



Interim Position Statement

8/8/2012

Committee: Infectious Disease

Title: Public Health Reporting and National Notification for Novel Influenza A Virus Infection

I. Statement of the Problem

The Council of State and Territorial Epidemiologists (CSTE) position statement 07-EC-02 recognized the need to develop an official list of nationally notifiable conditions and a standardized reporting definition for each condition on the official list. The position statement also specified that each definition had to comply with American Health Information Community recommended standards to support —automated case reporting from electronic health records or other clinical care information systems. In July 2008, CSTE identified sixty-eight conditions warranting inclusion on the official list, each of which now requires a standardized reporting definition. Criteria for public health reporting and national notification were approved by CSTE in 2009 and are included in position statement 09-ID-43. This position statement modifies 09-ID-43 by revising the laboratory evidence for novel Influenza A infection and the case classification criteria for a probable case. Note that for compatibility with Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO) terminology, novel influenza A is inclusive of the term “variant” influenza A viruses.

II. Background and Justification

Background

Human infections with novel influenza A viruses that can be transmitted from person to person may signal the beginning of an influenza pandemic. Rapid detection and reporting of human infections with novel influenza A viruses – viruses against which there is little to no pre-existing immunity – will facilitate prompt detection and characterization of influenza A viruses with pandemic potential and accelerate the implementation of effective public health responses.

Justification

Novel influenza A infection meets the definition of a nationally and **immediate-urgent** notifiable condition—as specified in CSTE position statement 08-EC-02—for the following reason(s):

- The condition is identified as immediately notifiable to the WHO by the revised (2005) International Health Regulations (IHR).
- A majority of state/territorial jurisdictions— or state/territorial jurisdictions that when taken together comprise a majority of the US population—have laws or regulations requiring **immediate** reporting of the condition from local health care providers or medical laboratorians to public health authorities; the CDC requests **immediate** notification of the condition from state public health agencies.

III. Statement of the desired action(s) to be taken

CSTE requests that CDC adopt this revised, standardized reporting definition for novel influenza A infection to facilitate more timely, complete, and standardized local reporting and national notification of this condition.

IV. Goals of Surveillance

To rapidly identify, contain and apply preventative measures for control of any novel influenza A infections.

V. Methods for Surveillance: Surveillance for Novel Influenza A infection should use the following recommended sources of data and the extent of coverage listed in Table V.

Table V. Recommended sources of data for case identification and extent of coverage for ascertaining cases of Novel Influenza A infection

Source of data for case ascertainment	Coverage
	Population-wide
Clinician reporting	x
Laboratory reporting	x
Reporting by other entities (e.g., hospitals, veterinarians, pharmacies)	x
Death certificates	x
Hospital discharge or outpatient records	
Extracts from electronic medical records	
Telephone survey	
School-based survey	
Other _____	

VI. Criteria for case identification

Reporting refers to the process of healthcare providers or institutions (e.g., clinicians, clinical laboratories, hospitals) submitting basic information to governmental public health agencies about cases of illness that meet certain reporting requirements or criteria. The purpose of this section is to provide those criteria to determine whether a specific illness should be reported.

A. Narrative description of criteria to be used to determine whether a case should be reported to local or state public health authorities

Reports should be made to local or state public health authorities on persons who fulfill at least one of the following criteria:

- Human infection with a novel influenza virus, an un-sub-typeable influenza A virus, or an influenza A virus with inconclusive subtyping results reported by a WHO collaborating laboratory.

OR

- Illness compatible with influenza virus infection (fever >100 degrees Fahrenheit, with cough and/or sore throat) occurring in a contact of a confirmed or probable case of novel influenza A virus infection.

OR

- Illness compatible with influenza virus infection and influenza A virus detected with methods available for detection of currently circulating human influenza viruses **and**
- Close contact with ill animals known to transmit novel subtypes of influenza A, such as wild birds or poultry, swine or other mammals **and/or**
- Travel, within 14 days, to any country where a novel influenza A virus, such as highly pathogenic avian influenza A (H5N1), has been recently identified in animals or people.

Other recommended reporting procedures

- All cases of Novel Influenza A infection should be reported.
- Reporting should be on-going and routine.
- Reporting should be immediate.

B. Table of criteria to be used to determine whether a case should be reported to public health authorities

Table VI-B. Table of criteria to determine whether a case should be reported to public health authorities.

Requirements for reporting are established under State and Territorial laws and/or regulations and may differ from jurisdiction to jurisdiction. These criteria are suggested as a standard approach to identifying cases of this condition for purposes of reporting, but reporting should follow State and Territorial law/regulation if any conflicts occur between these criteria and those laws/regulations.

Criterion	Reporting		
<i>Clinical Evidence</i>			
Fever		N	N
Cough		O	O
Sore throat		O	O
<i>Laboratory Evidence</i>			
Novel Influenza A virus, un-sub-typeable influenza A virus, or an influenza A virus with inconclusive subtyping results reported by a WHO collaborating laboratory	S		
Influenza A virus detected with methods available for detection of currently circulating human influenza viruses			N
<i>Epidemiologic Evidence</i>			
Contact of a confirmed or probable case of novel influenza A virus infection		N	
Close contact with ill animals known to transmit novel subtypes of influenza A, such as wild birds or poultry, swine or other mammals			O
Travel within 14 days to any country where a novel influenza A virus, such as highly pathogenic avian influenza A(H5N1), has been recently identified in animals or people			O

Notes:

S = This criterion alone is Sufficient to identify a case for reporting.

N = All —N criteria in the same column are Necessary to identify a case for reporting.

O = At least one of these —O (Optional) criteria in each category (i.e., clinical evidence and laboratory evidence) in the same column—in conjunction with all —N criteria in the same column—is required to identify a case for reporting. (These optional criteria are alternatives, which means that a single column will have either no O criteria or multiple O criteria; no column should have only one O.)

C. Disease Specific Data Elements:

Disease-specific data elements to be included in the **initial report** are listed below.

State

County

Age

Sex

Ethnicity

Race

Date of illness onset

Animal Exposure

Date of travel to a country where novel influenza A virus has been recently identified in animals or people

Influenza test type

Influenza test result

VII. Case Definition for Case Classification

A. Narrative: Description of criteria to determine how a case should be classified.

Clinical Presentation

An illness compatible with influenza virus infection (fever >100 degrees Fahrenheit, with cough and/or sore throat)

Laboratory Evidence

A human case of infection with an influenza A virus subtype that is different from currently circulating human influenza H1 and H3 viruses. Novel subtypes include, but are not limited to, H2, H5, H7, and H9 subtypes. Influenza H1 and H3 subtypes originating from a non-human species or from genetic reassortment between animal and human viruses are also novel subtypes. Novel subtypes will be detected with methods available for detection of currently circulating human influenza viruses at state public health laboratories (e.g., real-time reverse transcriptase polymerase chain reaction [RT-PCR]). Confirmation that an influenza A virus represents a novel virus will be performed by CDC's influenza laboratory. Once a novel virus has been identified by CDC, confirmation may be made by public health laboratories following CDC-approved protocols for that specific virus, or by laboratories using an FDA-authorized test specific for detection of that novel influenza virus.

Criteria for epidemiologic linkage: a) the patient has had contact with one or more persons who either have or had the disease and b) transmission of the agent by the usual modes of transmission is plausible. A case may be considered epidemiologically linked to a laboratory-confirmed case if at least one case in the chain of transmission is laboratory confirmed. Laboratory testing for the purposes of case classification should use methods mutually agreed upon by CDC and CSTE. Currently, only viral isolation, RT-PCR, gene sequencing, or a 4-fold rise in strain-specific serum antibody titers are considered confirmatory.

Case Classification

Confirmed: 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 Evidence*, above.

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

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

B. Classification Tables

Table VII-B lists the criteria that must be met for a case to be classified as confirmed and probable (presumptive).

Table VII-B. Table of criteria to determine whether a case is classified.

Criterion	Case Definition		
	Confirmed	Probable	Suspected
<i>Clinical Evidence</i>			
Fever		N	N
Cough		O	O
Sore throat		O	O
<i>Laboratory Evidence</i>			
Novel influenza A virus infection confirmed by CDC's influenza laboratory, or once a novel virus has been identified by CDC, confirmation may be made by public health laboratories following CDC-approved protocols for that specific virus, or by laboratories using an FDA-authorized test specific for detection of that novel influenza virus	S		
Test results are inconclusive for novel influenza A virus infection		N	
Infection with influenza A virus different from currently circulating human influenza H1 and H3 viruses until the confirmation process is complete.			N



Laboratory test to confirm novel influenza A virus infection pending			N
<i>Epidemiologic Evidence</i>			
Contact to a confirmed case of novel ant influenza A virus infection		N	

Notes:

S = This criterion alone is Sufficient to classify a case.

N = All —N criteria in the same column are Necessary to classify a case.

O = At least one of these —O (Optional) criteria in each category (i.e., clinical evidence and laboratory evidence) in the same column—in conjunction with all —N criteria in the same column—is required to classify a case.

VIII. Period of Surveillance

Surveillance should be on-going.

IX. Data sharing/release and print criteria

Notification to CDC for confirmed cases of novel influenza A virus infection is recommended.

- Data reported to the CDC is collaboratively investigated with the health department of the reporting state or territory. Electronic reports of confirmed cases in NNDSS are summarized weekly in the MMWR Table 1. Annual case data is also summarized in the yearly Summary of Notifiable Diseases.
- Novel influenza A virus detections that pose a significant public health threat are reported immediately. The number of cases, epidemiologic distribution, transmission risk, and other factors will influence frequency and method of communication and information feedback. State-specific compiled data will continue to be published in the weekly and annual MMWR.
- State-specific compiled data will continue to be published weekly in the MMWR and influenza activity report, FluView, and/or CDC's influenza website, then in the annual MMWR Summary. All cases are verified with the states/territories before publication, and only cases confirmed by CDC/CCID/ID will be reported.
- CDC's notification to all parties is conducted through the weekly influenza activity report, FluView and/or CDC's influenza website weekly surveillance postings.

X. References

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