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Health Alert

Swine Flu: Public Health Update and Recommendations for Screening
April 26, 2009

In recent days, the Centers for Disease Control and Prevention (CDC) has confirmed emergence of a novel influenza strain ("swine flu") as a human pathogen in the US and Mexico. The virus is a genetic reassortment of the influenza A (H1N1) strain, which contains genetic pieces from four different virus sources: North American swine influenza viruses, North American avian influenza viruses, human influenza viruses and swine influenza viruses found in Asia and Europe. The virus is susceptible to the antiviral medications oseltamavir and zanamivir, but resistant to amantadine and rimantadine.

As of today, the CDC has confirmed 20 cases of swine flu in the US (NYC 8, CA 7, TX 2, KS 2, OH 1), with no deaths or serious complications reported. Signs and symptoms of infection are typical of influenza viruses. The virus is transmitted person-to-person, and the incubation period is estimated to range from 1-7 days. The epidemiology suggests that most US cases occurred following travel to Mexico, or following contact with a symptomatic person who had recently traveled to Mexico. Isolates of swine flu are recognizable in the laboratory as influenza A, but are unable to be subtyped further using routine procedures. There is limited information available on the sensitivity of rapid influenza diagnostic tests for swine flu. Of the four US cases who were known to have been tested, three (75%) were positive.

In addition to events in the US, there is an ongoing outbreak of respiratory infections in Mexico, suspected to be of swine flu origin. The outbreak involves more than one thousand persons, with a high rate (8-12%) of complications such as pneumonia and death. However, only a small number of these cases have been laboratory confirmed with swine flu, and it is unknown if the high complication and mortality rate is a direct result of swine flu infection or other factors.

Presently, there are no confirmed or suspect cases of swine flu infection in Philadelphia. As per the CDC guidance, the Division of Disease Control requests that we enhance local surveillance through the following:

- Clinical laboratories should submit all recent isolates of influenza A to the Pennsylvania Bureau of Laboratories for subtyping

- Clinicians should consider the possibility of swine influenza virus infections in patients presenting with febrile respiratory illness (fever >100° F ***and*** cough or sore throat), particularly those persons:
    - Who have traveled to Mexico, where human cases of swine influenza A (H1N1) have been identified, or
    - Who have been in contact with ill persons from Mexico in the 7 days prior to their illness onset, or
    - Who have traveled or had contact with ill persons who live in areas of the United States where community transmission of the swine flu strain has been recognized (e.g., San Diego and Imperial Counties, California; Guadalupe County, Texas; the school-based outbreak in New York City)

- If swine flu is suspected, clinicians should obtain a respiratory specimen (nasopharyngeal swab usually recommended) for swine influenza testing and place it in a refrigerator (not a freezer). Once collected, the clinician should send the specimen to a laboratory that can perform viral culture or PCR testing. Clinicians can also contact their state or local health department to facilitate transport and timely diagnosis at a state public health laboratory.

- All suspected and confirmed cases that are not hospitalized should be advised to stay at home for at least the first 7 days after illness onset except to seek medical care. Household and other close contacts should be considered to be at high risk for infection. They should be advised to monitor their health for flu-like symptoms and limit community interactions if possible, staying home if they also develop symptoms.

- Report all suspect cases of swine flu infection to the Division of Disease Control at 215-685-6740.