

# Euthanasia Perspectives of Spanish-Speaking TN-Visa Swine Caretakers on a Commercial Sow Farm

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**Jacob Yarian**, Graduate Research Assistant, Department of Animal Science, Iowa State University

**Anna Johnson**, Professor, Department of Animal Science and Iowa Pork Industry Center, Iowa State University

**Jason Ross**, Professor and Director, Iowa Pork Industry Center and Department of Animal Science, Iowa State University

**Brad Skaar**, Professor, Department of Animal Science, Iowa State University

**Kenneth Stalder**, Professor, Department of Animal Science, Iowa Pork Industry Center, Iowa State University

**Suzanne Millman**, Professor, Department of Veterinary Diagnostic and Production Animal Medicine, Department of Biomedical Sciences, and Iowa Pork Industry Center, Iowa State University

**Monique D. Pairis-Garcia**, Associate Professor, Department of Population Health and Pathobiology, North Carolina State University

**Ivelisse Robles**, Post-Doc Researcher, Department of Population Health and Pathobiology, North Carolina State University

**Andréia G. Arruda**, Assistant Professor, Department of Veterinary Preventive Medicine, The Ohio State University

**Cassandra D. Jass**, Director, Production Well-Being, Iowa Select Farms

## Summary and Implications

Caretaker turnover rates and labor shortages plague the United States (U.S.) swine industry. In order to meet labor needs, producers may seek out qualified migrant workers through visas. Therefore, the objective was to investigate Spanish-speaking Trade NAFTA (TN) visa caretaker demographics and swine euthanasia attitudes on a commercial sow farm. An online Qualtrics Spanish survey was delivered and completed by 28 caretakers. Results will be presented descriptively. The majority of respondents were male and 30 yr old or under. All caretakers were from Mexico and held a master's or professional degree. Average residency in the U.S. was ~2 years. The majority of caretakers indicated comfort in performing euthanasia. Additionally, caretakers did not have trouble deciding to when to euthanize diseased pigs or piglets and did not delay euthanizing pigs and piglets. Finally, most caretakers did not feel badly about conducting euthanasia, but many indicated dissociating from the pig or piglet feelings prior to euthanasia. Overall, it was encouraging that Mexican caretakers on a TN visa did not differentiate between making euthanasia decisions between adult pigs and piglets. Hence, all pigs should receive timely euthanasia to alleviate suffering on-farm.

## Introduction

Swine caretaker turnover rates and labor shortages plague the United States (U.S.) swine industry. According to a 2016-2017 National Pork Board report, swine caretaker turnover rates were 35% and 20% for large and small to mid-size farms, respectively. One option to manage labor shortages is to seek out qualified caretakers through visa programs. This option is being utilized on U.S. swine farms with J1, H1B, H2-A, and Trade NAFTA (TN) visa, as well

as Green Card holders, being recruited by 41% of large producers, and 9% of the small to mid-size producers. Currently, Hispanic and Latino caretakers make up 19% of the total animal production and aquaculture workforce in the U.S. Therefore, it is important to understand workplace factors and perceptions affecting this demographic to effectively recruit and retain qualified swine caretakers.

Conducting euthanasia has been reported as a significant stressor. Matthis (2004) noted that although 68% of all swine caretakers reported that they “*feel fine*” after conducting euthanasia, 29% expressed negative emotions, such as, “*feeling sick to their stomach*”, “*thinking about euthanasia all day*”, or were “*generally sad*”. Furthermore, “*Spanish-speaking employees were the least willing to euthanize pigs compared to the English-speaking employees*” (44% vs. 29%). Despite limited research investigating swine caretaker euthanasia perceptions, recent exploratory studies have concluded that there is an opportunity to address caretaker mental well-being through animal euthanasia resources and training. Therefore, the objective was to investigate Spanish-speaking TN-visa caretaker demographics and swine euthanasia attitudes on a commercial sow farm.

## Materials and Methods

This study was reviewed and approved as exempted research by Iowa State University Institutional Review Board (IRB: 20-364-00) for Human Subjects Research and complied with CFR 45 Part 46. A total of 28 caretakers from a single swine company in central Iowa were enrolled. Eligible respondents were swine caretakers on a Trade NAFTA (TN) visa that had swine euthanasia experience and who spoke Spanish as their first language. Prior to

participating in the survey, caretakers signed a consent form.

## *Survey*

A survey was created using Qualtrics software. The survey included eight demographic questions: age, sex, race/ethnicity, job title, residency length in the U.S., country of origin, highest degree earned, and primary farm role. Caretakers completed 21 questions that were separated into categories adapted from Rault et al. (2017). Questions were categorized into four groups (a) **confidence** defined as knowing a pig is unlikely to recover, and can identify what is wrong (b) **knowledge** defined as having the skills to care for a ill or injured pig before euthanasia, and knowing how to complete euthanasia (c) **decision** defined as their thought process that results in a timely euthanasia treatment option and, (d) **comfort** defined as their feelings towards conducting euthanasia and how they cope afterwards. A modification in this work was that survey questions were further delineated between adult pig or piglet. Caretakers answered using a 5-point scale; 1) Strongly Disagree, 2) Disagree, 3) Neither Agree or Disagree, 4) Agree, 5) Strongly Agree. Additionally, caretakers were given the option 6) “Choose not to disclose”. All questions were translated into Spanish.

## *Statistical Analysis*

Data will be presented descriptively. Non-demographic results will be presented with medians.

## **Results and Discussion**

Demographics: Fifty-four percent were  $\leq 30$  yr and 46% were  $>30$  yr, comprising 64% male and 36% female. All caretakers were migrant workers from Mexico. The majority (67%) had a master’s or professional degree and 33% had a bachelor’s degree (Table 1). The average time caretakers have resided in the U.S. was 2 yr and 4 mo, and the average time working with pigs was 3 yr and 4 mo.

When comparing responses to answers on confidence, knowledge, decisions and comfort, little to no difference was observed between adult pigs and piglets. While the majority of caretakers felt comfortable conducting euthanasia (78.57%), some did indicate disliking having to euthanize (10.71% pigs vs. 3.57% piglets). Nearly one-fifth (17.86%) indicated that they were less likely to euthanize a sow close to farrowing. Avoidance of euthanasia may compromise the animal’s welfare and contribute to non-compliance of procedures in audits. Moreover, about one third (32.14%) and a quarter (25%) of caretakers agreed or strongly agreed, respectively, that there are good reasons not to euthanize adult pigs or piglets. When euthanasia is conducted, ~43% of the caretakers reported being able to dissociate from thinking of the animal’s feelings. Dissociation is a coping mechanism experienced during very difficult events. Caretakers (32.14%) also indicated feeling bad about euthanizing pigs and piglets, despite

acknowledging that it was the correct course of action (Table 2).

Overall, results provided insight into the perspective and challenges experienced by Spanish-speaking caretakers regarding confidence, knowledge, decisions and comfort around euthanizing adult pigs and piglets. Providing clear guidelines on specific circumstances that absolutely require pigs to undergo euthanasia, along with education on the caretaker’s duty to avoid suffering in lieu of life preservation, may alleviate some of these negative feelings. Furthermore, providing a caretaker mental well-being support structure to support them before, during, and after euthanasia could be very beneficial in reducing the high caretaker turnover rates and retain caretakers on our swine farms.

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# Iowa State University Animal Industry Report 2021

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**Table 1.** Spanish-speaking TN-visa swine caretakers' ( $n=28$ ) demographic information.

Variable	Category	Responses % (no.)
Age, years	≤30	54 (15)
	>30	46 (13)
Sex	Male	64 (18)
	Female	36 (10)
Race/Ethnicity	White	86 (24)
	Native American or Mixed Race	11 (3)
	Choose not to disclose	3 (1)
Job title	Manager: works with pigs daily	7 (2)
	Caretaker: works with pigs occasionally	11 (3)
	Caretaker: works with pigs daily	82 (23)
Primary farm role	Maternity/Wean	39 (11)
	Breed	54 (15)
	Other	7 (2)
Degree	Bachelor's	33 (9)
	Master's or Professional (i.e. MD, DVM, PhD)	67 (19)
Country of origin	Mexico	100 (28)

Table 2. Responses % (n) to three-euthanasia decision behavioral categories regarding pig and piglet euthanasia.

Category	Question	I					Prefer Not to Respond	
		1	2	3	4	5		
<i>Comfortable with euthanasia</i>	I feel comfortable doing euthanasia	-	10.71 (3)	10.71 (3)	57.14 (16)	21.43 (6)	-	
	If I had the choice, I prefer someone else to euthanize pigs rather than myself	25 (7)	57.14 (16)	10.71 (3)	-	7.14 (2)	-	
	If I had the choice, I prefer someone else to euthanize piglets rather than myself	25 (7)	53.57 (15)	7.14 (2)	-	7.14 (2)	7.14 (2)	
	I dislike euthanizing pigs	21.43 (6)	53.57 (15)	14.29 (4)	10.71 (3)	-	-	
	I dislike euthanizing piglets	21.43 (6)	50.00 (14)	21.43 (6)	3.57 (1)	-	3.57 (1)	
	It is difficult to decide when a diseased pig should be euthanized	28.5 (8)	67.86 (19)	-	3.57 (1)	-	-	
	It is difficult to decide when a diseased piglet should be euthanized	28.5 (8)	64.29 (18)	-	3.57 (1)	-	3.57 (1)	
	I tend to wait longer than I should before euthanizing a pig	42.86 (12)	39.29 (11)	10.71 (3)	7.1 (2)	-	-	
	I tend to wait longer than I should before euthanizing a piglet	39.29 (11)	39.29 (11)	10.71 (3)	7.14 (2)	-	3.5 (1)	
	I often feel that there are good reasons for not euthanizing a pig	7.14 (2)	39.29 (11)	17.86 (5)	28.57 (8)	3.57 (1)	3.57 (1)	
<i>Trouble Deciding and avoid if possible</i>	I often feel that there are good reasons for not euthanizing a piglet	7.14 (2)	35.71 (10)	25.00 (7)	17.86 (5)	7.14 (2)	7.14 (2)	
	I often disagree when a coworker says a pig needs to be euthanized	17.86 (5)	57.14 (16)	17.86 (5)	3.57 (1)	-	3.57 (1)	
	I often disagree when a coworker says a piglet needs to be euthanized	17.86 (5)	57.14 (16)	17.86 (5)	-	-	7.14 (2)	
	I am more likely to euthanize a pig now than 5 years ago	7.14 (2)	14.29 (4)	10.71 (3)	32.14 (9)	28.57 (8)	7.14 (2)	
	I am more likely to euthanize a piglet now than 5 years ago	7.14 (2)	14.2% (4)	10.71 (3)	28.57 (8)	28.57 (8)	10.71 (3)	
	I am less likely to euthanize a sow that is close to farrowing than other sows	14.29 (4)	28.57 (8)	32.14 (9)	14.29 (4)	3.57 (1)	7.14 (2)	
	<i>Feeling bad about euthanizing</i>	I know that euthanasia is the right thing to do to stop suffering, but I feel bad about doing it	25.00 (7)	39.29 (11)	-	28.57 (8)	3.57 (1)	3.57 (1)
		I try to save all pigs	-	3.57 (1)	7.14 (2)	64.29 (18)	14.29 (4)	10.71 (3)
		I try to save all piglets	-	3.57 (1)	7.14 (2)	64.29 (18)	14.29 (4)	10.71 (3)
		I try not to think about the pig's feelings when I euthanize it	17.86 (5)	17.86 (5)	14.29 (4)	35.71 (10)	7.14 (2)	7.14 (2)
	I try not to think about the piglet's feelings when I euthanize it	17.86 (5)	14.29 (4)	14.29 (4)	39.29 (11)	3.57 (1)	10.71 (3)	