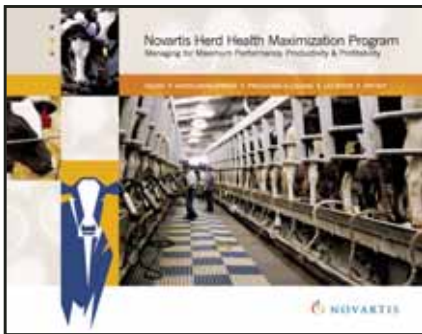


# Preventive Solutions to Improve Herd Health

Novartis Animal Health US, Inc. is pleased to offer an expanded line of vaccines for your dairy. Our dairy portfolio continues to grow, bringing new disease-prevention tools to you and your veterinarian.

Every Novartis product has been developed to effectively meet the needs of your dairy – as well as positively affect your profitability. To offer true value your health program must not only work, it also must provide you with a healthy return on your investment.

That's why the Novartis veterinary service team has developed a complete "Herd Health Maximization Program." This program outlines management protocols and vaccination recommendations for calves, heifers, lactating and dry cows. Copies are available from your Novartis territory manager or by calling 1-800-843-3386.



Arsenal, Ecolizer, Clostri Shield, Quick Shield, Pinkeye Shield, ReproSTAR, Scour Bos and Vira Shield are registered trademarks of Novartis AG. Fusogard is a registered trademark of Novartis Animal Health, Inc.

[www.livestock.novartis.com](http://www.livestock.novartis.com)  
800-843-3386



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**NOVARTIS PRODUCTS**



## For Maximum Performance, Productivity & Profitability

- Calves
- Heifer Development
- Pre-calving & Calving
- Lactation
- Dry-off



## Reproductive and Respiratory Protection



**Vira Shield® 6+L5 HB** is the first and only inactivated viral vaccine available in combination with *L. hardjo-bovis*.

Moreover, it's the only vaccine to feature 3-way BVD coverage, including: cytopathic (CP) Type 1, noncytopathic (NCP) Type 1 and NCP Type 2. Research demonstrated this Type 2 BVD protection remains strong for 11 months!<sup>1</sup> Research further confirms its value of building immunity early, even in calves that have high levels of maternal antibody due to high-quality colostrum.<sup>2</sup> Use it safely and confidently in calves, heifers and even pregnant cows. Use in dry cows to avoid any concerns over lost milk production.



**NEW! ReproSTAR® L5 HB** is an inactivated vaccine that aids in protection against five strains of leptospirosis – including *L. hardjo-bovis*, the most common cause of bovine leptospirosis in U.S. cattle.<sup>3</sup>

Its *L. hardjo-bovis* component was isolated on a U.S. dairy experiencing poor conception rates. ReproSTAR L5 HB is safe to use in all cattle, including pregnant cows.



**Arsenal® 4.1** is a modified live vaccine for aid in preventing respiratory diseases caused by BVD Types 1 and 2, BRSV, IBR and PI<sub>3</sub>. It contains a noncytopathic (NCP) strain of BVD. NCP causes up to

95 percent of BVD outbreaks. Strains of NCP are also the sole cause of persistently infected calves. Arsenal 4.1 will aid in the reduction of persistently infected calves caused by BVD Type 1 virus.



**Quick Shield® IN IBR-PI<sub>3</sub>** is a modified live intranasal vaccine for aid in the prevention of disease caused by IBR and PI<sub>3</sub> viruses. It goes right to work at a common site of infection – the nostrils.

## Broad-Spectrum Scours Preventives



**Scour Bos® 9** offers broad-spectrum scours protection – with three types of rotavirus, one type of coronavirus, four strains of *E. coli* bacteria and *C. perfringens* Type C. Vaccinating a dry cow with Scour Bos 9 ensures tomorrow's calf will be provided colostrum that carries powerful antibodies enabling her to be a healthy, strong milk producer. In the first year, booster with **Scour Bos® 4** for rotavirus and coronavirus protection. In subsequent years, only one annual dose of Scour Bos 9 is required and may be given up to 10 weeks prior to calving to the dry cow.



**Bovine Ecolizer®+C20** aids in the prevention of neonatal diarrhea by providing newborn calves direct, pre-formed antibody protection against enterotoxigenic strains of *E. coli* and also *C. perfringens* Type C bacteria. Ecolizer+C20 must be given by mouth within 4 hours of birth.

1. Chase C. Protection with an inactivated vaccine against IBR, BRSV and BVDV. Paper presented at: Annual Meeting of the American Association of Bovine Practitioners. 1995; San Antonio, Texas. Vira Shield has no approved claim for duration of immunity to Type 2 BVD.
2. Kaeberly M. Antibody response of young calves to inactivated viral vaccines. 1997 Beef Research Report - Iowa State University. A.S. Leaflet R1462.
3. Zuerner RL, et al. Repetitive sequence element cloned from *Leptospira interrogans* serovar hardjo type hardjo-bovis provides a sensitive diagnostic probe for bovine leptospirosis. *J Clin Microbiol.* 1988;26:2495-2500.

## Reduce Lameness



When lameness strikes the milking string, a whole host of problems arise, including poor reproductive performance and milk production. **Fusogard®** aids in the reduction of clinical signs of foot rot caused by *Fusobacterium necrophorum*. It provides the protection and safety of an inactivated bacterin while delivering effective, economical foot rot protection.

## Clostridial 7-Way Protection



**Clostri Shield® 7** is a seven-way vaccine that aids in the prevention of clostridial diseases. A small 2-mL subcutaneous dose fits right into Dairy Quality Assurance programs.

## Type A Protection 7-Ways Don't Have



**Clostridium Perfringens Type A Toxoid** is the first conditionally licensed *C. perfringens* Type A vaccine for cattle. *C. perfringens* Type A is implicated in serious and often deadly diseases, such as hemorrhagic bowel syndrome in high-producing cows. It's also deadly in calves and commonly isolated in cases involving abomasal ulcers and hemorrhage.

## Real-World Pinkeye Protection



**Pinkeye Shield® XT4** protects your herd against a leading cause of pinkeye, *Moraxella bovis*. It contains four field isolates (not laboratory strains) of the bacteria for broad-spectrum, one-dose pinkeye prevention.