Canadian Swine Health Intelligence Network

Réseau canadien de surveillance de la santé porcine

CSHIN QUARTERLY PRODUCER REPORT

REPORT Q1 JAN-MAR 2026

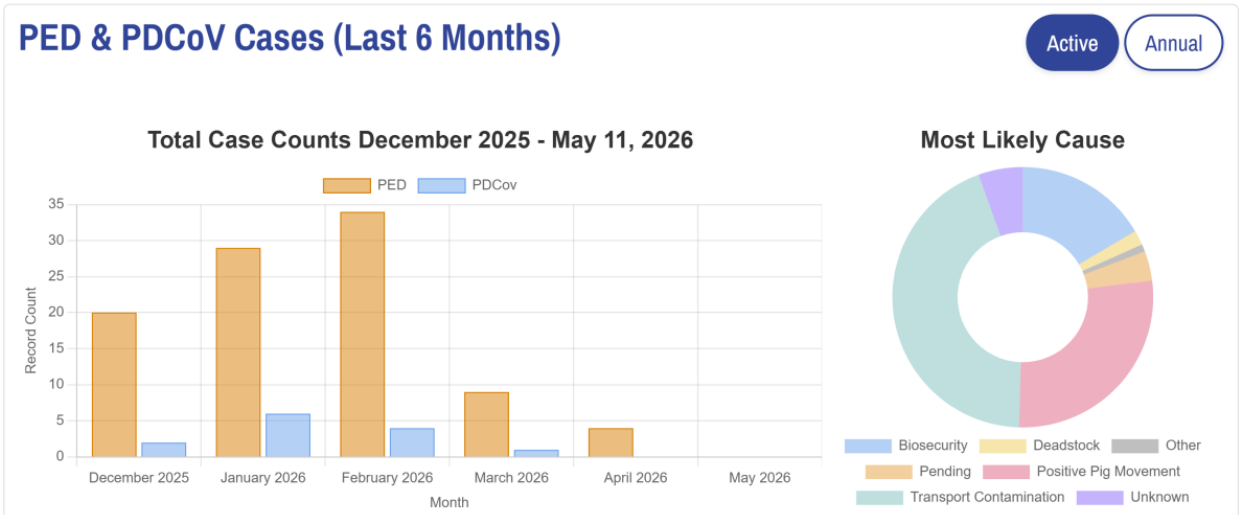
HIGHLIGHTS FOR SWINE PRODUCERS

Porcine Epidemic Diarrhea (PED) and Porcine Deltacoronavirus (PDCoV) Update

OAHN (Ontario)

Dr. Jordan Buchan provided the update that Q1 of 2026 was extremely challenging for porcine coronaviruses in Ontario. Jessica Fox the manager from Swine Health Ontario (SHO) updated the OAHN swine network during their quarterly meeting that **in Q1 of 2026, there were a total of 72 new PED cases and 11 new PDCoV cases in the province. This was the worst outbreak of PED and PDCoV that has ever occurred in Ontario to date.** Out of these PED cases, 19 were attributed to movement. Out of the 11 PDCoV cases, 7 cases were attributed directly to movement. From the cases reported during this quarter, 11 PED cases and 1 PDCoV case has since been closed and are now negative status. This quarter was particularly severe in terms of new porcine Coronavirus cases, and many have attributed this large spike in cases due to the particularly harsh winter conditions that allowed for better preservation and movement of the virus, which is compounded with weather-related difficulties surrounding proper cleaning and biosecurity protocols. The high snow levels also created issues with keeping snow out of barn entry ways and chute systems. Many of the cases reported were suspect to be a result of transport contamination, followed by flow-related movements of positive pigs (see SHO graph below generated on May 11, 2026). SHO continues to remind all members of the industry that it is essential to stay diligent when it comes to biosecurity measures to prevent PED and PDCoV, especially during manure spreading season that is well underway. It takes a conscious industry-wide effort to reduce positive cases. It will be a long summer ahead as producers affected will continue to work on virus elimination in preparation for the fall. SHO has many resources available on the SHO's website along with the PED and PDCoV tracking map that shows current and annual cases by county. http://www.swinehealthontario.ca/Disease-Information/PED-PDCoV-Tracking-Map

Ontario continues to support virus elimination as the best strategy for disease control. Vets and producers in Ontario are encouraged to continue to be diligent in testing for coronaviruses in all gastrointestinal cases, as PDCoV can present with minimal clinical signs. Timely diagnosis of these cases can help limit widespread contamination and potential spread to other sites.



PED and PDCoV Update Continued…

CWSHIN (Western Provinces)

Jenelle Hamblin reported that Manitoba had detected 8 cases of PDCoV and no cases of PED in Q1 2026. No linkages were found between the affected farms. One of these cases has since reached presumptive negative status, leaving 7 active PDCoV sites currently in Manitoba. All farms are working on virus elimination. Manitoba remains on high alert right now for PED.
Dr. Jette Christensen provided an update that Alberta had a detection of PED in February. The last case of PED in this province was in 2022. As of May 11, 2026, this remains the only case of PED in the province. High traffic surveillance testing has yielded negative results which supports success with disease containment efforts.

RAIZO (Quebec)

Dr. Géraldine Gouin reported that Quebec has detected 2 new cases of PDCoV in Q1 2026. Thus far in Q2 there has been 3 more cases of PDCoV detected on April 7, 2026, and 7 more PDCoV cases detected on April 20, 2026, in Quebec. To date this winter there were no PED cases detected in Quebec. It is important to note the 7 of these positive cases were detected through traceback activities and all had very mild clinical signs, usually presenting as mild cases of diarrhea and/or no clinical signs seen at all. Out of the total 12 PDCoV cases in Quebec, 1 has already regained negative status.

Take Home Messages:

- **Ontario continued to see a drastic increase in PED and PDCoV detections in Q1 2026. Swine Health Ontario continues to message the importance that all swine industry members to work together to prevent further disease spread during this critical time with very high viral loads.**
- **Manitoba reported 8 new cases of PDCoV in Q1.**
- **Quebec reported 2 new cases of PDCoV in Q1 and 10 new cases of PDCoV thus far in Q2.**
- **Routine processing plant disease surveillance continues to occur in MB, ON and QC with the hope of being able to detect those herds that have mild clinical signs of disease through traceback testing.**

Challenges with PED and PDCoV continue to be high especially due to the high snow volumes and colder winter that was seen across Canada. Enhanced biosecurity measures need to be taken when visiting high-risk sites like assembly yards, animal resting locations and processing docks. All high-risk sites should be assumed to be positive for various infectious agents such as PED/PDCoV, PRRS, Influenza etc. Care must be taken to avoid contamination of livestock trailers, footwear and clothing when visiting these high-risk sites. It is essential for producers and livestock transporters to ensure that all transport vehicles are thoroughly cleaned, disinfected and allowed the time to dry thoroughly before the next pigs are loaded.

Senecavirus A (SVA) Update- Livestock Assembly Sites

OAHN (Ontario)

Dr. Jordan Buchan from the OAHN swine network, provided the Ontario SVA update. The warm weather is here and there have already been reports of vesicular type lesions found on pigs at Ontario assembly yards. **SHO and OAHN continue to encourage veterinarians and producers to continue to monitor herds for clinical signs, as these can be extremely subtle.** Older pigs tend to present with vesicular lesions on the snout and/or coronary band(s). **In a sow barn and/or nursery barn, infections can present as a very subtle scour**. If a swine veterinarian or producer has any suspicion that there may be SVA in a swine herd, they must contact their vet and the CFIA for follow-up steps.

Producers and veterinarians in all provinces need to understand that lesions can be mild and hard to notice in some animals. Diligence is required to check all animals for SVA type lesions including blisters, ulcers on the snout, ears, face, on the

coronary band or between the claws on the feet before shipping them for slaughter, cull markets and/or directly for export to the U.S.A. **In a farrowing barn and/or nursery barn, an early sign of SVA infections can present as a very subtle scour**. Producers and veterinarians that have any suspicion that there may be SVA in a herd, or when vesicular lesions are seen at an assembly site, need to contact the CFIA for follow-up steps and diagnostics to rule out other serious foreign animal diseases.

Photo source: Swine Health Ontario

It is important to highlight that SVA cannot be eliminated from most assembly sites easily. When animals are held more than a few days there often will be a low percentage of sows that develop blisters. This is due to the continuous flow of these assembly sites. This creates the continuous need for the assembly yard staff to pre-screen sows for vesicular type lesions which requires extra time and training resources that the assembly yard might not always have available.

SVA is widespread in the U.S.A, it is also critically important to assume all livestock trucks returning into Canada are infected with virus and therefore must be thoroughly cleaned and disinfected and allowed appropriate downtime to dry. This is and continues to be a North American disease risk that requires inter-provincial/state industry collaboration.

CWSHIN (Western Provinces)

Dr. Tony Nikkel from CWSHIN provided and update on a previously reported sow-isowean operation that had detected SVA. This farm went through a 4-month eradication for SVA. Overall, the eradication went extremely well. This farm ships to 3 separate nursery sites that run all-in all-out and no extra efforts to eradicate this disease were required. Dr. Nikkel was never able to detect this virus in the finishing sites. It simply seemed to vanish! This especially seems atypical due to the research that states SVA to be a hardy and difficult virus to kill, but this didn't seem to be the case here.

Key SVA Take Home Messages:

- **Clinicals signs of SVA can be extremely mild and very hard to find in on-farm cases.**
- **Piglet diarrhea (scours) in both on-farm cases has been an early clinical sign seen in these herds. SVA should be considered as a rule-out when sending in diagnostic samples for diarrhea cases with sudden deaths. Swine Health Ontario will be starting a pilot project in June 2026, to include SVA PCR testing on eligible piglet diarrhea cases that are submitted to the Animal Health Lab (AHL) in Guelph.**
- **The virus is only detectable for a very short time period in the on-farm cases. This makes diagnostic testing important in the early stages of disease.**
- **Very easy to miss! Extra time and care need to be put into evaluating animals for lesions especially before shipping to slaughter and animals (including cull sows) to assembly sites for export to the U.S.A.**

CanSpotASF Surveillance Q1 Update

Below is the quarterly report on the CanSpotASF surveillance project with the main objectives to enhance early detection and therefore limit its spread if ASF is ever detected in Canada. CanSpotASF surveillance has also been helpful in proving freedom from ASF in international trade negotiations with other countries.

CanSpotASF 2026 Quarter 1 Report (Jan 1 to Mar 31)

Surveillance component (Tool)	Definition of a case	Region	Cases tested for ASF Quarterly (2025 Q4)
Passive surveillance (Reported twice per year)	CFIA Led Case Investigations	Maritimes	N/A
		Quebec	N/A
		Ontario	N/A
		Western Provinces*	N/A
Rule-out testing: herds, laboratories	Case ID assigned by laboratory based on date of submission and premises	Maritimes	3
		Quebec	41
		Ontario	22
		Western Provinces*	15
Rule-out testing: Invasive wild pigs	Carcass	Maritimes	0
		Quebec	0
		Ontario	0
		Western Provinces*	10
Rule-out testing: federal abattoirs	Carcass	Maritimes (no federal abattoirs for swine)	
		Quebec	94
		Ontario	55
		Western Provinces*	68
Rule-out testing: provincial abattoirs		Maritimes	0
		Quebec	1
		Ontario	4
		Western Provinces*	5

*Western Provinces: Includes Manitoba, Saskatchewan, Alberta and British Columbia

Disclaimers: The methodology used to calculate these numbers may differ amongst the reporting networks. CanSpotASF is a voluntary program. CanSpotASF testing is not indicative of invasive wild pig numbers in regions/provinces where this data was captured. It is important to note that all testing conducted to date has yielded negative ASF results.

Circovirus (PCV2) Knowledge Transfer Session- Dr. Matheus de Oliveria

Dr. Matheus de Oliveria presented to the CSHIN Q1 network as a guest speaker on Circovirus. Below is a summary of the key information that the CSHIN team wanted to communicate further to swine veterinarians and to producers on what we learned from Dr. Oliveria on this virus.

Circovirus infects a lot of different species. It is found everywhere! Circovirus alone is not able to generate a host response or disease, but rather it is about how much Circovirus is present. It is estimated that there needs to be 10^7 virus/mL of serum to cause disease. Circovirus causes disease by impairing dendritic cells which will decrease the overall humoral and cellular response.

A common question that is asked is "I vaccinate for Circovirus, but why do I still see cases? Did PCV2 change? Retrospectively Circovirus was detected in Demark in the 1980's and in Brazil and China. Here is a bit of history on this pathogen. It was first discovered in 1997 as PCV2a. In 2003 PCV2b was discovered and was associated with significant disease outbreaks globally. There was a genotypic shift from PCV2a to PCV2b. In 2008 PCV2d was the most prevalent type of this virus found. **There is absolutely no evidence that these shifts are linked to vaccine failure. The PCV2 vaccines are VERY successful vaccines.**

Dr. Oliveria completed a paper comparison in the virulence of 3 PCV2 genotypes and found that there was no difference in virulence. It is important to understand that genotypes are different from serotypes. Serotypes are based on antibodies that can react with antigens.

There are two different vaccine related effects that could be present and need to be investigated into if you have a swine herd that is experiencing more cases with Circovirus.

- **Lack of Vaccine:** Shortage, storage, staff shortages, environmental conditions, ergonomics.
- **Improper Vaccine Application:** Wrong needle size/ intradermal pressure, wrong dose, poor training of staff, ergonomics and vaccine fatigue for staff administering it.

Widespread continuous vaccination has changed the virus epidemiology.

Pre-vaccine Use: Most breeding herds had herd seropositivity with high antibody titers. Piglets had passive immunity protection until they were weaned.

Initial Vaccine Use: Sows are seropositive and had variable antibody titers. Piglets vaccinated with a degree of maternal antibody interference where we saw either no disease, or subclinical control where clinical signs mostly disappeared.

Long Term Continuous Vaccination: Results in low PCV2 infection pressure which leads to a proportion of the population (including gilts) seronegative status and decreasing antibody titers. The virus is in general controlled due to low pressures being present. **This is not vaccine failure.** In the next 5-10 years we will need to look into whether or not virus elimination for Circovirus will be required to decrease the proportion of sporadic cases of disease that will be seen on farms. A few strategies that could be considered in herds that are seeing sporadic cases of Circovirus pop up include:

1) Change in vaccination schedules: Consider earlier vaccination of piglets to avoid any maternal transfer.
2) Know the herd: Monitor for PCV2 viral load and antibody levels by ELISA test at the time of vaccination and through herd PCR tests.
3) Immuno-stimulation: Triggers PCV associated disease in herds with ongoing PRRS, Mycoplasma, *Strep. suis* or other infection pressures. Stress in animals can also induce this.

What about PCV3 and PCV4? Experimentally there is a lack of serologically and virologically free pigs. Reminder that in order to classify PCV3 as the cause of disease it should be causing late abortions, malformations in piglets born etc. You need to be seeing clinical signs of disease. Same is the case of PCV4 infections.

Key Take Home Messages Summary: PCV disease remains a challenge.

- **"Vaccination is a power with this pathogen! With great power though comes more great monitoring responsibility".**
- **May need to look into PCV2 elimination in herds moving forward.**

CSHIN Website

We are proud to direct you to the CSHIN website that can be accessed via this link. All CSHIN reports will be posted here as well as CanSpotASF quarterly reporting information. The website can be viewed in both English and French. CSHIN would like to thank Animal Health Canada- CAHSS division for their gracious financial and resource support to make this website a reality!

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