

Swine Health Guide



Porcine Epidemic Diarrhea Virus (PEDV) – What Is It?

Background:

- PEDV is caused by a virus (Coronavirus) that is related to transmissible gastroenteritis (TGE) virus.
- PEDV only infects pigs (NOT humans or other livestock).
- This is a new virus to the U.S. and was first confirmed in the country on May 17, 2013.

Clinical signs:

- In previously naïve herds, PEDV is similar to TGE and includes:
 - » Severe diarrhea in pigs of all ages
 - » Vomiting
 - » High mortality - almost 100% in preweaned pigs

Diagnosis: Requires sample submissions to a diagnostic laboratory (contact your veterinarian).

Transmission: Oral contact with contaminated feces. The most common sources of infected feces are pigs, trucks, boots, clothing or other fomites.

Incubation period: (*time from exposure to clinical signs*) Only 12-24 hours.

Shedding: (*amount of time animals can infect others*) Up to 3 to 4 weeks.

Immunity/Protection:

- No cross-protection with between TGE and PEDV even though both are Coronaviruses.
- Maternal protection through colostrum from previously exposed sows can be quite effective.
- No protection is long lasting (herds can re-break).
- Vaccine studies are in progress.

Treatment: Supportive care through hydration. Provide clean, dry, draft free environment with access to high quality drinking water (electrolytes may be beneficial).

Prevention: Limit cross contamination with any suspected pig's feces.

- **Clearly define and communicate a Line of Separation which marks the separation between your facility, transport vehicles or the outside / inside of your production site.**
- Contact your veterinarian and enhance biosecurity procedures.
- Biosecurity of transportation vehicles is important; they should be clean, disinfected and dry.
- Several disinfectants have been demonstrated to effectively inactivate PEDV, such as formalin, sodium carbonate, lipid solvents, and strong iodophors in phosphoric acid.
- Replacement breeding stock should originate from a negative herd.

Challenges to Industry: Infection with PED can create tremendous financial losses to a pork producer.

For more information on biosecurity and PED: pork.org or contact a veterinarian.



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 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 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.