

Swine Health Producer Guide



Transportation Biosecurity Recommendations for PEDV Control at Packing Plants

Key Point

Infection with Porcine Epidemic Diarrhea (PED) virus can create tremendous financial losses to a pork producer. PEDV transfers via feces and survives in manure for extended periods of time. During an outbreak of PED, affected animals shed a large amount of the virus into the environment. Contamination of trucks, equipment, clothing and footwear with feces can spread the virus.

Because of the extreme ease of PEDV to spread, it's very important that everyone do their part to prevent the spread of this disease. Some prudent steps to help achieve this goal include the following:

Driver, Truck and Trailer

- For each load of pigs, wear/use clean boots, coveralls, gloves, knee pads, etc.
 - After each load, place dirty boots and coveralls in a separate container for disposal or laundering. Do not contaminate the cab with dirty outerwear.
- Between loads, clean and disinfect the cab of the truck, including floor-boards, pedals, steering wheel, etc. Anywhere outside the cab of the truck should be seen as potentially contaminated so in an effort to keep the cab as clean as possible:
 - Use disposable footwear and coveralls while outside of the cab on the dock, in the yards, and inside of the facility. Dirty footwear should not enter the cab of the truck.
 - Limit foot traffic on the dock or in the yards.
 - Unnecessary foot traffic into other areas of the market should be avoided.
 - Do not enter another truck's trailer or cab.
 - Keep cab as clean as possible. Use disinfectant solution and wipes where possible.

- Between loads, wash and disinfect the trailer and all equipment and allow to dry completely.
 - Always use your own equipment and do not share equipment with other truckers.
 - Before cleaning and disinfection takes place, assume that trailer and equipment is contaminated.
- Always ask the market about their biosecurity practices and then abide by them. (See additional transport biosecurity recommendations at pork.org/PEDV.)

At the Market

- Receiving dock or chute should be as clean as possible between loads.
- Establish a **Line of Separation** that marks the separation between the market facility and the trucks, trailers and people outside of the market facility. (See Pork Checkoff's fact sheet, *Establish a Line of Separation: Help Control the Spread of PEDV and Other Swine Diseases*.)
 - An effective Line of Separation is the back of the trailer but may be at the chute or gate on the unloading dock.
 - Provide plastic disposable footwear and disposable coveralls for anyone that needs to cross the Line of Separation.

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- Where possible, when unloading live-haul personnel move the animals up to Line of Separation and then the market personnel handle the animals on the other side of the Line of Separation.
 - » If using shavings at the trailer exit, be sure they are clean and kept far enough back so they don't cross the Line of Separation.
 - » If the Line of Separation is crossed, boots and hands need to be washed. Disposable gloves, coveralls and plastic boots should be used and disposed of properly for each Line of Separation crossing.
 - Take precautions so that market equipment and transportation equipment do not cross the Line of Separation in the unloading process.
 - » If it is necessary for equipment to cross the Line of Separation and it is a piece of equipment that can withstand disinfectant solution, then it should be cleaned, disinfected and dried each time it crosses the Line of Separation.
 - » If plant equipment must be used for unloading, it should be cleaned and if possible disinfected between trucks.
3. When unloading the pigs, take precautions so that no pigs are able to re-enter the trailer.
 4. Provide procedures that allow for an exchange of paperwork that avoids cross contamination between market and driver.

Diseases Like to *Hitch a Ride*, Separate Yourself From Cross Contamination

The organisms that cause disease in pigs (bacteria, viruses and parasites) can survive in different types of materials. Organic matter (shavings, manure) or water, mud or snow carrying 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 the farms you serve are trying to keep out. Assume every site you touch is a risk. Do not be responsible for transferring this disease.

Disinfection Tips

Several disinfectants have been demonstrated to effectively inactivate PEDV. The list includes:

1. Oxidizing Agents [e.g., potassium peroxymonosulfate (Virkon S¹) or sodium hypochlorite (bleach)]
2. Sodium Carbonates (e.g., soda ash)
3. Lipid Solvents (e.g., ethyl alcohol)
4. Strong Iodophors in Phosphoric Acid (e.g., iodine)
5. Phenolic Compounds (e.g., 1 Stroke Environ² or Tek-Trol³)
6. Aldehydes (e.g., Synergize⁴)

Always clean before disinfecting as the disinfectants are less effective when organic material (i.e., feces) is present. Cleaning with hot water and detergents will assist with organic material removal. To avoid dilution of the disinfectant remember to drain off standing water prior to applying the disinfectant. After cleaning and applying disinfectant allow for a drying period to further inactivate any viruses present.

For the best efficacy disinfect with an appropriate disinfectant, at the correct rate, for the proper contact time, and apply so that all surfaces are covered.

Always mix disinfectants according to label directions. Misuse of a product is a violation of EPA regulations.

¹ A product of Antec Intl., Ltd.

² A product of Steris Corp.

³ A product of ABC Compounding.

⁴ A product of Preserve Intl.