

**DAIRY PRODUCERS SHOULDN'T JUST ACCEPT HIGH RATES OF DEATH LOSS.** Steps can be taken to learn from each loss and improve overall herd health.



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## Cows don't just die

Death on the farm doesn't have to be just a "fact of life" . . . we can learn from each loss.

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**W**HAT do you think when a cow dies on your operation? You may see it as a tragic event because the cow was important to you. Maybe you see it as a financial loss because a dead cow has no economic value and costs you time and money for removal. Perhaps you recognize that an on-farm death represents a substantial cow welfare issue because the cow probably suffered before dying. Or maybe you shrug it off as one of those unfortunate facts of life, since sooner or later every animal has to die. Quite likely you have considered every one of these points of view.

Have you considered investigating the cause of death as a means to improve your herd management and lower the likelihood of future deaths? With the exception of a few unmanageable problems — think lightning strike, for example — most on-farm cow deaths represent a failure of some manageable aspect of cow health.

### Records lack detail

When a cow dies on-farm, most likely it suffered from a disease or accident that might have been managed to achieve a better outcome. And for every cow that dies there are likely other cows on the farm at risk of a similar outcome. Therefore, we would suggest that it's very important to know how many cows die and why they die.

However, causes of on-farm cow death have not been given much attention. Few producers track death losses as an indicator of cow well-being or successful farm management. Throughout the dairy literature there have been few publications that focus on cow deaths or their cause. There are no industry benchmarks in which producers can compare their performance.

Historical data suggest that dairy cow mor-

tality ranged between 1 and 5 percent of rolling herd inventory per year into the 1970s, with typical losses of 2 to 3 percent. In the last decade, however, our investigations and other literature find a range of mortality in dairy herds across the U.S. between 2 and 15 percent, with typical losses between 6 and 8 percent. Clearly some herds do very well in maintaining a low mortality rate while others must have significant health or management problems that lead to numerous bad outcomes.

Do you monitor your average annual adult cow mortality rate? If it is higher than you anticipate, is there something you can do about it? How would you evaluate a cow death in a way that provides meaningful information that you can use to improve the well-being, productivity, and outcomes for your other cows? If something about transition cow care is leading to death losses on your dairy, would you know it? Would you have the tools to identify and manage these problems?

At the present time, it appears that few dairy producers think this way. Yes, most on-farm record systems provide an opportunity to list cause of death as the reason for removal of a cow from the herd, and most dairy producers include cause of death in their records. Therefore, producers, dairy researchers, or veterinarians can go to the records to find out why cows die. Some publications and the national surveys conducted by the USDA National Animal Health Monitoring System (NAHMS) provide summaries of causes of dairy cow death obtained from such records.

But what do these summaries tell us? First, you should ask whether the cause of death listed in these records is an accurate assessment. Second, you should consider whether the information describing cause of death provides useful information even when that information is accurate.

Almost all of these record entries are performed by farm personnel with little or no veterinary input. We have been interested

in causes of on-farm cow death for some time now and have compared veterinary assessment versus producer-attributed cause of death. Not surprisingly we find that producer records are only accurate about half of the time.

### More than meets the eye

This is not to say that producers don't understand their cows. Rather, it says that cause of death can be complicated and is hard to assess without a real investigation. The best means of assessing the type of disease that kills a cow is to perform a necropsy. Yet, the 2007 and 2014 NAHMS dairy studies showed that just 15 and 24 percent of operations performed some necropsies on dead cows, and fewer than 5 percent of dead cows were examined by necropsy. In other words, little is done to investigate why cows die.

Beyond the question of whether the listed cause is accurate, if you looked at your records and found that you were losing 8 percent of your annual rolling herd inventory to death each year, what would you do? Would you trust the records to tell you why those cows died?

And if you analyzed the reasons and found that some percentage of cows died from "digestive," what would you do next? Does this represent infectious disease, nutritional problems, intestinal accidents, bad surgical outcomes? What will be your course of action?

If your dairy is like most dairies, you might find some 20 or so different causes of death, and most of the categories are not named in ways that let you decide on a new course of action. In fact, many producers will list something like "shot" or "died" or "euthanized" for many of the cows. This type of information is not very useful if you are trying to improve outcomes.

In other words, most dairy records do not contain information about cause of death that producers can use to take meaningful action. We have studied causes of death, and most commonly we will find that the causes listed are so generic and noninformative that you shrug your shoulders and think, "Well, maybe nothing can be done about this."

But this is not true. For the dairies we have studied, it seems that only a small percentage of deaths were truly unavoidable. The remainder can be evaluated and good information can be obtained that leads the producer to take steps that shrink such losses in the future. But this requires investigation of losses in a manner that provides information about prevention strategies.

### Avoid repeatable mistakes

To take action and minimize preventable deaths, we recommend all producers consider the following steps.

First, it is very worthwhile to look at your records and find out how many cows die over time. If your death losses exceed about 2 to 3 percent of your rolling herd inventory, then it is well worth taking steps to find out more about cause of death.

Second, we recommend that you talk with your herd veterinarian about devising a strategy to conduct routine necropsy exams on your farm. This should include all ages of animals because determining cause of death in calves and heifers is also important. 

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