against K99+ E. coli, coronavirus and rotavirus diarrhea/scours causing pathogens. No allergic or other adverse reactions were observed. Vaccination has been the traditional way to protect calves from scours.

Triangle 10-HB, For vaccination against IBR, BVD Types I and II, PI3, BRSV, and 5 strains of Leptospirosis caused by *Leptospira pamona*, *L. hardjo*, *L. grippotyphosa*, *L. canicola*, and *L. icterohaemorrhagiae*, prevention of urinary shedding of *L. borgpetersenii* serovar *hardjo* in Heifers 10 months of age and older, and as an aid in the reduction of clinical disease due to IBR. Vaccinated animals subsequently exposed to *L. borgpetersenii* serovar *hardjo* have been shown to clear renal infections within 8 weeks of exposure.

Bar Somnus-2P™, is for the vaccination of healthy, susceptible cattle as an aid in the prevention of disease caused by *Haemophilus somnus*, and as an aid in the reduction of diseases caused by *Mannheimia haemolytica* and *Pasteurella multocida*. 21 day withdrawal. Contains neomycin as a preservative.

Bovilis Guardian, is a multiple-antigen vaccine used in pregnant heifers and cows that aids in the prevention of neonatal calf diarrhea by protecting against major bacterial and viral pathogens associated with scours. Rotavirus type G6 & G10. Coronavirus types 1 & 3. *Clostridium perfringens* C & D.

Presponse HM Cattle Vaccine, For vaccination of healthy dairy or beef cattle 7 months of age or older as an aid in the prevention of pneumonic pasteurellosis by stimulating immunity to *P. multocida*, and as an aid in the reduction of respiratory disease due to Mannheimia (*Pasteurella*) *haemolytica*.

ENDOVAC-Dairy, not only provides your herd unmatched *E. coli* mastitis protection, but protection from multiple gram-negative bacterial diseases. This industry leading vaccine provides cattle in every stage of production protection from *E. coli*, *Salmonella*, *Pasteurella*, and Mannheimia bacteria while increasing the animal's production of antibodies, B and T lymphocytes, and neutrophils.

Vira Shield® 6, is for use in healthy breeding cattle, including pregnant cows and heifers, as an aid in the prevention of disease caused by infectious bovine rhinotracheitis (IBR), bovine virus diarrhea (BVD Types 1 & 2), parainfluenza Type 3 (PI3), and bovine respiratory syncytial (BRSV) viruses and *Campylobacter fetus*, *Leptospira canicola*, *grippotyphosa*, *hardjo*, *icterohaemorrhagiae*, and *pomona*. Produced from non-cytopathic (BVD Types 1 & 2) and cytopathic (BVD Type 1) isolates.