Swine Health Surveillance
2nd 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.

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AUGUST 6

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Canada West Swine Health Intelligence Network

Take home messages

1. CWSHIN has picked up some unusual cases
    a. Porcine Respiratory Coronavirus (PRCV) is not new but positive tests have not been seen in CWSHIN before.
    b. Two new breaks with PRRS were reported in CWSHIN
    c. A neurologic case that has escaped diagnosis was discussed
2. One of two cases of PED in MB is now presumptive negative the other is following the PED elimination plan.

Practical tip

- If you see nursery pigs with uncoordinated front legs (walking on knees), please call your herd vet.
- Great care and vigilance are still important with any contact to high-risk sites such as assembly yards and slaughter facilities These contacts may spread disease to your pigs with vehicles or people returning from the sites.
- If you see increased abortions or sudden deaths -- please have your herd vet consider rule-out testing for ASF.

Contents

Unusual laboratory results

Antibodies for Coronavirus TGE/PRCV

In Q2, there were 27 tests antibody positive for Porcine Respiratory Coronavirus (PRC) at one laboratory. It means that antibodies not the virus itself was detected.

Cross reaction between to closely related virus when testing for antibodies may occur which makes antibody detection different from detection of the virus itself.

PRCV/TGEV differentiation kit **in 2025**			
Type of coronavirus	Test positive		
	No	Yes	Total
PRCV antibodies	0	27	27
TGE/PRCV antibodies	152	0	152
Total	152	27	179

Dr Niaz Rahim (VDS) explained the findings for us.

Both TGE (Transmissible gastroenteritis**)** and PRC are a type of Coronavirus.

- TGE may be found in cases of diarrhea
- PRC is linked to the upper airways and lungs.

Porcine Respiratory Coronavirus – antibody detection

Antibody detection of PRCV is not new.

The virus is known to be present in swine herds globally but the extent to which it is present is unknown.

PRCV present with no or mild clinical signs.

Transmissible gastroenteritis (TGE) is an acute, rapidly spreading, viral disease of swine of all ages, characterized by diarrhea and vomiting.	**Porcine respiratory coronavirus (PRCV) typically causes subclinical or mild respiratory infections in pigs but may lead to more severe disease with other factors. PRCV infection in Denmark was initially detected in 1984, but data are lacking about its current prevalence and diversity.**

Conventional serological tests, such as ELISA tests based on TGE antibodies, cannot distinguish between TGE and PRC (two closely related coronavirus). That's why laboratories use a commercially available PRC/TGE differentiation kit.

Detection of PRC-specific antibodies is not new; sometimes we detect PRCV-specific antibodies.

The main gaps and challenges with PRC are:

- Underreporting of PRC because many PRC infections are mild or show no clinical signs.
- Some areas/countries report high seroprevalence of PRC (antibodies found), but good information on PRC occurrence is not available.
- PRC often occurs in combination with other respiratory pathogens, such as PRRS, *Actinobacillus pleuropneumonia*, and *Mycoplasma hyopneumoniae*. Therefore, the role of PRC in pneumonia is not well understood.
- In some herds, PRC can be isolated from pigs year-round, while in others PRCV temporarily disappears during the summer months; therefore, the survival of PRCV in the environment affecting its spread is unclear.

Two herd vets on the call reported that they have seen antibody positive PRC results with no or very mild clinical signs. One herd vet reported to have seen sneezing in newborn pigs.

PCR run for Porcine teschovirus

For the first time one of the laboratories had run a PCR for Teschovirus. The test was negative and related to an unusual case with neurological signs.

This was an old case dating back to August 2024 – that has escaped a final diagnosis.

The herd vet has submitted 3-5 pigs about 4-5 times since August 2024.

In the 1st round of work-up:

- The pigs were affected 3-4 weeks after weaning with uncoordinated front legs. There was 10-15% sudden deaths per batch
- PCV3 was suspected but vaccination had no effect
- Antibiotics had no effect

Further (more recent) work-up when clinical signs with uncoordinated front legs persisted:

- Negative for several virus that may cause neurologic disease including Teschovirus but Positive for *M hyorhinis*.
- Feed medication seems to help, and clinical signs now appear later (5-6 weeks after weaning)

There is no definitive diagnosis, but some involvement of bacterial infection (*M hyorhinis*) is suspected

Unusual neurologic case

A neurologic case from August 2024 has escaped a definitive diagnosis.

Clinical signs: The pigs were affected 3-4 weeks after weaning with uncoordinated front legs. Up to 10-15% sudden deaths per batch.

Practical tip

If you see similar clinical presentation, please call your herd vet.

Monitored diseases

Coronavirus monitoring

Clarification on Coronavirus monitoring: Due to changes in number of submissions to VDS the Coronavirus monitoring is representative of the surveillance at high-traffic high-risk sites in MB where the proportion of lab-cases positive for PED is close to 15%.

PED in MB

PED in MB (3 and 7 April 2025)
Two swine premises in the RM of Grasslands have been confirmed to have PED - a nursery operation (IP001) and a linked downstream finisher (IP002).

Buffer areas have been defined with no other swine farms within 5km.

PED was contained on the two farms, and they have applied the elimination plan.

The first (IP001) was transitional as of 29 May 2025 and presumptive negative as of 25 June 2025.

Coronavirus

Take home message

High-traffic high-risk sites are still contaminated with coronavirus.

Practical tip

Great care and vigilance are still important with any contact to high-risk sites such as assembly yards and slaughter facilities. Contacts may be with vehicles or people returning from the sites.

Take home message

Two linked and contained cases of PED in MB was detected in April 2025.

The nursery is now presumptive negative the downstream finisher applies the MB PED elimination plan.

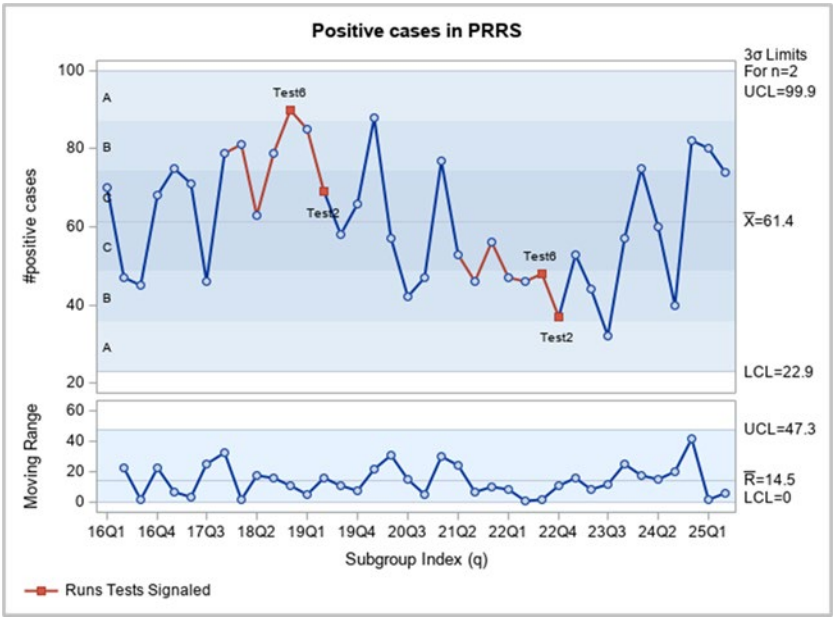
PRRS: high number of positive lab-cases

Two herd vets have seen a new break with PRRS

- Case #1: In one herd the nursery destabilized after PRRS had been controlled for years.
- Case #2: Generally, in the practice see less-and-less PRRS, but one farm recently had a break leading to multiple lab-submissions.

There have been 70-80 lab-cases (lab-case = one premises on same date) in the last quarters. These cases may represent very few premises due to repeated submissions from the same premises as part of the control efforts such as in case #2 above.

The number of PRRS-positive lab-cases is generally so low that if one or two herds break with PRRS resulting in several submissions -- it will show up as an “increased number of positives”.



PRRS

Take home message

The number of lab-cases positive for PRRS is a very sensitive method to monitor the occurrence of PRRS in western Canada.

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 Oct. 2023 and Jan. 2024.
- In January 2025, the first detection of D1.1 genotype in U.S. dairy cattle.

In the USA in August 2025,

- Poultry cases are slowing down
- California saw 3 new cases the last 30 days.
- Michigan is reported to be negative
- The large milk producing states tend to be positive
- Transmission routes are being investigated both respiratory and mammary. However, there is no consensus yet.

In Canada

- (30 June) Milk truck surveillance is negative so far with 4,500 samples
- HPAI has been detected in poultry in several provinces
- No detection of HPAI in swine reported

HPAI in dairy

Take home messages:

The risk for swine is still uncertain

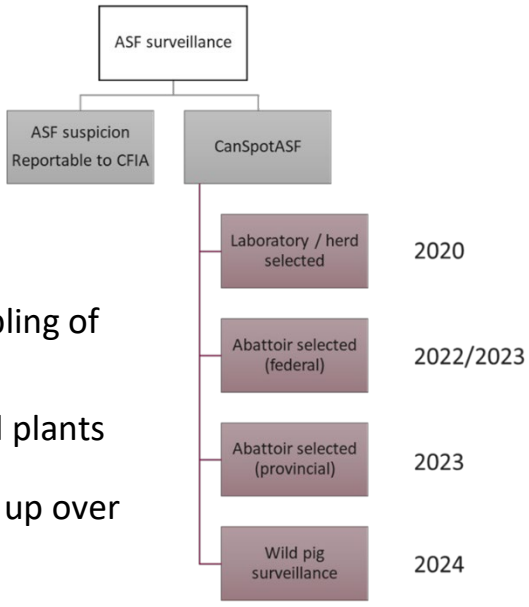
Surveillance in Canada includes:

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

As of June 2025, all surveillance tests in Canada have been negative.

CanSpotASF

Any ASF suspicion is reportable to CFIA. In addition, your herd may be selected for rule-out testing



- Selected by pathologists at laboratories or by a herd veterinarian
- Rule-out testing at abattoirs with sampling of condemned carcasses at
  - Federally and provincially inspected plants

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

When comparing Q2 in 2025 and 2024, the rule-out testing at laboratories and provincial abattoirs was substantially lower in 2025 (Apr-25).

If you see increased abortions or sudden deaths -please have your herd vet consider rule-out testing for ASF.

Rule out testing in western provinces - NO suspect cases					
Quarter	Laboratories			Provincial Abattoir	Wild pigs
	Pathology Lab-cases	Lab-cases tested for ASF	Tested in % of pathology cases	Carcass-cases tested	Animal-cases tested
Jan-24	158	46	29%	11	
Apr-24	113	45	40%	16	29
Jul-24	71	20	28%	16	5
Oct-24	88	21	24%	4	33
Jan-25	101	31	31%	8	53
Apr-25	116	14	12%	4	40

Acknowledgement

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