



# MULTI-STATE APPROACH TO STRATEGIES THAT EMPHASIZE MANAGEMENT OVER MEDICATION IN EXTENSION SWINE PRODUCTION



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## OBJECTIVE OF GRANT:

The objectives of this proposed research are to a) understand the knowledge gaps of herd health for small swine farmers in the United States, b) understand the knowledge gaps of herd health of small swine veterinarians in the United States, and c) develop educational and informative materials based on the knowledge gaps of the intended audiences. Creating quick and understandable educational materials for small swine farmers across the United States is needed to grasp this concept.

## EDUCATIONAL OUTREACH

This project includes various educational materials designed to help small swine producers and veterinarians increase their knowledge about overall swine health and farm management. These resources will be developed from focus groups and surveys of small farmers and veterinarians to identify knowledge gaps in swine care. From the survey results, the educational output included podcasts and short videos, multiple articles, and fact sheets, which will also be created to support the project's goals.

### Educational Materials that will be available in 2025:

#### Written Materials:

- Key Insights from a Comprehensive Survey of Small and Independent Swine Producers and Small Swine Herd Veterinarians across the United States
- Understanding Indoor and Outdoor Ventilation Systems
- Comprehensive Guide to Parasite Management in Swine Herds
- Understanding Pork Yields
- Mastering Swine Nutrition
- Models for raising pigs for pork: Independent ownership or Contract Operations
- MSU Livestock Enterprise Budget Spreadsheet

#### Podcasts:

##### Maine Farmcast (published January 2025)

- Small Swine Producers and Veterinarians Grant Update with Casey Zangaro

##### PigX Podcast (published April 2025)

- Niche Production, Episode 1: Investigative the Gaps Small ProducerHave in Resources. Casey Zangaro MSU Extension
- Niche Production, Episode 2: Energy vs. Fiber, Does Form Matter?, Dr. Lee Shultz, University of Minnesota
- Niche Production, Episode 3: Understanding the Importance of Protein in Pigs. Dr. Laura Greiner, ISU
- Niche Production, Episode 4: Direct Marketing in Swine. Dr. Colt Knight, University of Maine Extension

#### Short Videos (Available in Spanish), MSU Extension:

- Feeding Outdoor Pasture Pigs
- Land Management for Outdoor Pasture Pigs
- Water for Outdoor Pasture Pigs
- Housing for Outdoor Pasture Pigs
- Manure Management Considerations for Pasture Pigs

Farmcast: QR Code



PigX: QR Code



MSUE Pork: QR Code



## SITUATION STATEMENT

Small- and medium-sized swine farms often lack the resources to larger CA-FOs and require more research and education to address herd health and management challenges. These farms face gaps in veterinary support and access to proper information, affecting food safety, quality, and consumer trust. Targeted surveys and resources are essential to close this knowledge gap, promoting sustainable practices and maintaining confidence in the U.S. pork industry.



Producer (left) and Veterinarian (right) Focus Groups discussions from the World Pork Expo, June 2024.

## PROJECT SUMMARY AND RESULTS

### Focus group results

#### Producer Summary

- **Premise Identification & Biosecurity:** Producers are aware of the need for PINs and biosecurity but have yet to fully implement them.
- **Veterinary Care & Education:** There is limited access to swine veterinarians, leading to interest in telemedicine for practical advice.
- **Herd Health & Economic Pressures:** Economic challenges like high infrastructure costs and market uncertainties impact herd health maintenance.
- **Marketing & Consumer Engagement:** Focus on local marketing and educating consumers about herd health.
- **Regulatory Challenges & Communication:** Frustrations with regulations (e.g., Prop 12) and better communication with veterinarians.

#### Veterinarian Summary

- **Vaccine Recommendations & Hesitancy:** Vaccination recommendations are well-received, but hesitancy persists in some markets.
- **Health Emergencies:** Shift towards managing increased mortality, with common issues like dystocia and sick pigs.
- **Herd Health & Training Needs:** Producers need a better understanding of parasite management, environmental control, and updated resources.
- **Biosecurity Challenges:** Ongoing issues with biosecurity awareness and the lack of written plans.
- **Housing, Nutrition & Environmental Issues:** Concerns about improper housing, nutritional deficiencies, and environmental factors like manure management.

## PROJECT SUMMARY AND RESULTS

### Veterinarian Survey Results

Veterinarian Representation	18 responses 9 states	
Primary Clients Served	- 61% serve farmers raising pigs for freezer meat, family operations, or direct sales	
Health Concerns on Farms	- 72% report respiratory issues - 61% report reproductive issues - 61% report scours/diarrhea - 50% report parasites	
Vaccination Recommendations	- 78% recommend vaccines for overall swine health - 93% recommend circovirus - 79% recommend PLE and mycoplasma - 64% recommend swine influenza	
Farm Disease Outbreaks	- 44% of vets have responded to farm disease outbreaks	
Routine Care Visits	- 55% of vets visit farms for routine care at least every 6 months	
Comfort level around Pigs	- 68% of vets feel comfortable being around pigs	
Educational Needs	- Health: 44% - Environmental Management: 39% - Nutrition: 33% - Housing and Pastures: 33% - Reproduction: 28%	

### Producer Survey Results

Producer Representation	98 responses 22 states	
Primary Goals for Raising Pigs	- 25.5% focus on large-scale production (Commercial Markets) - 22.6% prioritize direct sales (Freezer meat and local) - 21.9% raise pigs for exhibitions and 4-H - 6.6% emphasize breeding and genetics	
Annual Pig Inventory	- 55% of producers have 0-999 pigs	
Health and Management Concerns	- 60% report respiratory issues - 50% report lameness issues - 40% report reproductive issues Top diseases: Swine Influenza and Circovirus	
Biosecurity and Feeding Practices	- 50% use biosecurity measures - 50% feed food waste or food by-products	
Antibiotic and Vaccine Usage	- 60% use antibiotics - 50% use vaccines regularly	
Educational Needs	- Nutrition: 68% - Health: 61% - Biosecurity: 50% - Housing and Pastures: 44% - Reproduction: 44%	