

Choosing the Proper Method for Euthanasia:

When humane euthanasia is the most appropriate option, the following considerations must be made:

- **Human Safety:** The method must not put producers or their employees at unnecessary risk.
- **Pig well-being:** The method should minimize any pain or distress on the animal.
- **Practicality/technical skill requirements:** The method should be easily learned and repeatable with the same expected outcome.
- **Costs:** The method should be economical for the producer.
- **Aesthetics (degree of unpleasantness for the observer):** The method should not be objectionable to the person administering the procedure.
- **Limitations:** Some methods are only suitable for certain sizes of pigs or certain locations.

Introduction: It is inevitable that in every swine production system, animals may become injured or ill. Euthanasia may be the best option to provide for the well-being of the individual animal. Additionally, applying a standardized protocol of timely euthanasia can minimize loss associated with the continued care of compromised pigs.

Welfare Implications: Timely euthanasia, as well as using appropriate methods and equipment, is critical in minimizing animal pain or distress.

- ✓ The definition of “timely” is:
 - Animals that are showing no improvement or having no prospect for improvement after two days of intensive care should be humanely euthanized, unless there are special circumstances.
 - Severely injured or non-ambulatory pigs with the inability to recover should be euthanized immediately.
- ✓ An animal that is immobilized and with a body condition score of 1 should be euthanized immediately.
- ✓ Because every operation will at some time have sick or injured pigs that do not respond to care and treatment, it is important to have a written euthanasia plan. Through proper training, the appropriate method of euthanasia can be safely applied on the farm level, insuring the humane death of an animal. Additional resources are available for recommended methods of euthanasia and employee training.
 - Pork Checkoff: Production series C.D: On-Farm Euthanasia of swine
 - Free Online at: <http://www.pork.org/Producers/resources/index.html>
 - Pork Checkoff: On-Farm Euthanasia of Swine- Options for the Producer
 - Available in English and Spanish at: <http://www.pork.org/PorkScience/AnimalWelfare.aspx?c=32>
 - Captive Bolt Considerations when Humanely Euthanizing Pigs. Factsheet
 - <http://www.pork.org/PorkScience/Documents/CaptiveBolt.pdf>
 - Free hard copies available at: www.porkstore.pork.org

Cost Implications:

- ✓ For some caretakers, it can be difficult to define whether to treat or euthanize an ill, injured, or compromised pig. However, developing a euthanasia decision tree can help those involved in the daily care of pigs to recognize pigs that should be euthanized.
- ✓ In times when production input costs are high relative to returned value, it is important for producers to evaluate their euthanasia decision tree and make changes consistent with the needs of the farm and the well-being of the animals.
- ✓ By applying timely euthanasia protocols, producers can reduce input costs, such as feed and medication, given to pigs that are not likely to recover or respond to treatment.

Introduction:

- ✓ For a producer, deciding when to euthanize ill, injured or compromised pigs under their care can be a difficult decision to make. Researchers at North Carolina State University (Morrow et al., 2006) evaluated the application of three different types of euthanasia protocols: conservative, medium, or aggressive euthanasia based on the condition of the pig. The overall objective of the study was to provide economic and well-being information necessary to determine if a compromised pig should be euthanized or provided continued care.

Results:

- ✓ By euthanizing compromised nursery pigs on arrival, managers can improve the well-being profile of the herd by seven-fold.
- ✓ Under the conservative euthanasia protocol, pigs that are weak, lame, have prolapses, or have two or more concurrent conditions are likely to have a low value and a negative well-being score. Therefore, herd input costs can be decreased and herd well-being profiles can be improved by applying an aggressive euthanasia protocol.
- ✓ Herds vary in the prevalence of compromising conditions, and managers need to focus on the conditions in their herds and adjust their protocols accordingly.
- ✓ Developing clear criteria for euthanasia can assist those that are faced with the often difficult decision of when proper euthanasia is the best choice from an animal well-being as well as financial standpoint.

Application:

- ✓ As an example of the decision making process used for incoming nursery pigs in this study, the aggressive euthanasia protocol was implemented by identifying and euthanizing nursery pigs with one or more of the following conditions.
 - Pigs that:
 - are weak and have difficulty getting to feed and water.
 - have one or more swollen leg joints, or are lame.
 - have one or more severely damaged digits.
 - are suspected to have a broken leg.
 - have tail bite wounds that has become infected.
 - have moderate wounds or injuries due to ear or flank biting.
 - have skin wounds present on all four quarters and both sides of their body.
 - have rectal prolapses that are protruding and damaged.
 - develop a scrotal or umbilical hernia.
 - arrive with a repaired scrotal or inguinal hernia, and have serious swelling and drainage.
 - are under the normal barn average weight, by 40 percent or more.
 - arrive with abscesses (including inguinal, scrotal, or jowl) that have a diameter of 2.5 cm. or larger.
 - are affected by respiratory disease, and have difficulty breathing for three or more days.
 - have profuse diarrhea and are dehydrated.

- ✓ To view the full research report with descriptions of protocols for conservative, medium, and aggressive euthanasia, visit: <http://www.pork.org/PorkScience/Research/Documents/02-175-MORROW-NCSU-.pdf>

Morrow WEM, et al. J Swine Health Prod. 2006;14(1):25-34.