

June 8, 2009

Chicago Department of Public Health



Health Alert



City of Chicago
Richard M. Daley, Mayor

Immunization Program

Chicago Department of Public Health
Terry Mason, M.D., F.A.C.S., Commissioner

Swine Influenza Update 19

Date: June 8, 2009

To: Chicago: Infection Control Professionals
Primary Care Providers
Emergency Room Directors
Infectious Disease Physicians
Primary Care Physicians
Obstetric and Gynecology Physicians

From: Dr. Susan Gerber, Chief Medical Officer
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Subject: Reporting, testing, treatment and chemoprophylaxis recommendations for individuals who may* be at high risk for complications (including pregnant women and HIV infected individuals) from novel influenza A (H1N1) infections

Background

As of June 8, 2009, the Chicago Department of Public Health (CDPH) has received reports of more than 700 people with confirmed novel influenza A (H1N1) infections and continues to receive additional reports daily. According to Chicago's influenza sentinel site providers, the proportion of outpatient visits due to influenza-like illnesses (4.8%) exceeds the national baseline for seasonal influenza (2.4%) and what would be expected at this time of year. Novel influenza A activity has not subsided in Chicago.

Reporting

1. CDPH recommends testing[†] and reporting persons with Influenza-Like-Illness (ILI) that meet the following clinical criteria:

Patient with Fever 100.0°F (37.8°C)

AND

Respiratory symptoms (i.e., cough or sore throat; includes but not limited to pneumonia, respiratory distress, ARDS)

AND

No known cause other than influenza

AND

Patient hospitalized (including in ICU) currently or within the last 7 days

2. CDPH recommends reporting deaths related to ILI (Fever 100.0°F (37.8°C) AND cough or sore throat).
3. CDPH recommends reporting clusters of ILI.

Diagnostic Testing

Diagnostic testing[†] should be considered for patients with mild ILI (i.e., not hospitalized) who may be at high risk for serious complications due to underlying medical conditions (see page 3) if results will be available in a timely enough manner (within 48 hours of symptom onset) to guide antiviral treatment decisions. Delaying initiation of antiviral therapy beyond 24-48 hours after symptom onset while diagnostic test results are pending is not prudent.

Diagnostic testing[†] should be considered for patients with mild ILI (i.e., not hospitalized) who do NOT have underlying medical conditions if they have close contacts who may be at high risk for serious complications due to underlying medical conditions (e.g., pregnancy) and if results will be available in a timely enough manner to guide chemoprophylaxis recommendations for these close contacts.

PCR testing for novel influenza A is now available through some hospitals and commercial laboratories. Testing at the Illinois Department of Public Health (IDPH) laboratory is for hospitalized patients with severe illness, to assist with public health management of outbreaks, and for emergency situations. IDPH recommends laboratories send specimens to the IDPH laboratory that are from non-hospitalized patients, only if approval has been obtained from CDPH by calling 311.

[†]Rapid influenza antigen tests are NOT reliable in this setting. Reverse transcriptase polymerase chain reaction (RT-PCR) for influenza A is recommended.

Treatment and Chemoprophylaxis

The currently circulating novel influenza A virus is sensitive to the neuraminidase inhibitor antiviral medications zanamivir and oseltamivir, but is resistant to the adamantane antiviral medications, amantadine and rimantadine.

- For hospitalized patients with confirmed or probable novel influenza A or ILI without an alternative diagnosis, **antiviral treatment is recommended.**
- For persons who may be at high risk for complications due to underlying medical conditions with mild (i.e., not hospitalized) confirmed or probable novel influenza A infections, antiviral treatment is recommended.
- For persons who may be at high risk for complications due to underlying medical conditions with mild (i.e., not hospitalized) ILI and for whom test results are not available, **empiric antiviral treatment is recommended.**
- For persons who may be at high risk for complications due to underlying medical conditions who are close contacts of persons with confirmed or probable novel influenza infections, **antiviral chemoprophylaxis is recommended.**
- For persons who may be at high risk for complications due to underlying medical conditions who are close contacts of persons with ILI, clinicians should **consider antiviral chemoprophylaxis.**
- Oseltamivir and zanamivir treatment and chemoprophylaxis regimens for novel influenza A are the same as those recommended for seasonal influenza.

Antiviral treatment with zanamivir or oseltamivir should be initiated as soon as possible after the onset of influenza symptoms, with benefits expected to be greatest if started within 48 hours of onset based on data from studies of seasonal influenza. However, some data from studies on seasonal influenza indicate benefit for hospitalized patients even if treatment is started more than 48 hours after onset.

Recommended duration of treatment is five (5) days, and for chemoprophylaxis is ten (10) days.

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Because of its systemic activity, oseltamivir is preferred for treatment of pregnant women. The drug of choice for prophylaxis is less clear. Zanamivir may be preferable because of its limited systemic absorption; however, respiratory complications and medication delivery system challenges that may be associated with zanamivir because of its inhaled route of administration need to be considered, especially in women at risk for respiratory problems.

United States FDA Pharmaceutical Pregnancy Categories of Drugs:

- Oseltamivir and zanamivir are "Pregnancy Category C" medications, indicating that no clinical studies have been conducted to assess the safety of these medications for pregnant women. Because of the unknown effects of influenza antiviral drugs on pregnant women and their fetuses, oseltamivir or zanamivir should be used during pregnancy only if the potential benefit justifies the potential risk to the embryo or fetus. However, no adverse effects have been reported among women who received oseltamivir or zanamivir during pregnancy or among infants born to women who have received oseltamivir or zanamivir. Pregnancy should NOT be considered a contraindication to oseltamivir or zanamivir use. Pregnant women might be at higher risk for severe complications from novel H1N1 (swine influenza) infections, and the benefits of treatment or chemoprophylaxis with zanamivir or oseltamivir likely outweigh the theoretical risks of antiviral use.

Persons who may* be at increased risk for serious complications from novel influenza A (H1N1) infections

Children younger than 5 years of age. The risk for severe complications from seasonal influenza is highest among children younger than 2 years of age.

Adults 65 years of age and older

Pregnant women

Anyone with long-term health problems with:

heart disease	lung disease (including asthma)
kidney disease	metabolic disease (such as diabetes)
liver disease	anemia (other blood disorders)

Anyone with a weakened immune system due to:

- HIV/AIDS or other diseases affecting the immune system
- long-term treatment with drugs such as steroids
- cancer treatment with x-rays or drugs

Anyone with certain muscle or nerve disorders (such as seizure disorders or cerebral palsy) that can lead to breathing or swallowing problems

Anyone 6 months through 18 years of age on long-term aspirin treatment (they could develop Reye Syndrome if they got influenza)

Residents of nursing homes and other chronic-care facilities

*There are insufficient data available to determine who is at increased risk for complications of novel influenza A infections. These recommendations are based on what is known about seasonal influenza viruses.

Additional information about novel H1N1 influenza is available at: <http://www.cdc.gov/h1n1flu/>

Detailed guidance on antiviral therapy and prophylaxis is available at:
<http://www.cdc.gov/h1n1flu/recommendations.htm> and at
<http://www.cdc.gov/flu/professionals/antivirals/dosagetable.htm#table>