

Prevalence of Swine Influenza in Ontario Sow and Finisher Hog Populations

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Background

Swine Influenza is usually thought of as a disease that causes a sudden outbreak of coughing with only a low level of mortality. Traditionally, the H1N1 strain of Swine Influenza has been isolated in the vast majority of cases in North America since the 1930's. Since the mid 1990's different forms of H3N2 strain started to frequently appear in North America. The Colorado strain of H3N2 has been isolated in Ontario and is widespread in the USA, and a more virulent Texas strain has been recently associated with severe clinical disease in American pig herds. Recent events in Eastern Asia emphasize the importance of knowing which strains are circulating in pig population because pigs are considered as a potentially important link in the transmission of different influenza subtypes to people.

Objectives

- To determine the apparent prevalence of Swine Influenza H1N1 in Ontario sow and finisher pig populations
- To determine the apparent prevalence of Swine Influenza H3N2 – Colorado strain, and H3N2 – Texas strain in the Ontario sow population.

Results

Apparent prevalence	Percentage of farms in the prevalence category			
%	H1N1 - Sows	H1N1 - Finishers	H3N2 – Sows Colorado strain	H3N2 – Sows Texas strain
0	14.3	50.0	90.8	92.1
> 0 – <20	4.8	1.4	9.2	7.9
≥20 – <40	9.5	12.5	0.0	0.0
≥40 – <60	15.9	15.3	0.0	0.0
≥60 – <80	11.1	8.3	0.0	0.0
≥80 – ≤100	44.4	12.5	0.0	0.0
N farms	63	72	76	76

All farms positive for Colorado H3N2 strain were positive with 1 positive animal. Two farms were positive for Texas H3N2 strain with 2 positive pigs.

Take Home Message

Classical Swine Influenza H1N1 is widespread in Ontario sow and finisher population, but H3N2 strains have a much lower prevalence level.

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