

CWSHIN

swine health surveillance

1st quarter 2020

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.

For diseases present in western Canada (domestic diseases) to:

- Detect emerging swine health issues early
- Integrate information for response to regional health issues
- Provide information about endemic diseases (benchmark)

For diseases absent in western Canada to:

- Detect emerging swine health issues early
- Provide evidence of the absence of disease to support trade

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

Producer Report

Topics

- The clinical impression from the practitioners in the region was that the Digestive syndrome was the most common syndrome
- An unusual condition – purple sows – was discussed but it is unclear:
 - If it is rare or common?
 - If it has an impact on production
- Influenza
- Coronavirus Porcine Epidemic Diarrhea (PED)
- COVID-19 and animals

Practical tips

- People with flu-like symptoms (coughing, fever et.) should not enter any barns with swine – the concern is both influenza and COVID-19
- People should avoid contact with animals (cats) with COVID-19
- Abattoir, assembly yards, layover facilities etc. (high traffic high risk facilities) and connected transport continue to be a risk for PED and other diseases.
- Producers are reminded that manure from previously PED-infected barns is a possible route of introduction and to take extra precautions when spreading possibly infected manure

Follow-up on *Strep zoo* from last quarter

The last premises (5th case) that broke with *Strep zoo* has been depopulated. The other 4 premises were stable, and all 5 cases were from the same production system. There have been no *Strep zoo* issues at provincial abattoirs for a while. Farm workers have been tested (swabs) for *Strep zoo* - all negative.

New Clinical Impression Survey

New CIS

With the new CIS we have the clinical impression from about 61% of the region's commercial swine premises.

The digestive syndrome that includes diarrhea was more common than other syndromes and diseases.

Unusual condition – purple sows?

Sows affected with purple discoloring located on belly legs may be a rare condition – we don't know?

Please help us and let us know if you have seen the purple sow condition by [click here](#)



Clinical Impression Survey (CIS)

The new CIS helped achieve our objectives better.

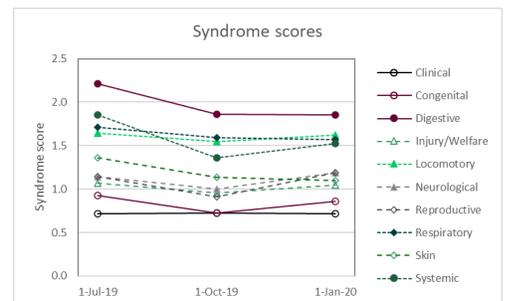
Response rates

Both the number of responding practices and vets have increased. As a result, the number of premises served by the respondents has also increased so the responding practices now serve 61% of commercial farms in the region.

Benchmarks

We can order syndromes by clinical impression given by practitioners. The Digestive syndrome was common; next was a group of 3 syndromes (Locomotory, Respiratory and Systemic) that were seen occasionally.

We have 4 rare syndromes (Skin, Neurological, Injury/welfare, Reproductive) and two very rare syndromes (Clinical and congenital (born with)).



Clinical Impression Survey – Purple sows



One loose housing sow site (3000) had approximately 30 weaned sows (P1/P2) affected with purple discoloring located on belly legs. The sows had normal appetite and recovered after about a week. There were no signs in piglets.

Following lab-results no definitive diagnosis was confirmed.

Rare cases of purple sows have been reported in other sow farms, but we do not know how frequent the condition is or if it has any impact on production especially reproduction?

Laboratory results

There were no signals in laboratory data.

Through the COVID-19 pandemic, the Influenza lab (Detmer) remains open with submissions via PDS.

Influenza strains of human origin isolated from swine reemphasizes that the disease can transmit from humans to swine.

Practical tips

People with flu-like symptoms (coughing, fever et.) should not enter any barns with swine.

PED

The clean-up in Manitoba is progressing well.

New cases of PED were confirmed in Ontario and Quebec in 2020.

Reminder and practical tips

High traffic high risk facilities (abattoir, assembly yards, layover facilities etc.) and connected transport continue to be a risk for PED and other diseases.

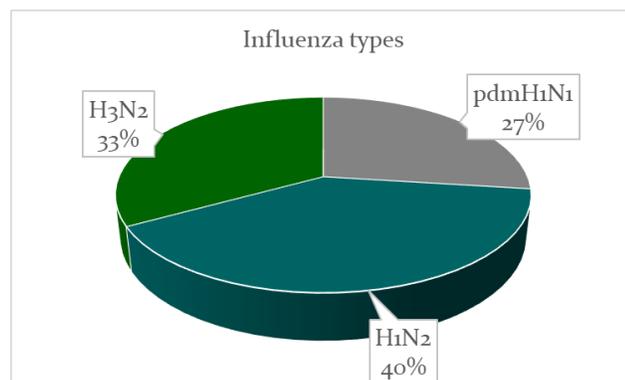
Producers are reminded that infected manure is a possible route of disease introduction and to take extra precautions when spreading possibly infected manure.

Influenza

Influenza strains of human origin isolated from swine reemphasizes that the disease can transmit from humans to swine. Therefore, people with flu-like symptoms (coughing, fever et.) should not enter any barns with swine.

The prelude to the 2019-20 season was that pandemic (human-to-pig) transmission occurred across Canada starting the summer of 2018 and peaking October 2018 to February 2019. As the pandemic influenza (pdmH1N1) waned, the gap was initially filled with a resurgence of H1N2 and H3N2.

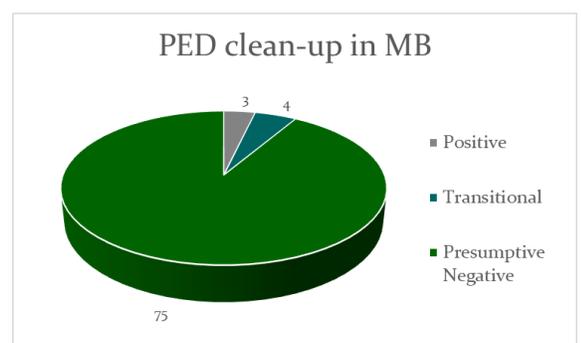
During the first quarter of 2020, things have stabilized and gone back to close to a third of each of the 3 dominant strains in western Canada: 27% pdmH1N1, 40% Alpha H1N2, and 33% H3N2.



PED

The clean-up in MB is well underway. Three finisher premises in buffers 2 and 11 are still considered positive. One nursery (buffer 4) and 3 finisher premises (buffers 4 and 6) have reached transitional status. The remaining 75

premises have reached presumptive negative status. One assembly point in MB affected by the interprovincial spread in January (follow-up from last quarter) has been depopulated and is waiting for warmer weather to finish the clean-up.



CWSHIN REPORT

COVID-19

Evidence that cats can become infected with COVID-19 is building.

There is no evidence that animals can spread COVID-19 to people.

However, absence of evidence is not the same as absence of transmission!

Restrictions due to COVID-19 may change wildlife behavior so wild animals enter areas normally heavily populated with humans.

Practical tips:

- people with COVID-19 should avoid contact with pets and other animals
- producers should not allow unnecessary visitors to enter their barns
- people with signs of disease should stay out of barns
- people should avoid contact with known infected pets (cats)
- producers should monitor unusual wildlife presence around swine barns and check biosecurity

Swine Health Ontario has shared with us that since Dec 2019 Ontario has had 19 positive new PED sites. All sites are working on elimination of virus currently 1/19 of these has regained negative status.

In Quebec, one nursery and 2 finishers, all epidemiologically linked together were confirmed positive for PED in March.

Therefore, we conclude that although the western region has come far in the PED clean-up, the threat is still there when spreading infected manure, from high risk and high traffic facilities, transport and contact to infected premises in ON and QC.

COVID-19 and animals

Some animal species can be infected with SARS-CoV2 - the virus that cause COVID-19 in humans. This quarter, we concluded that:

- the evidence that cats can be infected with SARS-CoV2 is building.
- there is no evidence that cats can spread COVID-19 to people but ***absence of evidence is not the same as absence of transmission.***

From around the world, wildlife has been reported to move into cities and urban areas because the restrictions due to COVID-19 have left these areas with minimal human traffic.

Unusual contact between swine herds and wildlife could present a risk of transmission of diseases other than COVID-19.

Wild boars in Haifa Israel entering apartment buildings

