

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

Our vision is to have a surveillance system imbedded in an intelligence network that monitors diseases both present and absent.

The surveillance system will be monitoring and assessing trends over time to:

- Detect new emerging swine health issues;
- Detect unusual clinical presentation of known diseases;
- Provide information about endemic diseases; and,
- For diseases absent in western Canada (such as FMD and ASF) the objective is to help provide evidence of the absence of disease to support trade.

In the intelligence network, we seek to exchange experience and knowledge on disease occurrence, treatment, control, and prevention.

<https://www.cwshin.ca/>

CWSHIN

Swine Health Surveillance

3rd quarter 2022

Producer Report

This report is intended for swine producers in the region.

Practical tips

Call your herd practitioner

- If you see sudden deaths or animals with bleeding
- If you see blisters

Messages

One new case of *Streptococcus equi zooepidemicus* detected in late September in Alberta. On post-mortem this case mimicked African swine fever (ASF).

Therefore, let us be reminded that:

- ASF suspect cases must be reported to CFIA immediately – producers call you herd practitioner or CFIA
- For ASF conditions with bleeding, sudden death, and discoloring an ASF rule-out test should be requested in laboratory submissions.
- Abattoir selection of eligible cases (selected total condemnation reasons) for ASF testing has started on federally inspected abattoirs and will start soon on provincially inspected plants.

CWSHIN will observe the Skin syndrome and in particular Seneca Valley Virus (SVV) more closely because SVV caused a disruption in flow of cull sows to slaughter in the USA over the summer.

CWSHIN REPORT

Strep zoo

A 5000-sow operation in Alberta was diagnosed with *Streptococcus equi zooepidemicus*.

This case had high sow mortality and the clinical presentation (on post-mortem) mimicked African Swine Fever (ASF).

However, as antibiotic treatment had been successful the case was considered

- not an ASF suspect case but
- eligible for ASF rule-out testing.

Practical tips

Call your herd practitioner if you see sudden deaths, bleeding, or discoloring.

Case story: *Streptococcus equi zooepidemicus* in Alberta

Background: In Canada, Strep zoo was first reported from 5 farms from the same system in Manitoba in 2019. The same year there were reports of sudden deaths attributed to Strep zoo at slaughter in the USA. The farms in MB have been depopulated to control the disease.

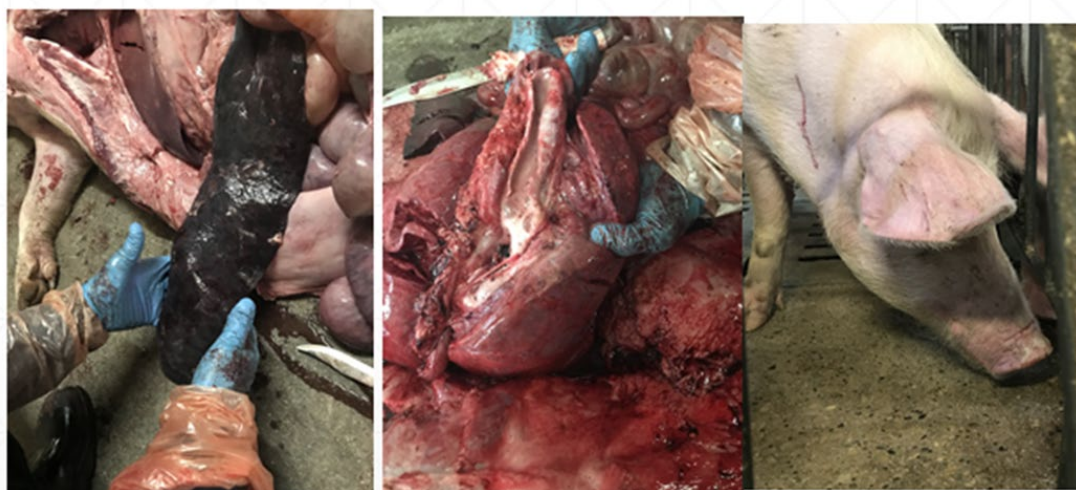
In late September 2022, a 5000-sow operation in Alberta was diagnosed with *Streptococcus equi zooepidemicus*¹. The timeline for this new case was:

- Friday onset of outbreak
 - Sow mortality (69 deaths in 7 days), abortions, many sows off feed
- Antibiotic treatment of affected sows that responded well
- On day 3, post-mortem (4 sows)
 - Dramatically enlarged spleen (3.5 feet x 7") – picture left
 - Froth filled airways (pulmonary edema) – picture middle
 - Clinical sign (other sows) discolored ears – picture right
- The nursery has never done better but some septicemia has been seen.

Potential sources of infection have been assessed but the source is unknown.

A risk of on farm spread was identified because 30-40 sows share water trough and there is a shared walkway.

The control strategy is to avoid depopulation with a combination of antibiotic treatments and feedback. Cull sows have been held back and are expected to be shipped (Fridays) to a plant that can handle sows. In the next week it will be important to monitor for downstream ripple effects.



¹ Picture courtesy of Dr Frank Marshall

CWSHIN REPORT

PED in Manitoba

A total of 128 premises have been declared positive for PED since October 2021.

50% of the 128 premises had achieved transitional, presumptive negative or full negative status (on 25 October).

Porcine Epidemic Diarrhea in Manitoba

Sit Rep 95 / 25 October 2022.

A total of 128 premises have been declared positive for PED

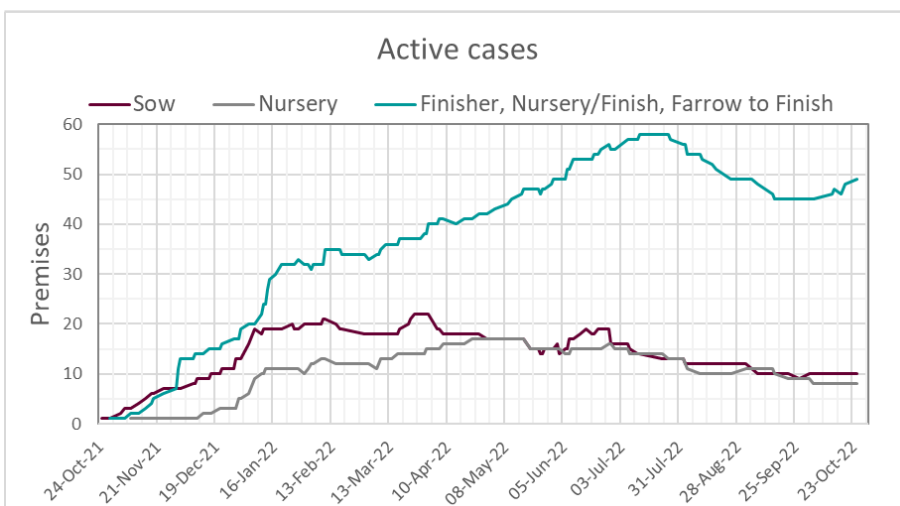
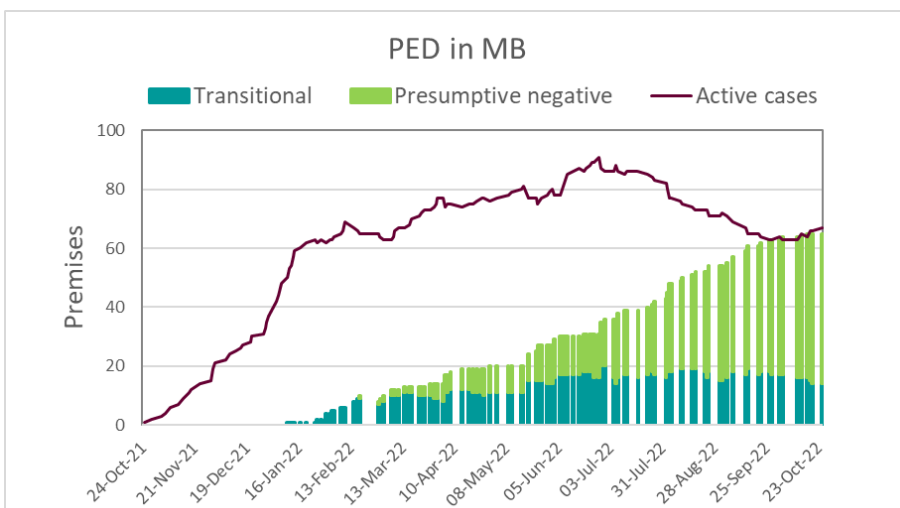
- 121 swine premises in the High-risk area
- 7 outside the High-risk area

The status has been revoked (declared infected after transitional or presumptive negative status had been achieved) on 7 premises.

50% of the 128 premises declared positive since October 2021 had achieved transitional, presumptive negative or full negative status (on 25 October).

Of the cases still active about 50 were premises with finishers; were 10 nurseries and the rest (10) were sow premises.

The manure spreading from affected premises is a risk for further spread of PED, but season is coming to an end 10 November.



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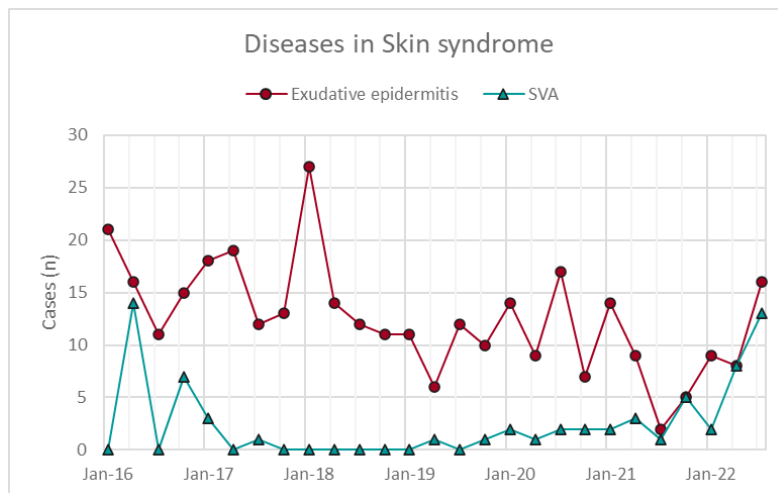
Skin syndrome and SVV

SVV caused a disruption in flow of cull sows to slaughter in the USA over the summer. Therefore, we observe the Skin syndrome and SVV more closely.

In Q3, there was an increase in lab positives for greasy pig and the surveillance for SVV at assembly yards has been ramped up.

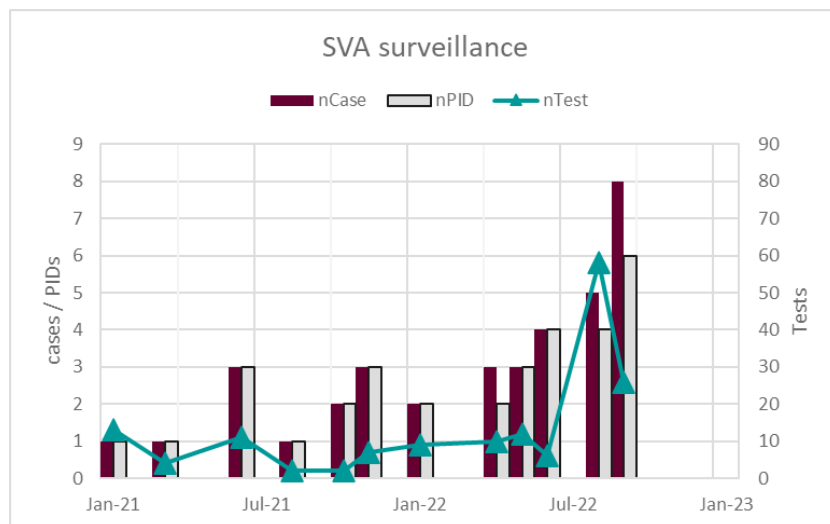
Follow-up on Skin syndrome and Seneca Valley virus (SVV)

Seneca Valley Virus (SVV) detected at slaughter of cull sows in the USA and traced back to assembly yards in Manitoba caused disruption to the flow of cull sows over the summer (Q2 mostly). As a result, the assembly yards have had to step up their control measures and surveillance. Therefore, we observe the Skin syndrome and in particular SVV more closely.



Greasy pig (exudative epidermitis) had an increased number of Lab positive cases (p) in Q3 (note cases (n)=positives (p)) which was recognized by the practitioners. It was mentioned that some farms are short staffed with poor fostering practices as a result. Also, no teeth clipping is the predominant practice now which in combination with fostering may lead to more skin lesions and be a factor in infections such as greasy pigs.

SVV testing (nCase) increased and the proportion positive increased from 0.13 in Q2 to 0.31 in Q3. Surveillance in August included: 4 PIDs; 5 cases; 58 testes. Surveillance in September included: 6 PIDs; 8 cases; 26 testes.



Case stories

Two case stories suggest new or rare virus may be involved in wasting disease and neonatal diarrhea for example PCV3 or Sapovirus.

CanSpotASF

ASF rule-out testing doing well with 22% of pathology cases and 109% of the eligible pathology cases tested for ASF.

Abattoir selection of cases for ASF testing has started at federally inspected abattoirs.

Practical tips

Let us be reminded that:

- ASF suspect cases must be reported to CFIA immediately
- For cases with of sudden deaths, bleeding or discoloring an ASF rule-out test should be requested – call your herd practitioner.

Case stories: Wasting disease and neonatal diarrhea

Case #1: This investigation was initiated by a producer complaint regarding suspected post-weaning multisystemic wasting disease (PMWS) in its nursery pigs that failed to thrive or reach market weight. There was compelling evidence that Porcine circovirus 3 (PCV3) may have been involved.

Case #2: In a 5000-sow operation, where day-olds were scouring Sapovirus may have played a role.

CanSpotASF

In Q3, ASF rule-out testing was doing well with 22% of pathology cases and 109% of the eligible pathology cases tested for ASF (data not shown). From April to September 2022 the numbers were 21% and 90% respectively (table last column).

However, with reference to the *Strep zoo* case mentioned earlier, let us be reminded that:

- ASF suspect cases must be reported to CFIA immediately
- For cases such as bleeding, sudden death, and discoloring of skin an ASF rule-out test should be requested in lab submissions.
- Abattoir selection of eligible cases (selected total condemnations) has started on federally inspected abattoirs and will start soon on provincially inspected plants.

CanSpotASF - West	2020/2021	2021/2022	2022/2023
Pathology (caseID)	560	683	393
Eligible disease cases	160	174	92
Cases ASF tested (caseID)	96	171	83
Cases ASF tested (caseID) in % of eligible	60%	98%	90%
Cases ASF tested (caseID) in % of pathology cases	17%	25%	21%