

Have your Veterinarian Necropsy Animals that Die Unexpectedly

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About every 4-5 weeks, I hear from a producer that has had several animals die over a period of days to weeks, and he/she doesn't know why. Unfortunately, when I ask if any of the animals that died were necropsied (the animal equivalent of an autopsy), the response is consistently "no".

Necropsies should be performed by a veterinarian as soon as possible after an animal dies. The cause of death can often be determined just by examining the animal's internal organs and tissues. However, in some cases tissue samples will have to be taken for further analysis and examination under a microscope in order to find an answer. Many large animal veterinarians perform necropsies on a regular basis. If the regular herd veterinarian doesn't perform necropsies or is unavailable, this service is also provided by most state diagnostic laboratories, provided you transport the carcass to the lab.

A necropsy can be a quick and invaluable means of determining the cause of death under the right circumstances. Other times, a necropsy might not determine why the animal died, but it can still determine what the animal **didn't** die from. This information can be very important, because it "rules out" possible causes of death and can thereby help the producer and/or veterinarian focus their diagnostic efforts elsewhere. Unfortunately, there will also be times when necropsies yield no useful information. This most commonly happens with aborted fetuses or when the animal is too decomposed to make an accurate determination of the cause of death.

Remember that necropsies and other diagnostic tests can be performed on aborted fetuses as well as cows and calves that have died. Even though a cause of abortion is only found in 1 of every 3-4 fetuses examined, it is still a very cost-effective procedure given that each mid- to late-term abortion costs the dairy producer between \$600 and \$1000 (source: AT Peter, 2000).

If a necropsy diagnoses a cause of death that allows a producer to prevent similar problems in the future, it can amount to huge monetary savings. Necropsies usually cost between \$50-\$150 depending on the size of the animal and the number of tests performed. Keep this valuable diagnostic tool in mind should you experience abortions or unexplained deaths in the future.

Tips to increase the odds of a successful (diagnostic) necropsy:

1. Have the animal or fetus necropsied as soon as possible after death.
2. Keep carcasses cold, **but not frozen**, until a necropsy can be performed. Freezing can damage tissues and make them unsuitable for examination under a microscope.
3. If you are submitting an aborted fetus for necropsy, make every effort to find the placenta and have it examined as well.
4. If calves are sick and dying, consider sacrificing a very sick calf so that a necropsy can be performed on a fresh specimen. Keep the calf alive so that the veterinarian can euthanize it just before the necropsy.
5. Remember any unusual behavior or abnormalities you observed in the animal before death and report them to your veterinarian.