
INFOSheet

Ministry of Agriculture and Food
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Euthanasia of Horses

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One always hopes that an older horse, that has been a friend for a long time, will quietly slip away (die) peacefully in the night. However, this is not always the case. As guardians of our animals we have to be prepared for one of the hardest things we have to think about, the putting to sleep or euthanasia of our horse.

The word ‘euthanasia’ is derived from eu -meaning good, and thanatos -meaning death. A good death would be one that occurs with a minimum of pain and at an appropriate time in the horse’s life to prevent pain and suffering⁽¹⁾. The difficult part is deciding ‘when is the right time?’ Whenever possible, owners should consult with their veterinarian.

A number of reasons are mentioned when considering euthanasia, including: for humane reasons, to prevent suffering caused by a medical condition, an injury (e.g., fractured leg), or disease, such as severe heaves or incurable colic. Age is often mentioned, but how old is old? The oldest horse known in Ontario was 48 when it died. On occasion, convenience is cited as the reason for euthanasia. The owner no longer needs or wants the horse and they don’t want it to go to another owner.

The American Association of Equine Practitioners provides some guidelines to the question ‘When is the right time?’ The following criteria may be helpful;

- Is the horse’s condition chronic, incurable and resulting in unnecessary pain and suffering⁽¹⁾? Some conditions, such as chronic laminitis with the pedal (coffin) bone protruding through the sole, are easier to assess than others. There is often no doubt as to the pain and suffering and the need for humane euthanasia to relieve current and future suffering.
- Does the horse’s condition present a hopeless prognosis for life⁽¹⁾? Foals born with severely deformed limbs often have a hopeless prognosis for quality of life.
- Is the horse a hazard to itself, other horses or humans⁽¹⁾? Some horses can handle being blind and can get along within their own personal space but, in a herd situation, they may be savaged or injured by other horses or run into a fence or other physical hazard.
- Is the horse constantly and in the foreseeable future unable to move unassisted, interact with other horses or exhibiting behaviours that may be considered essential for a decent quality of life⁽¹⁾? Circumstances such as severe painful laminitis or arthritis, where horses spend much of their day lying down and are susceptible to bed sores and abrasions, are easier than others to assess quality of life.
- Will the horse require continuous medication for the relief of pain and suffering for the rest of its life⁽¹⁾?

Bringing the Resources of the World to Rural Ontario

Before reaching a final decision, consult with your veterinarian and your insurance agent. Many companies providing insurance coverage for a horse will require notification and, perhaps, a second opinion before honouring a policy.

Other Options to Euthanasia

When these criteria are not met, there may be other reasonable options to consider. Will changing the way the horse is managed improve the horse's quality of life? Moving a horse with heaves to a place that has 24-hour-a-day, 7-day-a-week outdoor housing can make a horse with severe heaves almost normal again. Well-mannered horses, which are lame with mild navicular disease, may not be able to campaign in shows. However, they may be suitable as lead horses in a riding-for-the-disabled program if their condition can be controlled with medication and/or farrier care. Talk to your veterinarian about the possibility of these opportunities in your area.

Location for Euthanasia

Horses should be euthanized in a location that is easily accessible for removal and disposal. Avoid unnecessary pain or suffering when moving injured animals.

Euthanasia – Options

It is hard enough to decide that it is time to euthanize your horse. It is even harder to complete the task yourself. Therefore, prior to the need arising, speak with your veterinarian and consider the various options. They include:

Lethal Injection

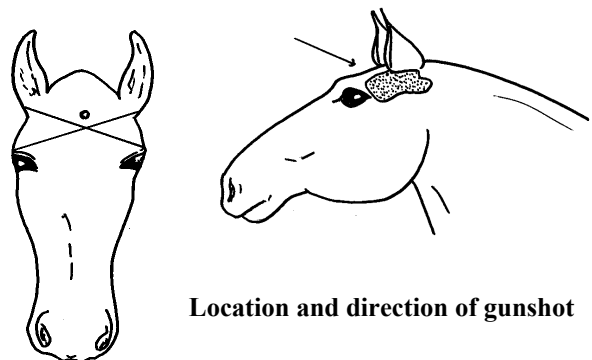
A veterinarian will often administer an intravenous injection of a tranquilizer, followed by an overdose of a barbiturate. This is a very fast and pain-free method of euthanasia. It is usually less traumatic emotionally to the owner than other methods. However, the euthanized horse now contains significant levels of barbiturate. The carcass must not be scavenged prior to disposal. It is your responsibility to ensure that birds, wolves and dogs do not eat from a contaminated carcass. There are sufficient drugs in a euthanized horse to be a danger to a scavenger's health.

Lethal injection may not be feasible in some areas since a veterinarian may not always be available for an emergency euthanasia. When scheduling a veterinary-assisted euthanasia, ensure that you schedule your veterinarian as well as a backhoe operator, or other means of disposal, on the same day.

Gunshot

The use of a firearm is a very efficient method of euthanizing a horse, when administered by an experienced person. The weapon should be fired with the muzzle close to the head (but not against the skull) at the correct location and in the required direction to ensure that the shot penetrates the brain and does significant damage⁽²⁾. It is essential that the horse is properly restrained. Muscle twitching may still occur even though the shot has been lethal. A number of calibers can be used, including: a rifled slug fired by a shotgun (410 gauge or larger) and rifles (including .308 and .223), when placed 1-2 inches from the skull. The smaller caliber .38 police service revolver or .22 calibre long rifle may render the horse unconscious but may not be lethal and may require exsanguination (bleeding out) subsequent to shooting.

While being fast and readily available in most rural communities, aesthetically, the use of a firearm may be unpleasant to the owner. In addition, the release of a projectile(s) by a rifle or shotgun poses a potential danger to animals and humans in the vicinity.



Location and direction of gunshot

Captive Bolt

A captive bolt pistol discharges a blank rifle cartridge (no bullet). It drives a piston-like bolt forward. When placed on the skull of an animal, the bolt is projected forward and delivers a lethal blow to the brain. The location on the skull and angle of the bolt is the same as recommended for euthanasia by a firearm.

A captive bolt pistol should only be used by an experienced operator. It does have the advantage that no permits or licences are required and it can be legally transported in a vehicle. For safety reasons, the captive bolt should only be used in a location, such as a knocking box, which provides protection from a horse falling on the operator.

Transportation to an Abattoir

Owners can transport their horse to a licensed horse abattoir, where experienced personnel can humanely euthanize it. Aesthetically, however, this may not be pleasant for the owner of a horse. This is a viable option only in those areas where horse abattoirs exist.

Horses that are not able to rise and stand unassisted may not be loaded, transported, and/or unloaded at an abattoir. These animals may only be loaded with veterinary authority for treatment purposes ⁽³⁾.

Donation to a Teaching Facility

In areas where veterinary schools are close at hand, horses can be donated to the teaching facility. Horses will be examined and humanely treated while in the care of the teaching hospitals. Subsequently, they will be euthanized using an overdose of a barbiturate.

Disposal Options

Confirmation that the horse is dead for five minutes is important. This can be achieved by monitoring the heart rate and, subsequently, corneal reflex. Pupils of the eye should be dilated. A blinking response to touching the cornea of the eye indicates brain activity and will necessitate the application of an alternate euthanasia method.

In many jurisdictions there will be acts similar to the *Ontario Dead Animal Disposal Act, 1990* ⁽⁴⁾. It states that;

The owner of a dead animal shall dispose of it within forty-eight hours of its death,

- (a) by burying it with a covering of at least two feet of earth and away from all waterways;
- (b) by the services of a person licensed as a collector under this Act; or
- (c) by any other methods of disposal provided for in the regulations. The regulations permit composting under 60 cm (2 feet) of organic substrate, such as straw or sawdust.

Burial

Burial is the most common method of disposal. The *Ontario Dead Animal Disposal Act* requires that a carcass be covered with at least 2 feet of earth. Preferably, the carcass should be buried deeper. In some areas burial would be impractical. These include rocky areas where it is virtually impossible to dig, and in saturated soils, where the carcass may float up. Depending on the time of year and the depth to which the frost penetrates, burial may not be an option during the winter.

Burial of mortalities in areas susceptible to *ground water contamination* could result in adverse effects in nearby wells. The potential for ground water contamination and subsequent well-water contamination is a function of the *soil type, bedrock depth, and ground water depth*. Coarse soils (sands and gravel) may increase ground water contamination risks because they allow rapid movement of liquids away from the burial site with minimal filtration or treatment. Shallow bedrock is a concern since open fractures in bedrock permit rapid movement of contaminated water with minimal filtration or treatment. Ground water depth also comes into affect. There are no ideal burial conditions to reduce the potential for ground water contamination because areas with clay soils often have a high ground water level. In general, avoid areas of thin soil cover over a bedrock layer ⁽⁵⁾. To determine which ground water contamination

category a potential burial site falls into, refer to the factsheet, *Proper Burial Techniques for Small Farm Animals and Poultry Mortalities Under 25 kg.* (www.gov.on.ca/OMAF/english/engineer/facts/03-049.htm)

If mortalities are not buried properly, wild animals, dogs, or birds could exhume them and help spread diseases. Partially decayed mortalities are odorous, unsightly, attract rodents and are a breeding spot for flies.

Composting

On-farm composting of a carcass is readily available but not aesthetically acceptable to everyone. It does, however, offer an option for immediate disposal of livestock mortalities of all sizes, as well as afterbirths, which can generally be done year round⁽⁶⁾. The OMAF factsheet, *On-farm Composting of Livestock and Poultry Mortalities* (www.gov.on.ca/OMAF/english/livestock/deadstock/facts/03-083.htm) will provide valuable information on this option.

Dead Stock Removal for Rendering

In many areas, licensed deadstock collectors are available to pick up dead animals. Since August 2004, producers may transport their livestock mortalities to provincially licensed collectors or other approved sites if the vehicle used to transport dead animals has a marker provided by the Ontario Ministry of Agriculture and Food indicating that it has been approved. The vehicle must be constructed to prevent spillage of liquids; dead animals must be covered at all times during transport and, after delivering to a deadstock receiving plant, the vehicle must be thoroughly cleaned and disinfected before leaving the plant premises.

Incineration

On-farm incineration of dead animals is illegal in Ontario and, therefore, **not an option**. Commercial incineration units are available in some areas but are expensive and may not be readily available to the horse owner.

Dragging into the Bush

Dragging a dead animal into the bush and leaving it to be scavenged is illegal in Ontario and, therefore, **not an option**.

Euthanasia Plan

Many of the difficult decisions associated with the euthanasia of a horse can be made prior to the event.

The development of a euthanasia plan with your veterinarian will ensure your wishes will be honoured in the event you or your veterinarian are absent in the case of an emergency.

Euthanasia plans outline the preferred method to be used, alternate methods, options for carcass disposal, and contact information for veterinarians. The euthanasia plan should be dated and posted in a central place in the stable. All employees should be aware of the plan. Figure 1 is an example of a euthanasia plan⁽⁷⁾.

Emergency Euthanasia Action Plan		
Business Name: _____		
Veterinarian's Name: _____		Phone: _____
Rendering or Disposal Service: _____		
Date: _____		
Drafted By: _____		
Age of Horse	Euthanasia Method of Choice	Alternative Method of Euthanasia
Foals (less than four months)		
Adults		

Figure 1

Dealing with the Death of a Horse

The feeling of sadness over the death of a horse is normal. Grief can leave you feeling sad, angry or guilty, and alone. The expression of our emotions is part of the healing process. For those who feel a need to express their emotions, the Ontario Veterinary College (OVC) provides a Pet Loss Support Hotline. It is staffed by a group of veterinary students who are trained to listen and support you through your grief. It provides a non-judgmental forum where you can express your feelings and concerns surrounding the loss of your animal. For further information, please refer to the OVC Pet Loss Support Hotline www.ovc.uoguelph.ca/petloss or call (519) 824-4120, extension 53694.

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