



STATE OF WASHINGTON

DEPARTMENT OF AGRICULTURE

*P.O. Box 42560 • Olympia, Washington 98504-2560 • (360) 902-1800*

May 5, 2009 - Update

The tentative detection of a novel swine influenza H1N1 virus in an Alberta swine herd over the weekend shook Canada's pork industry and raised concern about the potential for a new hybrid virus to emerge.

Canadian authorities reported on May 2 that preliminary testing detected the virus in an Alberta herd. The virus most likely came from a Canadian carpenter who works on the farm and had a flu-like illness when he returned from a visit to Mexico in mid-April

Dr. Brian Evans of the Canadian Food inspection Agency (CFIA) reported that the worker had contact with the swine on April 14. According to a Canadian Press report, about 220 swine in the herd of 2,200 began showing signs of sickness on April 24.

The CFIA reported, the farm has been quarantined and the carpenter has recovered as well as the swine. A United States Department of Agriculture (USDA) statement said the worker's family also had a flu-like illness but were recovering. The agency said it would take anywhere from 5 days to 2 weeks to get the final test results on the Canadian herd.

Swine are often infected with flu viruses, including strains from humans and birds. Swine are described as a mixing vessel where different viruses can trade genes (reassort) and produce new variants. The novel H1N1 virus itself has been said to contain genetic material from swine, avian, and human flu viruses.

Reassortment is a concern that people express because swine have their own influenza virus, so if they are infected with this [human] one, do you have to worry about other reassortment viruses coming out. At a news briefing yesterday, Peter Ben Embarek of the World Health Organization (WHO) said the virus isolated from the swine does not appear to differ from the virus spreading among humans. There is no sign, at all that the virus has changed. However, this could of course happen like with any other flu viruses; it is important to increase surveillance in humans and animals to detect any mutations.

The USDA said it is "actively working to develop an H1N1 vaccine for swine, just as the CDC is doing for humans".

At the WHO briefing, Ben Embarek said at least two laboratories are experimentally exposing swine to the new virus to see how it affects them. In addition, the World Organization for

Animal Health (OIE) said today it is awaiting the results of experiments to determine the susceptibility of various animals to the H1N1 virus.

After the detection of the H1N1 virus in swine in Canada, transmitted by a human, Food and Agriculture Organization of the United Nations (FAO) has again urged national authorities and farmers to carefully monitor swine and investigate any possible occurrences of influenza-like symptoms in domestic animals.

"The human-to-animal transmission that occurred in Canada does not come as a surprise as influenza viruses are capable of transmitting from humans to animals," said FAO's Chief Veterinary Officer Joseph Domenech.

"The Canadian event should therefore not be a matter of panic, but it should remind us of the human-animal link in virus transmission on which we definitely need to keep an eye."

Influenza viruses, whether in humans or among animals, are constantly evolving genetically and viruses change in their ability to cause morbidity and mortality in humans or animals. Therefore, the current H1N1 situation should be carefully monitored as many of the virus characteristics and developments are still unknown.

Washington State Department of Agriculture sent out the attached letter to Veterinarians and livestock owners last week. As an update to the letter, we now know H1N1 influenza can transmit to swine from people; however, the biosecurity information is still valuable. State and federal animal health authorities have intensified surveillance for swine respiratory disease and all cases of swine respiratory syndrome should be immediately reported to State Animal Health Officials.