Swine Health Surveillance 1st Quarter 2025

Producer Report

This report is intended for swine producers in the western Canadian provinces.

CWSHIN serves western swine producers, swine herd practitioners and governments to improve swine health, production, and the economic prosperity of the sector.

Our surveillance objectives are to:

- Detect new emerging swine health issues,
- Detect unusual clinical presentations of known diseases,
- Provide information about endemic diseases, and
- For diseases absent in western Canada (such as Foot and Mouth Disease and African swine fever) the objective is to help provide evidence of absence of disease to support trade.

www.cwshin.ca

MAY 12

By: Jette Christensen, CWSHIN Manager





It is an extra challenging Spring for on-farm and transport biosecurity because of the contamination of high-traffic sites (assembly yards, docks at slaughter etc.) with Porcine Epidemic Diarrhea (PED), Porcine delta coronavirus (PDCoV), and Seneca Valley Virus add to that the spring manure spreading from MB-premises previously infected (PED) that will have to happen.

Practical tip

- Farm biosecurity is critical for any direct or indirect contact with hightraffic sites and transport vehicles in all western provinces.
- Caution should be applied when spreading manure from previously PED infected barns specifically in MB.

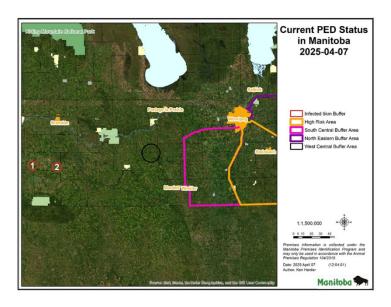
Contents

| Coronavirus | 3 |
|---------------------------|---|
| PED in MB | 3 |
| Porcine Delta Coronavirus | 4 |
| Case Story PDCoV | 6 |
| H5N1 in the USA | 7 |
| CanSpotASF | 8 |

Coronavirus

PED in MB

In 2024, Porcine Epidemic Diarrhea (PED) has been confirmed on one premises in Manitoba. This premises applied the MB PED elimination plan successfully and it is now presumptive negative.



PED in MB (3 and 7 April 2025)

Two swine premises in the RM of Grasslands have been confirmed to have PED. These IPs are a nursery operation (IP001) and a linked downstream finisher (IP002). A buffer area has been defined but with no other swine farms within 5km.

PED has been contained on the two farms, and they have progressed with the elimination plan.

PED in MB

Take home messages:

The one case of PED in 2024 is now presumptive negative.

Two linked and contained cases of PED was detected in April 2025. Both premises apply the MB PED elimination plan.

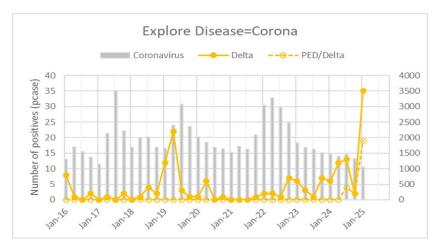
Porcine Delta Coronavirus

Porcine delta coronavirus (PDCoV) is also known as Swine delta coronavirus. PDCoV is from the same family of viruses as PED and transmissible gastroenteritis (TGE). PDCoV causes diarrhea and vomiting in all age groups and mortality in nursing pigs. Fortunately, the west has only seen very sporadic cases over the last 10 years.

PDCoV is provincially notifiable to the Office of the Chief Provincial Veterinarian in BC, AB, and SK.

In 2025, we have received 3 alerts from Quebec

- 1. 11 March a new case of PDCoV. Negative for PED.
- 2. 14 March a second case of PDCoV. Negative for PED.
- 3. 4 April
 - a. 3rd case of PDCoV. Negative for PED.
 - b. PDCoV positive PCR results at slaughter dock not linked to the 3 known cases of PDCoV. Suspecting other case(s) of PDCoV in Quebec



The CWSHIN laboratory data show that PDCoV has been detected sporadically since 2016 but in the last quarter (Jan-Mar 2025) we have the highest number of positive cases on record.

A total of 241 tests were positive in these cases. The samples were from 2 known infected premises in MB and increased testing at high-traffic sites also in MB.

| Positive tests in Q1 2025 | | | | | | | |
|---------------------------|-------|-----|-----------|----------|--|--|--|
| | Delta | PED | PED/Delta | Subtotal | | | |
| 3 high-traffic sites | 62 | 61 | 62 | 185 | | | |
| PDS (environmental) | 1 | 2 | 0 | 3 | | | |
| Missing PID VDS | 1 | 7 | 10 | 18 | | | |
| 2 known positive farms | 35 | 0 | 0 | 35 | | | |
| Total positive tests | 99 | 70 | 72 | 241 | | | |

This increased testing for PDCoV may explain part of the high number of positive tests in MB. SASK Pork reported that there has been no PED or PDCoV positives in their surveillance at high-traffic sites in 2025 to date. AB Pork reported one case of PDCoV at a high-traffic site in AB in March 2025.

Therefore, the facts remain:

- High-traffic sites (rest stops, assembly yards etc.) are contaminated and cannot be cleaned effectively
- Pigs are moving east to west.

All producers in the region are advised that on-farm and transport biosecurity are critical for any contact with high-traffic sites in (western) Canada.

Key factors that may have led to PDCoV in herds

- Uptick in slaughter plants receiving pig-loads that have been resting at a known contaminated restsite in Thunder Bay
- Rest-sites (such as the one in Thunder Bay) and assembly yards cannot be effectively cleaned
- The pig-loads will contaminate docks at slaughter and transport vehicles
- Leading to high exposure pressure on herds with
 - o indirect contact to the high-traffic sites
 - contact to transport vehicles that has transported the pig-loads
- On-farm and transport biosecurity are therefore challenged above average

Case Story PDCoV

About 10 weeks ago, a 900-sow farrow-to-finish site was confirmed infected with PDCoV. The presentation was mild scours through out all barns but no mortality.

The PED elimination protocol is being applied, and the clean-up is progressing as planned.

The source is unknown, but the herd shipped market hogs to slaughter (positive dock) prior to clinical signs. No biosecurity breaks were detected.

Challenging spring 2025

This spring the biosecurity measures on swine farms will be extra challenging because:

- We know that hightraffic sites are contaminated with PDCoV and PED.
- Vehicles that transport pig-loads east to west can be contaminated if cleaning failed.
- Spring manure spreading will include manure spreading from premises previously infected with PED (in MB)

Therefore,

- On-farm and transport biosecurity are critical for contact with hightraffic sites
- Caution when spreading manure from previously PED infected barns.

H5N1 in the USA

High Pathogenic Avian Influenza (HPAI) H5N1 caused substantial losses in the US poultry- and dairy-sectors the last year in particular, this winter.

At least two spillovers of HPAI H5N1 from wild birds to dairy cattle have been detected in the USA:

- Spillover of HPAI H5N1 genotype B3.13 likely occurred between October 2023 and January.
- In January 2025, the first detection of D1.1 genotype into U.S. dairy cattle was detected as the second spillover.

In the USA in April 2025,

- Number of poultry cases are slowing down
- Idaho is seeing an increase in detection of H5N1 in dairy, but it is unknown if the detections are related to an increased surveillance or if there is persistent infection in herds?

In Canada

- Milk truck surveillance is negative so far with over 3,000 samples
- HPAI has been detected in poultry in several provinces
- No detection of HPAI in swine reported

HPAI in the USA

Take home messages:

The risk for swine is still uncertain

Surveillance in Canada includes:

- Active surveillance on different types of farms
- Testing milk bulk trucks at arrival at processing (raw milk)
- Testing retail milk

All tests in the surveillance in Canada has been negative so far (April 2025)

CanSpotASF

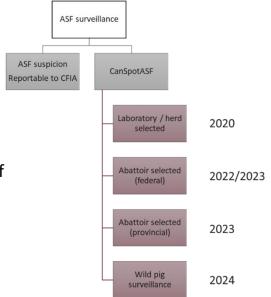
Any ASF suspicion is reportable to CFIA. In addition, there was rule-out testing in herds

 Selected by pathologists at laboratories or by a herd veterinarian

Rule-out testing at abattoirs with sampling of condemned carcasses at

- Federally inspected plants
- Provincially inspected plants

The wild pig surveillance started in July 2024.



As expected, the wild pig testing has ramped up over the winter.

| | Rule out testing - NO suspect cases | | | | | | | | | |
|---------|--|--------------------------|--|-------------------------|---------------------|--|--|--|--|--|
| | Laboratories | | | Provincial Abattoir | Wild pigs | | | | | |
| Quarter | Pathology Lab- cases (VDS/PDS/AB/BC) | Lab-cases tested for ASF | Tested in % of pathology Lab- cases | Carcass-cases tested | Animal-cases tested | | | | | |
| Jan-23 | 138 | 45 | 33% | 35 | | | | | | |
| Apr-23 | 97 | 10 | 10% | 47 | | | | | | |
| Jul-23 | 110 | 19 | 17% | 7 | | | | | | |
| Oct-23 | 105 | 12 | 11% | 10 | | | | | | |
| Jan-24 | 158 | 46 | 29% | 14 | | | | | | |
| Apr-24 | 113 | 45 | 40% | 17 | 29 | | | | | |
| Jul-24 | 71 | 20 | 28% | 15 | 25 | | | | | |
| Oct-24 | 88 | 15 | 17% | 5 | 50 | | | | | |
| Jan-25 | 101 | 12 | 12% | 10 | 142 | | | | | |
| Apr-25 | | | | | | | | | | |
| Jul-25 | | | | | | | | | | |
| Oct-25 | | | | | | | | | | |

Acknowledgement

- CWSHIN would not exist without
- The participation and support of swine practitioners, laboratories, governments and swine health experts
- Funding from pork boards and governments

www.cwshin.ca

