

As part of a calf rearing program, ear notches can be aseptically taken from the tip of the ear with notching pliers and sent to the lab for analysis. A negative test result not only clears the calf of PI, but also clears her dam. By eliminating that pair from any future testing, screening the milking herd can focus only on untested cows in the future.

A positive test result on a calf should result in quarantine and a retest in two to three weeks to differentiate acute infection from PI since most animals fully recover from acute infection. Another positive result upon retest should seal the calf's fate and indicate her dam on the

suspect list for subsequent testing, either by ear notch or individual milk sample on the next DHI test date.

Screening calves and bulk tanks should continue until you are confident the risk of BVD has been minimized. Prevent reintroduction and potential spread of BVD into low risk herds by testing new additions, limiting cattle movement and maintaining a proper vaccination program.

### Summary

**It's a small world when** it comes to BVD. Like the common cold, new strains of BVD are continually evolving, passing

from cow to cow and region to region. Complete isolation is improbable. Expansions, heifer growers, cattle shows and your neighbors are all sources of new BVD infections. When new strains get past your first line of defense (vaccination), it is critical to find and remove PI animals from the herd.

Don't leave your herd's health to chance. Assess your risk and implement a screening program using the newly available, more efficient than ever, diagnostic tools to keep losses from BVD to a minimum. ★

## Water is key to preventing heat stress

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**We all know the effects of heat stress:** reduced DMI, reduced milk production, decreased reproductive performance and the list goes on and on. How do you know your cows are heat stressed?

- Rectal temperatures will be above 102.5° F;
- respiratory rates increase to 80 breaths per minute (from 50 - 60)
- and milk production and DMI decreases at least 10 percent.

Preparations for relieving summer heat stress should have been initiated in March, but there are many things you can do now to help remedy the situation.

Water is the number one limiting factor on dairies. You need to provide plenty of fresh, cool water. Cows require three to four linear inches of space at the water trough to prevent boss cows from restricting access to other cows. In the summer, water intake will increase from 30 gallons/cow/day to 50-60 gallons/cow/day. Water should also be available to cows immediately after they exit the parlor. The process of milking causes cows to be thirsty and you need to take advantage of that to maximize water intake.

One low cost way to increase the water space on your farm is to install

PVC pipe along fence lines and lanes. To do this you will need a large diameter PVC pipe with the top third cut off along the horizontal access. Cap the ends, add a float and you have a durable watering system that was easy and cheap to install. To make it easy to maintain, add a handle and attach the pipe in such a way that you can easily tilt it to dump the water and debris. Be sure you have a water line that is large enough to maintain at least 50 percent water volume during the highest time of water demand.

Fans are another area to consider when trying to alleviate heat stress. Do you clean your fans? Most people don't think of it, but dirt on fan guards can reduce airflow by as much as 40 percent. How about placement? Thirty-six inch fans need to be placed every 30 feet and 48 inch fans every 40 feet. By doing this, you eliminate dead space under the fan next in line. Fans should be placed at a 30-degree angle for optimum cow contact. A good way to check if your fans are working properly and placed correctly is to measure wind speed. If you are standing directly under a fan in a line of fans, wind speed at chest level should measure at least 5 mph. If that is not occurring you either should clean

the fans, check their placement or check the air flow rating (cubic feet per minute, the fan may not mechanically be able to move enough air to do what you need).

When targeting areas for cow cooling, the holding area should be considered first. Limit the amount of time spent in the holding pen, especially in the summer time, to no more than an hour and a half. In a one group herd, try holding back half of the herd at the feed bunk or in the freestalls where hopefully heat stress is less. Ideally, you should have fans or a sprinkler system in the holding area to help reduce heat stress.

If you can't put a sprinkler system in the holding area, try adding a soaking station as the cows exit the parlor. To do this you need two showerheads aimed at a 45-degree angle opposite each other and something to turn the system on and off such as an electronic eye or wand system. This soaks the cows and allows for evaporative cooling.

With the volatility of milk prices, we need to do everything possible to maintain production. These are just a few ideas that can be done now to minimize your loss of milk production before the summer heat becomes worse. ★