

H3N2v Influenza Guidance for Healthcare and Public Health Providers
Michigan Department of Health and Human Services
August 19, 2016

On August 19, 2016, the Michigan Department of Health and Human Services announced the detection of five additional human cases of variant influenza A/H3N2 (H3N2v), bringing the total to eight confirmations since the end of July. All of these cases have had documented exposure with swine at either the Muskegon, Ingham or Cass county fairs, which all have had pigs test positive for H3N2 swine influenza. Michigan healthcare providers should be vigilant for additional suspect human cases of variant influenza that may occur throughout the rest of the fair season. This guidance updates the Michigan Department of Health and Human Services recommendations on influenza H3N2v surveillance, reporting and testing for healthcare providers, laboratories, and local health departments.

Influenza Case Identification, Testing, and Treatment

1. Clinicians treating patients with an influenza-like illness (fever $\geq 100^{\circ}\text{F}$ plus a cough and/or a sore throat) should ask about recent exposure to swine or attendance at county or state fairs.

Clinical characteristics of an H3N2v infection are similar to symptoms of uncomplicated seasonal influenza, including fever, cough, pharyngitis, rhinorrhea, myalgia, and headache. Vomiting, diarrhea and conjunctivitis have also been reported in some pediatric cases. Milder illness is possible, including lack of fever. Duration of illness in most cases is approximately 3-5 days, but may be a week or more. As with seasonal flu, those at higher risk for flu-related complications may develop more serious illness.

2. Collection of upper respiratory specimens is strongly advised for any influenza-like illness (e.g., outpatients, hospitalizations, deaths) among the following:

- Patients reporting direct or indirect swine exposure or attendance at a county fair
- Patients reporting close contact (within 6 ft) to an ill person with recent swine exposure
- Children <18 years of age
- Unusual or severe presentations of influenza-like illness, including hospitalizations
- Outbreaks of influenza-like illness, especially among children

3. Respiratory specimens should be collected as soon as possible after illness onset.

Preferred respiratory specimens include: nasopharyngeal swab, nasal aspirate or wash or a combined nasopharyngeal swab with oropharyngeal swab. Nasal or oropharyngeal swabs are also acceptable but less preferred. For intubated patients, also collect an endotracheal aspirate. Bronchoalveolar lavage (BAL) and sputum specimens are also acceptable.

- Specimens should be placed into sterile viral transport media and immediately placed on refrigerant gel-packs or at 4°C (refrigerator) for transport to the laboratory.

4. Specimens from suspect H3N2v cases should be submitted to MDHHS for confirmation:

- Commercially available rapid influenza diagnostic tests (RIDTs) and molecular-based testing **may not** detect H3N2v virus in respiratory specimens. In addition, a positive test result for influenza A cannot confirm H3N2v virus infection because these tests cannot distinguish between influenza A virus subtypes (does not differentiate between human influenza A viruses and H3N2v virus).
- For information on how to collect and submit specimens to the MDHHS Bureau of Laboratories, including the required Test Requisition form, refer to:
http://www.michigan.gov/mdch/0,4612,7-132-2945_5103-213906--,00.html

- Contact your local health department to coordinate specimen submission to the state public health laboratory.

5. The antiviral drug oseltamivir (Tamiflu) is effective in treating H3N2v virus infection.

Early initiation of antiviral treatment is most effective. Further information for clinicians regarding the treatment of H3N2v influenza is available at: <http://www.cdc.gov/flu/swineflu/h3n2v-clinician.htm>.

6. Infection Control

Healthcare personnel who treat ill persons with suspected H3N2v infections should follow standard, contact, and droplet precautions as recommended for patient care. More detailed infection control recommendations are available here: <http://www.cdc.gov/flu/swineflu/prevention-strategies.htm>

How to Report Suspect H3N2v Influenza Cases

Clinicians and Laboratorians:

To promptly report suspect cases and arrange testing, contact your local health department immediately (or contact MDHHS at 517-335-8165 or after hours at 517-335-9030).

Local Health Departments:

- Please report any confirmed, probable, or suspect H3N2v case to MDHHS at 517-335-8165 and enter the case into MDSS using the “Novel Influenza” form. Complete the Case Details form.
- MDHHS will work with local health departments to complete CDC forms if cases are identified.
- Case definitions are available online at: <http://www.cdc.gov/flu/swineflu/case-definitions.htm>

Healthcare and public health providers should continue to report other influenza cases (seasonal, suspect novel influenza cases, pediatric deaths, facility outbreaks) as previously directed; guidance is available at: www.michigan.gov/cdinfo in the Communicable Diseases (A-Z) under Influenza.

For more information on influenza A/H3N2v, please visit the CDC’s website at: <http://www.cdc.gov/flu/swineflu/h3n2v-cases.htm>.

Please contact the MDHHS Division of Communicable Disease at (517) 335-8165 with any questions.

This guidance should be considered interim and may change as situations warrant.