



Preliminary exploration of swine veterinarian perspectives on euthanasia on-farm



L. N. Edwards-Callaway¹, C. Cramer¹, I. Noa Roman-Muniz¹, E. Calaba¹, L. Stallones², S. Thompson¹, S. Ennis¹, H. Simpson¹, E. Kim³, and M. Pairis-Garcia⁴

¹Department of Animal Science, Colorado State University, Fort Collins, CO 80523-1171, USA

²Department of Psychology, Colorado State University, Fort Collins, CO 80523-1876, USA

³Colorado School of Public Health, Colorado State University, Fort Collins, CO 80523-1612, USA

⁴Department of Population Health and Pathobiology, North Carolina State University, College of Veterinary Medicine, Raleigh, NC 27607

Objective

To understand veterinarians' involvement and perspective on euthanasia training on swine farms

Abstract

Euthanasia is a critical component of swine production. Veterinarians should play a key role in development of euthanasia protocols and training to ensure humane euthanasia. This study aimed to understand veterinarian involvement and perspectives on euthanasia training on swine farms. An online survey was disseminated through the American Association of Swine Veterinarians newsletter in February 2020. The survey consisted of 56 questions. Twenty six veterinarians responded to the survey. The majority (88%, n = 23) of respondents indicated that most of the facilities with which they work have a written euthanasia protocol, and 69% of respondents indicated that they participated in the protocol design. The majority of respondents (88%; n = 23) indicated that caretakers are responsible for performing euthanasia of the pigs. When presented with the statement: "All employees performing euthanasia have been trained adequately", 52% of respondents agreed while 42% disagreed. Additionally, 81% (n = 21) of the respondents indicated a desire to facilitate additional euthanasia training. All respondents (100%; n = 26) "believe that euthanasia is a humane way to end animal suffering" and that "the euthanasia process on-farm is necessary." Over half of respondents (62%; n = 16) reported feeling emotionally upset after euthanizing an animal. Approximately half (54%; n = 14) of respondents believe their workplace values the mental health of employees, yet 50% (n = 13) indicated there were no programs to promote worker mental health and 96% (n = 25) indicated there were no employee check-ins with supervisors. Preliminary data supports the need for further euthanasia training on-farm developed with veterinarians and suggests veterinarians want to deliver more training. Although some facilities are considering employee mental well-being, further development of euthanasia training and wellness programs could benefit caretakers.

Background

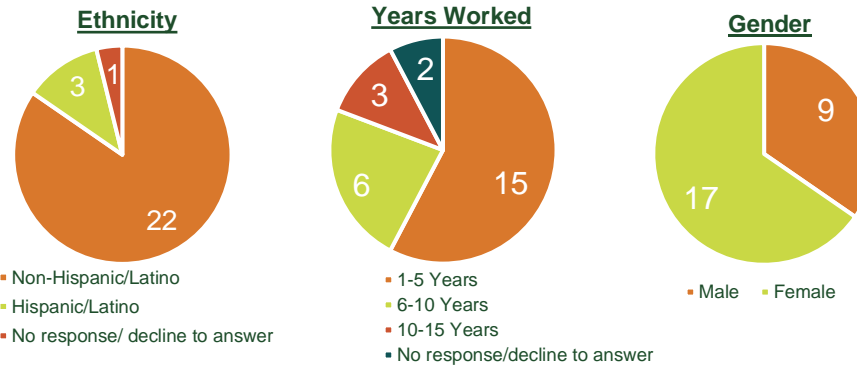
- Performing euthanasia can cause people who work with animals to experience psychological, emotional, and physical ailments (Hart and Mader, 1995; Arluke and Sanders, 1996).
- Areas needing attention in livestock production related to euthanasia are: training, written protocols, and clear communication regarding decision making (Walker et al., 2020).
- On dairy operations, Hoe and Ruegg (2006) reported that in 13 out of every 100 euthanasias, dairy personnel without training performed the task and that veterinarians were involved in euthanasia decision-making less than one third of the time.
- The availability of simple resources, support, and stress-management tools are highly beneficial to those who must euthanize animals as part of their daily job and this includes veterinarians.
- Although past research has focused on veterinarians, usually the shelter and companion medicine are the focus, not livestock production systems.
- Euthanasia is a critical component to animal management and veterinarians should be looked to for decision-making, training, and recommendations.

Funding provided by the National Pork Board NPB #19-070.

Methodology

- Survey with 56 questions was developed in Qualtrics (Qualtrics, Provo, UT) software (IRB #19-9050H)
- Distributed online through the *American Association of Swine Veterinarians* newsletter in February 2020
 - This was a portion of larger survey targeting swine caretakers
- Question categories included: demographics, attitudes and training towards euthanasia, methods of euthanasia, and mental health wellness in their job.
- 26 veterinarians responded to the survey
- A \$25 gift card was offered as an incentive for participation
- Must have been at least 18 years old and selected the veterinarian survey track
- Data was imported into Excel for preliminary statistical analysis

Respondent Demographics



Findings and Results

Protocols:

- The majority of respondents (88%; n = 23) agreed that the operations they work with have a written euthanasia protocol
- 69% (n = 18) of respondents agreed that they had participated in designing the protocol for euthanasia at the facility where they are a veterinarian

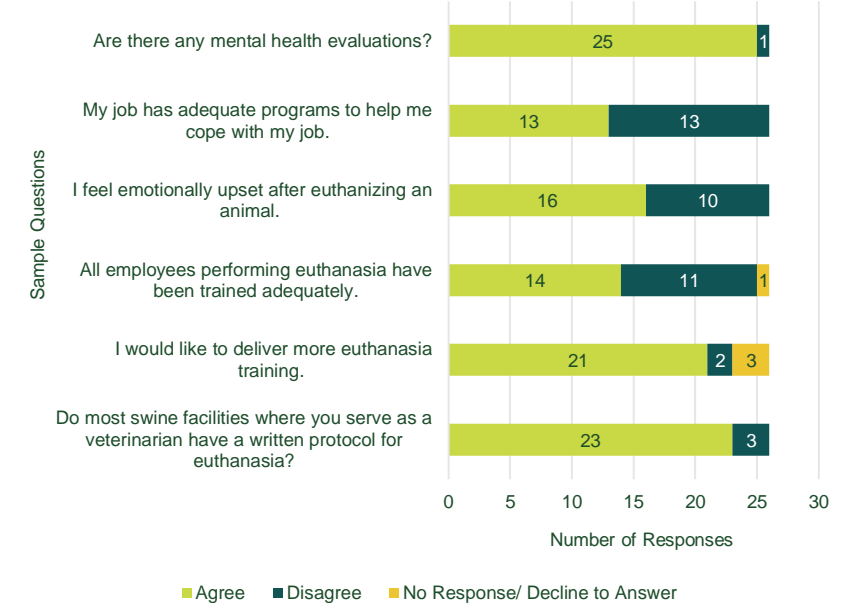
Training:

- A majority of the respondents (52%, n=14) agree that employees performing euthanasia were trained to do so.
- Overwhelming majority (81%, n= 21) of participants expressed a desire to help in facilitating more caretaker training

Mental Health:

- Over half (62%, n=16) reported negative emotional state after euthanasia
- Half (50%, n=13) reported no programs were at workplace to promote employee mental health
- Almost all reported that there were no mental health evaluation (96%, n= 25)

Responses to Agreement Statements



Conclusions

- Preliminary data emphasizes the need and support for the further involvement of veterinarians in euthanasia training on farm.
- Further development of these training programs along with wellness programs can be beneficial for caretakers and animals as well-being of both can be improved.
- Veterinarians are eager to become more involved in euthanasia training on-farm.

Citations

- Arluke, A., & Sanders, C. R. (1996). The institutional self of shelter workers. In A. Arluke (Ed.), *Regarding animals* (pp. 82–106). Philadelphia: Temple University Press
- Hart, L. A., & Mader, B. (1995). Pretense and hidden feelings in the humane society environment: A source of stress. *Psychological Reports*, 77, 554.
- Hoe, F.G.; Ruegg, P.L. (2006). Opinions and practices of Wisconsin dairy producers about biosecurity and animal well-being. *J. Dairy Sci.*, 89, 2297–2308.
- Walker, J. B., Roman-Muniz, I. N., & Edwards-Callaway, L. N. (2020). Timely Euthanasia in the United States Dairy Industry—Challenges and a Path Forward. *Animals*, 10(1), 71.