

Date: August 13, 2012

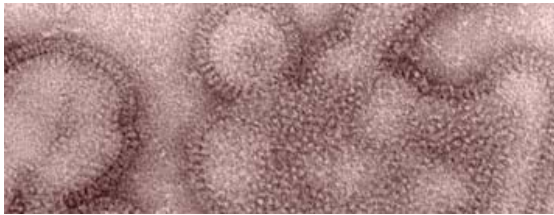
To: Emergency Management Coordinators, Health Center Clinicians, Chief Medical Officers and Health Center Operations Directors

From: CHCANYS Dept. of Emergency Management

Re: Novel H3N2v Influenza Virus Surveillance: CDC Descriptions and Recommendations

Dear Health Center Emergency Management Coordinators and Clinicians:

Recently, the Centers for Disease Control (CDC) in Atlanta, GA has begun tracking a novel influenza A virus called the H3N2v. This virus, a swine influenza variant, has been confirmed in 153 cases throughout the United States since July of 2011. These cases have been confirmed in Public Health laboratories using the CDC flu rRT-PCR Dx panel. The average age of these patients is 7 years of age with some adult confirmations. The case mix is 93% in patients less than 18 years of age and about 7% of the cases in adults. The patients have all exhibited typical influenza signs and symptoms that include but are not limited to fever, muscle aches, cough, runny nose, and sore throat.



H3N2v Micrograph. Centers for Disease Control. August, 2012

H3N2v virus has been identified to contain the human influenza A (H1N1) pdm09 M gene and all cases reported thus far have also contained the segment. The M gene is known as the “pandemic gene.” The many of the cases reported all seem to have had contact with pigs in one form or another. Some of the cases seem to have had contact with pigs at State or County fairs within their states. As of today, 2 pigs have been removed from the Ohio State Fair due to identified influenza infection. The human case distribution is as follows:

State	Number of Cases
Indiana	120
Hawaii	1
Iowa	3
Ohio	31
Illinois	1
Maine	2
Pennsylvania	3
Utah	1
West Virginia	2

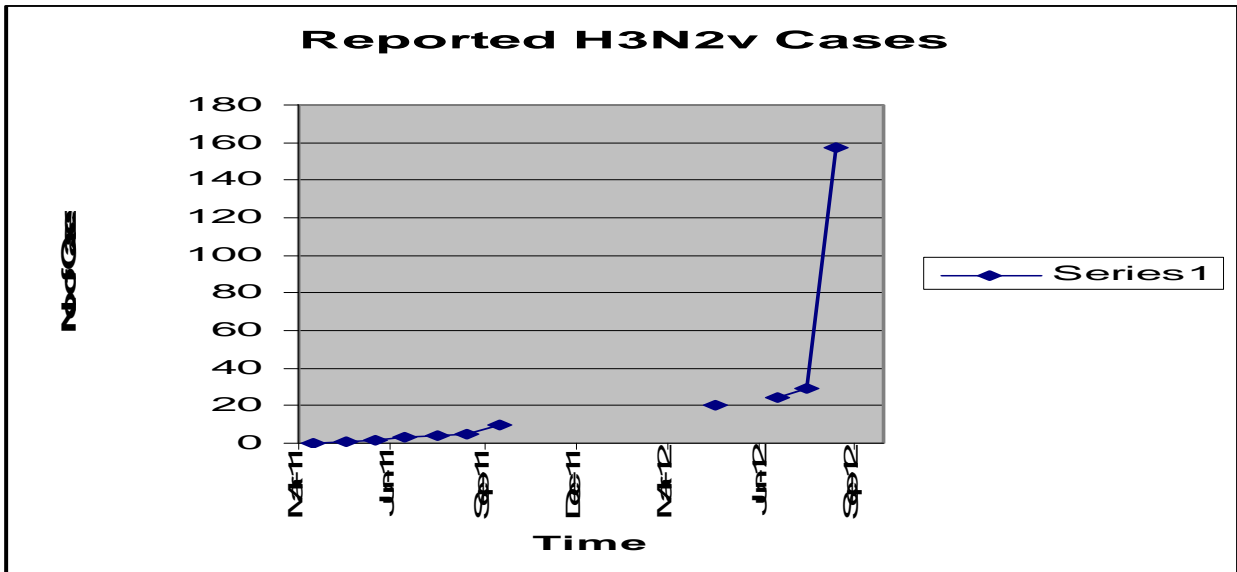


Chart A: Reported Cases of H3N2v

As noted in Chart A above, the number of confirmed cases has jumped by about 100 cases between the months of July of 2012 through August of 2012. The CDC believes this warrants further enhanced surveillance and has begun these processes of monitoring those states with confirmed cases. These processes include procedures aimed at detecting the source and geographic spread of H3N2 in the swine population and the source and spread of the H3N2v in human populations. The jump in cases has prompted the CDC to begin tracking transmission and the investigation of patient contacts in affected regions. These procedures, as well as traditional epidemiological and surveillance techniques, are being deployed to better track the spread of this novel viral recombinant.

As of today (August 13, 2012), there have been 3 hospitalizations regarding the H3N2v with 0 deaths associated with this illness. Patients that needed hospitalization had all high risk pre-existing conditions that typically result in influenza complications. Thus far, all cases identified have fully recovered with no lasting effects.

These cases seem to be zoonotic in nature and most cases report some kind of contact with pigs. As of today, there have been no reports of human to human transmission. Of the cases reported, most report contact with swine prior to illness either directly or indirectly at State and County Fairs. July through September are when most states and counties hold their fairs that include livestock and entertainment often featuring livestock. Also, the virus has *not* been shown to be transmissible by eating properly prepared pork.

The US Department of Agriculture has reported that the H3N2v virus with the M gene variant has been detected in the swine populations in a number of states. Officials are not sure how widespread the problem is as of yet. The CDC has recommended that standard safety precautions when in contact with swine and have recommended that clinicians advise patients that are attending county and state fairs to use standard safety precautions.

The CDC's recommendations for all persons:

1. Avoid contact with infected pigs.
2. Wash hands frequently using soap and running water before and after exposure to animals.
3. Do not eat or drink anything or put anything in the mouth when in contact with animals.
4. Young children, pregnant women, and persons over the age of 65 should avoid contact with live pigs and swine barns.
5. Persons with weakened immune systems should avoid contact with pigs.
6. For persons who may have swine or other livestock at home, advise them to watch them for signs of illness and report suspected animals to their veterinarian.
7. Avoid when possible direct contact with pigs.
8. Avoid direct contact with pigs if the human has flu signs and symptoms.
9. If a person must have contact with pigs or their environment, they are to wear protective clothing including but not limited to outer garments, boots, masks, gloves and other protective gear.

The CDC has conveyed the following information to clinicians regarding H3N2v for persons that may come in contact with pigs either professionally or while visiting fairs with livestock environments:

1. Children under the age of 5, pregnant women, the elderly (65 and older), and those with pre-existing chronic medical conditions should avoid contact with pigs altogether.
2. **Studies conducted at the CDC have shown that children under the age of 10 have little or nor immunity to H3N2v** whereas some adults may have some cross-protective immunity from previous experience with influenza. Most of the cases reported have been in children attending fairs.
3. The two FDA approved drugs that are expected to be effective in treating cases with H3N2v infection are oseltamivir (Tamiflu) and zanamivir (Relenza). Please follow local medication guidelines when using. Consider antiviral treatment for patients exhibiting ILI as soon as possible specifically those that indicate a history of exposure to swine and their environments.
4. The signs and symptoms of persons infected with H3N2v can not be differentiated with those signs and symptoms of other respiratory ailments and infections. Laboratory confirmatory tests are recommended.
5. **Rapid influenza detection tests (RIDTs) are ineffective in testing for H3N2v at this time. These tests may give false positives and negatives. Various RIDTs from various manufacturers have been tested and the results are mixed. Of the samples tested, most if not all the tests are reporting various results for a fixed number of positive controls. For more information about the RIDT study, please visit <http://www.cdc.gov/flu/swineflu/h3n2v-testing.htm>.**
6. **Patients suspected of having H3N2v should have specimens sent to the NYS Department of Health or the NYC Department of Health and Mental Hygiene for definitive testing. Please follow the local protocol for handling specimens. Negative rapid tests do not exclude**

H3N2v. Negative tests must be taken into the broader context of a circulating novel influenza virus, level of clinical suspicion, severity of illness, and risk for complications.

7. There is no specific vaccine available at this time for this H3N2 variant.
8. Reverse transcription polymerase chain reaction (RT-PCR) testing should be considered for patients presenting with ILI symptoms that are reporting recent swine exposure or exposure to swine environments. (This includes visits to state or local fairs where livestock is present.)
9. Influenza viruses that circulate in swine are called swine influenza viruses when they are isolated from swine, but are called variant viruses when isolated from humans.

The CHCANYS Emergency Management Department recommends that all health centers be aware of patients presenting with Influenza like illness (ILI) at their health centers and recommend that health centers brief their personnel on proper respiratory precautions. We also recommend that all health centers review their emergency plans regarding isolation and plans regarding the deployment of Points of Distribution set ups (PODS). Also, the Health Alert Network (HAN) has released a CDC health advisory on Friday, August 3rd, 2012. Please be alert to further advisories regarding this novel flu variant. Finally, please visit the following websites for more information regarding influenza and specifically this novel influenza A (H3N2v) virus:

1. www.cdc.gov
2. Interim Guidance on Case Definitions to be Used for Investigations of Influenza A (H3N2) Variant Virus Cases” for state and local health departments is available at <http://www.cdc.gov/flu/swineflu/case-definitions.htm>.
3. “Prevention Strategies for Seasonal and Influenza A(H3N2)v in Health Care Settings” is available at <http://www.cdc.gov/flu/swineflu/prevention-strategies.htm>.
4. “Interim Guidance on Specimen Collection, Processing and Testing for Patients with Suspected Influenza A (H3N2) Variant Virus Infection” for public health professionals is available at <http://www.cdc.gov/flu/swineflu/h3n2v-testing.htm>.
5. “Interim Guidance for Influenza Surveillance: Additional Specimen Collection for Detection of Influenza A (H3N2) Variant Infections” for state and local health departments is available at <http://www.cdc.gov/flu/swineflu/h3n2v-surveillance.htm>.
6. Compendium of Measures to Prevent Disease Associated with Animals in Public Settings, 2011 is available at <http://nasphv.org/documentsCompendiumAnimals>.

Should you have any further questions regarding this transmission, please call Mario J. Gonzalez at CHCANYS Emergency Management at 212-710-3810 or email at mgonzalez@chcanys.org.