

Bovine Respiratory Disease: The cattle industry's top health challenge

A \$1 billion bill the beef industry foots every year^{1,2}

BRD's economic impact

- Affects more than one in five head every year³
- Costs beef industry \$1 billion annually, due to lost performance, treatment and death^{1,2}
- Instances aren't decreasing^{4,5}, despite improved vaccination programs, cattle genetics and management practices
- Decreases carcass weight and value on the rail⁶

What is BRD?

It's a multifactorial disease complex of the upper and lower respiratory system and includes common respiratory illnesses like shipping fever and pneumonia. A bacterial and/or viral infection cause BRD, but risk factors like stress and extreme weather act as a catalyst for the disease. Common bacterial and viral infections include:

Viral Infection

- Bovine respiratory syncytial virus
- Parainfluenza 3
- Adenovirus
- Infectious bovine rhinotracheitis

Bacterial Infection

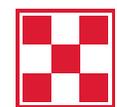
- *Manheimia haemolytica*
- *Pasteurella multocida*
- *Histophilus somni*
- *Mycoplasma bovis*



BRD risk factors

In the game of weaning, BRD often has the upper hand. Calves face a plethora of stressors around weaning, which lowers their ability to fight back against disease.

Stack the deck against BRD.
Visit [purinamills.com/weaning](https://www.purinamills.com/weaning) for more information about calf health and nutrition.



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¹ Brodersen BW. Bovine respiratory syncytial virus. *Vet Clin North Am Food Anim Pract.* 2010;26(2):323-333.

² Griffin D, Chengappa MM, Kuszak J, McVey DS. Bacterial pathogens of the bovine respiratory disease complex. *Vet Clin North Am Food Anim Pract.* 2010;26(2):381-394.

³ Brooks KR, Raper KC, Ward CE, Holland BP, Krehbiel CR, Step DL. Economic Effects of Bovine Respiratory Disease on Feedlot Cattle During Backgrounding and Finishing Phases. <http://pods.dasn.okstate.edu/docushare/dsweb/Get/Document-6830/P-1027%20Economic%20Effect%20of%20BRD1.pdf>. Accessed May 5, 2017.

⁴ USDA APHIS. 1999. Health Management and Biosecurity in U.S. Feedlots. Accessed on March 6, 2019. https://www.aphis.usda.gov/animal_health/nahms/feedlot/downloads/feedlot99/Feedlot99_dr_PartIII.pdf.

⁵ USDA APHIS. 2011. Health and Health Management on U.S. Feedlots with a Capacity of 1,000 or More Head. Accessed on March 6, 2019. https://www.aphis.usda.gov/animal_health/nahms/feedlot/downloads/feedlot2011/Feed11_dr_PartIV.pdf.

⁶ Schneider MJ, Tait RG, Busby WD, Reecy JM. An evaluation of bovine respiratory disease complex in feedlot cattle: Impact on performance and carcass traits using treatment records and lung lesion scores. *J. Anim. Sci.* 2009;87:1821-1827.