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.