

This report is a professional communication for swine producers and industry representatives, compiled by the OAHN Swine Network. It includes information obtained from the OAHN quarterly survey of clinical impressions provided by practicing veterinarians in Ontario, and laboratory data from the Animal Health Laboratory and Gallant Custom Laboratory.



# Ontario Animal Health Network (OAHN) Swine Producer & Industry Report

October-December 2017

Report #10

## Highlights

- **Ontario Swine Influenza A Virus (IAV) Update Highlights:**
- During 2017 Ontario saw an atypical seasonal pattern for IAV with an increase in cases seen over the spring and summer months
- More cases of IAV subtype H1N2 were detected at the end of 2016 and into 2017
- IAV can transmit from animals to people and vice versa. Tips are discussed on how to prevent the spread of this virus
- **Porcine Epidemic Diarrhea Virus (PED) is still a threat in Ontario**
- **Strep suis- What producers need to know....**
- **OAHN social media:**



## Ontario Influenza A Virus (IAV) Swine Update

Influenza is a common virus that affects multiple species, including swine, birds, horses, dogs and people. Influenza A virus (IAV) in swine causes coughing, fever, laboured breathing, signs of muscle stiffness, and abortion. The disease usually appears rapidly and pigs recover quickly, although severe cases can result in death. Some IAV strains can circulate and cause little or no signs of disease. Other respiratory pathogens (especially porcine respiratory and reproductive syndrome virus (PRRSV) and *Mycoplasma hyopneumoniae*) in combination with IAV can cause a syndrome called porcine respiratory disease complex.

Influenza A Virus (IAV) in swine has various subtypes, including H1N1, H3N2 and H1N2. H1N1 was the predominant subtype until 2004 when H3N2 IAV was identified in Canadian pigs and spread to swine herds throughout all provinces including Ontario. H1N2 IAV was first identified in Ontario pigs in February of 2015.

Under the Animal Health Act, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) is mandated to protect animal health and take action on diseases that may affect human health. Therefore, influenza in all animal species is designated as an immediately notifiable disease and all veterinary laboratories in Ontario are required to notify OMAFRA when the virus is identified by a laboratory test.

The number of IAV submissions reported by veterinary laboratories showed an irregular seasonal pattern in 2017 (figure 1). In a typical seasonal pattern, submissions with IAV in swine are most common during fall and winter months when the temperature is colder, moderately common in the spring and less prevalent during warmer summer months. During 2016, the number of submissions with IAV showed a typical seasonal pattern, while the year 2017 had a low number of submissions during the winter, a higher number of submissions in the spring and a moderate number of submissions throughout the summer.

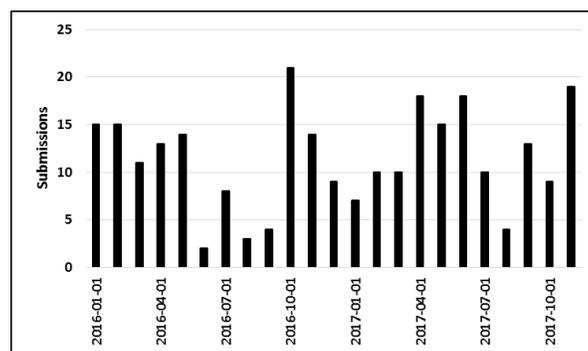


Figure 1

More submissions of H1N2 IAV in swine occurred in Ontario during late 2016 and 2017

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## Your OAHN Swine Network Team:

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(figure 2). The H1N1 and H3N2 subtypes dominated throughout most of 2016, but in late 2016 and throughout 2017 the three subtypes were equally dominant.

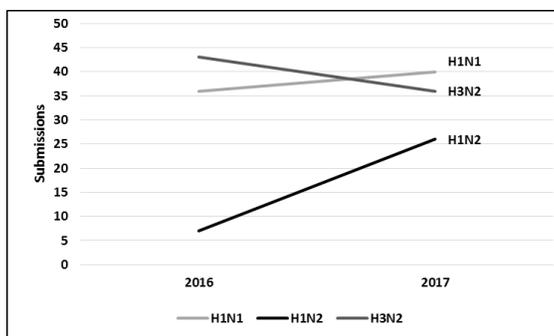


Figure 2

Veterinarians in the field have reported a range of clinical signs associated with H1N2 IAV infections. Some herds have mild clinical signs, although some herds have experienced increased mortality in the finisher phase.

Your veterinarian can provide advice on how to prevent and manage IAV infections in swine, including vaccination strategies, quarantine for incoming animals, and good biosecurity measures. If you are sick with a cold or flu, stay home and ask someone else to look after your animals. In rare situations, IAV can be transmitted to people. People can help prevent the transmission between animals and people by wearing gloves, an N-95 respiratory mask, and by washing their hands after working with or handling animals. Vaccination for people that work with swine is strongly recommended.

## Porcine Epidemic Diarrhea (PED) Update

There were 2 new sites infected over the corresponding quarter. One was a finishing barn in Huron County where both PED and Porcine Deltacoronavirus (PDCoV) were detected. The other site was a finishing barn in Bruce County that had PDCoV detected, but the pigs exhibited no clinical signs of infection. Dr. Mike DeGroot reported increasing numbers of positive dock tests at slaughter during the winter months from environmental testing. Cold and slushy conditions seem to make it easier for the virus to spread. PED is still continually circulating within Ontario's assembly yards. **The take home message is that PED is still alive and well within Ontario and is an ever-present biosecurity risk. Producers should be especially vigilant with biosecurity and with pig transport.**

## Streptococcus suis - Producer Reminder

*Strep suis* is a common pathogen present on most swine farms that results in neurological signs with the most common clinical presentation being pigs lying on their side and exhibiting paddling behaviour with their limbs. The OAHN Swine Network wants to remind producers that although *Strep suis* infections are common in pigs, this pathogen has the potential to infect people. Please remember to take precautions when dealing with suspect *Strep suis* pigs by wearing gloves and washing your hands after handling and treating these animals. If you require more detailed information, please speak to your herd veterinarian.

