

Swine Euthanasia Survey

Q1 This survey contains three parts. Part 1 covers your experience and role in the swine industry, job training, and formal education. Part 2 asks you to consider the relative impact on an individual pig's welfare due to common causes of illness, injury, or disease. It asks your opinions regarding when euthanasia should be considered for an individual animal. Part 3 covers causes of mortality on farm due to euthanasia of breeding stock, pre-weaning piglets, and non-breeding stock. Please answer the following questions based on your individual experiences, knowledge, and beliefs. Indicate your answer by selecting your choice, and/or typing in your response in the provided space. This survey should take 15-20 minutes to complete. Thank you for your time and participation in helping us gather this important information.

Q2 Part 1.

Q27 Which National Pork Board committee are you affiliated with?

- Animal Welfare
- Animal Science
- Other

Q3 What is your current, primary role in the swine industry?

- Veterinarian
- Academia animal scientist
- Swine researcher in industry
- Swine producer (operation owner)
- Swine farm stockperson (non-owner)
- Pork packer
- Industry representative
- Other (Please specify) _____

Answer If What is your current, primary role in the swine industry? Swine producer (operation owner) Is Selected

Q4 If you are currently a swine producer (operation owner), please specify what stage of production animals you own. Check all that apply.

- Farrow-to-finish
- Sow farm
- Nursery
- Grower/finisher
- Boar stud

Answer If What is your current, primary role in the swine industry? Swine farm stockperson (non-owner) Is Selected

Q5 If you are currently a swine farm stockperson (non-owner), please specify your role. Check all that apply.

- Farm manager
- Farrowing employee
- Sow farm employee
- Nursery farm employee
- Grower/finisher farm employee
- Boar stud employee

Q6 If you have worked or currently work with pigs, how many animals did/do you directly supervise or manage? Indicate approximate number of animals for each stage of production, as applicable.

- Breeding/farrowing (number of sows) _____
- Non-breeding stock (nursery and grower/finisher pigs) _____
- Boar stud _____

Q7 If you have worked or currently work with pigs, did you receive any euthanasia-specific job training (excluding training received in veterinary school related to euthanasia)?

- Yes
- No

Answer If If you have worked or currently work with pigs, did you receive any euthanasia-specific job training (excluding training received in veterinary school related to euthanasia)? Yes Is Selected

Q8 What type of training did you receive or participate in before or during your position?

- PQA/PQA Plus
- Company-specific quality assurance program
- On farm training
- Training by veterinarian
- Training by agricultural extension employee
- Other (Please specify) _____

Q9 What is your highest level of education received?

- No high school diploma/GED
- High school diploma/GED
- Associates degree/Certificate
- Bachelors degree
- Graduate degree (e.g., MS, MBA, Ph.D.)
- Professional degree (e.g., DVM, etc.)

Q10 Part 2. Euthanasia scores: This part concerns the impact of conditions on individual animals. Consider the potential impact of the condition on the animal's ability to function biologically, minimize negative mental states, and perform behaviors that allow him/her to cope with the environment.

Q11 For each condition listed, assign a euthanasia score by selecting the appropriate choice.
 Note: Please respond to the below questions considering your personal experiences and knowledge. Consider situations under which a pig producer is faced with injured, ill, or diseased animals and must make a decision regarding the individual animal using the resources, time, and expertise typically available on a swine farm.

	Euthanize immediately	Treat and euthanize on farm within 12 hours if no improvement	Treat and euthanize on farm within 24 hours if no improvement	Treat and euthanize on farm within 48 hours if no improvement	Do not euthanize and re-evaluate if condition worsens or cull
Fractured limb	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Severe lameness (non-weight bearing on one leg not due to fracture)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Severe diarrhea	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bloody diarrhea	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vomiting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skin injuries from penmates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dramatic weight loss or poor body condition score (Body condition score 1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Umbilical hernia (protrusion of intestines through the body wall)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scrotal hernia (protrusion of intestines into the scrotum)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Perforated hernia (any type)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vaginal prolapse (exteriorization of the vagina)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rectal prolapse (exteriorization of the rectum)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uterine prolapse (exteriorization of the vagina and uterus)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Penile prolapse (exteriorization of the penis)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12 Euthanasia scores continued.

	Euthanize immediately	Treat and euthanize on farm within 12 hours if no improvement	Treat and euthanize on farm within 24 hours if no improvement	Treat and euthanize on farm within 48 hours if no improvement	Do not euthanize and re-evaluate if condition worsens or cull
Open-mouth breathing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thumping (labored breathing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shallow, rapid breathing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cough	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dystocia (difficulty farrowing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MMA (Mastitis-Metritis-Agalactia)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous system disorders (convulsions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous system disorders (circling or incoordination)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous system disorders (involuntary eye movement or head tilt)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Septicemia (infection in the blood)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-weight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

bearing on two or more legs					
Extremely weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q13 You may use the empty boxes below to fill in any additional frequently seen conditions or symptoms which are not already listed. For each condition you list, assign a euthanasia score by selecting the appropriate choice.

	Euthanize immediately	Treat and euthanize on farm within 12 hours if no improvement	Treat and euthanize on farm within 24 hours if no improvement	Treat and euthanize on farm within 48 hours if no improvement	Do not euthanize and re-evaluate if condition worsens or cull
Condition or symptom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Condition or symptom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Condition or symptom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Condition or symptom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Condition or symptom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14 Part 3. The following questions are specified by pig production stage and your experience regarding each. We are only concerned with animals which are actively euthanized due to welfare concerns and not those which are euthanized strictly for economic reasons. Definitions: BCS: Body condition score (1-5 scale) Umbilical hernia: protrusion of intestines through the body wall Scrotal hernia: protrusion of intestines into the scrotum Vaginal prolapse: exteriorization of the vagina Rectal prolapse: exteriorization of the rectum Uterine prolapse: exteriorization of the vagina and uterus Penile prolapse: exteriorization of the penis Nervous system disorders: circling, incoordination, convulsions, involuntary eye movement, head tilt, etc. Septicemia: infection in the blood Dystocia: difficulty farrowing MMA: Mastitis-Metritis-Agalactia You may skip any question you do not feel you have adequate experience to answer.

Q15 Please rank the following common reasons for euthanasia regarding each of the production stages listed. "1" indicates the most common reason, "2" indicates the second most common reason, ..., and "5" indicates the fifth most common reason. Please rank the top 5 reasons. Type a 1,2,3,4, and 5 into your top 5 choices. Breeding Stock:

- _____ Severe lameness (non-weight bearing on one limb)
- _____ Gastrointestinal disease
- _____ Skin injuries (e.g., shoulder sores, vulva injuries, fighting wounds)
- _____ Dramatic weight loss or poor body condition score (BCS 1)
- _____ Respiratory disease
- _____ Reproductive disease (e.g., dystocia, MMA)
- _____ Prolapse (e.g., vaginal, rectal, uterine, penile)
- _____ Systemic disease (e.g., nervous system disorders, septicemia)
- _____ Non-ambulatory (non-weight bearing on two or more legs) or severely weak
- _____ Other (Please specify)

Q16 Indicate any condition not listed above which could be easily used on farm by a stockperson or manager as an indicator for euthanasia for sows or boars.

Q17 Please rank the following common reasons for euthanasia regarding each of the production stages listed. "1" indicates the most common reason, "2" indicates the second most common reason, ..., and "5" indicates the fifth most common reason. Please rank the top 5 reasons. Type a 1,2,3,4, and 5 into your top 5 choices. Pre-Weaning Piglets:

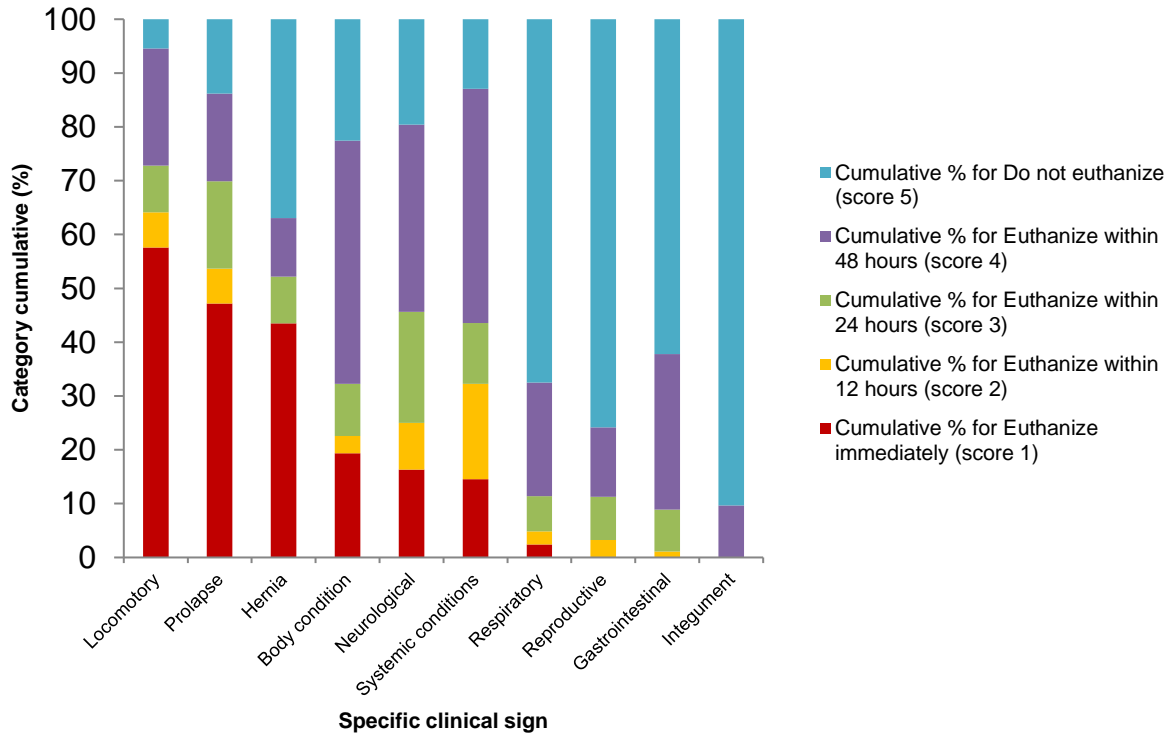
- _____ Severe lameness (non-weight bearing on one limb)
- _____ Gastrointestinal disease
- _____ Skin injuries (e.g., facial injuries, leg abrasions)
- _____ Starve outs or poor body condition score (BCS 1)
- _____ Respiratory disease
- _____ Hernias (umbilical or scrotal)
- _____ Systemic disease (e.g., nervous system disorders, septicemia)
- _____ Non-ambulatory (non-weight bearing on two or more legs) or severely weak
- _____ Other (Please specify)

Q18 Indicate any condition not listed above which could be easily used on farm by a stockperson or manager as an indicator for euthanasia of pre-weaning piglets.

Q19 Please rank the following common reasons for euthanasia regarding each of the production stages listed. "1" indicates the most common reason, "2" indicates the second most common reason, ..., and "5" indicates the fifth most common reason. Please rank the top 5 reasons. Type a 1,2,3,4, and 5 into your top 5 choices. Non-Breeding Stock (nursery and grower/finisher pigs):

- _____ Severe lameness (non-weight bearing on one limb)
- _____ Gastrointestinal disease
- _____ Skin injuries
- _____ Dramatic weight loss or poor body condition score (BCS 1)
- _____ Respiratory disease
- _____ Hernias (umbilical or scrotal)
- _____ Prolapse (necrotic)
- _____ Systemic disease (e.g., nervous system disorders, septicemia)
- _____ Non-ambulatory (non-weight bearing on two or more legs) or severely weak
- _____ Other (Please specify)

Q20 Indicate any condition not listed above which could be easily used on farm by a stockperson or manager as an indicator for euthanasia for non-breeding stock.



1
2 **Figure 1 Cumulative distribution of euthanasia scores for specific clinical signs.**