
Vet's Corner: How much BVDV is out there?

BVDV ear notch testing is proving to be a valuable tool in determining the prevalence of PI carrier animals. Despite elaborate and costly vaccination programs, infertility and respiratory disease continues to plague herds until we bite the bullet and undergo the expense of individual whole herd ear notch testing. Our heifer grower farms were the leaders in insisting on negative ear notches for all incoming cattle, and the practice is being adopted by producers who purchase cattle.

Dr. Julia Ridpath, USDA Veterinarian specializing in BVDV research presented the following table at the recent Northeast Dairy Veterinarian Conference.

Likelihood of Buying a BVD PI Calf

Number of Calves Introduced	PI Prevalence Level in Source Calves
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	0.10%	0.15%	0.20%	0.25%	0.30%	0.35%	0.40%
50	4.9%	7.2%	9.5%	11.8%	13.9%	16.1%	18.7%
100	9.5%	13.9%	18.1%	22.1%	26.0%	29.6%	33.0%
250	22.1%	31.3%	39.4%	46.5%	52.8%	58.4%	63.3%
500	39.4%	52.8%	63.2%	71.4%	77.7%	82.7%	86.5%

The top row gives the occurrence rate of BVDV-PI in source herds. In herds tested in our practice where BVDV-PI carriers are suspected to exist, we commonly find two to six carriers in 500 head herds. 0.40% to 1.20% is the PI prevalence level in these problem herds.

The left hand column gives the number of animals purchased. In the Northeast it is common to purchase smaller quantities of springers but over a year's time, it is not uncommon to purchase 50 head. And several large producers are purchasing whole herds, so buying cows by the hundred is not unheard of.

Unless the purchased animals are ear notch tested, the prevalence rate in the herd of origin can only be assumed. 0.10% (one in a thousand) PI prevalence rate could be assigned to an untested closed herd which has not purchased replacements or bulls or gone to cattle shows. So if 50 springers are purchased from such a quality source, there is a 4.9 % (one in twenty chance) that a BVDV-PI carrier will be brought into the herd.

For the large herds, which purchase 100 head there is 9.5 % (one in ten chance) that the incoming cattle will infect the herd with BVDV. If 100 cattle were purchased from one of our problem herds there is a greater than one chance in three, that BVDV will be brought into the herd.

Ear notch BVDV-PI testing is an easy, convenient procedure that should be considered for inclusion in every dairy farm's biosecurity program.

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