



New Hampshire Health Alert Network

Health.Alert@nh.gov

Status: Actual
Message Type: Alert
Severity: Moderate
Sensitive: Not Sensitive
Message Identifier: NH-HAN #20120806 Influenza H3N2v
Delivery Time: 12 hours
Acknowledgement: No
Originating Agency: NH Department of Health and Human Services, Division of Public Health Services

DATE: August 6, 2012

TIME: 1500 EDT

TO: Physicians, Physician Assistants, Nurses, Infection Control Practitioners, Infectious Disease Specialists, Hospital Emergency Departments, Hospital CEOs, Laboratory Response Network, Manchester Health Department, Nashua Health Department, NHHA, NH School Nurses and Administrators, Community Health Centers, EWIDS, DHHS Outbreak Team, DPHS Investigation Team, Public Health Network, and DPHS Management Team

FROM: Jodie Dionne-Odom, MD, Deputy State Epidemiologist

SUBJECT: Increase in Influenza A H3N2v Virus Infections in the United States

NH Department of Health and Human Services (NH DHHS) recommends:

- Awareness of an increase in novel influenza viruses detected in the United States. No novel influenza infections have been detected in New Hampshire to date.
- Review of influenza testing guidelines and awareness of the recommendation to increase influenza testing of patients with influenza-like illness if the patient has severe illness or had recent exposure to swine.
- Reporting suspected cases of novel influenza to the Division of Public Health Services at 603-271-4496 (after hours 1-800-852-3345, x5300).
- Persons who are at high risk for influenza complications should consider avoiding exposure to pigs (such as at agricultural fairs) and swine barns this summer, especially if ill pigs have been identified. Persons at high risk include those with underlying chronic medical conditions such as asthma, diabetes, heart disease, or neurological conditions, or who are pregnant or < 5 years or > 65 years of age or have weakened immune systems.

Background

Variant influenza A (H3N2v) viruses normally circulate in swine and were first detected in humans in July 2011. It has also been isolated in U.S. swine in many states. Since a year ago, there have been 29 cases of H3N2v virus infection, including 16 cases occurring in the last three weeks, all with recent contact with swine (15 of them at an agricultural fair). All 29 human cases were infected with H3N2v viruses that contain the matrix (M) gene from the influenza A (H1N1) pdm09 virus. This M gene may confer increased transmissibility to and among humans.

This past week CDC reported 12 additional human infections with influenza A (H3N2) variant virus in 3 states: Hawaii (1 case), Ohio (10 cases) and Indiana (1 case). Other states with cases

since July 2011 include Iowa (3), Maine (2), Pennsylvania (3), Utah (1) and West Virginia (2). No H3N2v infections have been identified in New Hampshire to date. While the viruses identified in these cases are genetically nearly identical, separate swine exposure events in each state were associated with human infections. There is no indication that the cases in different states are epidemiologically related.

Clinical characteristics of the 16 H3N2v recent cases have been generally consistent with seasonal influenza, and have included fever, cough, pharyngitis, myalgia, and headache. No hospitalizations or deaths have occurred among the 16 confirmed cases since July 2012. Public health and agriculture officials are investigating the extent of disease among humans and swine, and additional cases are likely to be identified as the investigation continues. While most cases are thought to have been infected as a result of close contact with swine, limited human-to-human transmission of this virus was identified in some cases in 2011. Therefore, enhanced influenza surveillance is indicated in regions and states with confirmed H3N2v cases.

Diagnostic Testing

Currently, while there are low levels of circulating seasonal influenza viruses, increasing collection of specimens from patients with ILI (defined as fever (100°F [37.8°C] or higher) with cough and/or sore throat) is recommended. Increased specimen collection is encouraged specifically from patients presenting with ILI in the following high priority areas:

- ILI outbreaks, particularly among children in child-care and school settings, since these have been the settings associated with human-to-human H3N2v virus transmission.
- Unusual or severe presentations of ILI, especially among children.
- Hospitalized ILI and acute respiratory illness in children under 18 years of age.
- Patients with recent exposure to swine or to close contacts with exposure to swine.

Commercially available rapid influenza diagnostic tests (RIDTs) may not detect H3N2v virus in respiratory specimens. Therefore, a negative rapid influenza diagnostic test result does not exclude infection with H3N2v or any influenza virus. In addition, a positive test result for influenza A cannot confirm H3N2v virus infection because these tests cannot distinguish between influenza A virus subtypes (they do not differentiate between human influenza A viruses and H3N2v virus). Therefore, respiratory specimens in patients with ILI who meet one of the four priority areas outlined above should be collected and sent for RT-PCR testing at the NH Public Health Laboratories (PHL).

NH PHL approved specimen types are:

Nasopharyngeal swabs, nasal swabs, throat swabs, nasal aspirates, nasal washes and dual nasopharyngeal/throat swabs, bronchoalveolar lavage, bronchial wash, tracheal aspirate, sputum, and lung tissue.

(From human patients with signs and symptoms of respiratory infection)

To conduct RT-PCR testing for influenza:

- Collect the specimen as soon as possible after illness onset.
- Collection should be by trained personnel using droplet precautions
- Place the sample in viral transport media and store and transport at 4° C.

To acquire viral testing kits, contact the NH Public Health Laboratories office at 1 (800) 852-3345, extension 4605 or (603) 271-4605.

Reporting to NH DPHS

NH DPHS asks that clinicians report suspected cases of novel influenza to the Division of Public Health Services (DPHS) within 24 hours at 603-271-4496 (after hours 1-800-852-3345, x5300). Suspected cases of novel influenza are patients with influenza-like illness and recent exposure (within 7 days before illness onset) to swine.

Additional Resources

For additional information about diagnostic testing for influenza, treatment, and vaccination in New Hampshire, please refer to the prior Health Alert Network message from September 12, 2011, found at <http://www.dhhs.nh.gov/dphs/cdcs/alerts/documents/influenza2011-2012.pdf>

For additional information on influenza A H3N2v in the United States, please refer to CDC's website at the following web address:

<http://www.cdc.gov/flu/swineflu/influenza-variant-viruses-h3n2v.htm>

For any questions regarding the contents of this message, please contact NH DHHS Bureau of Infectious Disease Control at 603-271-4496.

For after hours / toll free, call 1-800-852-3345, ext. 4496.

DEFINITION OF TERMS AND ALERTING VOCABULARY

Message Type

Alert: Original alert
Update: Prior alert has been updated and superseded
Cancel: Prior alert has been cancelled
Error: Prior alert has been retracted

Status

Actual: Refers to a live event
Exercise: Designated recipients must respond to the communication or alert
Test: Related to a technical and/or system test

Severity

Extreme: Extraordinary threat to life or property
Severe: Significant threat to life or property
Moderate: Possible threat to life or property
Minor: Minimal threat to life or property
Unknown: Unknown threat to life or property

Sensitive

Sensitive: Indicates the alert contains sensitive content
Not Sensitive: Indicates non-sensitive content

Message Identifier

A unique alert identifier that is generated upon alert activation

Delivery Time

Indicates the time frame for the delivery of the alert

Acknowledgement

Indicates whether an acknowledgement on the part of the recipient is required to confirm that the alert was received, and the time frame in which a response is required.

Originating Agency

A guaranteed unique identifier for the agency originating the alert.

Alerting Program

The program sending the alert or engaging in alerts and communications using PHIN Communication and Alerting (PCA) as a vehicle for their delivery.

You have received this message based upon the information contained within our emergency notification database.

If you have a different or additional e-mail or fax address that you would prefer to be used, please contact:

Denise M. Krol, MS
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Tel: 603-271-4596
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