



IN THIS ISSUE

- H5N1 Highly Pathogenic Avian Influenza (HPAI) updates in U.S. dairy herds and in Canadian and U.S. poultry flocks
- Lessons learned for producers on “How far scavengers will move pig carcasses”
- PED/ PDCoV outbreak in Ontario
- Lessons learned for producers on how to best work up abortion cases at the AHL

H5N1 Highly Pathogenic Avian Influenza (HPAI) Updates

Dr. Tanya Rossi provided the network with an update on the evolving picture of HPAI both in Canada and the U.S.A. (Information source: Dr. Murray Gillies, Animal Health Canada)

U.S.A Update

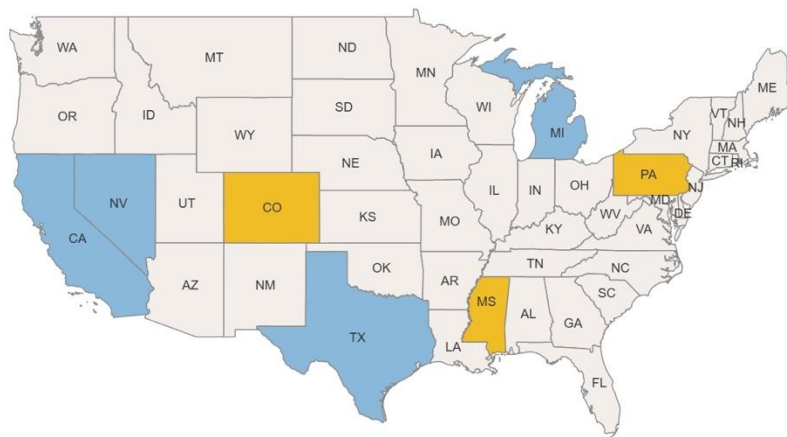
Changes to the U.S.A administration have made it more difficult to gather information and scientific literature around the outbreak of HPAI in the U.S.A. An information freeze was put in place and has even affected Canadians with membership to the American Association of Bovine Practitioners (AABP) as this information freeze applies to collaboration with government agencies like the CDC and the USDA.

From the info available as of Jan 31, 2025, cases of HPAI in California are between 2-5 detections on avg per day. The [USDA](#) reports 34 cases in the last 30 days and all of them were reported from California.

On the [US bulk milk sample surveillance map](#) (see map below), all states except for California, Nevada, Texas and Michigan are listed as “provisionally unaffected” (grey colour on map), and Mississippi remain unaffected with no clear explanation on how/why. Several states are still not participating in this surveillance initiative that was rolled out as mandatory in Dec 2024. Some of the states that aren’t participating are listed as provisionally unaffected. It is uncertain how this is the case when they aren’t conducting/reporting on national surveillance. The situation continues to be dynamic in the U.S. so for the most up to date reported information please visit this [link](#).

HPAI U.S.A National Bulk Milk Surveillance Map- Feb 20, 2025

Map Legend
 Provisional Unaffected
 Affected
 Unaffected





H5N1 Highly Pathogenic Avian Influenza (HPAI) Updates Continued

HPAI in poultry in the U.S.A is at its worst levels yet. As of February 20, 2025, the USDA is reporting over 23M birds affected with massive, multi-million bird flocks involved. This includes their second largest egg producer. The price of eggs in the U.S.A has reached over \$8 US a dozen now in many places due to a shortage of eggs.

California reported its first detection of [H5N9 in a duck farm](#) that was also positive for H5N1.

The CDC is not reporting any new human cases, but the accuracy of this information is unknown. The U.S.A is reporting an [increasing level of Flu in hospitals](#) visits and test positives.

Canada:

Canada remains free of HPAI in cattle. The U.S. did confirm a detection of HPAI in swine, so this proves that pigs are susceptible to this virus. Swine producers are encouraged to not feed milk or milk by-products to their pigs unless they have been previously pasteurized, as pasteurization kills Influenza virus.

Canada is experiencing a much less severe [outbreak for HPAI in poultry](#). As of February 21, 2025, there are 30 infected premises for HPAI in poultry with 19 in BC, 1 AB, 8 ON, 1 QC, 1 NFLD.

Porcine Epidemic Diarrhea (PEDV)/ Porcine Deltacoronavirus (PDCoV)

Jessica Fox from SHO provided an update on coronavirus cases in Ontario for Q4 of 2024. This quarter there were 4 new cases. Two cases in November (1 PED and 1 PDCoV), and two cases in December (1 PED, 1 PDCoV). November's cases were both in farrow-to-wean farms, whereas December's cases were in finishing barns.

The start of Q1 2025, has seen a significant increase in both PED and PDCoV cases. Jessica would like to remind **producers to stay vigilant with their biosecurity, as many of these cases are speculated to be linked to biosecurity breaches.** Everyone in the swine industry in Ontario needs to do their part to help prevent disease spread.

SHO continues to support elimination as the best strategy for disease control. Early testing for coronaviruses in all gastrointestinal cases is essential, as PDCoV in particular can present with extremely mild clinical signs. Timely diagnosis of these cases can help limit widespread contamination and potential spread to other sites.

If you are a swine producer that is not currently enrolled in SHARC please contact Jessica Fox Jessica.fox@swinehealthontario.ca. SHARC provides producers with disease information that they need to make decisions that limit their risk. 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>



Topics of Interest- How Far Will Scavengers Move Pig Carcasses?

Dr. Jordan Buchan provided this published study to the OAHN swine network for discussion. This study looked at how far scavengers move pig carcasses from a deadstock bin or pile. One of the “superpowers” of African Swine Fever (ASF) is its ability to survive for prolonged periods after the death of the host. When an infected wild pig dies, the virus remains infectious in the carcass and soil for an extended period of time (months). Safe removal and disposal of carcasses from the environment is a very important disease control measure and is critical to ASF eradication from wild boar populations.

Vertebrate scavengers provide a benefit to the ecosystem by accelerating carrion decomposition and returning nutrients to the ecosystem. Some scavengers do not consume carcasses on the site where they find it, but rather scatter the carcass remains in the immediate surroundings. The movement of entire or partial carcasses can present a risk of increased exposure to additional wild pigs.

These German and Norwegian researchers wanted to study the scattering of wild boar carcasses by vertebrate scavengers. They placed 20 carcasses (up to 25kg) and 21 separate limbs equipped with very high frequency (VHF) transmitters and monitored scavenger activity using camera traps in a mountainous region in southeast Germany.

The researchers found the following:

- All but one of the carcasses or separate limbs experienced some scatter
- There were 72 scatter distances that could be recorded from 89 scattering events. The mean scatter distance was 232 metres, and the maximum recorded distance was 1250 metres
- Scavengers moved scattered pieces into denser vegetation compared to the half-open vegetation where the carcasses were initially placed by the researchers
- Red foxes (*Vulpes vulpes*) were the most common scavenger species and contributed to 72 scattering events and 58 measured scatter distances
- The first scattering event by a crow occurred within 1 hour and the first scattering event for a fox was within 4 hours, although the average was closer to 5 days

Take Home Messages:

- The researchers commented that these results indicate that scatter distances are greater than those suggested in previous studies
- Early detection and removal of infected carcasses and carcass parts, with regular deadstock bin pick-up, can help to reduce the potential for exposure of infected carcasses or soil to susceptible wild pigs
- Consider as well that scavengers may bring infectious domestic diseases closer to your pig site if the scavengers have access to infected carcasses that are not disposed of properly on other sites.





Topics of Interest- Abortions

Dr. Al Scorgie provided a summary on a recent article published by the Animal Health Laboratory (AHL) on how to best work up a diagnosis for the cause of abortions on swine farms with samples submitted to the AHL.

Drs. Emily Brouwer and Tim Pasma wrote an article on abortion in swine in a recent AHL, (Animal Health Laboratory) Newsletter. This is a condensed version of that article. A high proportion of abortion cases submitted to AHL will have no specific diagnosis. From 2019 to 2023 the number of cases of abortion with no diagnosis ranged from a low of 25.9% to a high of 66.7%. Part of the reason no diagnosis is made is because there are non-infectious causes of abortion, and not all causes of abortion will cause gross or histological lesions.

Some of the non-infectious causes of abortion include seasonal effects, ambient temperatures such as heat stress, stress factors and toxic factors. Seasonal infertility occurs in late summer to early fall and is thought to be associated with photoperiod and high temperatures. Stress could be from comingling or movement. There could be maternal illness in the sows that results in abortion with no lesions in the fetus for example Influenza. Mycotoxins have been implicated in pregnancy failure in sows.

Take Home Messages: To improve the chances of finding a diagnostic cause of abortion, AHL recommends submitting up to three litters of aborted fetuses, include placentas and keep fetuses chilled or frozen.

(Source: Dr. Emily Brouwer and Dr. Tim Pasma, AHL Newsletter 2024:28(3):12)



Aborted swine fetuses (Image source AASV photo library)



How can you Participate in OAHN?

Share the information contained within this report with others involved in the swine industry and with other swine producers. Help us spread the word! Ask your veterinarian for more information about topics included in this report.

Contact Us!

Website: www.oahn.ca
Email: oahn@uoguelph.ca
Twitter: @OntAnHealthNet
Facebook: @OntarioAnimalHealthNetwork

Do you Enjoy Podcasts?

Check out all the current OAHN podcasts at oahn.podbean.com.

Have an idea for a podcast you'd like to hear? [Let us know!](#)

Meet your OAHN Swine Network Team:

Practice Veterinarians

Dr. Christine Pelland (network co-lead)
Dr. Allister Scorgie
Dr. Sue Burlatschenko
Dr. Andrea Patterson
Dr. Jordan Buchan

Ontario Veterinary College

Dr. Zvonimir Poljak

Animal Health Lab

Dr. Josepha DeLay
Dr. Tim Pasma

OMAFA

Dr. Christa Arsenault (network co-lead)
Dr. Hannah Golightly
Dr. Jaydee Smith
Dr. Maggie Henry

Gallant Custom Labs

Anna Pietruszkiewicz
Kevin Millsap

CSHIN Rep

Dr. Jordan Buchan

Industry

Julie Kuiack OP
Jessica Fox SHO

OAHN Coordinator

Dr. Tanya Rossi

