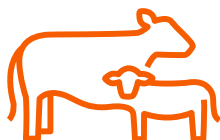


Help Protect the Future of Your Herd

Bovi-Shield **GOLD**

Put the line of Bovi-Shield GOLD[®] vaccines to work for you

Bovi-Shield GOLD[®] fetal protection vaccines help protect heifers and cows, as well as their unborn calves, against disease challenges caused by bovine viral diarrhea virus (BVDV) and infectious bovine rhinotracheitis (IBR) virus.



How can prebreeding vaccination help?

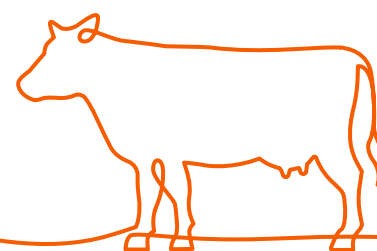
Vaccinating naive heifers or cows with two doses of a modified-live virus reproductive vaccine prior to breeding helps protect the heifer or cow and her unborn calf, from disease challenges. The line of Bovi-Shield GOLD reproductive vaccines can help maintain your herd's immunity and help guard against economic loss.

Why use prebreeding vaccines?

Exposing naive (unvaccinated) pregnant heifers or cows to viruses such as bovine viral diarrhea virus (BVDV) and infectious bovine rhinotracheitis (IBR) virus can cause abortions or early embryonic death. Plus, a calf exposed to BVDV could be born persistently infected with BVDV.

Consider this additional information about the challenges of BVDV and IBR:

- ✓ A meta-analysis of 325 studies in 73 countries from 1961 to 2016 revealed that the **prevalence of BVDV has increased in North America.**¹
- ✓ BVDV infections have a global economic impact through **high morbidity and mortality rates**; increased premature culling; and decreased reproductive performance through **embryonic losses, abortions, or birth defects.**
- ✓ Bovine viral diarrhea virus persistent infection (BVDV-PI) in animals is caused when pregnant nonvaccinated cows are exposed to BVDV and the **unborn calf becomes persistently infected with BVDV.** These animals are permanently infected and excrete large amounts of infectious BVD virus throughout their lives.



Bovi-Shield GOLD®: The Market-leading Reproductive Vaccine Family²

	Administration Route	Dose	Persistent infection from BVD Types 1 and 2	IBR Abortions	BVD Type 2 testicular infection	BVD Types 1 and 2	IBR	BRSV	PIs	<i>Leptospira canicola</i> , <i>L. grippityphosa</i> , <i>L. hardjo</i> , <i>L. icterohaemorrhagiae</i> and <i>L. pomona</i>	<i>Leptospira borgpetersenii</i> (Lepto hardjo- bovis)	<i>Campylobacter fetus</i> (vibrio)
Bovi-Shield GOLD FP® 5	SQ or IM	2 mL	✓	✓	✓	✓	✓	✓	✓			
Bovi-Shield GOLD FP® 5 L5	IM	2 mL	✓	✓	✓	✓	✓	✓	✓	✓		
Bovi-Shield GOLD FP® 5 VL5	IM	2 mL	✓	✓	✓	✓	✓	✓	✓	✓		✓
Bovi-Shield GOLD FP® 5 L5 HB	SQ or IM	2 mL	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Talk with your veterinarian or Zoetis representative about respiratory protection.

Also, beef producers can visit [BuildingHealthyHerds.com](https://www.BuildingHealthyHerds.com)
and dairy producers can visit [CalfWellness.com](https://www.CalfWellness.com).

Do not use in pregnant cattle (abortions can result) unless they were vaccinated, according to label directions, with any Bovi-Shield GOLD FP or PregGuard GOLD FP vaccine prebreeding initially and within 12 months thereafter. Do not use in calves nursing pregnant cows unless their dams were vaccinated within the past 12 months as described above. **To help ensure safety in pregnant cattle, heifers must receive at least 2 doses of any Bovi-Shield GOLD FP or PregGuard GOLD FP vaccine with the second dose administered approximately 30 days prebreeding.**

¹ Scharnböck B, Roch FF, Richter V, et al. A meta-analysis of bovine viral diarrhoea virus (BVDV) prevalences in the global cattle population. Sci Reports. 2018;8.

² Analytics data, January to November 2022, based on comparison of doses sold from Bovi-Shield GOLD® reproductive vaccines compared with competitive reproductive vaccines.