

Proper Euthanasia Practices

By Casey Havekes, Cornell University Cooperative Extension North Country Regional Ag Team



Despite it being a topic and action that is avoided on farms unless absolutely necessary, euthanasia is an important area for producers to have a thorough understanding of. Accidents happen and diseases occur that are sometimes out of our control, but it is the responsibility of the caretaker to ensure that those animals don't experience unnecessary pain and suffering. It's important for farmers to recognize and adhere to their responsibility of ensuring the basic needs of their animals are met. These basic needs include having access to feed and water, protection from the elements and predators, proper medical care is provided when needed, and that they are not suffering from pain and disease. In the unfortunate circumstance that an animal is suffering, it is the caretaker's responsibility to ensure that a 'good death' is provided to that animal.

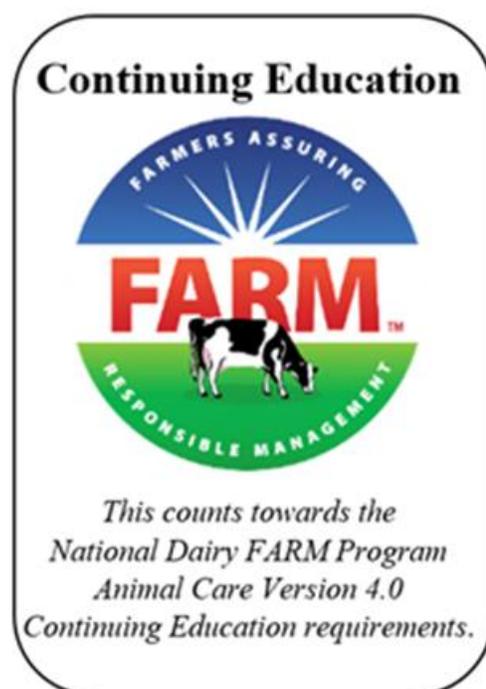
The American Veterinary Medical Association (AVMA) defines euthanasia as: "ending the life of an individual animal in a way that minimizes or eliminates pain and distress". As part of the National Dairy FARM Program Version 4.0, each farm is required to have a euthanasia protocol, and those involved in euthanasia practices are required to have annual continuing education on this topic. Below are key considerations for when you are developing your euthanasia protocol, but please have a more in-depth conversation with your herd veterinarian to ensure you are doing the right thing for your animals and your operation. As your herd veterinarian is responsible for reviewing your protocols as part of your herd health plan, this is a good opportunity to discuss with them!

As part of your euthanasia protocol, you should be able to answer the following questions:

- How are employees trained to identify animals that are candidates for euthanasia?
- What criteria are used to determine if an animal should be euthanized?
- What method is used to euthanize the animal?
- How are employees trained to confirm the animal is dead after euthanasia is completed?
- What happens to the carcass of the euthanized animal?
- How is it handled and disposed of?
- Is the equipment used to euthanize and move the deceased animals cleaned/sanitized afterwards?
- Do you record the reason for euthanasia? Where?

The first step to ensuring proper euthanasia practices are implemented is to ensure that you've correctly identified situations and/or animals where euthanasia is the best option. According to the American Association of Bovine Practitioners (AABP), these include:

- "Fracture, trauma or disease of the limbs, hips or spine resulting in immobility or inability to stand
- Disease conditions for which no effective treatment is known (i.e. Johne's disease, lymphoma)
- Diseases that involve a significant threat to human health (i.e. rabies)
- Disease conditions that produce a level of pain and distress that cannot be managed adequately by medical means
- Emaciation and/or debilitation from disease, age or injury resulting in an animal being too compromised to be transported or marketed
- Loss of production and quality of life (advanced age, severe mastitis, etc.)
- Advanced ocular neoplastic conditions ("cancer eye")
- Disease conditions for which treatment is cost-prohibitive
- Extended drug withdrawal time for clearance of tissue residue
- Poor prognosis or prolonged expected recovery" (AABP, 2019)



Once an animal is identified as a candidate for euthanasia, the farm must decide what the best method of euthanasia is for their situation. Human safety, animal safety and welfare, practicality, skill, and cost are amongst some of the factors to consider when deciding upon the method euthanasia. According to the AVMA, there are three acceptable methods of on-farm euthanasia:

1. IV administration of a lethal dose of barbiturate (with the help of your vet)
2. Gunshot (placement is very important)
3. Penetrating captive bolt (for mature animals) followed by an additional step (placement is very important)

All of these methods require training and should involve insight from your herd veterinarian. For more information on each of the methods listed above, please refer the [AABP document](#) referenced throughout this article or the [AVMA Guidelines for the Euthanasia of Animals](#). These documents will provide further details on correct gun placement and distance, bullet choice, proper drug administration, and much more. As part of your continuing education on this subject, be sure to check these resources periodically as the technique or exact placement guidance may have been updated.

Once the method of euthanasia is decided upon and the act of euthanizing the animal is complete, the individual trained in this area must be able to confirm the animal is dead. The trained individual should safely confirm the lack of a heartbeat, and lack of respirations for 3-5 minutes. The AABP further recommends that it is good practice to monitor the animal for an additional 20 to 30 minutes to ensure that the animal is dead and not just unconscious. Additional signs to look for include lack of eye reflexes, graying of the mucous membranes, and rigor mortis.

Once the animal is confirmed dead, the farm should have a plan for where the animal's carcass will be disposed and how the carcass will be handled. If barbiturates are used, use care with carcass disposal as drug residues may be an issue. It is important to make sure that the equipment used for euthanizing animals is well cared for, and cleaned/sanitized properly between animals. This is especially important when using intravenous methods. The AABP also recommends that a gun cleaning, captive bolt cleaning, and service log records are also kept when using these methods of euthanasia. Lastly, the FARM Program encourages keeping accurate and complete records of euthanasia. This record should be kept in safe place that can be easily accessed. Since you already have to keep protocol records to be in compliance with FARM 4.0, we recommend keeping it in the same binder

with your other protocols. This record should include the following details: the animal ID, the person performing euthanasia, the reason for euthanasia, the method of euthanasia, and the method of carcass disposal.



Euthanasia is never a fun topic to discuss, but it is extremely important that your farm has taken the necessary steps to ensure that animals are euthanized in a timely fashion using the absolute best practices. Please remember that ALL individuals responsible for carrying out euthanasia practices must be trained and participate in continuing education, and that proper care must be taken when operating firearms.

