Canadian Swine Health Intelligence Network

Réseau canadien de surveillance de la santé porcine

CSHIN QUARTERLY PRODUCER REPORT

REPORT Q3 JUL-SEPT 2025

HIGHLIGHTS FOR SWINE PRODUCERS

Senecavirus A (SVA) Update

Starting in 2015, Senecavirus A (SVA) has caused intermittent complications with respect to the export of Canadian cull animals to the United States. This disease resembles reportable swine vesicular diseases. This is a national issue and since June 2025 has impacted Ontario cull sow movements.

In July 2025, the APHIS and the USDA removed the export eligibility status for a cull sow assembly in Ontario due to SVA lesions being seen in cull sows sent to a USDA processing facility. These lesions initiated foreign animal disease investigations at this US processing plant. The suspect animal(s) were initially quarantined for individual inspection and further testing. Since the initial site, more Ontario cull sow assembly sites have also had their export eligibility status revoked by APHIS and the USDA for similar reasons. The affected assembly sites accept cull sows from Quebec, the Maritimes and Ontario. Each affected assembly site has now actioned the USDA requirements including removing all animals from each site to thoroughly clean and disinfected before they were able to regain their export status. The assembly site operators worked closely with veterinarians to develop the required SOP's and have now completed actioning the USDA listed requirements. All Ontario cull sow assembly sites have re-gained their export status to the U.S.A, but some are still under a 60-day requirement for vet inspection on each load going to the U.S.A. After this 60-day period expires these sites will be able to export normally as long as no further SVA typical lesions are detected at U.S. processing plants. Export restrictions on these assembly sites caused disruption and had significant effects on the eastern Canadian cull sow system. Similar export issues related to SVA, have arisen previously in western Canada. It is important to continue inter-provincial industry collaboration on this issue.

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 USA. (Source Poster below: Swine Health Ontario)

Senecavirus A (SVA) Update

SVA On-Farm Case Detections in Ontario and Manitoba

Ontario On-Farm SVA Case

Dr. Christa Arsenault provided an update that there is currently one on-farm case of SVA in Ontario. This farm sent cull sows to a cull sow assembly site in Ontario and lesions were noted at the cull sow assembly site on one animal. This prompted notification to the Canadian Food Inspection Agency (CFIA) who then conducted an on-farm investigation with the herd veterinarian present. There were no pigs with snout lesions seen at the time of this investigation and only potentially two animals that were seen with blisters near the bulbs of the heel. Diagnostic samples taken by the CFIA from this farm were positive for SVA. The veterinarian involved reported that **clinical signs of SVA were extremely mild on this farm and could easily be missed by veterinarians and producers.** Loose sow housing also complicated being able to find only a few animals with clinical lesions**. The initial clinical sign that presented in this herd was a scour in only a few pens of nursery pigs for 1 week in duration. All affected pigs were normal within 3-5 weeks. Nursery pigs from the oldest group that scoured were sent to the AHL for testing and tested SVA negative on PCR test.** There was no scour in nursing piglets and no increased mortality. Some sows did go off feed for 3-4 days. The source of infection is unknown. This herd is currently working with their veterinarian on eliminating the virus.

Swine Health Ontario (SHO) has taken the lead providing SVA updates and critical messaging to Ontario swine producers and industry members. Several updates have been sent out by SHO to date and additional resources can be found on their webpage here. SVA is an immediately notifiable disease to the Ontario Ministry of Agriculture, Food and Agribusiness (OMAFA).

Manitoba On-Farm SVA Case

Dr. Tony Nikkel provided an update that there is currently one on-farm case of SVA in an iso-wean sow barn in Manitoba. This case presented with a scour seen in nursing piglets (1-5 days of age) and an increased mortality in piglets. For example, in a farrowing room approximately 30% of litters were affected by the scour while other litters appeared normal. Within an affected litter not all piglets were affected. On piglet post-mortem, lesions looked similar to an *E.coli* toxemia. Samples were submitted to a lab for normal causative viral agents for piglet diarrhea and all tests came back negative. Samples were then tested for SVA and came back positive on PCR test.

Five days after the piglet scour was investigated and 2 days after back feeding, 3 sows in farrowing showed blisters. When blisters were seen, these were immediately reported to the CFIA. The CFIA came and took samples from animals on the farm and placed this farm under quarantine. Since this was an iso-wean farm, the CFIA understood that this farm wasn't able to hold animals more then a few days longer than usual, so they worked quickly. The CFIA in this case did a fantastic job at collaborating with the producer and herd veterinarian. All foreign animal disease testing came back negative, SVA testing was positive. At this time the quarantine order was lifted by the CFIA.

After 2 weeks there were no symptoms on this farm, and all animals appeared to be clinically normal. No animals ever went off feed. Some lameness was noted by the producer, but no lesions were ever noticed on the coronary band or feet. This herd is currently working with their veterinarian on virus elimination.

Key Take Home Messages:

- **Clinicals signs of SVA can be extremely mild and very hard to find in on-farm cases.**
- **Piglet diarrhea (scours) is an early clinical sign of SVA. SVA should be considered as a rule-out when sending in diagnostic samples for diarrhea cases. The CSHIN team discussed that potential inclusion of SVA into piglet diarrhea panels would be a good idea when possible.**
- **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.**

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

OAHN (Ontario)

Jessica Fox the manager of Swine Health Ontario (SHO) provided an update at the OAHN swine network meeting on PED and PDCoV cases seen in Q3 of 2025. This quarter there was a significant decrease in cases in Ontario with a total of 2 new cases: 1 PED in a finishing barn and 1 PDCoV in a nursery-finisher barn. Both cases tested positive in early July. **Overall, the case detections were drastically decreased compared to Q1 and Q2 2025, however Swine Health Ontario continues to remind producers and those in the swine industry to stay vigilant with biosecurity now that the cold weather is here. SHO ran a PED and PDCoV awareness week in Ontario in November, where they provided daily communications and important resource information and biosecurity reminders as we enter into the winter season.**

SHO continues to promote the use of the Swine Health Area Regional Control (SHARC) program to producers so that they can stay aware of current positive sites in their proximity allowing them to make informed decisions about what transportation routes are best. Choosing a transportation route with less known outbreaks can decrease the risk of further transmission of disease. The PED and PDCoV tracking map is available on the Swine Health Ontario website and shows current and annual cases by county. http://www.swinehealthontario.ca/Disease-Information/PED-PDCoV-Tracking-Map

CWSHIN (Western Provinces)

Dr. Jan Lumasac reported that in mid-October 2025, southeastern Manitoba had a swine herd break with PDCoV. This case presented initially with scours. Photos were sent for veterinarian input and samples were further sent to the laboratory that confirmed PDCoV infection. These pigs were in the late finishing stage. The barn that broke has been emptied and completed a thorough cleaning and disinfection. It will be receiving new pigs soon.

Also in mid-October 2025, a finisher reported similar issues with scours noted. Samples were taken and sent to the laboratory and tested positive for PED. These pigs were young and will be shipped for market soon. There was no epidemiological links discovered between these farms.

CWSHIN continues to message to veterinarians and producers the importance of biosecurity practices in high-risk high-traffic sites. These sites should all be assumed to be positive. High-risk high-traffic sites include rest stops, assembly yards, docks at processors etc. Often these high-traffic sites are noted to be impossible to thoroughly clean and disinfect. Manure spreading season is here and with this comes more risks for PED, PDCoV and other virus spreading to barns.

RAIZO (Quebec)

Dr. Géraldine Gouin reported that Quebec had no new cases of PED or PDCoV detected in Q3. Throughout the year Quebec reported a total of 6 PDCoV cases and 1 PED case. 4/6 of the PDCoV cases have regained negative status. The other cases are in different stages of virus elimination. Environmental surveillance sampling continues at processing docks and positive tests continue to be reported.

Take Home Messages: Ontario saw a drastic decrease in PED and PDCoV detections in Q3 compared to the previous two quarters. Both Ontario and Manitoba reported 1 new case of PED and 1 new case of PDCoV in Q3. Challenges with PED and PDCoV continue to be high especially as the seasons change to colder weather. 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.

Circovirus (PCV-2)

RAIZO (Quebec)

Dr. Géraldine Gouin and Dr. Laurie Pfleiderer provided the Circovirus update. During Q3 2025, Quebec veterinarians reported twice the historical average of Circovirus cases. RAIZO reported a case rate of 16-18% of Circovirus detections throughout 2025 vs. pervious years this case rate was between 0-4%. Most of the Circovirus cases were detected in finishers in Quebec. Some had PCV2 histological lesions and some did not. The cases seem to be centered just south of Montreal. Most cases are typed to be PCV-2 subtype d. Most cases presented as pale pigs with gastric ulcers and low CT values with no histopathological lesions. The decision was made to switch Circovirus vaccines in these cases, and this resulted in no more PCV-2 cases seen clinically, no more gastric ulcer cases, improvements in mortality rates and all secondary pathogens e.g. *Glassers, Strep* cases vanished. This was a PRRS negative herd.

Dr. Pfleiderer provided and overview of two clinical cases of PCV-2. Case 1 was in a newly repopulated sow farm that contains gilts that had received 3 PCV2 vaccine doses. This herd saw an increase in stillbirths and mummies. Necropsies performed on stillbirths showed classical myocardial lesions and very low CT values (below 10). Case 2 was in a gilt developer unit where all animals were vaccinated with 2 full doses of 2 different Circovirus vaccines. Classical PDNS symptoms and lesions were seen in these pigs with low CT values.

OAHN (Ontario)

Dr. Christine Pelland mentioned that most of the PCV-2 subtype d cases that she sees are PRRS positive flows. Other health challenges will amplify PCV-2 clinical signs if present in these herds.
Dr. Jordan Buchan provided an update that in Ontario for the past 5-6 quarters PCV-2 cases have been trending to increase. There is on an ongoing OAHN swine network project where all PCV-2 PCR positive diagnostic samples are further being sent in for subtyping with all costs of this test being covered by the OAHN swine network project funds. This project just launched, but to date the majority of PCV-2 subtypes (19 cases, 63% of cases tested to date) were typed to be PCV-2 subtype d.

CWSHIN (Western Provinces)

Dr. Tony Nikkel mentioned that back in 2005-2006 when Circovirus vaccines came onto the market it was very typical for recently vaccinated herds to seen drastic decreases in the levels of other pathogens e.g. *Glasser's* and *Strep*.

Swine *Brucellosis* in Denmark

- *Brucella suis* is a bacterium that causes swine brucellosis, a zoonotic disease (humans are susceptible) primarily affecting pigs.
- It leads to chronic inflammation in the reproductive organs, often resulting in abortion in pregnant sows, as well as orchitis, infertility, lameness, paralysis, and abscesses.
- Transmission occurs primarily through ingestion of infected tissues or fluids, contaminated semen during breeding, and nursing from infected animals.
- In the U.S.A. *Brucella suis* was the first biological agent weaponized in 1952 and was field-tested with *B. suis*-filled bombs.
- After 25 years without cases, Denmark confirmed on outbreak of *Brucella suis* in a smallholder pig herd in August, 2025.
- The source of infection remains unknown. All of Denmark's outdoor pig farms use double fencing to keep invasive wild boar and other wildlife out (important to note that these fences cannot keep some animals out e.g. hares).
- This incident has disrupted trade, and suspended pig movements within the European Union.

CanSpotASF Surveillance Q3 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 2025 Quarter 3 Report (Jul 1 to Sept 30)

Surveillance component (Tool)	Definition of a case	Region	Cases tested for ASF Quarterly (2025 Q3)
Passive surveillance (Reported twice per year)	CFIA Led Case Investigations	Maritimes	1
		Quebec	0
		Ontario	0
		Western Provinces*	0
Rule-out testing: herds, laboratories	Case ID assigned by laboratory based on date of submission and premises	Maritimes	1
		Quebec	18
		Ontario	24
		Western Provinces*	13
Rule-out testing: Invasive wild pigs	Carcass	Maritimes	0
		Quebec	0
		Ontario	0
		Western Provinces*	3
Rule-out testing: federal abattoirs	Carcass	Maritimes (no federal abattoirs for swine)	
		Quebec	96
		Ontario	46
		Western Provinces*	90
Rule-out testing: provincial abattoirs		Maritimes	0
		Quebec	3
		Ontario	2
		Western Provinces*	7

*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.

New World Screwworm (NWS) in North and Central America- Information for swine producers

Dr. Andrea Osborn from the Community for Emerging and Zoonotic Diseases (CEZD) provided an update to the CSHIN network on the international status of New World Screwworm (NWS).

- NWS is a parasitic fly larva, *Cochliomyia hominivorax,* that gets into wounds and destroys surrounding tissues. It is widespread in South America. This disease can affect most mammals including livestock, wildlife and humans.
- This disease was eradicated from the U.S. and Central America between 1957-2001 using sterile male flies. Re-emergence in the Florida Keys was noted in 2016, but that has since been controlled. Normally, Panama is the control point where millions of sterile flies are released to control northward movement.
- Re-emergence with steady northward movement has been ongoing since the summer of 2023. Cases can be referenced via this link.
- Human cases have been reported in Costa Rica, Panama, Nicaragua, Honduras, Belize and Mexico. Travel associated cases have occurred in Canada and the U.S.
- The movement of NWS northward may be due to a more aggressive fly, increased rainfall, sterile fly program mismanagement, illegal cattle trafficking, rearing cattle in "barrier" areas in Panama.
- Any impacts this outbreak is having on wildlife are unclear; it is difficult to know the extent of the cases.
- Mexico notified the U.S. of a detection of New World Screwworm in southern Mexico in a cow in November 2024. Immediate trade restrictions were issued by the USDA.
- New World Screwworm continues to creep further and further north and now is very close to the U.S. border. On May 11, 2025, the USDA closed the border to imports of animals from Mexico.
- The U.S. has put $750 M into efforts to prevent NWS infections so far. They have made a huge investment into a new sterile fly facility located in Texas to combat this disease.
- **Massive economic impacts will occur in the U.S. if they are unable to prevent the introduction of the New World Screwworm. If this parasite was to arrive in Canada, if would not be able to survive our winters. Research now indicates that NWS requires an overwinter temperature above 9.4 degrees C from December-February and an average soil temperature above 8 degrees C for 60 consecutive days, which is necessary for pupal survival.**

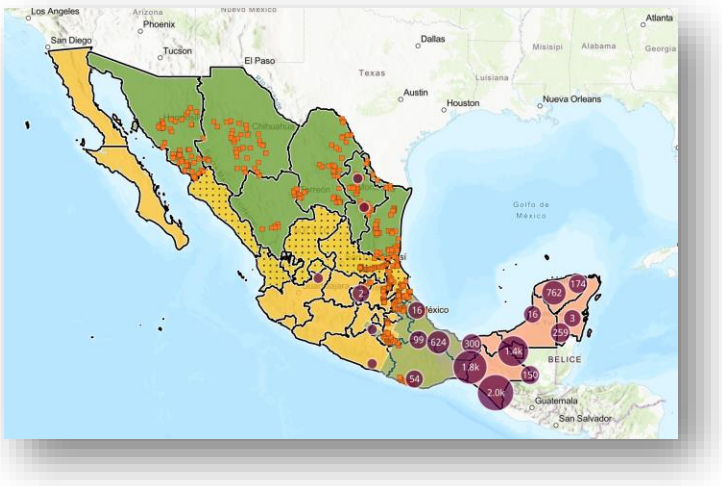

Photo (on page 7) information and legend: This map Indicates the current geographical distribution of NWS detections in Mexico and showcases how close detections are to the U.S. border (within 110 km in Nuevo Leon in September 2025). Areas on this map that are considered positive for NWS are in pink with the number of cases detected in these areas identified in burgundy circles. The sterile fly release zone is the most southern green band on this map; the yellow areas are buffer zones with the yellow stippled area requiring inspections of animals moving north. Green area is considered free, with the orange squares indicating the location of fly traps.

New CSHIN Website

We are proud to announce the launch of the new CSHIN website that can be accessed via this link. Moving forward all CSHIN reports will be posted via this website as well as other CSHIN related information including 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!

This information is a professional communication for swine producers. This information is not validated and may not reflect the entire clinical situation. Your judgment is required in the interpretation and use of it. It is the intent of CSHIN to improve the health of the national swine herd. CSHIN is funded by the Canadian Association of Swine Veterinarians (CASV), The Canadian Pork Council (CPC) and The Canadian Animal Health Surveillance System (CAHSS).

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