



For scours control,
**It may be time to use
Bovilis® Guardian®**

Calving Date	Initial Vaccination*	Booster Dose
February 1	November 1	November 22 - December 13
February 15	November 15	December 6-27
March 1	December 1	December 22 - January 12
March 15	December 15	January 5-26
April 1	January 1	January 22 - February 12
April 15	January 15	February 5-26
May 1	February 1	February 22 - March 15

*initial vaccination 3 months prior to calving
booster 3-6 weeks later

BOVILIS GUARDIAN has been shown to be effective for the vaccination of healthy pregnant cattle to provide immunity against neonatal calf diarrhea and includes the most important scours causing pathogens.

- Rotavirus** -Type G6, G10
- Coronavirus** - Type 1, and Type 3
- E. coli** - *E. coli* pilus Type K99
- Clostridium perfringens*** - Type C and D

Help ensure the colostrum your calves receive contains a high concentration of antigen-specific antibodies by vaccinating pregnant cows and heifers with BOVILIS Guardian

- **Broad-spectrum coverage** against the most prevalent and relevant scours-causing bacteria and viruses.
 - Includes a cell-free extract of K99 pili of *Escherichia coli*, a unique combination of two inactivated coronavirus subtypes, two G-types of inactivated rotaviruses and a bacterin-toxoid from *Clostridium perfringens* types C and D.
- **Shown effective against:**
 - Neonatal calf diarrhea caused by **bovine group A serotype G6 rotaviruses**.
 - Neonatal calf diarrhea caused by enterotoxigenic ***E. coli* pilus type K99**.
 - Enteritis caused by ***C. perfringens* type C** and enterotoxemia caused by ***C. perfringens* type D**.
 - Neonatal calf diarrhea caused by **bovine coronavirus**.
- **Vaccination protocol timed for optimal colostrum antibodies.**[†]

The ONLY subcutaneous scours vaccine for use in pregnant cows and heifers to help reduce neonatal diarrhea in calves that features:

- Subunit technology using pili instead of whole *E. coli* cells or cell walls (which could be a potential source of endotoxin), to generate a **strong, targeted immune response against *E. coli* pilus type K99, with a lower rate of injection site reactions**.
- Coverage against **two subtypes of coronavirus**.
- Includes ***C. perfringens* type D** in addition to ***C. perfringens* type C**.



To find out more about **BOVILIS® Guardian®**, or for technical support, please contact your Merck Animal Health representative at **MAHCattle.com**

[†]To be injected in healthy pregnant cattle 3 months prior to calving. Repeat in 3-6 weeks following initial vaccination. For subsequent calvings, revaccinate 5-7 weeks before calving. Always read and follow the label instructions to ensure this product is suitable for the animal to be vaccinated.