BVD: What's the Big Deal?

Bovine Viral Diarrhea (BVD) is a viral disease that may cause multiple clinical symptoms. Persistently infected (PI) carriers continually shed the virus, which can affect the health of other cattle they come in contact with. BVD virus is an immunosuppressive virus that can predispose cattle, especially calves, to infections such as those that cause respiratory disease. PI calves are usually "poor-doers" that serve as a source of infection for other calves. The bottom line is that BVD, ultimately, can affect your bottom line. With proper screening methods, you can minimize your herd's BVD risk.



- An estimated 0.2-0.4 percent of cattle are BVD PI carriers.
- Many show no symptoms of being carriers, yet can shed up to 10,000,000 virus particles a day.
- PI carriers continuously excrete the virus in urine, stool, blood, and mucosal and nasal discharge.
- Economic loss can be from \$40-200 per exposed cow. This is dependent on time of exposure and vaccination program that is in use.
- NMDA's Veterinary Diagnostic Services (VDS) Laboratory is here to help. In order to help you minimize your herd's BVD risk, we're now offering BVD PI ELISA (enzyme-linked immonosorbent assay) tests.

- Send unpreserved ear-notches on ice. If the notches are going to be more than seven days old at time of shipping, they should be frozen beforehand. Serum samples may be submitted in cattle older than three months .
- The ELISA currently in use has 100 percent sensitivity and specificity with ear-notch samples; serum samples have 91 percent sensitivity and 97 percent specificity. (Idexx)
- Proven negative PI cattle add value to the herd.

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Possible surveillance options:

- Test all heifers, cows, and bulls to see if they are PI carriers; cull anything that tests positive.
 - Test all herd additions, especially bulls.

After the initial screening, test each year's calf crop. The dams of positive calves should then be tested. Any positive animals should be removed from the herd.

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• There are other surveillance options. Please work with your veterinarian to develop a plan that is the most beneficial for you.



For more information about NMDA's Veterinary Diagnostic Services (VDS) Laboratory and the services it provides to the state, veterinarians, and the public, please visit NMDA's <u>VDS web page</u>.