Important Information about Swine Flu

As you may have seen in the media, there has been an outbreak of respiratory illness in Mexico, and similar cases of illness are now being reported in the United States, particularly in southern California, Texas and New York. Some of these cases have been confirmed as “swine flu,” a new strain of influenza A virus type H1N1, which is a hybrid derived from strains found in swine, birds, and humans and that appears to be capable of spreading from person to person, like the usual seasonal influenza strains. It is anticipated that most people will not have immunity to this strain. As of late Sunday, there have been 20 confirmed cases of swine flu in the United States, with most affected patients reporting mild flu-like symptoms and only one case requiring hospitalization. No deaths have been reported in this country. Because of concern for the possible further spread of this virus, the US Department of Health and Human Services and the World Health Organization have both declared this situation to be a public health emergency.

Below is information about how to identify and manage known or suspected swine flu cases, based on guidance from the Centers for Disease Control and Prevention (CDC), as of April 25, 2009. These guidelines, which could change as more information becomes available, are updated regularly on the CDC website (www.cdc.gov/swineflu).

Identifying possible cases
Case definition:
A patient should be considered a suspected case of swine flu if that person has an acute respiratory illness with fever AND:
1. close contact (within 6 feet) with a person known or suspected to have swine flu within 7 days preceding the onset of illness
   OR
2. lived in or recently traveled to San Diego and Imperial Counties, California, Guadalupe County, Texas, or Mexico within the 7 days preceding the onset of illness.
   (Note that these locations could be subject to change on a daily basis.)

Diagnostic testing:
For suspected cases, respiratory samples should be sent to the virology lab for testing in the same manner as for seasonal influenza, except the requisition should indicate “suspected swine flu.”

Rapid diagnostic tests can also be used, but it is uncertain how these tests will perform with the new swine flu strain. Tests positive for influenza A could be associated with the swine flu virus or other seasonal influenza A strains (further testing of virology samples
will be done by the State Lab for some samples). Tests positive for influenza B make it unlikely that the case is related to swine flu. Negative tests, however, cannot be used as evidence to exclude swine flu.

**Infection control of possible cases**

Notify Infection Control (617-726-2036) and Infectious Diseases (617-726-3812) or the Infectious Diseases fellow on call on nights or weekends of any suspected or confirmed cases. Suspected and confirmed cases should be placed on Airborne plus Contact Isolation Precautions for 7 days from the time of onset of symptoms.

For Airborne Precautions – patient is placed in a negative pressure room and health care workers wear N95 respirators on entering the room.

For Contact Precautions – health care workers use Cal Stat (which inactivates influenza viruses) and then don gown and gloves prior to entering the patient’s room. Remove gown and gloves and then use Cal Stat on exiting the patient’s room.

The patient should be encouraged to use hand hygiene (soap and water or Cal Stat regularly) and if the patient leaves the room he/she should wear a surgical mask. If the patient is an outpatient or is discharged, he/she should be encouraged to remain home until the end of the infectious period, defined as 7 days after the onset of symptoms. Outpatients should be instructed in the use of regular hand hygiene and covering of coughs and sneezes with tissues at home.

**Therapy and prophylaxis**

The swine flu virus is susceptible to oseltamivir (Tamiflu) and zanamavir but resistant to amantadine and rimantadine.

Therapy with oseltamivir or zanamavir is recommended for suspected cases of swine flu in the same doses used for seasonal influenza for a duration of 5 days. These recommendations could change as more information becomes available.

Antiviral chemoprophylaxis (pre-exposure or post-exposure) with either oseltamivir or zanamavir (in same doses as used for prophylaxis against seasonal influenza) is recommended for:

1. Household contacts who are at high risk of complications of influenza (e.g., elderly and persons with chronic medical conditions) of a suspected or confirmed case;
2. School children who are at high risk for complications of influenza and who had close face-to-face contact with a confirmed or suspected case;
3. Travelers to Mexico or border workers (Mexico) who are at high risk of complications of influenza; and
4. Health care workers who had unprotected close contact with an ill
confirmed case of swine flu during the patient’s infectious period (7 days).

Antiviral chemoprophylaxis can be considered for:

1. Health care workers at high risk for complications of influenza who are working in an area with confirmed swine flu cases and are caring for patients with any acute febrile respiratory illness; and
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 flu.

We will provide updated information as it becomes available.

For questions about Infection Control, contact the Infection Control Unit (617-726-2036) or the Infectious Diseases fellow on call for nights and weekends.

For questions about clinical management, contact the Division of Infectious Diseases (617-726-3812) or the Infectious Diseases fellow on call for nights and weekends.

For questions about diagnostic specimen handling, contact the Virology Laboratory (617-726-3820) or the Microbiology/Pathology resident on call for nights.

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