Georgia Department of Agriculture

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Gary W. Black
Commissioner

What is PEDv?
Porcine Epidemic Diarrhea Virus (PEDv)

Porcine Epidemic Diarrhea (PED) is a viral disease of swine that is associated with fever, severe diarrhea and vomiting. The disease is highly contagious and is caused by a *Coronavirus*. PED mimics a common pig disease called Transmissible Gastroenteritis (TGE), which is also a *Coronavirus*, only lab tests can tell the difference. PED is not a zoonotic disease (it does not affect people), does not affect any other domestic species and is not a food safety concern.

The disease is most severe in young piglets, but can affect pigs of any age. The disease can cause death and loss of production. Introduction of PEDv into a swine herd with no previous exposure to the virus typically results in acute outbreaks of abortion, severe diarrhea, vomiting, high morbidity (often 100%) and variable mortality (as high as 100% in young pigs less than 3 weeks of age). The incubation period is short (3-4 days) and natural immunity develops. Pregnant sows often abort due to fever; however, older pigs usually recover from the disease within 7-10 days. PEDv can be spread in several ways. The fecal/oral route (virus in the fecal matter of affected pigs is ingested by healthy animals), fomites (inanimate objects such as equipment (trailers, chutes, buckets and waterers), clothing, boots and contaminated feed have all been shown to spread the virus. The virus is very hardy and can survive for long periods of time especially in cold damp weather.

Currently, there is no specific treatment or commercially available vaccine for the disease. Supportive therapy is useful in the treatment of older animals and sows that have recovered from the disease pass immunity to their offspring. Recovered animals can shed the virus for up to a month after recovery.

A very strict biosecurity program is the only way to prevent introduction of the virus. Very thorough cleaning and disinfecting of trailers and equipment are essential to keeping the virus out. The creation of a "Clean Crossing Line" will help to prevent contaminated personnel or products from entering the farm.
PED exists in many parts of the world. The disease is very common in China, Korea and other Asian countries. In May 2013, the disease was first diagnosed and confirmed in the USA, in Iowa. It is currently unknown how the virus entered the US. There is some concern that feed products such as porcine plasma products sprayed on pellets in certain rations has been responsible for introduction or spread of the disease. PED is not a listed disease of the World Organization for Animal Health (OIE); is not considered a Foreign Animal Disease in the United States; and there are currently no international or interstate trade restrictions pertaining to PED in U.S. swine.

The disease has spread to 28 states across the United States and to Canada causing millions of dollars of damage due to losses from abortions, mortality and poor feed conversion. Currently, the number of confirmed cases is more than 5,500. In the southeast, only Georgia, Florida, Alabama, Louisiana and Arkansas have not had a reported case of PEDv. All hog farmers are encouraged to monitor the Georgia Department of Agriculture website, www.agr.georgia.gov , for news and updates on PED.

Veterinarians can send samples to our state diagnostic labs for confirmation of PEDv:

Athens Veterinary Diagnostic Lab ----- 706-542-5568
Tifton Veterinary Diagnostic Labs ----- 229-386-3340

UPDATE FROM USDA

This is a production disease, and is not a regulated disease at this time reportable to the World Health Organization (OIE) or the Georgia Department of Agriculture; however, because PEDv is a persistent disease that is continuing to spread across the country, USDA APHIS VS is instituting a monitoring and control program. USDA has announced they will be issuing a Federal Order in May 2014 that requires mandatory reporting of all herds diagnosed with PEDv. The herds will be required to identify themselves and provide location information. Animal health laboratories receiving diagnostic samples will also be required to provide positive tests and location information to USDA.

BIOSECURITY FOR PED

So what can you do to decrease the chance of your herd becoming infected with PED? First and foremost, review and tighten your biosecurity protocols. Be diligent about personnel and visitors but also consider supplies, feed ingredients, food items, etc. that might be of international origin. If you are unsure about the origin of a particular product, or the components of a product, contact the supplier and request information on the origin of their ingredients or components. Contact your Georgia Pork Board and National Pork Board.

Additional biosecurity recommendations should include:

- Limiting traffic (people, vehicle, trailers and equipment) onto the farms
- Thoroughly cleaning and disinfecting anything coming onto the farm
- Enforcing downtime requirements and maintaining a log of visitors
- Properly disposing of dead stock
- Isolating newly arriving animals and continuing vet to vet discussions about animal health at the herd of origin
- Showering into the facility where practical and changing into clean boots and coveralls (veterinarians should also be careful not to track the virus between herds on their person, equipment or vehicles).

RESOURCES

www.agr.georgia.gov
www.pork.org/pedv- National Pork Board PEDv information page
National Pork Board.
Biosecurity for Pork Producers (National Pork Board)
American Association of Swine Veterinarians
http://www.pork.org/filelibrary/RecommendExhibitor.pdf.
USDA APHIS VS Q&A Fact Sheet and a summary

If you have any questions, you can go to the Georgia Department of Agriculture website, www.agr.georgia.gov , or contact the State Veterinarian's Office at 404-656-3671.

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