Depopulation Decision Tool



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STEP 1:

Have all alternatives to depopulation been considered?

YES, these options are not viable or have been exhausted.

NO —

Consider alternate management, housing, or marketing strategies to help alleviate or resolve the situation. Examples may include:

- Moving animals to a different slaughter facility or marketing channel.
- Move animals to a different housing facility.
- Hold animals on farm longer if possible, without significant negative impact to animal health and welfare.
- Alter diet formulations to slow or limit growth.

Depopulation

If depopulation is necessary, refer to the AVMA Guidelines for the Depopulation of Animals and the AASV Recommendations for the Depopulation of Swine for information about depopulation method options.

- Consult with state and federal animal health officials when necessary.
- Consider state laws related to carcass disposal that impact depopulation method decisions.
- Proceed to Step 2 to document the decision-making process for choosing the depopulation method(s) that best suites the situation and available resources.

STEP 2:

Every situation where depopulation is considered will be unique due to the limitations and constraints imposed by the type of emergency, resource availability, geography, site variation, local regulations, etc. When choosing a depopulation method, the factors listed in the table must be considered to assess the feasibility of each method. Producers should work with their herd veterinarian to discuss these factors and complete the table to document whether each factor positively (+) or negatively (-) contributes to the feasibility of a method if used. Refer to the Choosing a Depopulation Method section of the AASV Recommendations for the Depopulation of Swine for details to consider for each factor.

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Method permitted under constrained circumstances	Compounded or nonpharmaceutical-grade injectable anesthetics and nitrite foam* euthanasia agents	Grow- finish & older All All											
	S VSD+	Nursery 6 8 grow- fi finish											
nethods	Anesthetic overdose	All											
	MBFT	< 12 lbs											
	High expansion foam+gas*	All											
	Electrocution	> 3 days old											
Preferred methods	PCB	> 12 lbs											
<u>a</u>	NPCB	< 70 lbs											
	Gunshot	Nursery & older											
	8	All											
	CO ₂	All											
	Movement to slaughter	Finisher & older											
	Factor	Phase of production	Animal welfare	Aesthetics	Worker safety	Biosecurity	Personnel available	Resources readily available	Animal environment	Rapid application (> 1000 pigs/hr)	Carcass restrictions	Cost	Preference to use

CO₂ = carbon dioxide; CO = carbon monoxide; NPCB = nonpenetrating captive bolt; PCB = penetrating captive bolt; MBFT = manual blunt force trauma; VSD+ = ventilation shutdown plus. * This method is not included for swine in the AVMA Guidelines for the Depopulation of Animals, 2019.

This table was adapted from Baysinger et al. A case study of ventilation shutdown with the addition of high temperature and humidity for depopulation of pigs. JAVMA. 2022;259(4):415-424. https://doi.org/10.2460/javma.259.4.415

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STEP 3:

Based on the feasibility assessment, record the method or methods of choice to be used for depopulation. Also record the secondary or backup method to be applied if the primary method is unsuccessful.

Signatures of those participating in the decision-making process can also be recorded here. Signatures of the site owner, veterinarian, and other internal decision makers are suggested. Signatures of state or federal animal health officials may also be included if necessary.

Method(s) of Choice:		
Secondary or backup method to be applied if th	ne primary method is unsuccessful:	
Approval Signatures		
Name		
Title/Company		
Name		
Title/Company		
Name	Date	
Title/Company		
Name		
Title/Company		

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