



# Emergency Euthanasia Guidelines for Horses

Severe illness and accidents involving horses may happen at any time. Some situations such as trailer accidents, road accidents, natural or man-made disasters (flood/fires), catastrophic injury during competition, or on the farm disease outbreaks or injury resulting in severe injury, or illness of the animal may require humane euthanasia.

It is always best to seek assistance from a veterinarian when considering euthanasia. However, in some circumstances a veterinarian may not be readily available to assist in the evaluation and euthanasia of an animal. The welfare of the horse in these circumstances may require emergency euthanasia. The aim of emergency euthanasia is to provide a quick and humane death to ultimately, prevent and minimize suffering. Emergency euthanasia should be performed when a delay in treating the animal would perpetuate or significantly aggravate the condition. If in doubt about the necessity of euthanasia immediately contact a licensed veterinarian.

The 2013 Report of the American Veterinary Medical Association Panel on Euthanasia classifies barbiturate (injectable) euthanasia of equids as **acceptable**, and gunshot and penetrating captive bolts as **conditionally acceptable**. Only veterinarians have access and are licensed to use barbiturates.

Penetrating captive bolt and gunshot are the only acceptable options for emergency euthanasia by non-veterinarians. Regardless of the method chosen, human and animal safety, logistics and verification of death are critical considerations.

## Indications for Emergency Euthanasia for Horses

- Violent or self-destructive thrashing causing the animal to be a hazard to itself or others,
- Evidence of severe shock such as an animal that is non-responsive to stimuli,
- Exposure of abdominal contents or organs,
- Open fracture of a long bone which includes the leg bones below the shoulder or hip, and/or

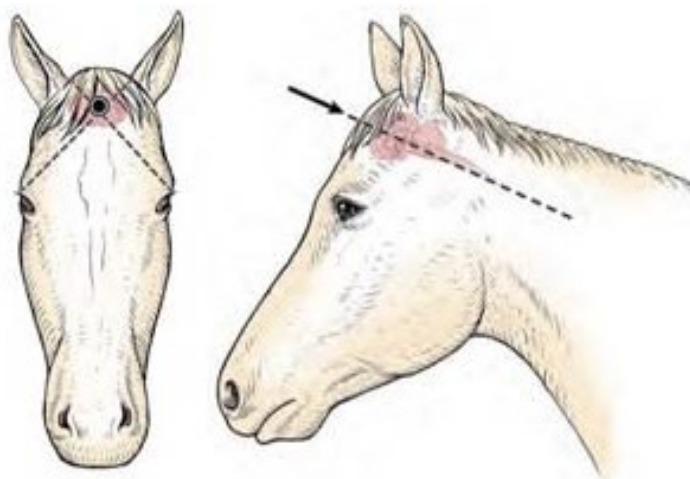
- Animals with chronic and/or incurable conditions as evidenced by an animal demonstrating signs of severe pain and distress.

## Euthanasia by Gunshot

Gunshot euthanasia should only be attempted by individuals well trained in firearm use and safety, and those who have an understanding of ricochet potential. Extreme care must be taken to minimize danger to the operator, bystanders, and/or other animals. Firearm euthanasia leads to instantaneous death due to the direct destruction of the brain, resulting in immediate unconsciousness and permanent destruction of the cardiac and respiratory centers of the brain. Death should be confirmed within five minutes.

## Placement and Aim

The diagram below shows the anatomic site for gunshot or placement of a captive bolt and desired path of the projectile in equids. The point of entry of the projectile should be at the intersection of two imaginary lines, each drawn from the outside corner of the eye to the center of the base of the opposite ear.



\*Diagram - Anatomical Landmarks, Iowa State University College of Veterinary Medicine, Veterinary Diagnostic and Production Animal Medicine

**Many cities have laws prohibiting the discharge of a firearm within city limits. Be aware of local laws and ordinances.**

## Euthanasia by Captive Bolt

The penetrating captive bolt euthanizes by physical destruction of the brain. Only a penetrating captive bolt gun can be used for euthanasia. A concussive captive bolt gun should never be used as it is not an effective means of euthanasia for horses.

Placement and aim of the captive bolt is the same as described for a gunshot, except that the captive bolt gun must be firmly placed perpendicular against the animal's head at the point of impact. Use of this method eliminates the potential for ricochet. Death should be confirmed within five minutes.

The selection of the cartridge strength must be appropriate for the size of the animal. As strength varies among manufacturers, it is important to follow the specific manufacturers' recommendations. To ensure maximum concussive power routine cleaning and maintenance should be performed. Inadequate gun care can lead to poor performance requiring more than one shot to kill the animal.

Care and caution should be used when handling a captive bolt gun to ensure human and animal safety.

For information and ordering of a captive bolt gun for emergency euthanasia contact for the following manufacturers:

- **Koch Supplies** - (800) 456-5624
- **Hantover** - (800) 821-2227
- **Packers Engineering Equipment Company** - (800) 279-7326

## Logistics

When practical, choose an euthanasia location that is easily accessible for carcass removal equipment. Remember, horses should be handled so that no unnecessary pain or suffering is imposed prior to euthanasia.



## Confirmation of Death

Immediately following the gunshot or captive bolt euthanasia the animal will collapse and may experience a period of intense muscle contraction (usually no longer than 20 seconds) followed by a period of relaxation and some poorly coordinated kicking or paddling movements.

Absence of rhythmic breathing, heartbeat, and corneal reflex (a blink) confirms death. Touch the cornea of ensure no corneal reflex. The presence of any eye movement or blinking, at this point, should be viewed as evidence of sustained or recovering brain activity and should be dealt with by a repeat shot.



**Disclaimer:** The California Department of Food and Agriculture (CDFA) does not intend the release of these guidelines to affect the legal issue of criminal responsibility in any way.

## CDFA Animal Health Branch

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