



Nasalgen[®]3-PMH

The color of unmatched protection.

The first and only intranasal BRD vaccine against viral and bacterial pneumonia.

BOVILIS[®] NASALGEN[®]3-PMH is the first intranasal vaccine that effectively protects beef and dairy cattle against five major causes of respiratory disease in one dose:

- Bovine respiratory syncytial virus (BRSV)
- Infectious bovine rhinotracheitis (IBR)
- Parainfluenza 3 (PI₃)
- *Pasteurella multocida*
- *Mannheimia haemolytica*

Easy to administer.

- **Eliminates the need and stress of two separate vaccines**
- Single 2 mL dose in one nostril

Unique blue shadow for confident administration.

- Avoid missing calves or double-dosing

Duration of immunity (DOI).

- 78 days: BRSV
- 195 days: IBR
- 95 days: PI₃
- 125 days: *P. multocida*
- 122 days: *M. haemolytica*

Mounts strong, early response¹ for powerful, long-lasting protection.

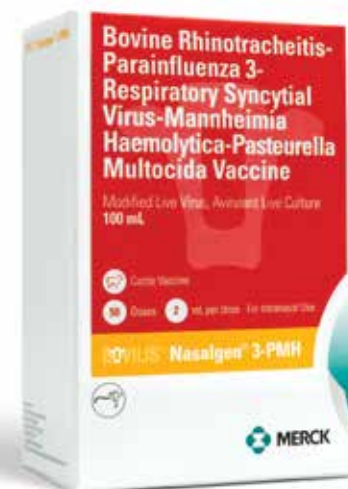
- Mimics natural exposure to the most common causes of pneumonia for an effective immune response

No injection site reactions.

- Helps your operation meet Beef Quality Assurance standards

BOVILIS NASALGEN 3-PMH: The one and only.

- Designed with an IBR that is not temperature-sensitive, ensuring the vaccine will replicate and protect in any situation²
- **Safe in pregnant cows and in calves nursing pregnant cows building a strong foundation for disease protection.**



¹Data on file, Merck Animal Health.

²Grissett GP, et al. Effect of Ambient Temperature on Viral Replication and Serum Antibody Titers Following Administration of a Commercial Intranasal Modified-Live Infectious Bovine Rhinotracheitis-Parainfluenza-3 Virus Vaccine to Beef Cattle Housed in High- and Moderate-Ambient Temperature Environments. *Am J Vet Res.* 2014;75(12):1076-1082.