U.S. veterinarians estimate that bovine viral diarrhea virus (BVDV) costs producers more than $30 per head each year in lost productivity, even after vaccination.1

Fortunately, with an effective management strategy and the right diagnostic tools, BVDV can be controlled.

IDEXX recommends this 3-step strategy for BVDV control:

1. Determine your herd status using the IDEXX BVDV PI X2 Test at a local laboratory.
2. Test all new introductions to the herd using the IDEXX SNAP® BVD Test.
3. Work with your veterinarian to design a vaccination and biosecurity program.

Dairy Farm

Control Strategy

- Determine herd status by testing all:
  - Calves (If calf is negative, dam is negative. No need to test dam.)
  - Cows of positive calves (If calf can’t be traced to cow, consider testing all cows.)
  - Open cows and bulls
- Test all new introductions to the dairy, including replacement heifers and bulls.
- Develop a vaccination and biosecurity program with your veterinarian.
- Keep vulnerable cattle (especially pregnant cows and those of uncertain testing status) away from contact with untested cattle.
- Test annually using the Surveillance Strategy and/or continue to test each calf crop. (Note: PI-tested calves bring added value.)

Surveillance Strategy

- Test all:
  - New cattle introduced to the dairy
  - Aborted fetuses
  - Calves that die
  - Cows with increased somatic cell counts
  - Cows with mastitis
  - Animals treated for bovine respiratory disease (BRD) and/or other illnesses
  - If a PI animal is detected, implement the Control Strategy.

Calf Ranch/Dairy Heifer Developer

Control Strategy

- Determine herd status and test new introductions by:
  - Purchasing BVDV-PI-tested cattle.
  - Testing all cattle with unknown PI status on or before arrival.
- Develop a vaccination and biosecurity program with your veterinarian.

Surveillance Strategy

- Test all:
  - New cattle introduced to the farm
  - Cattle that die
  - Animals treated for BRD and/or other illnesses
  - Cattle in “hospital” pens/pastures with an unusually high sickness rate
- If a PI animal is detected, test all cattle in that pen or pasture and consider implementing the Control Strategy.

PI (Persistently Infected)
An animal infected before birth that remains infected for life and can continually infect other cattle.

TI (Transiently Infected)
An exposed animal whose system eventually fights off the virus. Infection lasts several days to a few weeks and makes the animal susceptible to other diseases.
BVDV Testing Strategy Guide—Dairy

Understanding How a PI Calf Is Created Is Key to Developing a BVDV Control Strategy

**More common route**
(More than 90%)

Susceptible pregnant female (non-PI) infected with BVDV at about 1½–4 months of gestation

BVDV virus from any source

PI calf

BVDV persistently Infected (PI) calf is produced

**Less common route**
(Less than 10%)

BVDV persistsently infected (PI) female becomes pregnant

BVDV Myths

**MYTH:** PI calves will be killed by modified live virus (MLV) vaccination.

**FACT:** Controlled experiments have not been able to induce sickness or death in PI calves following MLV vaccination. However, case reports indicate that MLV vaccination can cause a PI animal to become sick or to die, though far less than 100% are negatively affected.

**MYTH:** BVDV won’t affect vaccinated cattle.

**FACT:** The tremendous amount of virus secreted by a PI calf can overwhelm a level of immunity that is protective under less severe exposure. Vaccination alone will not solve BVDV problems.

**MYTH:** Calves are PI because their dam is PI.

**FACT:** Recent research has shown that 7% of PI calves’ dams were PI; the other 93% of calves have dams with a normal immune response to BVDV and are not persistently infected.

**MYTH:** The greatest cost associated with a PI calf is the death of that calf.

**FACT:** The reproductive loss associated with lower pregnancy proportions, more abortions and higher calf mortality is the greatest economic cost of PI animals.

**MYTH:** A PI calf will be thin, have a rough hair coat and be a poor doer.

**FACT:** While many PI animals are unthrifty, reports have indicated up to 50% will appear normal and may enter the stocker operation in excellent condition. PI calves cannot be visually identified.

Look to IDEXX for Complete BVDV Diagnostic Solutions

IDEXX diagnostic tests are used around the world to protect dairy herds from BVDV.

Ask your IDEXX representative about the latest advances in BVDV diagnostics:

- The 20-minute IDEXX SNAP® BVD Test detects PI status from a large ear-notch sample, allowing you to quickly check new introductions during any farm visit.
- The new laboratory-based IDEXX BVDV PI X2 Test protects herds with unmatched sensitivity and specificity, even for challenging BVDV strains, to accurately assess the herd’s PI status.

For more information, contact your IDEXX representative, or visit idexx.com/bvdv or idexx.com/snapbvd.