

Swine PEDV/SDCoV testing at PADLS

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Porcine Epidemic Diarrhea virus (PEDV) and Swine Delta Corona virus (SDCoV) as the names suggest belong to the Coronavirus group of viruses that cause diarrhea among pigs. The other viruses infecting pigs belonging to this viral family are transmissible gastroenteritis virus (TGEV), porcine respiratory coronavirus (PRCV), and porcine haemagglutinating encephalomyelitis virus (HEV). These viruses can also cause similar enteric disease syndromes as seen with PEDV infection.

When should PEDV be a concern?

A hog-farm dealing with diarrhea issues should consider swine enteric coronavirus disease (SECD) on its differential list for ruling out PEDV/SDCoV infections. As the winter weather sets in, it is important to be on guard. Suckling piglets are most affected with PEDV infections resulting in significant mortality. Diarrhea and vomiting are other signs with this pig disease.

How is the disease diagnosed in a herd?

Work with your herd veterinarian. Dead animals for diagnosis and testing can be necropsied at any of the 3 PADLS labs. PVL-Harrisburg is now offering real time PCR testing for the disease diagnosis. Acceptable specimens are *oFeces*, *oIntestinal tissue*, *oRectal swabs*, *oOral fluids*, and *oEnvironmental swabs*. Expect some follow-up from USDA for SECD positive herds.

How should I send specimens for PCR to the lab?

Ship feces or other suitable specimens on ice packs, and in sterile containers (preferably tubes) available from your veterinarian. Include the filled out submission form found on www.padls.org. Samples can also be directly delivered to the PADLS Harrisburg lab for faster turnaround times.

What will it cost to do testing?

If premise identification number (PIN) is included on the submission form, and qualified sample types are submitted, there will be no charge until federal funds allocated for testing are exhausted. Those not submitting the PIN or submitting non-qualified samples e.g. environmental swabs not tied to a farm premise will be charged a testing fee of \$30/sample for PCR.

What test is used at PADLS for SECD diagnosis?

A real time PCR test that can detect not only PEDV and SDCoV but can also differentiate these viruses from closely related TGE virus is being used.

When can I expect results?

1-2 business days. Results can be emailed to the clients for quicker delivery.

How can I get more information about PEDV or SECD?

NBC swine unit (Dr Tom Parsons or Dr Meghann Pierdon 610-444-5800, **USDA** (Dr Paul Pitcher, 717-380-9754). **State Veterinarian's office** (Dr David Griswold or Dr Craig Shultz 717-705-1626)

AASV website (www.aasv.org) and National Pork Board (www.pork.org)

Federal Order www.aphis.usda.gov/animal-health/secd