

General Statement Regarding Euthanasia Methods for Dogs and Cats

One of the most critical responsibilities of those in the animal care and sheltering field is to provide the most humane death possible for companion animals when euthanasia is necessary. The term "euthanasia" is derived from Greek, meaning "good death." In order to be humane, every euthanasia technique must result in painless, rapid unconsciousness, followed by cardiac or respiratory arrest, and ultimately death.

The Humane Society of the United States (HSUS) recommends the injection of sodium pentobarbital, prepared specifically for use as a euthanasia product, as the preferred agent for the euthanasia of companion animals. This method, when properly performed, has been found to be the most humane, safest, least stressful, and most professional choice by The HSUS, The American Humane Association, and the American Veterinary Medical Association.

Sheltering personnel must consider many factors when choosing a method of euthanasia. The most important factor, of course, is the humaneness of the method. Other considerations include the number and types of animals handled, the number of employees available, the training available for euthanasia personnel, and legal limitations. Once an acceptable method has been chosen, shelter personnel must carefully maintain euthanasia equipment and keep an accurate inventory of euthanasia drugs to ensure both an adequate supply and the fulfillment of federal and state record-keeping requirements.

It is a binding obligation of shelter administrators to evaluate current euthanasia procedures frequently, ensure that animals are being properly handled, and verify that employees are competent, compassionate, and properly trained. Euthanasia should be entrusted to the most conscientious and qualified personnel only--never to a person who is careless, indifferent to animal suffering, or untrained in animal behavior and euthanasia techniques. Employees must be able to cope emotionally with euthanizing large numbers of animals while maintaining a concern for the well-being of each individual dog or cat.

Sodium Pentobarbital

Sodium pentobarbital, injected by well-trained and caring personnel, is the preferred method for providing the most humane death of dogs and cats.

The HSUS stresses that shelter administrators must ensure that euthanasia personnel are properly trained to administer this drug prior to performing euthanasia. The HSUS also believes strongly that there should be two people involved in the euthanasia process: one to hold and calm the animals and one to inject.

Intravenous (IV) injection (within the vein) is considered to be the most rapid and reliable method of performing euthanasia by injection when it can be administered without causing fear

or distress in the animal. Sodium pentobarbital may be administered by intraperitoneal (IP) injection (within the peritoneal cavity) to cats, kittens, and puppies if IV injections are difficult or impractical. Sedation of aggressive, fearful, wild or feral animals may be considered prior to administration of sodium pentobarbital. Intracardiac (IC) injections (within the heart) are acceptable only for animals who are unconscious or deeply anesthetized. Because intrahepatic (IH) injections (within the liver) have not yet been sufficiently studied, The HSUS cannot recommend IH as an acceptable route. Questions remain regarding the accuracy of injection, organ sensitivity to pain, suitability for multiple species, and smooth induction into unconsciousness.

In addition, the following euthanasia injection routes are not acceptable: subcutaneous (under the skin), intramuscular (within the muscle), intrapulmonary (within the lung), intrarenal (within the kidney), intrasplenic (within the spleen), intrathecal (within the membranes of the spinal cord), intrathoracic (within the chest cavity), and any other nonvascular injection routes.

Sodium pentobarbital is a Schedule II barbiturate, which means it is a federally controlled substance; it can only be purchased using a Drug Enforcement Administration (DEA) registration and order form, and is subject to federal security and record-keeping requirements. Its use is also carefully controlled by state laws and regulations.

Pentobarbital Combinations

Any combination of pentobarbital with a neuromuscular blocking agent is absolutely unacceptable for euthanasia. There are, however, other combination products on the market, such as Beuthanasia- D, which combine pentobarbital with another substance to hasten cardiac arrest.

Beuthanasia-D has received Food and Drug Administration approval for use with dogs only, and therefore should not be used for the euthanasia of cats. Intravenous (IV) and intracardiac (IC) are the only acceptable routes of injection. As with pure sodium pentobarbital, IC injections with Beuthanasia-D are only acceptable for animals who are unconscious or deeply anesthetized. With other injection routes, there are concerns that the cardiotoxic properties may cause cardiac arrest before the animal is fully unconscious.

Beuthanasia-D is a Schedule III drug, rather than a Schedule II, which means it can be obtained directly from the manufacturer by anyone with a DEA registration; no order form is required. However, Schedule III drugs are subject to the same security and record-keeping requirements as Schedule II drugs.

T-61

T-61 is an unacceptable injectable drug combination containing a local anesthetic, a general anesthetic, and a neuromuscular blocking agent. It has been removed from the market by its manufacturer in the United States, but is still available in Canada. It is intended to be given intravenously at a precise rate of injection (1cc for 5 seconds) that is almost impossible to maintain. Most importantly, if improperly administered, T-61 can cause animals intense pain after administration and a curare-like paralysis of respiration (suffocation) before the animal loses consciousness. Because of these limitations, T-61 is an unacceptable euthanasia agent.

Carbon Monoxide

Carbon monoxide (CO), when delivered in a properly manufactured and equipped chamber, is a conditionally acceptable method of euthanasia for some animals; however, The HSUS believes it is far less suitable than sodium pentobarbital. The many limitations of CO make the method less practical, considerably slower, and more expensive than lethal injection. Animals under four months of age have shown a resistance to hypoxia (oxygen deficiency). It is absolutely unacceptable to use CO for the euthanasia of dogs and cats who are old, under four months of age, sick, or injured. Because of these limitations, there must always be an acceptable backup method readily available.

CO must be provided by compressed cylinder gas, be used only in a chamber that has been commercially manufactured for CO euthanasia, and be properly maintained. The chamber must be designed to minimize stress and to allow for the appropriate separation of animals. Chambers must never be overcrowded.

CO is a hazardous substance considered especially dangerous because it is odorless, tasteless, colorless, and explosive. Repeated exposure to CO, even at low levels, can result in many serious long-term effects including (but not limited to) cancer, infertility, and heart disease. CO chambers must therefore be used with extreme caution, and proper guidelines must be in place to ensure both a humane death for the animals and safety to personnel.

Carbon Dioxide

Carbon dioxide (CO₂) is not acceptable for routine use in animal care and control facilities for the euthanasia of companion animals. However, a commercially manufactured chamber using compressed cylinder CO₂ may be acceptable for certain wildlife species. CO₂ produced from dry ice or generated from any other method is condemned.

Inhumane Methods

The methods that The HSUS considers inhumane, disapproves of, and campaigns against include decompression, nitrous oxide, drowning, decapitation, cervical dislocation, pithing, exsanguination, electrocution, gunshot (excluding properly performed field euthanasia in an emergency situation where safe, humane transport of the animal is not possible), air embolism, nitrogen flushing, strychnine, chloral hydrate, caffeine, nicotine, magnesium sulphate, potassium chloride, succinylcholine chloride (Sucostrin, U-Tha-Sol, Anectine, Quelicin Chloride, Scoline Chloride), and any combination of pentobarbital with a neuromuscular blocking agent.

The Humane Society of the United States is committed to recommending only those methods of euthanasia that are painless, rapid, and—to the fullest extent possible—minimize fear and apprehension in the animal. For more information, please write The HSUS Companion Animals section, 2100 L Street NW, Washington, D.C. 20037 or call (202) 452-1100.

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