



# Emergency Slaughter

This is the downloadable version of the online guide. As such, some of the features are missing, including video footage and web links. The online version may be accessed at [www.hsa.org.uk](http://www.hsa.org.uk)

## Introduction

When animals are injured, or have a disease associated with severe pain or suffering, emergency killing may be the best, or only, option to alleviate the animal's suffering.

This online guide provides practical guidance on the humane emergency killing of cattle, sheep, pigs and poultry. The guide is aimed primarily at livestock producers but will be of interest and use to veterinary surgeons, knackermen, animal welfare inspectors, Animal Health Officers, agricultural students and any others who may be involved in dealing with emergency killing of livestock.

For more detailed information about any of the equipment mentioned in this guide, see the other titles available in the HSA's series of online guides.



## Important points about this website

This guide is intended to assist operators in planning for and dealing with the emergency killing of livestock. In order to safeguard the welfare of the animals to be killed, it is necessary for the guide to be both thorough and illustrated. As such, some people may find some of the descriptions and graphics upsetting. Please do not read further or view the video clips if you feel you may be negatively affected by the content.

Specific guidance regarding the emergency killing of poultry may be found in the online guide titled [Practical Slaughter of Poultry](#).

Equipment used for killing livestock is also potentially lethal to humans. If you are in any doubt as to any aspect of the operation of such equipment, you should consult the manufacturer. In no circumstances can the Humane Slaughter Association (HSA) accept any liability for the way in which equipment is used, or any loss, damage, injury or death caused thereby, since this depends on circumstances wholly outside the HSA's control.

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The HSA aims to provide up-to-date and accurate information. If you have suggestions for improving any of the material included in this guide please let us know at [info@hsa.org.uk](mailto:info@hsa.org.uk) or using the contact details provided on the HSA website.

## Principles

If there is no other practical and humane possibility to alleviate pain or suffering of animals which are injured or diseased, then emergency killing becomes the only option.

Once the decision has been made to undertake emergency killing of an animal, it is important that the animal is killed as soon as possible to avoid any further suffering.

Proper advance planning for emergencies is essential to protect animal welfare. Decide on standard operating procedures in advance so that, when necessary, emergency killing can be performed quickly and efficiently, minimising suffering.

This guide will help you decide:

- **Who** should perform the emergency killing
- **Where** the animal should be killed
- How best to **handle** the animal
- What **method** should be used to kill the animal

Although not covered in depth in this guide, it is also important to consider **carcass disposal** and human **safety**.

## Who

When deciding who should carry out the emergency killing of an animal, it is important to remember that the animal should be killed as soon as possible. The appropriate person may be a veterinary surgeon, a slaughterman, a knacker, or the owner of the animal or someone else with the necessary skills, acting on behalf of the owner.

### Veterinary surgeon

A veterinary surgeon should be the first person to call if the animal is involved in an accident which results in serious injury, or if the animal is suffering from a serious illness. A veterinary surgeon will be able to decide if emergency killing is necessary and, if so, kill the animal using any of the methods described in this guide, including lethal injection. Remember that an animal cannot be eaten after being killed by lethal injection. A veterinary surgeon should be able to attend quickly in an emergency.

### Slaughterman

A trained slaughterman may be able to kill an animal in an emergency using captive-bolt equipment or firearms. In some countries, certain certification and licences could be required. A slaughterman might not be able to attend quickly in an emergency.

## Knackermen

In some countries, knackermen may be available to kill an animal in an emergency and dispose of the carcass. Knackermen may be required to hold certain certification and licences to carry out such a service. As with slaughtermen, a knackerman might not be able to attend quickly in an emergency.

## Owner

If other options are not available, or will incur a significant time delay, it may be necessary for the owner of the animal to kill the animal (this should only be considered if the owner is competent), or request someone else with the necessary skills to do it. Owners of animals should consider seeking training in emergency killing methods so that they are prepared for when such emergencies occur. The methods available may be restricted, depending on the equipment available. Owners should also make sure they are familiar with any legal requirements before killing an animal. Failure to plan for and protect the welfare of an animal at this time could cause it to suffer, and as a result it may be considered that an offence against the law was committed. It is important for the welfare of the animal that the killing is carried out confidently, quickly and humanely.

## Where

In an emergency due to an accident or sudden illness, it may not be possible for an animal to be moved without causing unavoidable suffering. In these instances, the animal must be killed where it is found. In some situations it may be possible to move the animal to a better or more convenient location.

In general, it is less stressful for the animal if it is killed in familiar surroundings. However, the nature of the emergency may mean this is not possible; a road traffic accident for example.

If firearms are used, be aware of any possibility of ricochet and make sure that the animal is on soft ground. It is not advisable to use a free-bullet firearm in an enclosed space. It is important that a suitable backdrop is present in order to stop the bullet, should it exit the carcass or should the target be missed.

› See the firearms [Operation](#) and [Safety](#) pages from the HSA online guide to [Humane Killing of Livestock Using Firearms](#) for further information.

It may be relevant to consider also ease of access for any machinery required to remove the carcass after killing the animal. Note that the onset of rigor mortis can make it difficult to remove carcasses from restricted spaces. However, such considerations should not take precedence over welfare considerations.

You may wish to consider informing neighbours of what is happening, especially if firearms are to be used. This will help to protect human safety and to make sure the procedure is carried out with the minimum of disturbance.

If the animal is to be transported to another location it needs to be fit to travel - a veterinary surgeon can help decide about this. It may be possible to transport the animal to a veterinary surgery or to a slaughterhouse, depending on the nature of the emergency. It is important not to cause the animal any unnecessary suffering.

## Handling

Animals should always be handled with care. In many cases where animals have to be killed to protect their welfare, they will be recumbent or their movement limited by their injuries or situation. However, some may require restraint in order to facilitate safe and effective killing. The following methods of restraint are suggested:

<b>Cattle:</b>	Use a halter or confine the animal in a narrow pen constructed of hurdles or gates.
<b>Deer:</b>	Confine the animal in a narrow pen constructed of hurdles or gates. Covering the eyes of the animal, for example with lightweight fabric, may help calm the animal.
<b>Goats:</b>	Use a halter or confine the animal in a narrow pen constructed of hurdles or gates.
<b>Horses:</b>	Control with a head collar and lead rope, halter or bridle.
<b>Pigs:</b>	Pass a rope around the upper jaw, behind the canine teeth. The pig will pull away from the operator, who stands in front of the animal. This ensures that the shot is being discharged directly away from the operator.
<b>Sheep:</b>	Use a halter, or confine the animal in a narrow pen constructed of hurdles or gates.

Small and neonate animals may be restrained in a small pen or box. If safe to do so, small animals may also be manually restrained, depending on the killing method to be used.

Should there be any doubt in the mind of the operator as to the correct target area for firearms or captive-bolt equipment, then it should be identified and, if possible, marked. This can be done using a spray marker, a felt pen, or in the case of a very dark-coated animal, French chalk.

## Methods

There are a variety of methods available for emergency killing of animals:

- Lethal injection
- Free-bullet firearms
- Captive-bolt stunning followed by bleeding or pithing
- External trauma followed by bleeding

The choice of method for killing an animal in an emergency depends on who is to kill the animal, the availability of equipment, legislation and licensing requirements, the location of the animal, and the species.

Emergency killing methods for poultry are described in the online guide to [Practical Slaughter of Poultry](#).

## Lethal injection

Emergency killing by lethal injection is typically carried out by a veterinary surgeon. The animal will be injected intravenously with a lethal dose of anaesthetic drugs following, in some cases, initial injection of a sedative. The animal will rapidly lose consciousness and die.

When an animal is killed by lethal injection there may be restrictions on how the carcass can be disposed of. The carcass cannot be used for human or animal consumption if it has been killed by lethal injection.

## Free-bullet firearms

The operator of any firearm must be competent in order to protect the welfare of the animal. It is very important that the correct ammunition is used, otherwise the animal might not be killed immediately and/or the operator could be injured. The use of firearms in enclosed spaces, or when animals are on hard surfaces, could result in ricochet of free bullets and is to be avoided for health and safety reasons. There is no need to bleed or pith an animal following effective use of firearms.

Various firearms can be used to kill livestock:

- A **humane killer** is a single-shot, free-bullet pistol with a vented barrel. They are extremely dangerous and must only be used by experienced operators. Humane killers are frequently used by veterinary surgeons and knackermen. It is very important that the correct ammunition is used. The muzzle of the gun is placed against the forehead of the animal and a bullet fired into the brain, causing instantaneous death. When using any free-bullet weapon it is possible the bullet may exit the animal's body and ricochet off solid walls and floors. Animals should therefore be positioned on soft ground near a suitable backdrop. Great care must be taken to get the direction of the shot correct when inside buildings. More information: [Humane killer](#).
- **Shotguns** are the best firearm for on-farm destruction of all livestock, when used by a competent operator. Shotguns are a safer firearm to use because the shot disperses within the head of large animals and, in other cases, does not have the potential to travel as far as rifle bullets, reducing the possible risk of operator injury. A forehead shot at close range (5-20cm) will kill outright animals of all species and sizes. The muzzle of the shotgun must not be held against the animal's head as this will result in severe injury to the operator. More information: [Shotgun](#).
- **.22 Rifles** can be used to kill sheep, pigs and small cattle, but correct shot placement is difficult to guarantee and so shotguns are usually the preferred option. The gun should be fired 5-20cm away from the forehead of the animal. The muzzle of the rifle must not be held against the animal's head as this will result in severe injury to the operator. More information: [Rifle](#).

Once shot, the animal should collapse and may bleed from the bullet entry point, its nose and its mouth. After shooting (typically starting about a minute later) the animal may demonstrate some involuntary movement of the limbs but this is normal and does not necessarily indicate consciousness.

Legislation controlling firearms differs across the world. Operators must ensure that they operate within the bounds of relevant national legislation. Contact your local authority for information before obtaining or using any firearm.

› See the HSA online guide to [Humane Killing of Livestock using Firearms](#) for more detailed information on the use of firearms. Information is available on firearms [equipment](#), the correct shooting [positions](#) for different species and the [operation](#), [maintenance](#) and [safety](#) of firearms.

## Captive-bolt stunning

Captive-bolt stunning followed by bleeding or pithing can be used for emergency killing of animals where a free-bullet is impractical for safety reasons. Certification and licensing may be necessary for the use of this method.

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A captive-bolt stunner fires a retractable bolt against the animal's head and in many cases into the animal's brain, rendering it immediately unconscious. The animal will collapse, but there may be some involuntary movement of the limbs. There is likely to be some bleeding from the hole in the skull made by the bolt and from the nose of the animal.

A rapid death is ensured by bleeding or pithing the animal immediately after stunning. Whilst both these procedures are humane when carried out correctly, they may be distressing to watch and require a competent and confident operator.

Pithing is the physical destruction of the brain by insertion of a cane or rod through the hole in the skull made by the bolt. During pithing the animal will initially exhibit violent involuntary muscle contraction. An animal that has been pithed must not be used for human or animal consumption. More information: [Pithing](#).

The easiest way to bleed an animal in an emergency is to cut the throat completely from ear to ear, exposing the spine and ensuring all major blood vessels are cut. Due to the specific blood supply to the brain in cattle, it is worthwhile performing a chest stick after the throat cut; insert the knife into the furrow at the base of the neck, aiming into the chest to sever the blood vessels where they emerge from the heart. The signs of an effective bleed out are rapid blood loss for around two minutes. More information: [Bleeding](#).

› See the HSA online guide to [Captive-bolt Stunning of Livestock](#) for more detailed information on the use of captive-bolt equipment. Information is available on the types of [equipment](#) available, the correct [positioning](#) for different species and the [maintenance](#) procedures and [safety](#) considerations.

## External trauma

Neonate lambs, kids and piglets can be humanely killed by delivering a heavy blow to the head. This must only be used if no other method is immediately available.

There are two variations of this method:

1. Hold the animal by the back legs and deliver a firm blow to the back of the head with a blunt instrument, e.g. an iron bar or hammer.
2. Hold the animal by the back legs and swing it through an arc to hit the back of its head with considerable force against a solid object, e.g. a brick wall or metal stanchion.

With both methods it is essential the blow is delivered swiftly, firmly and with absolute determination. If there is any doubt that the animal has not been killed effectively, the blow should be immediately repeated and/or death should be ensured by bleeding the animal: this can be done by cutting the throat from ear to ear to sever both carotid arteries and both jugular veins; alternatively, insert the knife into the base of the neck towards the entrance of the chest to sever all the major blood vessels where they emerge from the heart.

More information: [Bleeding](#).

## Species recommendations

Recommended emergency killing methods for each species are listed below. The choice of method will depend on the individual circumstances.

### Cattle

Cattle may be killed using captive-bolt stunning immediately followed by bleeding or pithing; shotguns; humane killers; rifles; or lethal injection.

### Deer

Deer may be killed using captive-bolt stunning immediately followed by bleeding or pithing; shotguns; humane killers; rifles; or lethal injection.

### Goats

Goats may be killed using captive-bolt stunning immediately followed by bleeding or pithing; shotguns; humane killers; rifles; or lethal injection.

### Horses

Horses may be killed using captive-bolt stunning immediately followed by bleeding or pithing; shotguns; humane killers; rifles; or lethal injection.

### Infant lambs, kids and piglets

Lambs, kids and piglets may be killed using captive-bolt stunning immediately followed by bleeding or pithing; or lethal injection. If no other method is immediately available, external trauma may be used, immediately followed by bleeding.

### Pigs

Pigs may be killed using captive-bolt stunning immediately followed by bleeding or pithing; shotguns; humane killers; rifles; or lethal injection.

### Poultry

Poultry may be killed using captive-bolt stunning or electrical stunning immediately followed by bleeding or neck dislocation; or lethal injection. If no other method is immediately available, neck dislocation may be used without prior stunning.

### Sheep

Sheep may be killed using captive-bolt stunning immediately followed by bleeding or pithing; shotguns; humane killers; rifles; or lethal injection.

## Rabbits

Rabbits may be killed using captive-bolt stunning immediately followed by bleeding; or lethal injection. If no other method is immediately available, external trauma or neck dislocation may be used without prior stunning.

## Carcase disposal

It is important that carcasses are disposed of properly and promptly. Apart from the obvious environmental, public health and disease implications, this is often also a legal requirement. It is recommended to have a carcase disposal procedure in place before killing any animal, although it is recognised that this may not be possible in the case of an emergency. Remember that if a large animal is killed in a confined space, such as a stable, the carcase must be removed promptly. If left for too long it will go into rigor mortis and will be difficult to remove.

Depending on the circumstances, the options for carcase disposal may include:

- Transport to an abattoir, making sure to comply with any relevant food hygiene legislation
- Collection by or delivery to a knackerman for disposal
- Collection by or delivery to a licensed incinerator
- On-farm incineration
- On-farm burial

Check with your local authority before proceeding to dispose of any carcasses using any of these methods. Legislation regarding carcase disposal varies between countries and operators should take care to ensure that they comply with relevant laws.

## Safety

The methods used for killing animals are also potentially lethal to humans. If you are in any doubt as to any aspect of the operation of humane killing equipment, you should consult the manufacturer. It is essential that safety and operating procedures recommended by equipment manufacturers are precisely followed, and that all operators are properly trained in safe operation and maintenance of the equipment.

General safety information for firearms and captive-bolt equipment may be found at the following links:

- [Firearms](#)
- [Captive-bolt equipment](#)