



Porcine Epidemic Diarrhea Virus (PEDv)

What is PEDv?

PEDv is a highly contagious coronavirus that causes acute diarrhea, vomiting, dehydration, and high mortality in nursing piglets. PEDv is not transmissible to humans or other animals and does not pose a risk to food safety.

The main route of transmission is fecal-oral route. Major sources of transmission include diarrhea, vomit, and contaminated objects or materials such as transport trailers and feed.

The virus damages gut villi, which reduces absorptive capacity leading to loss of fluid and dehydration.

PEDv strains spread rapidly causing a high number of pig deaths and substantial economic losses.

Incubation period = 2 days
Diarrhea can last 7-14 days with mortalities up to 40% in suckling pigs.

Two clinical types:
Type I: only affects growing pigs
Type II: affects pigs of all ages

Symptoms

Sows	Piglets	Weaners and Growers
<ul style="list-style-type: none"> Range from loose feces to watery diarrhea Off feed 	<ul style="list-style-type: none"> Diarrhea Dehydration High mortality 	<ul style="list-style-type: none"> Acute watery diarrhea Low mortality but high morbidity Vomiting

Causes/Contributing Factors

The immunological status of a herd determines how susceptible the pigs are to the virus. When the virus is first introduced to a susceptible herd, an outbreak of acute diarrhea will occur.

The ability of PEDv to disappear then re-emerge indicates that the virus is effectively able to escape vaccination, biosecurity, and control systems.

PEDv is not a reportable or notifiable disease in Canada. But is now reportable in Alberta under provincial legislation.



Diagnosis

PEDv is confirmed using diagnostic testing (typically polymerase chain reaction) on feces or intestines from acutely infected pigs.

PEDv is related to transmissible gastro enteritis (TGE) virus, however, tests for TGE will not detect PEDv. PEDv must be differentiated from TGE by laboratory testing.

Prevention

Biosecurity is the best preventative measure!

Infected feces is most commonly transferred to farms via pigs, trucks, boots, clothing, or other things that can physically move it. Therefore, it is essential to implement and follow strict biosecurity protocols.

Never let dirty trucks on the farm. Only washed and disinfected trailers should pick up and deliver pigs. All barn visitors require clean boots and clothing. Additional, excellent information can be found from Alberta Pork at www.albertapork.com

As PEDv is reportable in Alberta, producers should contact their veterinarian immediately if their animals are exhibiting signs of PEDv.

References

<http://www.inspection.gc.ca/animals/terrestrial-animals/diseases/other-diseases/ped/eng/1392762503272/1392762576176>

<http://www.thepigsite.com/diseaseinfo/83/porcine-epidemic-diarrhoea-ped/>

<http://www.albertapork.com>

[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/com14713](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/com14713)

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