

## What to Know About Abortion

By Charles E. Gardner, DVM

“Doc, you have to be a little more careful when checking pregnancies. Two cows that you called pregnant last month came back in heat since then.” These words came from Ernest, one of my dairy clients from years ago. He was only half serious, because I had done his reproduction exams for a long time without incident. But, of course, he was concerned. There are major economic losses when pregnant cows become non-pregnant.

As we proceeded to check the cows for this visit, we came to one that had been bred 46 days earlier. As I lifted her tail to examine her, we noticed some cloudy discharge coming from her vulva. Reaching in, I felt a small fetus, but it was in the vagina, not the uterus. She was in the process of aborting it.

We now knew we had a definite problem. Three abortions in less than a month in a 60-cow herd is not normal. Two or three percent a year is the average in dairy cows, but there is a great deal of variation. Many herds go long periods with none, and then experience several close together, just as Ernest was experiencing. Unfortunately, finding the cause and solving it can be very challenging.

Besides obvious pregnancy losses, where a cow diagnosed pregnant comes back into estrus, or a visible fetus is found, there are also early embryonic deaths, where cows conceive but lose the embryo before pregnancy is confirmed. These cows may miss one heat cycle, and then return to estrus at an unusual interval. With the use of ultrasound, an embryo with no heartbeat may be found, alerting the palpator that embryonic death has occurred.

There are several causes of abortion and early embryonic death. Genetic defects, toxins, and infectious diseases are the most common. In later pregnancy, any form of stress can cause the cow to abort a living fetus. If the incidence in your herd seems too high, there are several things you can do to make a diagnosis. Start by discussing it with your veterinarian. He or she may suggest the following:

1. Take any aborted fetus, plus some placenta if available, to a diagnostic lab. Include blood samples from the dam and a few other cows in the herd for infectious disease testing. Unfortunately, by the time you find the fetus, it may already be badly decayed, making diagnosis by the lab difficult.
2. If the problem persists, take a blood sample from every cow when she is confirmed pregnant. Separate and freeze the serum. If the cow later aborts, take a second sample, and submit both to the lab to look for changes in infectious disease titers. The titer indicates the level of immunity. If it has risen dramatically from the first to the second sample, we know that cow was infected during that interval.

3. Keep your herd up to date on vaccinations. Work with your veterinarian on a sound program.
4. Avoid feeding moldy or spoiled feed. Consider the use of a mycotoxin binder to reduce the risk of abortion from these sources.
5. Try to minimize stress from all sources. This will pay off in many ways besides avoiding late gestation abortions.

We all know getting cows pregnant in a timely manner is an important part of dairy farm management. It is especially frustrating to learn that cows diagnosed pregnant are no longer so. Adding to the frustration is the fact that the cause is often hard to diagnose. Minimizing stress, feeding good feeds, and having your herd properly vaccinated are the best policies to prevent abortion and early embryonic death.