



ONTARIO PORK

Q&A PORCINE EPIDEMIC DIARRHEA VIRUS

What is Porcine Epidemic Diarrhea Virus (PEDV)?

Porcine Epidemic Diarrhea PED is a viral disease causing vomiting, diarrhea, and high death loss in pigs. It is caused by a coronavirus. After introduction of the virus into a naïve sow herd, acute outbreaks of watery diarrhea will be seen. In nursing piglets the disease can be severe with mortalities reported up to 100%. In growing pigs, there is widespread diarrhea with low mortality.

Are there public health concerns?

- No, this disease is only infectious to swine.
- As such, it is not a food safety concern.

How is it transmitted?

The virus can be transmitted by the direct or indirect fecal-oral route. While the direct route would involve animal to animal contact, the indirect route may include contaminated fomites such as footwear, clothing, farm supplies, and vehicles.

What are the clinical signs of PED?

Incubation in individual pigs may be as short as 22-36 hours or 2-4 days at the herd level.

Clinical signs of PEDV are:

- Characterized by acute outbreaks of severe diarrhea and vomiting that can affect up to 100% of the herd when previously unexposed;
- Significant mortality (i.e. average = 50%; high= 100%) is reported to occur in suckling piglets under 7 days of age while pigs that are older than 7 days are expected to recover;
- In herds that have become endemic, diarrhea and vomiting are typically limited to suckling and recently weaned pigs.

Where is PEDV found?

The presence of Porcine Epidemic Diarrhea Virus was confirmed in the United States during the week of May 13, 2013 and has since spread to 22 states. PEDV is thought to have caused outbreaks of diarrhea in Europe as early as 1971 and was identified in Asia as early as 1982. Epidemic outbreaks are sporadic in these regions and are reported to be of greater significance in Asia in more recent years.

How can the disease be stopped from spreading?

Critical steps for the prevention of PEDV entry:

- Ensure the introduction of negative animals;
- Institute biosecurity protocols that include measures addressing personnel, animal, and supply movements.
- Ensure hog trailers are cleaned and disinfected prior to arrival at your farm
- Common disinfectants and drying are effective in killing PEDV.

Are there import/export issues?

- PEDV is not a disease that is listed as notifiable by the World Organization of Animal Health (OIE).
- PEDV is not considered a foreign animal disease by the Canadian Food Inspection Agency and within Canada there are no associated trade restrictions.
- PEDV is not a reportable disease in Ontario but the Health of Animals Act considers this type virus a “serious risk” and veterinarians must report it to the Ontario Ministry of Agriculture and Food
- Alberta is the first province in Canada to make it a reportable disease

How is PED treated?

- Treatment is normally limited to supportive therapy to address dehydration.
- A vaccine has not been developed yet for this disease.

How is Ontario responding to an outbreak of PED?

If there is a suspected case of PEDV:

- Farmer should contact his/her veterinarian
- If PEDV is suspected farmer should stop all movement of swine in or out of operation
- Veterinarians would submit samples from infected pigs to the local laboratory
- Diagnosis is confirmed by PCR on feces or intestines from acutely affected pigs
- Veterinarians, Ontario Pork, the Ministry of Agriculture and Food and OPIC/OSHAB all have resources available to help during a crisis.

How do I get more information?

- If you are a producer with questions, please contact your local veterinarian
- Visit the Ontario Pork (<http://www.ontariopork.on.ca/ProductionStandards/PED.aspx>), Canadian Swine Health Board (www.swinehealth.ca) or Ontario Pork Industry Council (www.opic.on.ca/biosecurity-resources/porcine-epidemic-diarreah-ped) websites.
- Farm Animal Care Helpline (519) 837-1326
- Contact Ontario Pork
 - Phone: 877-668-7675 or 519-767-4600
 - Email: communications@ontariopork.on.ca