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Voluntary Herd BVD Eradication Incentive Program in NYS

**Belinda S Thompson DVM, Edward Dubovi PhD, Isabelle
Schweitzer MS, and John Huntley DVM MPH**

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2004 New York Cows & Production

655,000 dairy beef cows (NY cow/calf herd)

**~655,000 heifers and calves in these
operations**

= 1,310,000 dual purpose cattle

1,410,000 all cattle and calves

100,000 head of single purpose cattle

11,650,000,000 lbs of milk



BVD Control Challenges Due to Wide Management Range

Total confinement operations, all age and management groups

Grazing operations

Seasonal confinement operations

Co-mingled heifer raiser operations

Cow/calf

Conventional dairy operations, with calves segregated at birth

Co-mingled Stocker calf operations

Year-round calving and breeding in majority of operations

High \$value of dairy replacements



New York State Cattle Health Assurance Program

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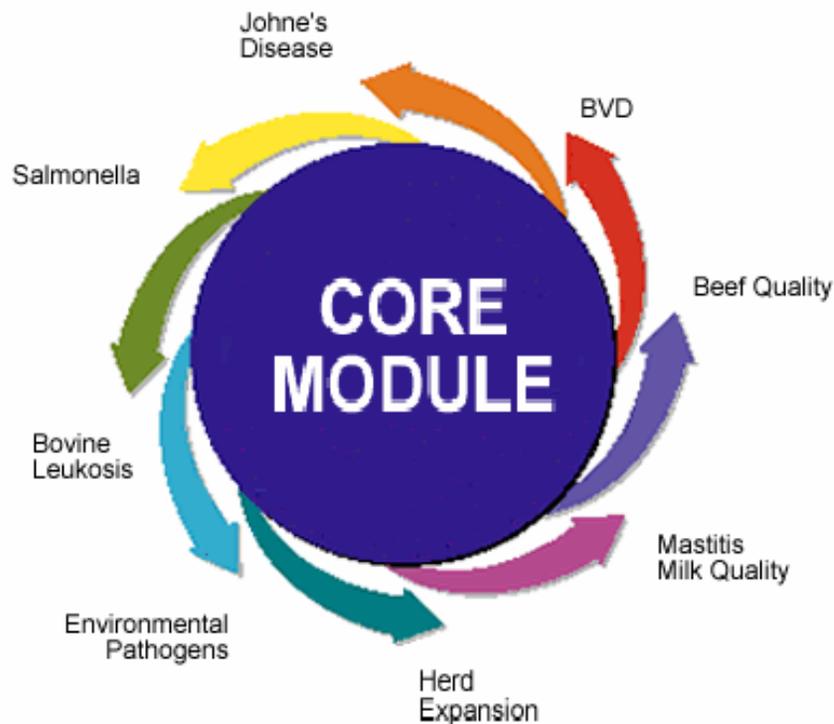
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NYS Department of Agriculture and Markets

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Welcome to the Bovine Viral Diarrhea Virus Module

Section 1 [BVD Module - Fact Sheets](#)

General information on the control of bovine viral diarrhea virus

Section 2 [BVD Module - Forms](#)

Risk assessments for developing BVD herd plans

Section 3 [BVD Module - Slide Sets](#)

Power Point presentations on risk assessment, control and biosecurity for BVD



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BVD Module - Fact Sheets

General information on the control of bovine viral diarrhea virus

Section 1

1. [Introduction to Bovine Viral Diarrhea](#)
2. [BVD Control Procedures](#)
3. [NYSCHAP Bovine Viral Diarrhea Module](#)
4. [Methods for Detection of BVD](#)

Bovine Viral Diarrhea Virus Sections: 1 [2](#) [3](#)



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Voluntary BVD Eradication Incentive Program Participation for NYSCHAP Herds, Starting in 2002

- Summary of any previous BVD testing on farm.**
- Number of animals present, by management group.**
- Testing strategy to be employed.**
- Signature of farm owner/manager, herd veterinarian and NYSCHAP veterinarian indicating commitment to complete herd test, follow biosecurity plan and remove all PI animals.**



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- Letter indicating qualification for incentive and farm specific accession forms.
- Info sheet regarding sample collection, handling and submission requirements.
- Test results, including a phone call on all BVD positive antigen detection tests.
- Free confirmatory testing for PI status on all BVD antigen positive animals



First 21 herds enrolled

- **19 Dairies – one herd not yet testing**
- **2 Contract Heifer Raisers**
- **20 different supervising veterinarians**
- **11 herds have completed the herd testing, including 9 months follow-up after the removal of the last PI. 10/11 have continued to test newborn and purchased replacements.**
- **4 herds are within the nine-month window following removal of last detected PI.**
- **Remainder of farms need to complete baseline herd inventory testing and follow-up testing.**



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- Herd size 515 avg. (30 – 1631)
- Lactating cows 239 (0-800)
- All dairies also raised their own heifers
- 3 herds with lactating cows have not elected to use bulk tank testing.

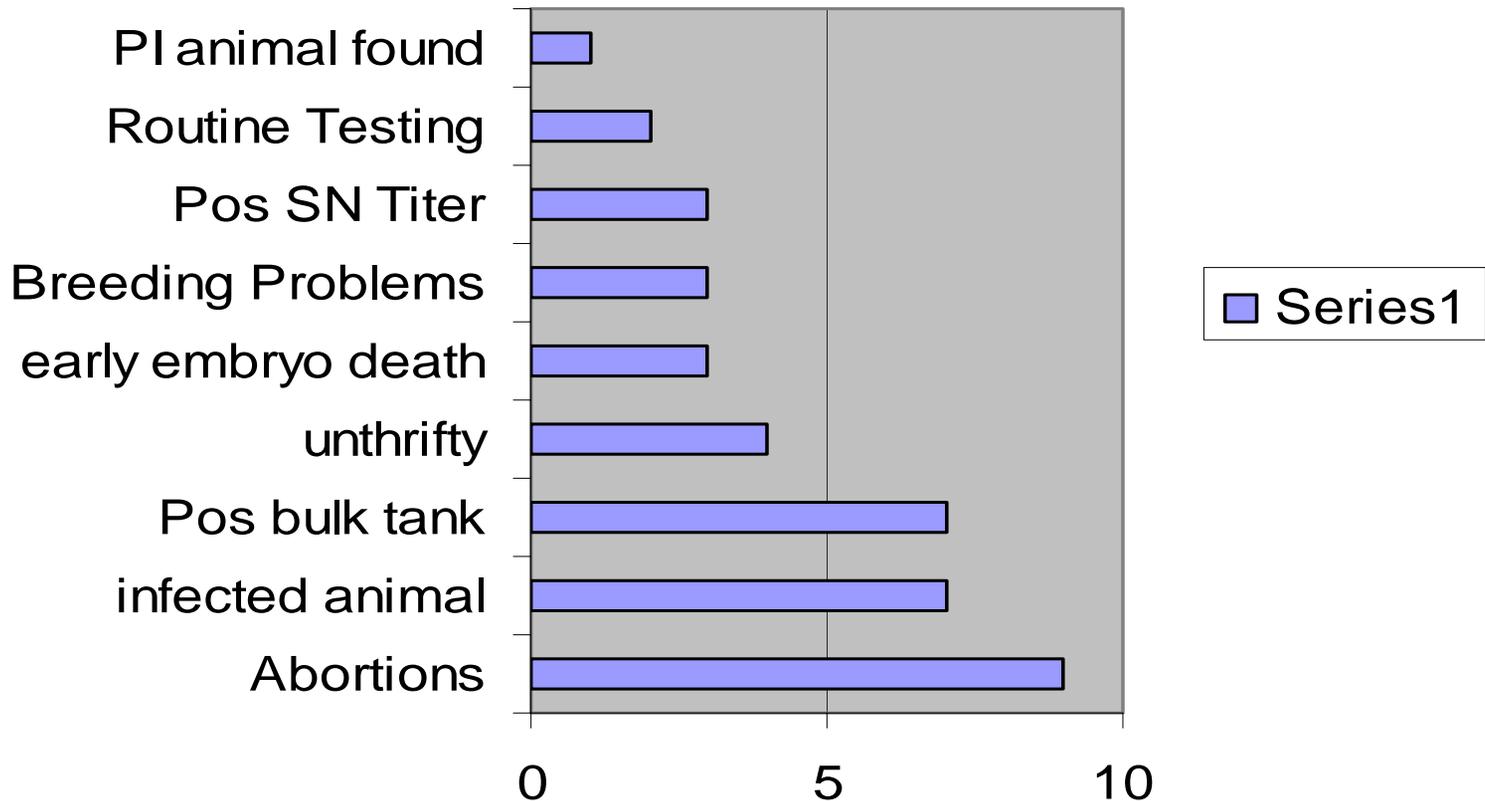


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- **5 farms claims to be completely closed herds, one with >1500 head.**
- **One herd was recently assembled from many sources.**
- **2 farms are multi-source heifer raisers.**
- **Remainder of the herds purchase replacements, often pregnant when purchased.**
- **One herd has completed the program and dropped out of the NYSCHAP program.**



Reasons for Joining BVD Testing Program





- BVD identified in 13/20 herds (65%)
- 7 herds had positive bulk milk test results
- 7/7 have completed testing of lactating cows – 5/7 found 1-3 PI lactating cow(s); 1 herd lost 5 animals to follow-up testing and never found a PI cow but did subsequently find a calf; 1/7 did not find positive lactating cow



- **9 lactating PIs, 2 non-lactating adult PIs, 39 young stock PIs**
- **2 herds had adult non-lactating PI (dry cows)**
- **11 herds had PI young stock, from 1 – 11 individual heifers/calves.**
- **3/5 of the closed herds had PI animals.**
- **All herds with adult PI animals also had at least one PI heifer/calf.**
- **One of the herds with a positive bulk tank found a PI calf despite not finding lactating cow.**
- **4 herds had PI young stock and no PI adults, 2 of which were heifer raiser operations.**
- **50 total PI animals identified and removed**
- **50/9404 (0.53%)**



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- Herd with 10 PI animals/~1000 head also had a consistent pregnancy rate of about 25% in the year prior to the removal of the PIs. The industry benchmark is 20%.

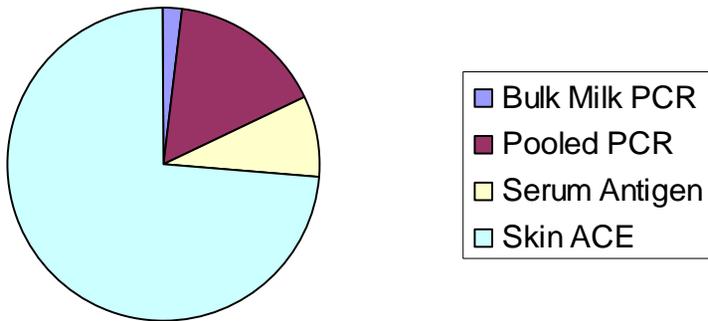


Cost of laboratory testing

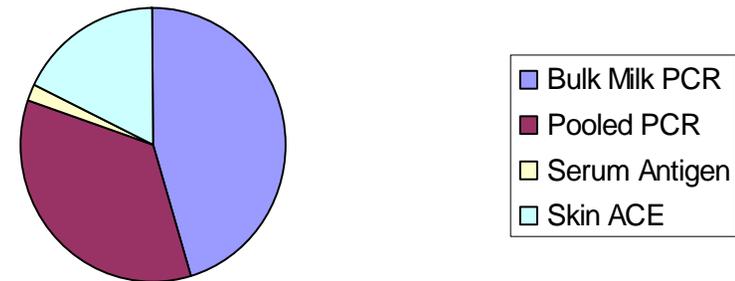
- Average cost to test entire herd including newborn calves for 9 months following removal of last PI = \$2.04 per animal.
- Bulk tank PCR and VI = \$60 (\$50)
- Pooled PCR testing = \$35 (\$25)
- Individual serum or skin ACE tests=\$5(\$4)



BVDV Test Breakdown by Test



Breakdown of No. of Animals Screened per Test



Discounted price of test per head:

Bulk Milk PCR and VI = \$0.40 (\$50/test up to 400 cows)

Pooled PCR = \$2.82 (\$25/pool of up to 10 animals)

Skin or serum ACE = \$4.00



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- 9404 animals tested (2360 tests)
- \$25,450 total cost (\$2.71/head)
- \$19,214 cost to 21 farms (\$2.04/head)
- \$6,236 cost to NYS Ag and Markets (\$0.66/head)
- \$509 total cost per PI removed (50 PIs)

Herd Completes Incentive Program Testing and Removal of PIs

- No certification because no program is in place to control or monitor farm inventory and verify in a timely follow-up.
- Letter of congratulations to the farm and veterinarian



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Dear Dr. _____

Please pass along our
congratulations to the _____ Farm
on completing the whole herd BVD
testing, and determining that the
herd is currently BVD free.



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BVD is a virus that is easily re-introduced by lapses in biosecurity. Appropriate biosecurity is encouraged at all times. In addition, we encourage herds that have established a negative herd status to continue testing **ALL** herd additions, as well as every calf born on the premises that will remain for more than a few days.



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In the event that a PI animal is identified as part of the herd in the future, and testing of new introductions and baby calves has been maintained, very little additional testing of resident animals will be necessary. Even if the biosecurity breach is never identified, the herd can maintain control of BVD.



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Also, if the herd maintains verifiable identification and records, negative individual test results should be accepted as evidence of negative PI status at any future time in the animal's life, for the purpose of movement or sale.



- **1 herd: “re-introduction” of BVD**
- **Stopped testing newborn heifer calves after completing incentive program.**
- **Neglected to test offspring of replacements purchased as bred heifers.**
- **Clinical illness in calves stimulated a new round of testing, identifying PIs; they are now, again, testing all neonatal heifer calves.**
- **One of our farms has ventured into Alpaca raising since the herd has tested negative for BVD.**



Unexplained BVD cases

- An aborted PI fetus, never detected by animal caretakers, can be a source of BVD exposure to pregnant pen mates during a time when no other PI animals are identified on the premises.
- Dairy bull calves removed at 2-4 days of age are almost never tested by the farm of origin. PI bull calves could be a brief source of virus.



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The Animal Health Diagnostic Center is a partnership of the College of Veterinary Medicine at Cornell and NYS Agriculture and Markets



NYSCHAP is a program of NYS Agriculture and Markets