

STANDARD OPERATING PROCEDURE #302

LARGE ANIMAL EUTHANASIA

1. PURPOSE

This Standard Operating Procedure (3.1 (s)IR 5.01, 4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07, 4.08, 4.09, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15, 4.16, 4.17, 4.18, 4.19, 4.20, 4.21, 4.22, 4.23, 4.24, 4.25, 4.26, 4.27, 4.28, 4.29, 4.30, 4.31, 4.32, 4.33, 4.34, 4.35, 4.36, 4.37, 4.38, 4.39, 4.40, 4.41, 4.42, 4.43, 4.44, 4.45, 4.46, 4.47, 4.48, 4.49, 4.50, 4.51, 4.52, 4.53, 4.54, 4.55, 4.56, 4.57, 4.58, 4.59, 4.60, 4.61, 4.62, 4.63, 4.64, 4.65, 4.66, 4.67, 4.68, 4.69, 4.70, 4.71, 4.72, 4.73, 4.74, 4.75, 4.76, 4.77, 4.78, 4.79, 4.80, 4.81, 4.82, 4.83, 4.84, 4.85, 4.86, 4.87, 4.88, 4.89, 4.90, 4.91, 4.92, 4.93, 4.94, 4.95, 4.96, 4.97, 4.98, 4.99, 5.00) is for use by Research, Veterinary, and Support Staff (PI) and their research

3. CONSIDERATIONS

All animal euthanasia must be performed by appropriately trained personnel approved on the Animal Use Protocol.

Euthanasia procedures should not be performed in the same room where animals are housed.

All euthanasia procedures must be continuously monitored by the person(s) performing the procedure, until confirmation of euthanasia is complete. Animals must not be left unattended until the procedure is complete.

4. ACCEPTABLE METHODS BY SPECIES

- 4.1. Rabbit, ferret, cat, dog, non-human primate:
 - 4.1.1. Barbiturate overdose
 - 4.1.2. Exsanguination under general anesthesia
- 4.2. Sheep, swine, goat, cattle:
 - 4.2.1. Barbiturate overdose
 - 4.2.2. Exsanguination under general anesthesia
 - 4.2.3. Physical methods

5. PROCEDURES

- 5.1. Barbiturate overdose:
 - 5.1.1. Sedate animals prior to barbiturate overdose.
 - 5.1.2. Pentobarbital sodium is the main agent of injectable commercial euthanasia solutions.
 - 5.1.3. Inject pentobarbital intravenously at a dose of 120mg/kg.
Note: in ferrets, inject pentobarbital intraperitoneally.
 - 5.1.4. Confirm euthanasia before disposing of the carcass by observing that there is no respiratory movement for at least 3 minutes, and that the heartbeat has ceased.
- 5.2. Exsanguination:
 - 5.2.1. Exsanguination is not recommended as a sole means of euthanasia, but may be considered as an adjunct to other agents or methods
 - 5.2.2. Deeply anesthetize the animal as per SOP.
 - 5.2.3. Verify that withdrawal reflex is absent by pinching the toes with hemostats of non-hooved animals and pinching leg tendon of a hooved animal.
 - 5.2.4. Withdraw the maximum volume of blood; volume should be sufficient to cause death.

5.2.5. Confirm euthanasia before disposing of the carcass by observing that there is no respiratory movement for at least 3 minutes, and that the heartbeat has ceased.

5.3. Physical methods:

5.3.1. Licensed slaughterhouse: