



## Infectious Disease SOP—Influenza A (Novel Virus Infection)

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**Maintenance Steward:** Epidemiology Supervisor      History:  New  Revised  Archived

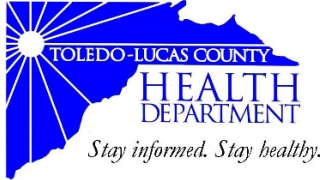
**Organizational Scope:**  
 Full Agency    Administration    Community Services    Environmental Health    Health Services

**Frequency of Review:**  
 Annually    Biennially    5 Years    As Needed    Other:

**Location:**  
*S-Drive:* S: → Users → Common → Policies & Procedures  
*Website:* [www.lucascountyhealth.com/employee-login/](http://www.lucascountyhealth.com/employee-login/)  
*Hardcopy:* Environmental Health and Community Services Director's Office  
*Archived Version(s):* S:\CSRP\SOGs\Archives

**Requisite Signatures**

<input checked="" type="checkbox"/>		7-20-17
	Medical Director	Date
<input checked="" type="checkbox"/>		07 2017
	Health Commissioner	Date
<input checked="" type="checkbox"/>		7/20/2017
	Director of Environmental Health & Community Services	Date



## Infectious Disease SOP—Influenza A (Novel Virus Infection)

### I. Policy

It is the policy of the Toledo-Lucas County Health Department (TLCHD) to adhere to all state, federal, and local statutes governing the management and case investigation of individual communicable disease cases and outbreaks within Lucas County.

### II. Scope

This standard procedure applies to the Infectious Disease Program when investigating one case of Influenza A (Novel Virus Infection). When an outbreak occurs, call ODH ORBIT. In an outbreak, refer to the “Epi and Surveillance OB Procedure.”

### III. Purpose

This procedure/process establishes guidelines for influenza A investigations. Per the Ohio Administrative Code (OAC) 3701-3, influenza A is a Class A disease and must be reported immediately via telephone according to 3701-3-02, 3701-3-03, 3701-3-04, and 3701-3-05 of the Administrative Code.

### IV. Background

The influenza virus is responsible for the causing novel influenza A infections as well as other influenza infections. Novel influenza infections are human infections with influenza A viruses that are different from currently circulating human influenza H1 and H3 viruses. One of the reasons that novel influenza viruses are a concern is because of their potential to lead to an influenza pandemic.

Diagnosis of novel influenza infections include isolation in tissue cell culture from respiratory specimens, reverse-transcriptase polymerase chain reaction (RT-PCR) testing of respiratory specimens, immunofluorescent antibody staining of respiratory specimens, and rapid influenza diagnostic testing (RIDT) of respiratory specimens. Although humans are the reservoir of human influenza viruses, different antigenic subtypes occur in other species that may be the source of new human subtypes due to genetic reassortment. Influenza occurs in pandemics, epidemics, localized outbreaks, and as sporadic cases. Attack rates are higher for school aged children than for preschoolers or adults. Novel influenza viruses are transmitted from person to person through droplet spread, direct contact with nasopharyngeal secretions, or via objects recently contaminated with secretions. Human to human spread of novel influenza may not occur or may be limited but most adults with seasonal influenza may be able to infect others beginning 1 day before symptoms develop and up to 5 days after onset of illness. Children may be infectious for up to 7 days after onset of symptoms. Incubation periods for novel influenza are unknown until the virus begins to circulate, though incubation periods will likely be similar to seasonal influenza with an average of 2 days.

Novel influenza virus is a Class A reportable disease, which requires an immediate investigation regarding the possible source of the novel influenza virus exposure within 24 hours of initial report.

## V. Case Definition

### A. Clinical Description

Novel influenza A is an illness compatible with an influenza virus infection (fever >100 degrees Fahrenheit with cough or sore throat).

### B. Laboratory Criteria for Diagnosis

1. Novel subtypes can be detected with methods available for detection of currently circulating human influenza viruses at the ODH laboratory.
2. Confirmation that an influenza A virus represents a novel virus will be performed by the Centers for Disease Control and Prevention's (CDC) influenza laboratory.
3. Once the novel virus has been confirmed by CDC, confirmation may be made by ODH Laboratory and other public health laboratories following CDC-approved protocols for that specific virus.
4. For more information regarding laboratory testing, please refer to the ODH Influenza A IDCM at <http://www.odh.ohio.gov/pdf/IDCM/novelflu.pdf>

## VI. Case Classification

### A. **Suspect:**

1. A case meeting the clinical criteria, pending laboratory confirmation. Any case of human infection with influenza A virus that is different from currently circulating human influenza H1 and H3 viruses is classified as a suspected case until the confirmation process is complete.

### B. **Probable:**

1. A case meeting the clinical criteria and epidemiologically linked to a confirmed case, but for which no confirmatory laboratory testing for novel influenza virus infection has been performed or test results are inconclusive for a novel influenza A virus infection.

### C. **Confirmed:**

1. A case of human infection with a novel influenza A virus confirmed by CDC's influenza laboratory or using methods agreed upon by CDC and CSTE as noted in Laboratory Criteria, above.

### D. **Not a case:**

1. This status is not generally used when reporting a case, but may be used to reclassify a report if investigation revealed it was not a case.

*\*\*\*Once a novel virus is identified by the CDC, it will be nationally notifiable until the Council of State and Territorial Epidemiologists (CSTE) in consultation with the CDC determines that it is no longer necessary to report each case.*

## VII. Procedure

The procedure/process of the Infectious Disease Program is to ensure that all cases are investigated in the same format.

When a report is received, a member of the ID team will complete an interview of the contact using the following forms: Human Infection with Novel Influenza A Case Report form, ODH Lab Microbiology Specimen Submission form, and CDC Specimen Submission form 50.34. These forms can be found in S:\CSRP\SOGs\Influenza A.

**A. Outbreak Response:**

1. Call ODH ORBIT at 614-995-5599 for guidance

**B. Public Health Investigation Process**

1. ODRS:
  - a. Check to see if the patient is entered into ODRS. If not, enter the patient into ODRS
2. Investigation
  - a. Case investigation should start as soon as possible following notification.
  - b. Contact the patient's provider and/or hospital to obtain demographic information, symptoms, date of onset of symptoms, and pertinent test results.
  - c. Once the provider and/or hospital ICP has been contacted call the patient/parent and complete the interview.
    - i. Provide education from the fact sheet on the IDCM website at <http://www.odh.ohio.gov/pdf/IDCM/novelflu.pdf>. This information is also located in S:\CSRP\SOGs\Influenza A.
      - 1) If no one answers, leave a message requesting a call back.
      - 2) Mail an informational letter requesting a callback.
      - 3) Continue to attempt phone contact with the patient for three more times in the span of 48 hours after the informational letter was sent.
      - 4) After interview is completed, ask the patient/parent whether they would like more information. If they express an interest, ask what the best method to deliver the information would be (e.g. e-mail, mail, etc.)
3. Treatment
  - a. Influenza antivirals, such as the neuraminidase inhibitors Oseltamivir and Zanamivir, are recommended for cases of novel influenza A virus infection.
  - b. Antiviral treatment should be given as soon as possible after development of symptoms, within 48 hours of onset of symptoms is optimal. Clinicians should NOT wait for laboratory confirmation of influenza before administering antiviral therapy.
4. Isolation/Follow Up Specimens
  - a. Per CDC recommendations, hospitalized cases should be placed in contact, droplet, and airborne precautions for all cases of Novel Influenza A infection.
  - b. If the case is not hospitalized, the individual should be asked to voluntarily isolate himself/herself at home to avoid exposing others to possible infection. Contacts should self-monitor for onset of influenza-like illness.
5. Prophylaxis

- a. Non-pharmaceutical interventions (NPIs) can be used to delay or mitigate the spread of the virus in the absence of an appropriate vaccine. These interventions can include:
  - i. School closings
  - ii. Canceled public gatherings
  - iii. Public wearing of face masks
  - iv. Avoidance of crowds
  - v. Voluntary isolation of cases
  - vi. Voluntary quarantine of household contacts
6. Contacts (Exclusion)
  - a. Public health personnel should attempt to identify all known close contacts of suspected novel influenza A cases. Close contacts are defined as persons who were within 6 feet of an ill suspected, probable, or confirmed case while the case was symptomatic.
  - b. All identified close contacts should be monitored daily for 7 days after the last known exposure to a person ill with novel influenza A. The following should be assessed each day during this period:
    - i. Measured temperature
    - ii. Presence of any symptoms
  - c. Any close contacts that have a measured temperature of  $\geq 38.0^{\circ}\text{C}$  ( $100.4^{\circ}\text{F}$ ) or any illness should be referred for prompt medical evaluation and possible testing for the novel influenza A virus.
  - d. Monitoring can be discontinued when laboratory testing by RT-PCR of appropriately collected respiratory specimens by the state health department or the CDC has excluded infection with virus OR when there is absence of any illness symptoms among contacts during the 7-day surveillance period described above.
  - e. Influenza antivirals can and should be used to prophylactically treat contacts of confirmed or suspected cases of novel influenza A.
7. Notification
  - a. Notify TLCHD contacts immediately after investigation with patient (in sequential order)
    - i. Supervisor of Epidemiology
    - ii. Director of Community Services and Environmental Health
    - iii. Medical Director
    - iv. Health Commissioner
  - b. The food sanitarian supervisor office will be advised if a licensed food establishment is noted in the food history. A licensed sanitarian will follow up with an inspection as appropriate.
  - c. Public health recommendations and interventions will be shared with the public by the PIO or to specific individuals within 6 hours of identification of the agent as determined by ODH and supervisory staff at the local health department. An OPHCS alert will be distributed within 12 hours of a positive test result as determined by supervisory local health department staff and ODH.
8. Documentation
  - a. Enter information into ODRS as it is obtained.

- b. Include a note documenting investigation, education, and intervention.  
*Sample: Spoke with mother by phone on [date]. EDUCATION: Reviewed disease facts, transmission, and symptoms. DISEASE COURSE: Client has history of [medical conditions] and started [symptoms] on [date]. Started [treatment] on [date]. HOUSEHOLD: HH contacts include [relationships]. All are [asymptomatic/symptomatic] [Include information about sensitive settings for HH contacts]. OCCUPATION: [job] TRAVEL HISTORY: [Include information about travel history within the past 2-3 weeks]. MAILING: Mailed fact sheet and cover letter to home address.*
  - c. Include a note for each occupation, activity, or other notification and any actions taken.
9. Closing a case
- a. Ensure that all available information is entered into ODRS before closing. Close case and print record. Staple with investigation sheet and any related documents and file in the appropriate file drawer for the current year located in the CSRP office.

**C. Appendices**

None

**VIII. Reference/Investigation Forms**

- A. For additional information please refer to the ODH IDCM at <http://www.odh.ohio.gov/pdf/IDCM/novelflu.pdf>

**IX. Maintenance**

**A. Review**

- 1. The Infectious Disease standard operating procedures are to be reviewed every other year or as needed to ensure compliance with both agency and accreditation standards.
- 2. If guidance/recommendations from the Centers for Disease Control, Ohio Department of Health or law changes regarding this infectious disease, TLCHD will follow the most up-to-date guidance and adjust the SOP(s) as needed.

**B. Revision**

- 1. All changes made to this SOP are to be noted on the **Record of Change**. Substantial changes will require renewed signatures from all applicable parties. This includes changes to the intent, scope, procedures, or policy statement.
- 2. Changes in style, format, grammar or minor error correction will not require renewed signatures but must be indicated on the Record of Change.

