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Practical biosecurity to reduce swine disease risk

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Background

- I have two roles:
 - 1. Adjunct Professor at Kansas State University working with the diagnostic laboratory and helping to train students.
 - 2. Private Practitioner and owner of Abilene Animal Hospital



Abilene Animal Hospital, P.A.

- We are normally an 8 veterinarian mixed animal practice
- 40% swine services, 40% companion animal services, 20% bovine/equine
- We currently have two veterinarians doing the swine work





Abilene Animal Hospital, P.A.

- What do swine veterinarians do?
 - **Private practice**
 - Feed companies
 - Pharmaceutical companies
 - Corporate farm veterinarians
 - Food Safety Inspection Service (FSIS)
 - Teaching/research
 - Diagnosticians



Abilene Animal Hospital, P.A.

- What do **private practice** swine veterinarians do?
 - Farm calls when there is a health problem
 - Preventative health care
 - Audits
 - Diagnostics for a problem or routine monitoring
 - Monitor production records
 - Employee training



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Geography – Cambodia vs. US



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Geography – Our practice area



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Pork Quality Assurance (PQA)

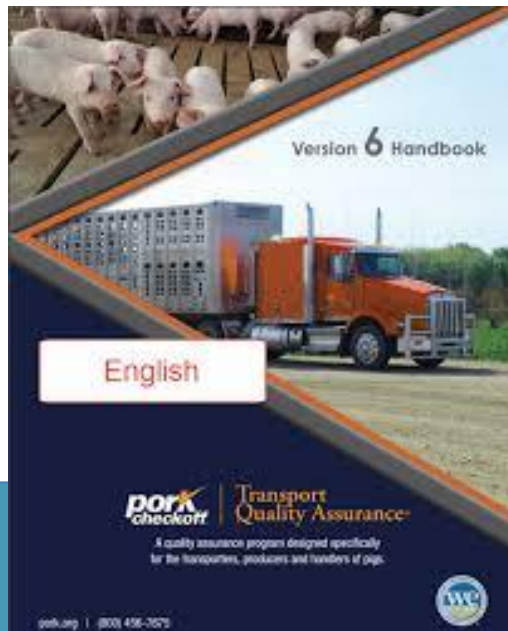
- All farm employees that handle pigs must be trained in PQA within 90 days of employment
- Training is reviewed annually and recertification is every three years





Transport Quality Assurance (TQA)

- Similar to PQA training, but for truck drivers





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Why are we in Cambodia?

- USAID Feed The Future grant to help Cambodian farmers
 - Increase farmers' knowledge of on-farm biosecurity
 - Give farmers more information on how to use alternative feed sources





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The U.S. Government's Global Hunger & Food Security Initiative

Dr. Mike Tokach – Swine nutritionist, University Distinguished professor at Kansas State University

Dr. Lisa Tokach – Veterinarian, Abilene Animal Hospital and adjunct faculty for College of Veterinary Medicine at K-State

Dr. Jessie Vipham – Assistant Professor, Sustainable Intensification Innovation Lab at K-State

Dr. Kang Kroesna – Dean of Faculty and Professor, Veterinary Medicine, Royal University of Agriculture

Mr. Chea Bunna – Lecturer, Veterinary Medicine, Royal University of Agriculture



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What is biosecurity?



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What is biosecurity?

- A set of preventative measures designed to reduce the risk of transmission of infectious diseases.



What kind of diseases can be spread?

- Viruses (FMD, Aujesky's, PRRS, CSF, influenza)
- Bacteria (Salmonella, E. coli, Mycoplasma, Pasteurella)
- Parasites (ascarids, Trichuris, lungworms)



Who can spread disease?

- Pig sellers
- Feed stores
- Visitors/neighbors
- Village Animal Health workers (VAHWs)
- Veterinarians
- Boar man
- Pig buyers
- Farmers themselves



Who can spread disease?

- Pig sellers
 - Low or high risk?
 - Problems:
 - How can we improve biosecurity?



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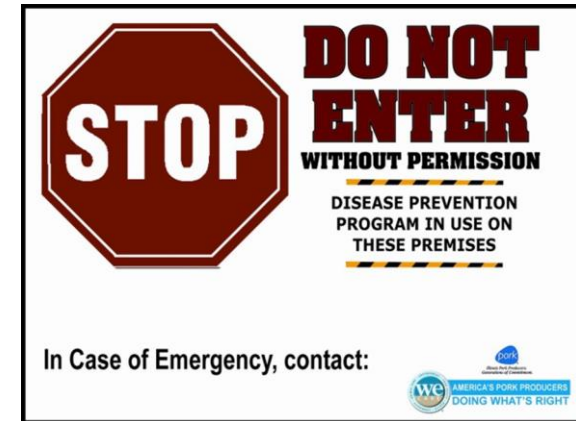
- Other: raw meat
 - Low or high risk?
 - Problems:
 - How can we improve biosecurity?





How can we prevent the spread of disease?

- Control access to the pigs.
 - Design the farm to have a gate or other barrier to stop easy access to the pigs.
 - Post a sign to limit traffic to the pig area.





How can we prevent the spread of disease?

- If you must have visitors, ask them to disinfect their footwear, change footwear, or cover their footwear with plastic before entering your pig area





How can we prevent the spread of disease?

- Don't allow access to your pigs if you/visitor have been around other sick pigs until you/they have bathed, changed clothes, washed footwear.



How can we prevent the spread of disease?

- Understand that we move disease on shoes, vehicles, hands, equipment like scales, syringes, and ropes.



How can we prevent the spread of disease?

- If buying pigs, buy from ONE source
- Try to buy directly from the farmer





How can we prevent the spread of disease?

- Use AI, not natural service from a reputable boar man who only does AI
- Be sure boar man uses good sanitation and biosecurity





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How can we prevent the spread of disease?

- Feed the pigs adequate food and water to help them stay healthy



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How can we prevent the spread of disease?

- Keep different age groups of pigs separate
- Wash and disinfect the facility between groups of pigs.





How can we prevent the spread of disease?

- Disinfect after the pig buyer has been there, ask that his cart and vehicle are clean when he arrives.





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THE END



QUESTIONS?



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