

# Volunteer Awareness: PEDV Biosecurity

## considerations for county fair swine weigh-in

1/20/2016 Update from ISUEO Swine Field Specialists: Mark Storlie and Matt Swantek

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### Thank you for being a volunteer to work with our county fair swine weigh-in.

PEDV is a new disease that has raised the importance of biosecurity. This is important to our local pork producers and pork industry. This is an educational opportunity for farm and non-farm youth and adults. The principles are important for swine weigh-in, but will continue to be important at fair time.

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### Porcine Epidemic Diarrhea Virus (PEDV)

The virus (a coronavirus) only infects pigs (not humans or other livestock). The virus infects and destroys the intestinal lining which limits nutrient uptake and causes the "epidemic diarrhea". Mortality is almost 100% in piglets less than 14 days of age. Adult and growing pigs are affected, but have enough body reserves to withstand the virus challenge until the intestinal lining is regenerated. PEDV does not affect pork or food safety, it is safe for consumption.

- **Transmission:** Oral contact with contaminated feces (fecal-oral)
- **Common source of infected feces:** Pigs, trucks, boot, clothing or other fomites
- **Incubation period (time from exposure to clinical signs):** Only 12 to 36 hours
- **Shedding (amount of time pigs can infect other pigs):** Up to 42 days but virus will remain in pig's environment 2-3 weeks.
- **Amount of virus needed to infect a pig:** Microscopic/trace amounts of infected fecal particles

### Why is this important? Protect our local pork producers and pork industry (to the best of our ability).

PEDV can cause significant economic losses for pork producers. The greatest loss will be incurred by operations with sows. If a sow operation breaks with PEDV, there is usually 3-5 weeks period with few or no piglets to wean off the sow. Nursery or older pigs generally survive the virus challenge and have a seven to ten day period of limited or no weight gain.

### COMMUNICATION, COMMUNICATION, COMMUNICATION

The purpose of this document is to increase awareness and stress the need for everyone to communicate openly as the actions or inactions of one person can impact everyone.

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### Suggested supplies for weigh-in crews:

1. Tagger, scale, scale support
2. Table, clipboards, pens and containers to manage paper
3. Disposable coveralls, disposable gloves and plastic boots.
4. Hand sanitizer and paper towels: Keep paper work clean ... exhibitor/parent signatures.
5. Water source: Used to rinse manure/organic material from scale or pig transfer area.
6. Disinfectant: Used on tagger, scale and pig transfer area. (Synergize, Tek-Trol®, DC&R®, Virkon®-S, etc.)
7. Container with disinfectant to submerge ear taggers and weighing equipment.
8. Garbage receptacle: For disposal of coveralls, gloves and plastic boots.
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### Extension Staff: Will prioritize and schedule weigh-in times based upon PEDV status

1. Prioritize operation type and PEDV status on each exhibitors  
**Assumed Negative** with sows (farrowing)  
**Assumed Negative** with only growing pigs  
then **Confirmed Positive** (lab test), **Potential Positive** (diarrhea within 5 weeks of weigh-in)

### **PEDV like to hitch a ride ... separate yourself from cross contamination.**

PEDV within infected feces can survive on different materials and survive longer in cool, damp conditions. Organic matter (shavings, manure) or water, mud or snow can carry diseases on boots, clothing, tires, undercarriages, trailers, shovels, winter panels, sorting panels and people can infect healthy pigs. Other activities, such as walking into a contaminated barn or packing plant can increase risk for disease spread because boots and trailers can become contaminated with diseases you are trying to keep out. Assume every site you touch is a risk.

### **Weigh-in Locations:**

1. Centralized Location – one site, prioritize PEDV Status, held on one day
2. Multiple Locations – several sites, prioritize PEDV Status, may be held 1 to 5 day period
3. Moving Location – maybe one or more locations - the scale and processing equipment move for each pig source (may be only 15-20 ft to provide unique pig processing area free of bedding material or organic material falling out of the trailer and overlap of foot traffic), prioritize PEDV Status, may be held 1 to 5 day period
4. On-farm Locations – several sites, prioritize PEDV Status, may be held 1 to 5 day period

#### **Derby adjustment for multiday weigh-in period.**

If the maximum weight is 50 pounds on day 1 of weigh-in, allow 1 pound growth for each day. Thus day 2 the maximum weight is 51 lbs. .. 3 day, 52 lb. ..5 day, 54 lb. I encourage a weigh-in period to 5 days or less.

Where trucks, trailer drive on the same road, foot traffic cross over same path, pig processing (weigh/tag) is maintained on same location ... there is an increased potential for cross contamination ... virus hitch a ride. Assume PEDV is present and our actions must minimize the potential to spread or contaminate others.

### **Weigh-in site: Central Location**

- Never enter an exhibitor's trailer. Minimize handling pigs – exhibitors are directed to come with at least two people (1 pig handler and 1 in trailer).
- Suggest three worker as a team:
  - 1) Scale reader/tagger
  - 2) Data recorder and
  - 3) Form checker/Supply Support
- Any work that may have contact with pigs should be wearing disposable coveralls, disposable gloves and plastic boots ... especially the Scale reader/tagger. Change before contact with other exhibitor pigs.
- If equipment (tagger, scale chain) touches the ground or contaminated surface, disinfectant before using.
- Between tagging each pig:
  - place tagger in container of disinfectant (the ear could be contaminated even if no clinical signs)
- Between pig sources and at the end of the day:
  - place equipment (tagger, scale chain) in container of disinfectant
  - wash and disinfect scale
  - clean-up and disinfect processing area
  - change disposable gloves
  - If coverall had contact with a pig while handling or trailer while tagging, change disposable coverall

### **Weigh-in site: On-farm**

- Ensure vehicle used transport weigh-in crew and equipment is clean and disinfected
- Prioritize operation type (farrowing) and PEDV status on each exhibitors
- Discuss the farms biosecurity protocol. They may provide coverall or boots. If not, wear disposable coverall, boots and gloves.
- Minimize items you bring on farm. Scale equipment, only the number of tags going to be used (not your whole supply), etc. Farm can provide clip board, table, support supplies.
- Avoid entering swine production building. I encourage weighing outside, next to the door or pigs loaded onto a trailer/cart and process in machine shed.
- Equipment (unloaded for weigh-in) must be washed and disinfected before loading into vehicle to leave the farm. Ensure all equipment has been thoroughly washed, disinfected and dry before going to the next farm.

***This document is to identify equipment management, people's actions and pig handling that may help reduce the chance of spreading PEDV. This cannot eliminate the risk, but reduces the risk. Details make the difference.***