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Mayor

## SEASONAL & AVIAN INFLUENZA HEALTH ADVISORY AND DIRECTIONS TO MRSA RESOURCES November 15, 2007

This Advisory provides information about 2007-08 influenza surveillance, testing, vaccine availability, treatment, prophylaxis and infection control. This advisory and additional influenza information are posted on the SFDPH website: <http://www.sfdph.org/cdcp> - click on "Health Alerts" or influenza links. Information on Methicillin Resistant *Staphylococcus aureus* (MRSA) is also posted on the SFDPH website - click on "Infectious Diseases L - R", then "MRSA".

### ACTIONS REQUESTED OF ALL CLINICIANS

1. **Report** laboratory-confirmed cases of seasonal influenza and suspected cases of avian influenza A (H5N1) that *meet the criteria* described below to SFDPH Disease Control at (415) 554-2830.
2. **Test** symptomatic individuals living in large group or institutional settings in San Francisco.
3. Encourage influenza and/or pneumococcal **vaccination**.
4. Consider **treatment** and chemoprophylaxis of seasonal influenza with oseltamivir or zanamivir.
5. Implement **respiratory and hand hygiene** among staff, patients and visitors in all health care settings.

### INFLUENZA SURVEILLANCE/REPORTING

Report cases in the following priority groups to SFDPH Disease Control at (415) 554-2830 within 24 hours:

#### 1. Residents of large group or institutional settings (e.g. long-term care, rehabilitation, or assisted living facilities) in San Francisco:

We will investigate reported cases and work with local institutions to prevent and interrupt transmission of respiratory outbreaks that meet the following criteria:

- One or more lab-confirmed cases of influenza, **OR**
- Outbreaks of undiagnosed febrile respiratory illness.

#### 2. Pediatric Patients:

- Lab confirmed influenza-related deaths in children 0-17 years, **OR**
- Lab confirmed influenza cases in children 0-17 years who have been hospitalized in the ICU and have a clinical syndrome consistent with influenza or its complications, including lower respiratory tract infection, acute respiratory distress syndrome, apnea, cardiopulmonary arrest, myocarditis, Reye or Reye-like syndrome, or acute CNS syndrome (e.g. encephalitis, seizures).

The California Department of Public Health (CDPH) continues to request timely submission of clinical specimens on pediatric cases for culture, strain typing and antiviral resistance testing. This helps to determine if local emerging strains are causing unusual morbidity and mortality.

#### 3. Individuals with possible exposure to Avian Influenza A (H5N1): **Report these cases immediately.**

There is currently no transmission of influenza A (H5N1) to humans in the US. However, if you suspect influenza A (H5N1) infection immediately implement infection control precautions and call SFDPH Disease Control at (415) 554-2830 to determine the need for testing.

**Consider Influenza A (H5N1) testing YEAR ROUND for patients meeting all of the following:**

- Requires hospitalization or is fatal; **AND**
- Has or had a documented temperature of  $\geq 38^{\circ}\text{C}$  ( $\geq 100.4^{\circ}\text{F}$ ); **AND**
- Has radiographically confirmed pneumonia, acute respiratory distress syndrome (ARDS), or other severe respiratory illness for which an alternate diagnosis has not been established; **AND**
- Has at least one of the following potential exposures (A, B, or C) within 10 days of symptom onset:
  - A. History of travel to a country with influenza A (H5N1) documented in poultry, wild birds, and/or humans, **AND** had at least one of the following potential exposures (1-5) during travel:
    1. Direct contact with (e.g., touching) sick or dead domestic poultry;
    2. Direct contact with surfaces contaminated with poultry feces;
    3. Consumption of raw or incompletely cooked poultry or poultry products;
    4. Direct contact with sick or dead wild birds suspected or confirmed to have influenza A (H5N1);
    5. Close contact (within 1 meter [approx. 3 feet]) of a person who was hospitalized or died due to a severe unexplained respiratory illness;
  - B. Close contact (within 1 meter [approx. 3 feet]) of an ill patient with confirmed or suspected influenza A (H5N1);
  - C. Worked with live influenza A (H5N1) virus in a laboratory.

**Testing Patients for Influenza A (H5N1) Who Do Not Meet the Suspect Case Definition:**

Testing for influenza A (H5N1) virus infection can be considered on a case-by-case basis for:

- A patient with mild or atypical disease (hospitalized or ambulatory) who has one of the exposures listed above (criteria A, B, or C); **OR**
- A patient with severe or fatal respiratory disease whose epidemiological information is uncertain, unavailable, or otherwise suspicious but does not meet the criteria above

For Case Report Forms, laboratory guidelines, and other reference materials visit our website Influenza Reporting and Disease Control Resources page at URL <http://www.sfdcp.org/index.cfm?id=92>.

**LABORATORY: TESTS, SPECIMEN COLLECTION AND SUBMISSION**

The results of rapid diagnostic tests for influenza may help in selecting appropriate antiviral therapy, avoiding inappropriate antibiotic therapy, determining if influenza is the cause of a respiratory illness outbreak, and promptly starting measures to decrease the spread of disease. Point-of-service rapid antigen tests will guide most acute care decisions. However, for residents of large group or institutional settings, for suspect cases of avian influenza and on a case-by-case basis SFDPH can test for influenza virus A, including subtypes H1, H3 and H5N1, and influenza B by Polymerase Chain Reaction (PCR) and a panel of other viral respiratory pathogens using culture and antigen detection methods. Submission of respiratory specimens for testing to the San Francisco Public Health Laboratory **must** be coordinated through SFDPH Disease Control (415-554-2830).

**Seasonal Influenza Testing for Residents of Institutional Settings during an Epidemiologic Investigation:**

Nasal washes are preferred; other acceptable specimens include nasopharyngeal swabs and pharyngeal swabs.

**Culture and strain typing on severely ill pediatric patients:** These tests are important for epidemiologic characterization of influenza in this population. Results will likely not be available in time to guide clinical decisions. Acceptable specimens for testing include nasal washes, nasopharyngeal swabs or pharyngeal swabs.

**Influenza A (H5N1) Testing:** Because the sensitivity of rapid antigen tests varies, clinicians with patients who meet the testing criteria for influenza A (H5N1) should consult with SFDPH Disease Control regarding the need to submit additional specimens for PCR testing (even if the rapid antigen test result is negative). In contrast to seasonal influenza infection, pharyngeal swabs should be collected as they are more sensitive than nasal samples for detection of influenza A (H5N1). Other acceptable specimens include nasopharyngeal swabs or nasal

washes. CLINICAL LABS SHOULD NOT CULTURE SPECIMENS FROM SUSPECTED INFLUENZA A (H5N1) CASES.

**Instructions for submitting both Seasonal Influenza and Influenza A (H5N1) specimens:** If submitting swabs use Dacron with an aluminum or plastic shaft. Cotton or alginate-tipped swabs are not acceptable. Specimens are accepted Monday thru Friday, 8am to 5pm. SFPDH Disease Control can facilitate special arrangements for Influenza A (H5N1) testing. Specimens must be accompanied by an SFPDH laboratory form. Detailed instructions and lab forms are available on our website: <http://www.sfdcp.org/index.cfm?id=92>.

## VACCINE

**Seasonal Influenza:** Flu vaccine, in both intranasal and injectable form, is available in San Francisco and should be given to health care workers, people at risk and anyone who wants protection against influenza. A list of the groups with highest risk for complications or transmission can be found at our website <http://www.sfdph.org/flu>. Some at-risk patients should also be immunized against pneumococcus.

With the chaptering of SB 739, CA Health and Safety Code changed effective July 1, 2007 to say that all employees of acute care hospitals must be vaccinated against influenza or sign declination forms.

Since July 1, 2006, it has been against CA law to administer thimerosal-containing vaccine to women who are knowingly pregnant and to children who are less than three years of age (Health and Safety Code Section 124172 subdivision a). Vaccine supply this year is sufficient for both pediatric patients and pregnant women. If providers are in need of more vaccine, they should go through their regular vaccine distributor. More information about types of available vaccine is posted at [www.sfdph.org/flu](http://www.sfdph.org/flu). If you do not have thimerosal-free vaccine to offer pregnant women, a supply is available at the SFPDH Adult Immunization and Travel Clinic (415-554-2863).

Vaccine is best given in the context of ongoing primary care but many public flu clinics are operating. For a list of SF public flu clinics, see <http://www.sfdph.org/flu> or leave a message on our flu info line (415-554-2681).

## ANTIVIRAL TREATMENT AND CHEMOPROPHYLAXIS

**Seasonal Influenza:** According to the Centers for Disease Control and Prevention (CDC), influenza A virus resistance to adamantanes (amantadine and rimantadine) is common, while resistance to neuraminidase inhibitors (oseltamivir and zanamivir) is infrequent. Therefore, only oseltamivir and zanamivir are recommended for antiviral treatment or chemoprophylaxis during the 2007-8 influenza season. Oseltamivir and zanamivir also have activity against influenza B viruses.

- Oseltamivir: FDA-approved for chemoprophylaxis or treatment of persons age  $\geq 1$  yr.
- Zanamivir: FDA-approved for prophylaxis of persons age  $\geq 5$  yrs and for treatment of persons  $\geq 7$  yrs.

See <http://www.sfdph.org/flu> for CDC recommendations on antiviral agents for seasonal influenza.

## OUTBREAK AND INFECTION CONTROL MEASURES

**Outbreaks:** Once an outbreak or suspected outbreak is reported to the SFPDH Disease Control, our staff will work with the institution to help monitor the progression of the outbreak and provide guidelines and recommendations to control the outbreak.

To monitor newly occurring cases, we review a daily listing of cases with information about the age, location, key signs and symptoms, lab results, and duration of illness. This information helps us to determine the length of the surveillance period and guides our recommendations for the length of time that appropriate infection control and social distancing measures (e.g., cancellation of group activities, closing the common dining areas) should remain in place.

**Seasonal influenza:** Respiratory and hand hygiene is now considered a component of Standard Precautions. To minimize disease transmission, for the duration of the influenza season, and if possible year round, *health care providers should implement respiratory and hand hygiene precautions in the health care setting and in the community.* Please provide this information to staff responsible for implementing hygiene measures:

- Isolate patients with fever and respiratory illness as soon as possible, ideally in a private exam room;
- Place signs at the entryway and in all patient areas **to require patients with respiratory symptoms and fever to wear a surgical mask** and to wash hands or use waterless hand cleanser after coughing, sneezing, blowing noses, touching faces, or handling used tissues;
- Provide masks, tissues and alcohol-based hand cleanser in all patient areas;
- Staff entering the exam room of a patient with fever and respiratory illness should use droplet precautions (surgical mask) until an infectious cause of illness is ruled out and should wash their hands or use waterless hand cleanser before and after each patient.

Flyers and posters in several languages supporting these measures are available on the CDPH website (<http://www.dhs.ca.gov/ps/dcdc/izgroup/shared/education/education.htm>) under the Disease Prevention section, and on the CDC website (<http://www.cdc.gov/flu/professionals/flugallery/index.htm>). Flyers and posters can also be ordered free of charge from SFDPH ([http://www.sfdcp.org/UserFiles/File/IZ\\_Materials\\_Request\\_FORM\\_Seasonal.pdf](http://www.sfdcp.org/UserFiles/File/IZ_Materials_Request_FORM_Seasonal.pdf)).

**Influenza A (H5N1):** Standard, contact, airborne, and eye protection precautions are recommended. Download specific guidelines from our website: <http://www.sfdph.org/cdcp> - click on Disease Reporting and Control and then the Infection Prevention/Control link or go directly to <http://www.sfdcp.org/index.cfm?id=98>. Also, *immediately* notify your hospital infection control professional and SFDPH Disease Control (415) 554-2830.

## **MRSA RESOURCES**

MRSA information is posted on the SFDPH website. Go to <http://www.sfdph.org/cdcp> , and click on “Infectious Diseases L – R”, then “MRSA”.

Documents include:

- A Parent’s Guide to MRSA in California
- Strategies for Clinical Management of MRSA in the Community
- CDC Recommendations for the Prevention of Community-acquired MRSA infections