

DAIRY VETERINARY NEWSLETTER

May 2024

AABP Issues New Cattle Euthanasia Guidelines

The American Association of Bovine Practitioners (AABP) has released updated “Guidelines for the Humane Euthanasia of Cattle”. The entire 15-page document can be found at this link:

https://www.aabp.org/Resources/AABP_Guidelines/EUTHANASIA-2023.pdf

It had been quite a few years since I last saw the full AABP euthanasia document. One new feature is a greatly expanded list of “**Indications for prompt euthanasia**” of cattle:

- Fracture, trauma or disease of the bony or soft tissue structures resulting in immobility or inability to stand
- Disease conditions for which no effective treatment is known ([e.g.] Johne’s disease, lymphoma)
- Diseases that involve a significant threat to human health ([e.g.] rabies)
- Disease conditions for which treatment will not be pursued due to cost
- Diseases for which the level of care to properly manage pain and distress and treat the disease is beyond the willingness or ability of the farm or facility
- Emaciation and/or debilitation from disease, age or injury resulting in an animal being too compromised to be slaughtered on site, transported, or marketed
- Advanced neoplastic conditions (e.g. cancer eye, lymphoma)
- Congenital or acquired conditions that produce a level of pain and distress that cannot be managed adequately by medical or management methods
- Nonambulatory cattle with signs of uncontrolled pain or distress

There is more information in the AABP document regarding “consideration” of bovine euthanasia, as well as “**Considerations for selection of method of euthanasia**”:



Down cow affected by disease and/or injury



Johne’s disease infected cow with clinical signs

(Each of the following subjects below has a paragraph of further detail about it in the full document.)

- Human safety
- Animal welfare
- Restraint
- Practicality
- Skill (in administration of the euthanasia method by the operator)
- Cost
- Aesthetics
- Diagnostics (specifically mentioned was, “ - - selected euthanasia method should not compromise diagnostic sample collection (as in rabies testing).”
- Carcass disposal (the major issue described here is that “cattle euthanized using a barbiturate overdose” are not acceptable for rendering, and in many states this method dictates that carcasses must be incinerated or buried to prevent scavenging by other animals and/or environmental contamination by the drugs).

Gunshot and captive bolt methods have new guidelines

I have discovered in talking to a number of other veterinarians that they were unaware of, and were most surprised by, some new recommendations regarding gunshot or captive bolt euthanasia methods.

Gunshot - (This paragraph is not new): “When properly executed, gunshot induces instantaneous unconsciousness and death, is inexpensive and does not require close contact with the animal. It should be emphasized that this method should only be attempted by individuals trained in the use of firearms and who understand the potential associated dangers.”

Rifles and Handguns - “ - - the .22 caliber handgun or rifle loaded with a long rifle (LR) solid point bullet is sufficient for calves less than four months of age. In cattle over four months of age, it is necessary to use .22 Magnum or higher calibers for consistently effective euthanasia. - - Rifles are capable of higher muzzle energies compared with handguns and are often a better choice in situations where a fractious animal must be shot from a distance.”

Shotguns - “Shotguns are very lethal at close range (less than three feet from the point of intended entry), whether loaded with shotshells or slugs. The 12-, 16-, and 20-gauge shotguns are a good choice for euthanasia of adult cattle. The 28 or .410 gauge shotgun is an excellent choice for use in calf euthanasia. If using a shotgun loaded with shot shells, the operator should be very conscious of the distance from the gun barrel to the animal as projectiles will spread out into a larger pattern. Ideally, to obtain maximum consistency and efficacy of euthanasia, it is desired that the BBs from the shot shell make contact with the skull as a compact mass.”

Placement of Firearm - “ - - the firearm should be held within one to two feet of the intended target. The projectile(s) should be directed perpendicular to the front of the skull to minimize the likelihood of ricochet. - - the muzzle of any firearm should never be held directly against the animal’s head. - - [this] can result in explosion of the barrel.” (See Figure 1 on following page.)

Penetrating Captive Bolt – “Only penetrating captive bolt devices are approved for euthanasia of mature bovines and - - must not be used as the sole method of euthanasia. (NOTE: more follows regarding second application of captive bolt as an option.) The bolt gun must be placed firmly against the skull at the same entry point previously described for a gunshot. Since use of the captive bolt gun requires close proximity to the animal, adequate restraint and prior sedation or tranquilization may be required.” (See Figure 2 on following page.)

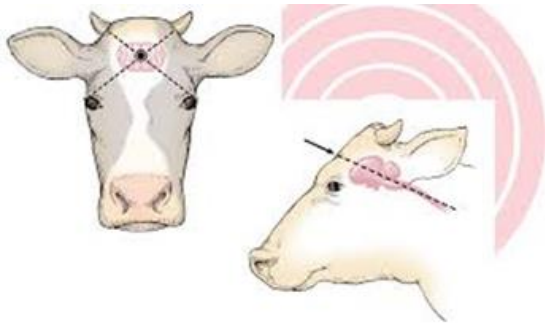


Figure 1. Firearm euthanasia landmarks, AABP



Figure 2. Captive bolt placement, AABP

There are a number of “Secondary or Adjunct Euthanasia Methods” described. The most practical method in many situations may be the “Second Shot”. The revisions in the document are somewhat confusing; one part states, “If the first shot does not lead to immediate unconsciousness, a second shot in the original frontal or poll location is required immediately.” Another section describes, “If using a gunshot or penetrating captive bolt behind the poll as a second shot, the shot should be directed toward the base of the tongue with proper positioning essential.” Because the captive bolt now requires a secondary method, either a second bolt in the original location or in the poll location are the most practical recommendations for acceptable captive bolt euthanasia.

The full AABP document contains much other information such as Determination of Unconsciousness, Unacceptable Methods, Euthanasia of Calves and Bulls, Euthanasia of Bison and Buffalo, and Live Fetotomy (“Evidence - - demonstrates that farm animal fetuses remain in an unconscious state throughout late pregnancy and birth and that newborns only become conscious when they have successfully inhaled air into their lungs.”) Nevertheless, live fetotomy is reserved only for situations where it is judged necessary to attempt to save the life of the dam.

Utah State Dairy Producer Field Day June 4, 2024

There will be a Dairy Producer Field Day on Tuesday June 4, 2024 at the Extension Building at the Cache County Fairgrounds, 490 S 500 W in Logan, UT (there is no charge to attend, including for the lunch):

9:30 am to 9:40 am	Check-in
9:40 am to noon	Station rotations (8 stations to visit; see below)
Noon to 1:00 pm	Lunch sponsored by IFA
1:00 pm to 2:00 pm	Optional tour of the USU Caine dairy
2:15 pm to 3:00 pm	Optional tour of the Aggie Ice Cream Creamery

Stations:

- Nutrition Technology** - Intermountain Farmers Association
- Milking Technology** - Dairy Systems Company
- Wild Bird Management** - Dr. Amber Adams-Progar, Washington State University
- Drone Technology** - Justin Clawson, MS, Utah State University
- Irrigation Technology** - Dr. Burdette Barker, Utah State University
- Biosecurity For Dairy Farms** - Dr. Dave Wilson, Utah State University
- Risk Management Tools** - Dr. Ryan Larsen, Utah State University
- Situational Awareness/Farm Safety** - Dr. Bruce Richards, Utah State University

Those participating in the optional tour of the USU Caine dairy will be asked to follow these biosecurity measures:

Anyone planning to be on the USU dairy should not visit dairies where cows have tested positive for H5N1 (HPAI) within two weeks of the field day.

All participants coming to the USU dairy are responsible for wearing clean clothing and their own clean boots or shoes.

Plastic boot covers will be provided and required for use on the farm.

Visitors will not walk through the corrals or have contact with the dairy cows.

5600 Old Main Hill
Logan UT 84322-5600

Those participating in the optional tour of the Aggie Ice Cream Creamery are required to:

Wear closed toed shoes and long pants.

Wear provided hairnets, shoe covers, and beard nets (if applicable).

Consider wearing warm clothes for freezer tour; it gets quite cold.

Please consider attending the field day, and recommend it to your dairy producer clients; we hope to see you there.

Please RSVP for the event at <https://tinyurl.com/USUDairyFieldDay>

Questions? Call Bruce Richards (435) 797-3763

Please let us know your comments and suggestions for future topics. I can be reached at (435) 760-3731 (Cell), or David.Wilson@usu.edu.

David Wilson, DVM, Dairy Extension Veterinarian

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