

Gavin Newsom Mayor Communicable Disease Control and Prevention 101 Grove Street, Room 408 San Francisco, CA 94102

Phone: (415) 554-2830 Fax: (415) 554-2848 www.sfdph.org/cdcp

INFLUENZA HEALTH ADVISORY

October 30, 2008

This Advisory addresses influenza surveillance, testing, vaccine, treatment, prophylaxis and infection control.

ACTIONS REQUESTED OF ALL CLINICIANS

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

This advisory is posted on the SFDPH website at: www.sfcdcp.org/healthalerts. Additional reporting and reference materials (including laboratory guidelines and a document specifically addressing avian influenza A (H5N1)) are posted at: www.sfcdcp.org/diseasereporting and www.sfcdcp.org/influenzareporting.html.

INFLUENZA SURVEILLANCE/REPORTING

The 2008-9 influenza season began early in San Francisco (SF): in September, SFDPH received reports of cases of lab-confirmed influenza A. Please report cases in the following priority groups to SFDPH Disease Control (415-554-2830) within 24 hours:

1. Residents of large group or institutional settings (e.g. long-term care, rehabilitation, or assisted living facilities, college dormitories) 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.

Early in the flu season, when rapid influenza tests may be falsely positive, during suspected flu outbreaks SFDPH may request specimens for confirmatory testing at the SFDPH Public Health Laboratory.

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's or Reye's-like syndrome, or acute CNS syndrome (e.g. encephalitis, seizures).

The California Department of Public Health (CDPH) may request additional specimens from these severely ill pediatric flu cases to perform viral culture, strain typing and antiviral resistance testing. These tests may determine if local emerging strains are causing unusual morbidity and mortality. Also, secondary infection with Methicillin Sensitive *S. aureus* (MSSA) and Methicillin Resistant *S. aureus* (MRSA) may complicate influenza infection and can progress rapidly to death. If MSSA or MRSA has been isolated from any source in severe pediatric influenza cases, please notify SFDPH and if possible, save the *S. aureus* isolate for future testing.

Categories of urgency levels

Health Alert: conveys the highest level of importance; warrants immediate action or attention

Health Advisory: provides important information for a specific incident or situation; may not require immediate action

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action

3. Individuals possibly infected with Avian Influenza A (H5N1):

If you suspect avian influenza A (H5N1) infection immediately implement infection control precautions and call SFDPH Disease Control at (415) 554-2830 to determine the need for testing. For more information refer to *Avian Influenza A (H5N1) – Criteria for Testing, Tests, Specimen Collection and Submission, and Infection Control Precautions* located at: www.sfcdcp.org/influenzareporting.html.

The California Sentinel Provider Influenza Surveillance Program

We are inviting primary care providers (physicians, nurse practitioners, and physician assistants) from any specialty and any practice type to enroll as sentinel physicians in SF. The California Sentinel Provider Influenza Surveillance Program is a partnership between clinicians, local health departments, CDPH, and the Centers for Disease Control and Prevention (CDC) to conduct surveillance for influenza-like illness (ILI). The data collected by Sentinel Providers help CDPH and CDC to develop influenza prevention and control strategies and to select the virus strains to be included as components of the vaccine. Influenza surveillance enables the detection of new subtypes and emerging strains of influenza viruses.

Sentinel Providers report the number of patients seen with ILI and the total number of patients seen for any reason on a weekly basis to the CDC by fax or internet. Specimen collection materials and shipping to CDPH are provided at no cost to the provider. Results from rapid antigen or PCR testing, culture, typing and sub typing performed by CDPH are sent to participating providers, who also receive weekly updates on state and national influenza activity. If you are interested in becoming a Sentinel Provider, contact Melissa Dahlke (510-620-3846).

LABORATORY: TESTS, SPECIMEN COLLECTION AND SUBMISSION

The results of rapid diagnostic tests for influenza may help select appropriate antiviral therapy, avoid inappropriate antibiotic therapy, establish influenza as the cause of a respiratory illness outbreak, and ensure prompt implementation of measures to decrease the spread of disease. Point-of-service rapid antigen tests will guide most acute care decisions.

Additional testing may be appropriate for some patients including: **residents of large group or institutional settings**, **severely ill pediatric patients**, **patients possibly infected with avian influenza A (H5N1)** and others on a case-by-case basis. ALL testing **must** be coordinated through SFDPH Disease Control (415-554-2830). 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. For **severely ill pediatric patients**, culture and strain typing can be done; however these tests which are important for epidemiologic characterization of influenza in this population will likely not be available in time to guide clinical decisions. For **patients possibly infected with avian influenza A (H5N1)**, contact SFDPH Disease Control immediately at (415) 554-2830.

Collection of Seasonal Influenza Specimens: In general nasal washes are preferred; other acceptable specimens include nasopharyngeal swabs and pharyngeal swabs. If submitting swabs, use Dacron with an aluminum or plastic shaft. Cotton or alginate-tipped swabs may compromise performance of lab tests and are not recommended. Specimens are accepted Monday - Friday, 8am to 5pm, and must be accompanied by an SFDPH lab form. Detailed instructions and forms are available on our website: www.sfcdcp.org/influenzareporting.html.

VACCINE FOR SEASONAL INFLUENZA

Influenza vaccine, in both intranasal and injectable form, is widely available in San Francisco this season. For the first time in history annual vaccination is recommended for **all** children age 6 months through 18 years. Health care workers, people at risk and anyone who wants protection against influenza should also receive vaccine. A list of the groups with highest risk for complications or transmission can be found at our website: www.sfdph.org/flu. Some at-risk patients should also receive pneumococcal vaccine. For details about the Advisory Committee on Immunization Practices (ACIP) recommendations go to: www.cdc.gov/flu/professionals/acip/index.htm.

By CA law, (Health and Safety [H & S] Code section 1288.7) all employees of acute care hospitals must be vaccinated against influenza or sign declination forms. CA law (H&S Code Section 124172, subdivision a) also

states that only thimerosal-free vaccines be given to "knowingly pregnant" women and all children between 6 months and 35 months of age. Thimerosal-free vaccine supply this year is sufficient. If providers need more vaccine, go to your regular vaccine distributor. More information about available vaccine types is posted at www.sfdph.org/flu. Also the SFDPH Adult Immunization and Travel Clinic (415-554-2863) can provide thimerosal-free vaccine to pregnant women.

For questions on flu vaccine in SF go to: www.sfdph.org/flu or leave a message on flu info line (415-554-2681).

ANTIVIRAL TREATMENT AND CHEMOPROPHYLAXIS FOR SEASONAL INFLUENZA

Currently, for the 2008-9 season, the neuraminidase inhibitors, oseltamivir and zanamivir, are the antiviral agents recommended by CDC for treatment or chemoprophylaxis. However, these recommendations may change. During the 2007-8 season, CDC noted 10.9% of tested influenza A (H1N1) strains in the US contained a mutation conferring resistance to oseltamivir. Much higher levels of oseltamivir resistance were detected in other parts of the world. The CDC and CDPH will test influenza isolates for resistance throughout the 2008-9 season.

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

The adamantanes are no longer recommended for influenza prevention or treatment due to continued high levels of resistance in most influenza A strains and ineffectiveness against influenza B strains.

For more information on antiviral agents including side effects and dosing refer to: www.cdc.gov/flu.

OUTBREAK MONITORING

Once an outbreak or suspected outbreak is reported to SFDPH, our staff will work with the facility to help monitor the outbreak progression and will provide guidelines and recommendations to control the outbreak. To monitor, 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 determine the length of the surveillance period and guides our recommendations during the time that appropriate infection control and social distancing measures (e.g., cancellation of group activities, closing common dining areas) should remain in place.

INFECTION CONTROL FOR SEASONAL INFLUENZA

Respiratory Hygiene/Cough Etiquette is now a component of Standard Precautions. To limit disease transmission, for the duration of the influenza season, and if possible year round, health care providers should implement respiratory hygiene/cough etiquette and hand hygiene procedures 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 or at a distance of at least 3 feet from others;
- Place signs at the entryway and in all patient areas to require persons with cough to wear a surgical
 mask when possible 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;
- Instruct all persons to cover the mouth/nose with a tissue when coughing or sneezing and to perform hand hygiene after contact with respiratory secretions;
- 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.

Free flyers and posters can be ordered from SFDPH (www.sfcdcp.org/fluproviders.htm]). Flyers and posters in several languages supporting these measures are also available on the CDPH website (www.cdph.ca.gov/programs/immunize/Pages/FluPreventionMaterials.aspx), and on the CDC website (www.cdc.gov/flu/professionals/flugallery/index.htm).