A devastating disease is affecting swine herds across the United States, killing more than 8 million animals in 32 states so far, mostly pre-weaned piglets. Porcine Epidemic Diarrhea (PEDv) is a viral disease that can cause extremely high mortality in young pigs. It causes fever, vomiting, severe diarrhea, and dehydration. There is currently no treatment but symptoms may be treated. It is important to contact your veterinarian immediately if you notice any of these symptoms.

About PEDv and similar diseases
PEDv is spread in the feces of infected pigs, by items that become contaminated by feces (boots, clothing, hands, vehicles), and possibly in contaminated feed. Recovery takes 7-14 days. Infected pigs can shed very high numbers of virus particles for 7-10 days. Because of this, the disease tends to spread very rapidly. Such a disease could be devastating to heritage breeds, and all due care should be taken to prevent infection.

The disease is caused by a corona virus that is similar to Transmissible Gastroenteritis (TGE). Only testing can determine which virus is present in a herd. Another new virus that emerged this year is Porcine Delta Coronavirus (PDCoV), which also causes diarrhea, vomiting and often death in pigs and especially piglets. Both PEDv and Deltacorona virus are part of the new Swine Enteric Coronavirus diseases (SECD). Because SECD are emerging diseases with very high mortality, they are now required to be reported to the USDA. PEDv is not infectious to people, other species or a risk to food safety.

Immunity to PEDv is passed from sow to her litter in her colostrum if she has already had the disease. Most of the herds in the US have never been exposed to PEDv, which is why it spreads so quickly to all the animals in the herd. In June of 2014, Harrisvaccines became the first company in the United States to receive a USDA conditional license for the iPED vaccine for PEDv. Immunity to the virus after illness had been thought to last several years, but there has been one case reported of a repeated infection in a herd only one year after the first outbreak.

Prevention and Biosecurity

- Biosecurity is the primary means to prevent PED at this time. Since reinfection is possible, good biosecurity practices are vital to the health of herds. For more information and a sample biosecurity plan, visit the Biosecurity section of The Livestock Conservancy’s web page. [Click here](http://www.livestockconservancy.org/index.php/resources/internal/biosecurity) or go to: http://www.livestockconservancy.org/index.php/resources/internal/biosecurity
• Your swine veterinarian is a good source of information to formulate a biosecurity plan that is tailored to your situation.
• Replacement stock pose a biosecurity concern, because exposed animals may not show symptoms yet. Consider having a new boar tested before bringing him onto your farm, and quarantine new animals for 30 days. Small farms could consider trading semen instead of boars.
• Keeping clean can help prevent illness by killing small amounts of virus before it gets into your pigs. The virus thrives in cool, moist conditions, so the goal is to have the environment as dry as possible to kill the virus. PEDv survives in the environment for 6-8 weeks, longer in winter.
• Use hot water and detergent for cleaning, then follow up with a disinfectant such as a 10% bleach solution, Virkon-S, or Synergize (quaternary ammonia plus glutaraldehyde).
• Is your bloodline represented in multiple locations? Now might be the time to think about ways to make sure that the genetics you’ve worked so hard to develop will continue in the breed in the event of a disaster.

If you suspect PEDv or PDCoV

• Contact your swine veterinarian right away. He or she will have access to testing and to the latest recommendations for treatment.
• Stop breeding – piglets are the most susceptible, so don’t plan for more piglets until there is no more disease on your farm
• If an animal is diagnosed as having PEDv, don’t isolate it from the rest of the herd. It’s better to go ahead and get the whole herd infected to develop immunity at the same time. A long cycle of new infections can allow the virus to linger on your farm. Consult with a swine veterinarian for more information.
• If your veterinarian diagnoses PEDv or PDCoV on your farm, they will be required to report the disease to USDA. Your state agricultural officials will work with you to develop a biosecurity and control plan. This is a very important step if you are raising an endangered breed, and to get you “back in business” as soon as possible. Below are links from the USDA on reporting guidelines and faqs.
  • http://www.aphis.usda.gov/wps/portal/aphis/ourfocus/animalhealth

The Swine Enteric Coronavirus Disease (SECD) epidemic is a very serious and rapidly changing situation. We have made some suggestions and provided information based on what is currently known. Some of this information is very likely to change as there is much research underway and more will be known as it is discovered.

If you want to stay informed, two resources that provide the latest news about this deadly disease are:
http://www.wattagnet.com/porcine_epidemic_diarrhea_virus_update_PEDV.html