Centers for Disease Control and Prevention
Your Online Source for Credible Health Information

Swine Flu

Interim Guidance on Antiviral Recommendations for Patients with Confirmed or Suspected Swine Influenza A (H1N1) Virus Infection and Close Contacts

Objective: To provide interim guidance on the use of antiviral agents for treatment and chemoprophylaxis of swine influenza A (H1N1) virus infection. This includes patients with confirmed or suspected swine influenza A (H1N1) virus infection and their close contacts.

Case definitions
A *confirmed case* of swine influenza A (H1N1) virus infection is defined as a person with an acute respiratory illness with laboratory confirmed swine influenza A (H1N1) virus infection at CDC by one or more of the following tests:

1. real-time RT-PCR
2. viral culture

Infectious period

The infectious period for a confirmed case of swine influenza A (H1N1) virus infection is defined as 1 day prior to the case's illness onset to 7 days after onset.

A ***suspected case*** of swine influenza A (H1N1) virus infection is defined as:

1) A person with acute respiratory illness who was a close contact to a confirmed case of swine influenza A (H1N1) virus infection during the case's infectious period, OR

2) A person with an acute respiratory illness who traveled to or resides in an area where there are confirmed cases of swine influenza A (H1N1) virus infection.

Close contact is defined as: within about 6 feet of an ill person who is a confirmed or suspected case of swine influenza A (H1N1) virus infection during the case's infectious period.

Acute respiratory illness is defined as: recent onset of at least two of the following: rhinorrhea or nasal congestion, sore throat, cough (with or without fever or feverishness)

High-risk group for complications of influenza is defined as: a person who is at high-risk for complications of seasonal influenza: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e717a1.htm. However, it too early to ascertain what persons are at high-risk for complications of swine influenza A (H1N1) virus infection. This guidance will be updated as new information is available.

Clinicians should consider swine influenza A (H1N1) virus infection in the differential diagnosis of patients with febrile respiratory disease and who 1) live in areas in the U.S. with confirmed human cases of swine influenza A (H1N1) virus infection or 2) who traveled recently to Mexico or were in contact with persons who had febrile respiratory illness and were in the areas of the U.S. with confirmed swine influenza cases or Mexico in the 7 days preceding their illness onset.

Special Considerations for Children

Aspirin or aspirin-containing products (e.g. bismuth subsalicylate – Pepto Bismol) should not be administered to any confirmed or suspected ill case of swine influenza A (H1N1) virus infection aged 18 years old and younger due to the risk of Reye syndrome. For relief of fever, other anti-pyretic medications are recommended such as acetaminophen or non steroidal anti-inflammatory drugs.

Antiviral Resistance

This **swine** influenza A (H1N1) virus is sensitive (susceptible) to the neuraminidase inhibitor antiviral medications zanamivir and

oseltamivir. It is resistant to the adamantane antiviral medications amantadine and rimantadine.

Seasonal influenza A and B viruses continue to circulate at low levels in the U.S. and in Mexico. Currently circulating **human** influenza A (H1N1) viruses are resistant to oseltamivir and sensitive (susceptible) to zanamivir, amantadine and rimantadine. Currently circulating **human** influenza A (H3N2) viruses are resistant to amantadine and rimantadine, but sensitive (susceptible) to oseltamivir and zanamivir. Therefore, at this time antiviral treatment recommendations for suspected cases of swine influenza A (H1N1) virus infection need to consider potential infection with **swine** influenza A (H1N1) virus as well as **human** influenza viruses, and their different antiviral susceptibilities.

Antiviral Treatment

Suspected Cases

Empiric antiviral treatment is recommended for any ill person ***suspected*** to have swine influenza A (H1N1) virus infection. Antiviral treatment with either zanamivir alone or with a combination of oseltamivir and either amantadine or rimantadine should be initiated as soon as possible after the onset of symptoms. Recommended duration of treatment is five days. Recommendations for use of antivirals may change as data on antiviral susceptibilities become available. ***Antiviral doses and schedules recommended for treatment of swine influenza A (H1N1) virus infection are the same as those recommended for seasonal influenza****:* *http://www.cdc.gov/flu/professionals/antivirals/dosagetable.htm#table*

Confirmed Cases

For antiviral treatment of a confirmed case of swine influenza A (H1N1) virus infection, either oseltamivir or zanamivir may be administered. Recommended duration of treatment is five days. These same antivirals should be considered for treatment of cases that test positive for influenza A but test negative for seasonal influenza viruses H3 and H1 by PCR.

Pregnant Women

Oseltamivir, zanamivir, amantadine, and rimantadine are all “Pregnancy Category C" medications, indicating that no clinical studies have been conducted to assess the safety of these medications for pregnant women. Only two cases of amantadine use for severe influenza illness during the third trimester have been reported. However, both amantadine and rimantadine have been demonstrated in animal studies to be teratogenic and embryotoxic when administered at substantially high doses. Because of the unknown effects of influenza antiviral drugs on pregnant women and their fetuses, these four drugs should be used during pregnancy only if the potential benefit justifies the potential risk to the embryo or fetus; the manufacturers' package inserts should be consulted. However, no adverse effects have been reported among women who received oseltamivir or zanamivir during pregnancy or among infants born to such women.

Antiviral Chemoprophylaxis

For antiviral chemoprophylaxis of swine influenza A (H1N1) virus infection, either oseltamivir or zanamivir are recommended. Duration of antiviral chemoprophylaxis is 7 days after the last known exposure to an ill confirmed case of swine influenza A (H1N1) virus infection. ***Antiviral dosing and schedules recommended for chemoprophylaxis of swine influenza A (H1N1) virus infection are the same as those recommended for seasonal influenza:*** *http://www.cdc.gov/flu/professionals/antivirals/dosagetable.htm#table*

Antiviral chemoprophylaxis (pre-exposure or post-exposure) with either oseltamivir or zanamivir is ***recommended*** for the following individuals:

1. Household close contacts who are at high-risk for complications of influenza (persons with certain chronic medical conditions, elderly) of a confirmed or suspected case.
2. School children who are at high-risk for complications of influenza (persons with certain chronic medical conditions) who had close contact (face-to-face) with a confirmed or suspected case.
3. Travelers to Mexico who are at high-risk for complications of influenza (persons with certain chronic medical conditions, elderly).
4. Border workers (Mexico) who are at high-risk for complications of influenza (persons with certain chronic medical conditions, elderly).
5. Health care workers or public health workers who had unprotected close contact with an ill confirmed case of swine influenza A (H1N1) virus infection during the case’s infectious period.

Antiviral chemoprophylaxis (pre-exposure or post-exposure) with either oseltamivir or zanamivir can be ***considered*** for the following:

1. Any health care worker who is at high-risk for complications of influenza (persons with certain chronic medical conditions, elderly) who is working in an area with confirmed swine influenza A (H1N1) cases, and who is caring for patients with any acute febrile respiratory illness.

2. Non-high risk persons who are travelers to Mexico, first responders, or border workers who are working in areas with confirmed cases of swine influenza A (H1N1) virus infection.

Adverse events and contraindications

For further information about influenza antiviral medications, including contraindications, and adverse effects, please see the following:
http://www.cdc.gov/flu/professionals/antivirals/side-effects.htm
http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5707a1.htm

File Formas Help:

How do you view different file formats(PDF, DOC, PPT, MPEG) on this site?

Page last reviewed April 25, 2009 17:46 EDT
Page last updated April 25, 2009 17:46 EDT
Content source: Centers for Disease Control and Prevention

Centers for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA 30333, USA
800-CDC-INFO (800-232-4636) TTY: (888) 232-6348, 24 Hours/Every Day - cdcinfo@cdc.gov