



## Module 17

# Euthanasia and Emergency Killing

## Student Activities

### Questions

1. **Where does the word 'euthanasia' come from, and when is it applied?**

**(2 marks)**

- The word euthanasia comes from the Greek *eu* (good) and *thanatos* (death). Euthanasia is humane by definition, because the word implies that the subject does not suffer pain, fear or distress when dying.
- Normally, you perform euthanasia in order to relieve animals who are suffering from an incurable illness, or who cannot be treated or rescued.

2. **Other terms such as 'slaughter', 'culling', 'mass killing' and 'humane killing' also describe the act of killing or manner of death for an animal. Explain these phrases, emphasising what makes them different from euthanasia.**

**(4 marks)**

- Slaughter: strictly speaking, slaughter is the killing of animals by drawing blood. Usually the term 'slaughter' is used to refer to the routine killing of animals for market. However, the term is also used for the killing of large numbers of animals to control diseases on farms and, in those situations, sometimes the method of killing does not involve loss of blood (e.g. gassing). Slaughter should also be humane.
- Culling, mass killing and humane killing: these phrases are used to describe the killing of large numbers of animals as required by law, usually in response to a disease outbreak or an over-population problem. These differ from euthanasia because the motivation for the deaths is human-centred, i.e. we want to consume the animals or we are at risk from them. Euthanasia is an act of mercy to prevent suffering in the animal him/herself.

**3. List three of the commonly used criteria for a 'justified end to suffering' (i.e. the euthanasia) of individual companion animals.**

**(3 marks)**

Students may list any three of the points below.

- Severely injured animals
- Animals with terminal conditions for whom suffering is likely, or in whom pain and distress are already apparent and cannot be resolved
- Aggressive animals whose interactions with humans and other animals are likely to cause unnecessary suffering, or where, because of their aggressive nature, they cannot be kept in conditions likely to provide for all their needs
- Aged animals, where there are no resources to provide for their needs.

**4. List three criteria for the humane killing of animals who form part of a group, such as strays.**

**(3 marks)**

Students may list any three of the points below.

- When there are insufficient resources to provide a reasonable quality of life
- As part of planned population control for the 'greater good' of the remaining population
- In some disease conditions where there is a legal responsibility
- For experimental animals: at the end of their use or when a humane end-point is reached.

**5. Recall six general criteria required in order for a method of euthanasia to be considered ideal.**

**(6 marks)**

- Rapidly induces unconsciousness and death without pain, distress, anxiety
- Personnel are not at risk
- Feasible for the circumstances, i.e. the animal can be restrained with a minimum of distress, and it is cost-effective
- The method is 'aesthetically' acceptable to the operator and the client
- Can be administered competently by the staff available
- Produces a body which can be safely disposed of.

**6. List the three most common and accepted methods of euthanasia. State a benefit and disadvantage for each.**

**(9 marks)**

- Overdose of intravenous drugs.  
Benefit: the drug is not aversive.  
Disadvantage: restraint may be distressing for the animal. If the distress results in a struggle and the injection is not applied accurately, the drug may become an irritant.
- Stunning and exsanguination.  
Benefit: captive-bolt stunning provides rapid insensibility.  
Disadvantage: training is required to ensure the correct positioning of the bolt, and there must only be a short delay before the exsanguinations, otherwise the animal may regain consciousness.
- Shooting.  
Benefit: the bullet provides immediate insensibility, and causes irreversible damage to nervous tissue, resulting in death.  
Disadvantage: the shooting must be carried out with an appropriate weapon, by a competent person, and the safety of people and other animals close by must be considered. In particular, the ammunition must be strong enough to kill the animal with one shot.

**7. Name four methods of euthanasia that are not considered acceptable from a welfare point of view, and give reasons.**

**(4 marks)**

Students may list any four of the points below.

- freezing (protracted death)
- drowning (fear, distress, aversive)
- starvation (very protracted death)
- suffocation (fear, distress, aversive)
- immersion in ethanol (fear, distress, aversive)
- use of non-specialist microwave equipment (uncontrolled local heating)
- intra-peritoneal barbiturate injection (in general, likely to cause severe pain as the agent is an irritant to the tissues in the peritoneum)
- gassing (poisoning, or anoxia-inducing – due to fear and anxiety during induction)
- decapitation (in general, particularly for large species, the severing of the neck tissues cannot be achieved in a time which is considered 'immediate', and there is the possibility of consciousness persisting in animals such as reptiles and birds).

**8. Which two methods of euthanasia for large animals are likely to provide a 'good death'?**

**(2 marks)**

- For large animals on a farm, the use of a race or crush and captive-bolt stunning followed by bleeding or pithing.
- For large animals who are 'free', accurate head, heart or high-neck shooting offers a balance between efficiency and the distress of capture.

**9. Why is neck dislocation not considered an ideal method of killing birds? Give an alternative.**

**(2 marks)**

Neck dislocation or 'neck pulling' is widely used in the killing of birds but is considered less than ideal. Recent work has clearly demonstrated that, while neck dislocation disrupts the nervous tissue in the spinal canal, the blood supply to the brain may continue for a significant period, causing suffering.

An alternative to neck dislocation for birds is 'percussive stunning' with a specifically designed mechanical gun which both stuns and kills by irreversibly destroying brain function.

**10. What methods of euthanasia are available for stranded cetaceans?**

**(3 marks)**

For small stranded cetaceans, an overdose with etorphine or barbiturates is possible. Head shooting with a rifle is also possible, but specialist knowledge should be sought. For larger stranded cetaceans no reliable method for humane euthanasia is available.

## In-class activities

### Discussions

Allow 45 minutes for this activity.

Give the students the following scenario: you have to euthanise a camel. She is pregnant, but she has another month to go before she is due to give birth. Her owner cannot care for a premature calf. As a class or in small groups, discuss what should you do, and why.

*Notes to lecturer:*

#### **What to do**

Wait for at least five minutes after the mother has died before removing the foetus from the womb. It is unlikely the foetus will try to breathe at this point; if you are in doubt, clamp the foetus's trachea. Then monitor the foetus's heart until it stops.

#### **Why?**

You would take this approach because it is the practice recommended by the World Organisation for Animal Health (OIE) Guidelines. The scientific reason for it is that the foetus has been unconscious during gestation, and his mother's death will cause hypoxia. By waiting for five minutes, you ensure that the hypoxia creates irreversible unconsciousness, so that you can then remove the foetus and monitor its heart until it is dead. If you remove the foetus too soon, breathing could still be possible and this would make the foetus capable of suffering. That is why you would clamp the foetus's trachea. You would monitor the foetus until its heart had stopped and it was dead, as part of your professional care.

#### **Further discussion points**

How should this scenario be communicated to the owner? What are his/her needs at this time?

If the owner says that he wants to feed the foetus to his animals, does this affect your actions or decisions?

How would you expect the euthanasia of a pregnant animal to affect you as a practising vet?

## Welfare report

Write an animal welfare report on one of the following questions.

1. What methods are commonly used in your area for the destruction of stray or unwanted animals? Collect information on these methods, and relate these to the concept of 'humane euthanasia' and to research on 'best practice'. This can be found in journals and on the internet.
2. The concept of a 'good death' is a difficult one – who defines 'good' and in comparison to what? How are animals in your area are killed (a) for food? (b) at the end of their working lives? (c) if they are ill or injured? (d) if they are pet animals and euthanised? Make a list of the methods used, and ask friends and colleagues to rank or order them (in their view) from best to worst.
3. Have you in your local animal population any diseases that, if detected, demand the culling of individuals or groups of animals, such as foot and mouth, rabies, etc.? Find out how this is managed by your local authority or animal health agency. If there is no local example, use an example from another area and find out how it was managed.

All welfare reports can incorporate elements of the following suggested format:

1. Relevant background:
  - Define the issue being addressed in the report
2. Welfare science:
  - What are the welfare infringements?
  - How severe are they?
  - How long do they last or how long does the animal suffer?
  - How many animals are affected?
3. Ethics:
  - Theories, principles and frameworks that are relevant to your argument
  - Related ethical concerns and dilemmas
  - Consideration of professional ethics and issues
4. Law and/or welfare codes/minimum standards/other policy documentations as appropriate:
  - Is there any legislation nationally or internationally?
  - If so, how is enforcement implemented?
5. Summary/Conclusion
6. References list

## Personal reflection

In this lecture, you have learned about euthanasia to relieve suffering and about euthanasia as a convenience for owners. When you are in practice, what do you think your policy will be on convenience euthanasia? What will you do if your manager/the practice owner disagrees?

*Notes to lecturer:*

Reflective exercises encourage students to spend time considering the subject, and question their own morals and ethics. Personal reflection is a valuable tool for personal and professional development, but it cannot be judged or assessed. You may wish to see evidence of thoughts in a notebook, in which case you should encourage students to keep a welfare diary. You should be sure to clarify that you will want to see evidence that the reflective exercises have been completed without reading any contents which the student may wish to keep private

## Applied Learning Opportunities

### Interview a vet

Interview a practising vet about his/her experiences of euthanasia. If an opportunity arises to sensitively approach an owner who has had his/her animal euthanised, then interview them too. You may wish to let them speak freely, although the following questions may get you started:

1. Describe the scenario where the animal needed to be euthanised (detail the welfare needs that were being compromised).
2. Who took the decision to euthanise – the vet or the owner, or was it a joint decision?
3. How was the issue communicated between the vet and the owner?
4. Which method of euthanasia was used?
5. Was it a personally distressing experience and, if so, how did the vet/owner deal with this?
6. If given the chance again, would he or she do anything differently?

Write an essay that highlights the scenario, details the importance of communication and examines the impact of euthanasia on owners and vets alike.