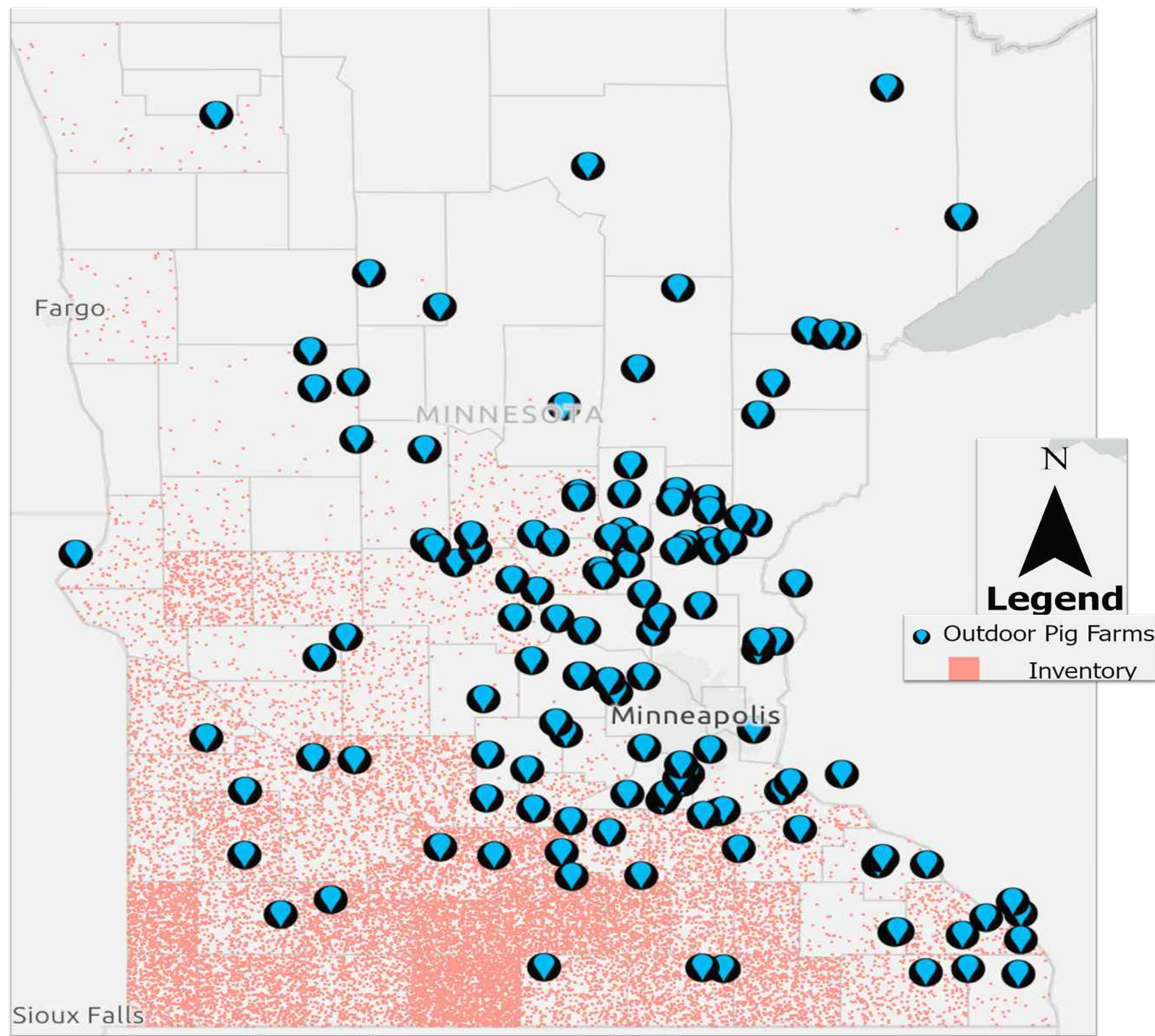




Characterization of farming, management, biosecurity, and marketing practices of alternative pig farms in Minnesota

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Map of Alternative Pig Farms in Minnesota

METHODS

- An APF database was created to identify the study's target population from a variety of online, publicly accessible databases.
- A Qualtrics® survey of the identified APFs was distributed via email to gather information regarding different APF practices.
- Consenting APFs were visited by the research team to collect pigs' blood and/or oral fluids and a herd-level prevalence study was conducted by testing for PRRS by ELISA and RT-PCR.

DISCUSSION and CONCLUSION

- MN APFs are diversified, with many raising other livestock/poultry in addition to pigs.
- Efforts should be made to encourage APFs to register for a Premises ID to aid in future outbreak control.
- For those who have never consulted a veterinarian, efforts should be made to educate APFs on the benefits of veterinary care and facilitate improved access.
- By encouraging the creation of a farm biosecurity plan, those with few biosecurity measures in place may be able to identify appropriate and applicable measures specific to their farm.
- Survey results identified a few practices that should be further explored, to evaluate their role in disease spread within this population and between the broader swine industry.

ACKNOWLEDGEMENTS

- UMN Swine Disease Eradication Center
- SARE Graduate Grant

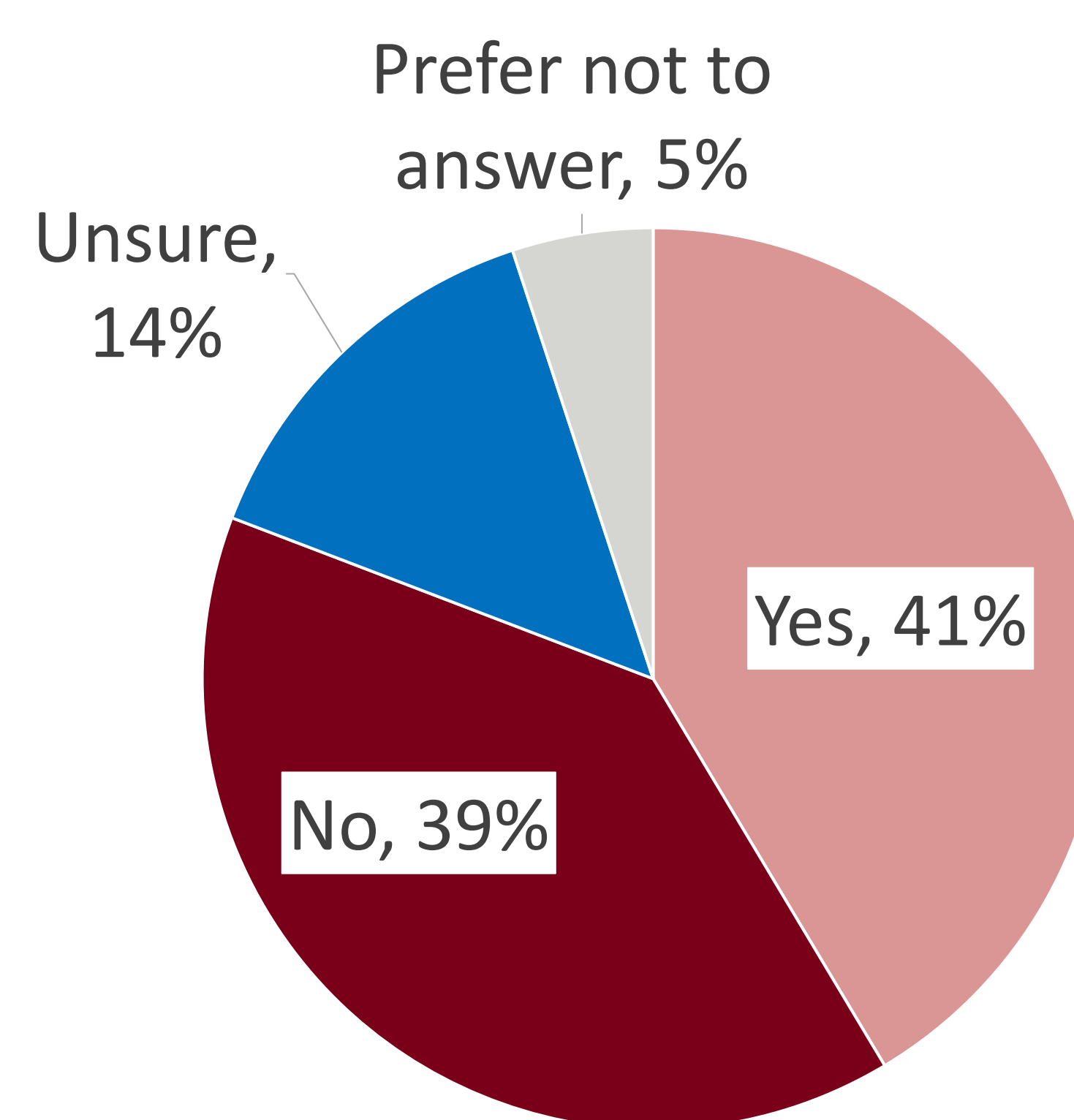


BACKGROUND

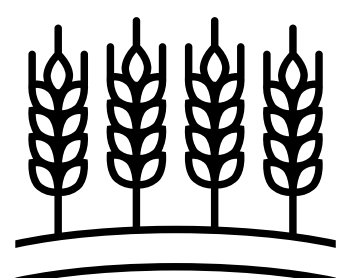
- US swine industry primarily raises hogs indoors, yet some farmers have chosen to raise hogs with outdoor access.
- Alternative pig farms (APFs) include niche, pasture-raised, and organic.
- Information regarding the number, location, and different practices of APFs in Minnesota (MN) is unknown.
- Research to identify APFs and to characterize their farming, management, biosecurity, and marketing practices in MN was carried out because APFs can play a role in the spread of pathogens and their subsequent control and prevention within the broader swine industry.
- Porcine Reproductive and Respiratory Syndrome (PRRS) virus is of major concern to all US pig farmers; therefore, a herd-level PRRS prevalence study was also conducted.


RESULTS

200+ APFs identified
29% Survey Response Rate

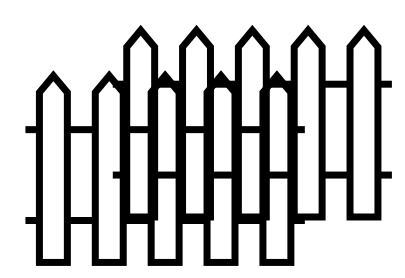



 64% pasture/forest access
 5% exclusive hoop barns

13% produce their own feed on-site 

 35% have never consulted a veterinarian

93% produce other livestock/poultry 

 32% have double Perimeter fencing

19% have employees 

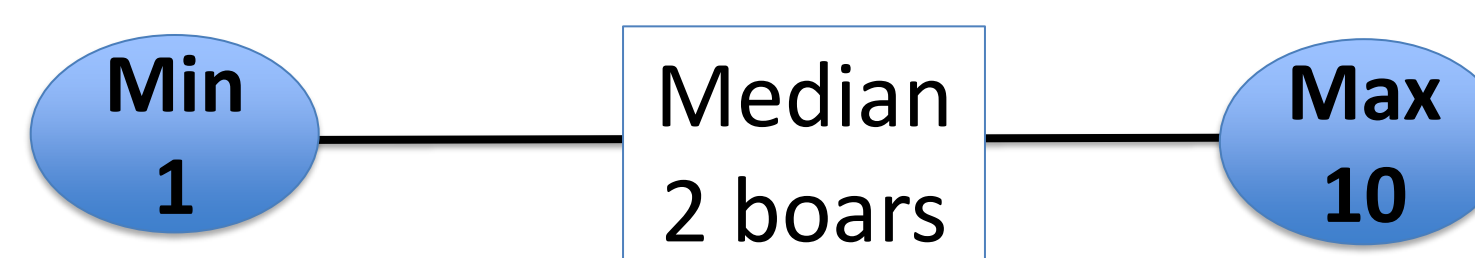
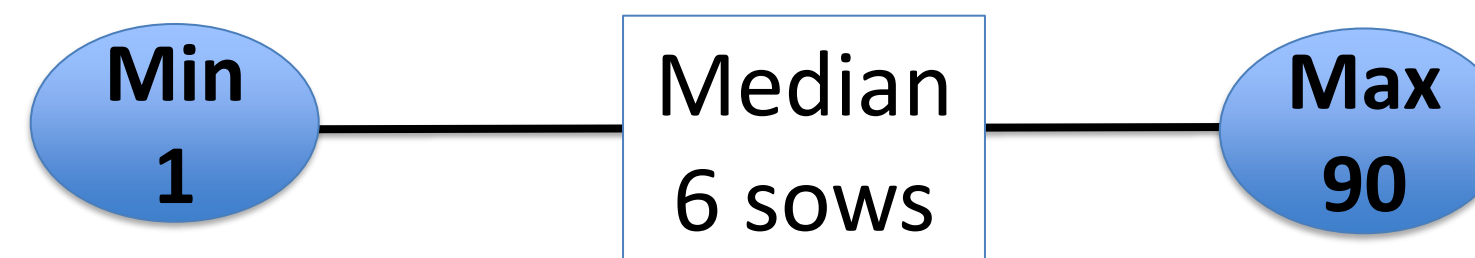
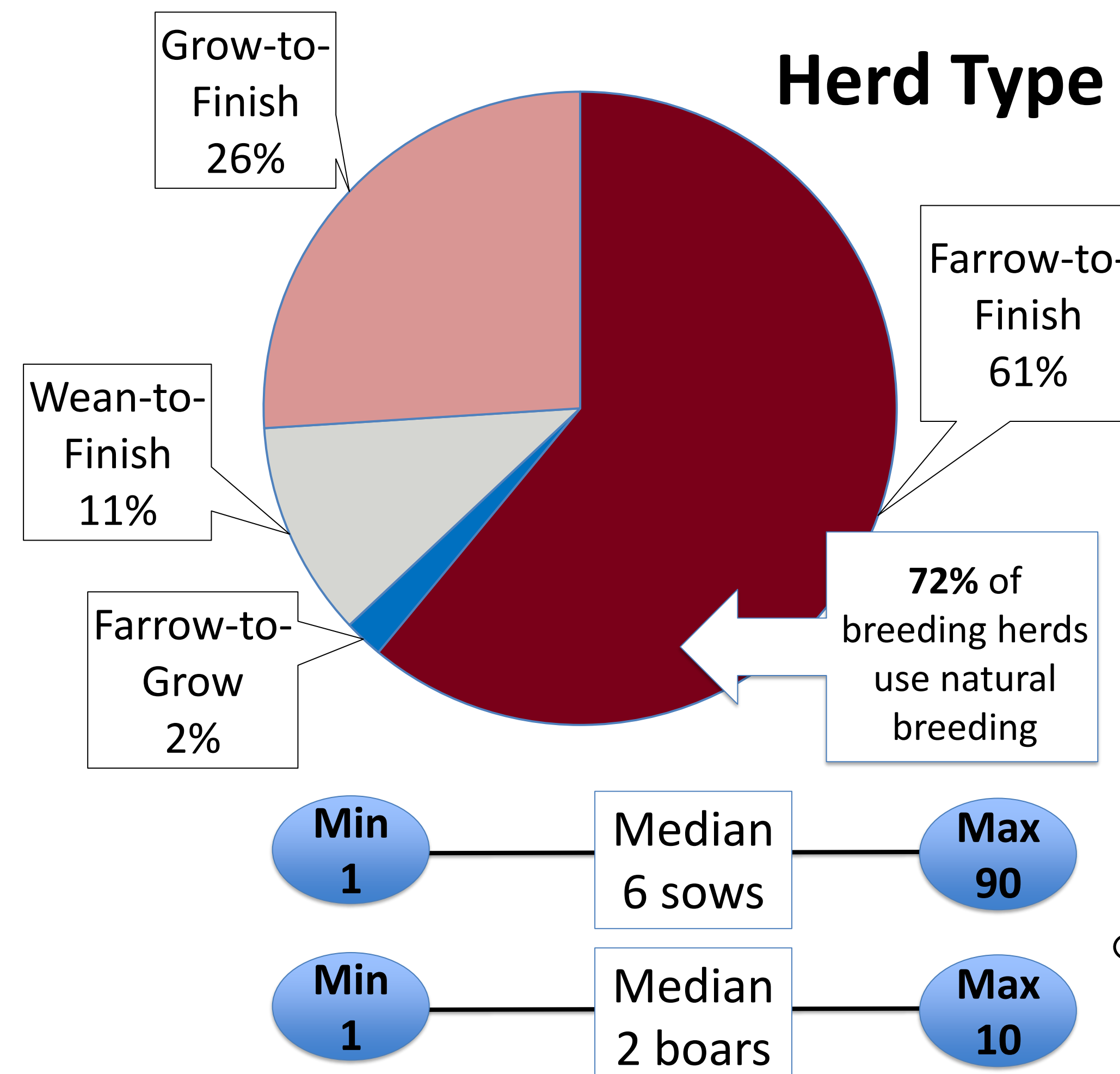
 2 farms exclusively utilize USDA-exempt meat lockers

84% sell pork direct to consumers 

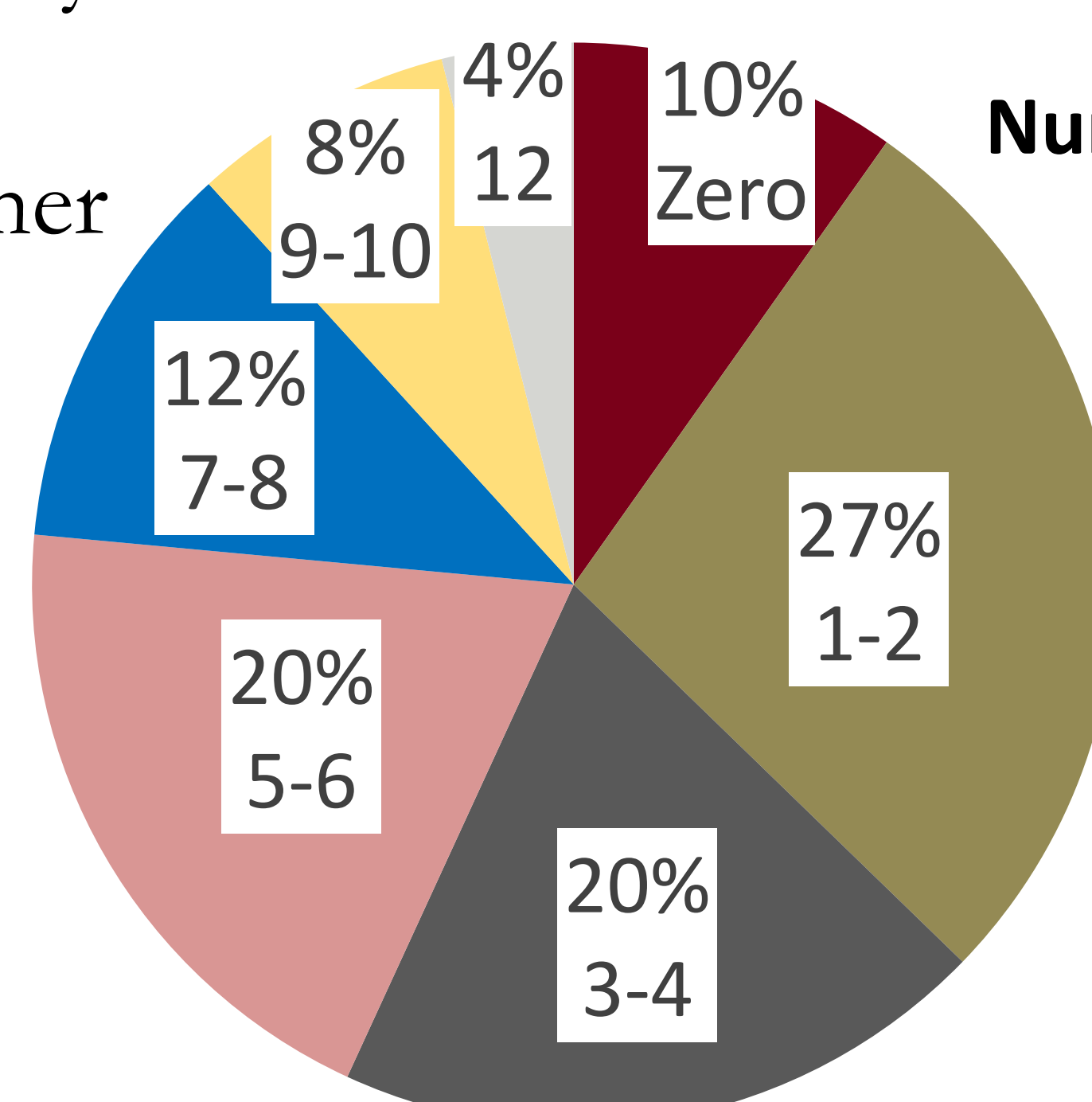
Registered Prem ID



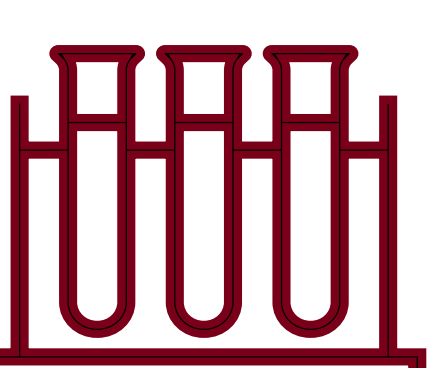
Herd Type



Number of biosecurity measures Implemented (out of 12)



PRRSV Test Results for 25 Farms

36% apparent herd seroprevalence (ELISA) 
 20% had at least 1 positive PCR