



Health Update:

Influenza and Respiratory Illness 2019 – 20

November 14, 2019

Situation: Seasonal influenza activity has begun in California and is expected to increase. For activity updates visit www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Influenza.aspx and see Surveillance Reports.

Actions Requested of San Francisco Clinicians

- **Report influenza and other acute respiratory outbreaks, suspected cases of novel or variant influenza, influenza-associated deaths in children aged 0 – 17 years, and RSV-associated deaths in children aged 0 – 4 years**, according to updated reporting guidance below.
- **Encourage and administer annual influenza vaccine** to everyone aged ≥ 6 months. Vaccination is particularly important for individuals at high risk of influenza complications and for health care workers. Provide pneumococcal vaccination with Prevnar13[®] and/or Pneumovax23[®] as recommended by the Centers for Disease Control and Prevention (CDC).
- **Prescribe antiviral chemoprophylaxis** for those at higher risk for influenza-related complications who have been exposed to influenza, especially those in congregate settings.
- **Review and implement influenza infection control precautions.** In the outpatient setting, those with influenza-like illness (ILI) should be instructed to stay at home until 24 hours after fever resolves, except to access medical evaluation and care. All patients with ILI should wear a (surgical) face mask in all health care settings.

Reporting: SFDPH Communicable Disease Control phone (415) 554 – 2830; fax (415) 554 – 2848. See www.sfdcp.org/communicable-disease/disease-reporting/influenza-reporting-resources/.

PLEASE REPORT:

All outbreaks of influenza or acute respiratory illness, whether occurring in health care institutions (e.g., hospitals, long-term care, rehab) or in congregate settings (e.g., schools, assisted living, correctional facilities) (*report by phone within 24 hours*).

- See recommendations checklist and other resources at www.sfdcp.org/longtermcare.

Fatal laboratory-confirmed influenza-associated cases aged 0 – 17 years (*report within 7 days*).

- This is an update from previous years where fatal cases aged 0 – 64 years were reportable.
- Complete a case history form (www.sfdcp.org/influenzareporting.html).



- SFDPH may request that retained specimens from fatal cases be sent to CDPH for viral culture, strain typing and antiviral resistance testing.

Fatal respiratory syncytial virus (RSV)-associated cases aged 0 – 4 years (*report within 7 days*).

Novel or variant influenza (*report immediately by phone if suspected*).

- Novel influenza (“bird flu” e.g., A/H5N1 and A/H7N9 viruses) is characterized by ILI severe enough to require inpatient medical care in a person with recent (within 10 days of illness onset): (a) close contact with a confirmed or suspected case of human infection with a novel influenza virus; OR (b) travel to areas where a novel virus has been detected in humans or animals; OR (c) working with a novel influenza virus in a lab.
- Variant influenza (“swine flu”) is caused by an influenza A virus that normally circulates in pigs and can occur sporadically in humans, most commonly among people who have direct or frequent contact with pigs.
- Visit www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Influenza.aspx and see Quick Sheets for Novel Influenza and Variant Influenza.

Testing, Specimen Collection, and Submission

Influenza testing is indicated when it will help guide clinical decision-making. Testing may be most useful in hospitalized and/or critically ill patients, and at the beginning and end of influenza season when the pre-test probability is lower. Treatment with antivirals should not be delayed pending test results.

Laboratory testing with real-time reverse-transcription polymerase chain reaction (rRT-PCR) is the preferred testing method when there is strong clinical suspicion of influenza, even if the rapid test is negative. Influenza testing by RT-PCR is readily available at hospital and commercial laboratories and is particularly encouraged: (1) for hospitalized, intensive care, and fatal cases of ILI; (2) during acute respiratory outbreaks; and (3) in persons with ILI whose history of travel or contacts suggests concern for variant or novel influenza.

Rapid Influenza Diagnostic Testing (RIDT) can be useful but has limitations. Rapid influenza tests vary in terms of sensitivity and specificity, with sensitivities ranging from 50-70%. False positives are common when influenza prevalence is low, and false negatives can occur when influenza prevalence is high. To minimize false negative results: collect respiratory specimens for RIDT within 3-4 days of illness onset and consider confirmatory testing with RT-PCR, particularly if an RIDT result is negative during a period of high community influenza activity.

San Francisco Public Health Laboratory (SFPHL) offers influenza testing by RT-PCR in special situations, such as ILI outbreaks in institutional settings, and only with pre-approval. Instructions can be found at: www.sfcdcp.org/communicable-disease/disease-reporting/influenza-reporting-resources/.



Vaccination

General: Annual influenza vaccination is recommended for everyone aged 6 months and older. For complete CDC recommendations and approved products, visit:

https://www.cdc.gov/mmwr/volumes/68/rr/rr6803a1.htm?s_cid=rr6803a1_w

- To find vaccination locations in SF see: www.sfcddcp.org/immunizations/where-to-get-immunized/. For 2019 – 2020, most influenza vaccine is quadrivalent (2 flu A and 2 flu B strains), though trivalent vaccine is still acceptable. Latex is now absent from all U.S. flu vaccine formulations.
- The live, attenuated quadrivalent intranasal flu vaccine (LAIV4; FluMist®) was reformulated prior to the 2018 – 2019 season with a new H1N1 strain shown to generate a robust immune response in the recipient and is available this year in limited quantities. For healthy individuals aged 2 – 49 years, CDC and the American Academy of Pediatrics (AAP) recommend either FluMist or inactivated, injectable flu vaccine without preference.
- Children aged 6 months through 8 years who previously received 0-1 lifetime doses of influenza vaccine should receive 2 doses of the 2019 – 20 formulation, given at least 4 weeks apart. Those with 2 or more prior lifetime doses require just 1 dose this year.
- Children aged 6 – 35 months and knowingly pregnant women should receive preservative-free vaccine (single-dose vial or prefilled syringe).
- Persons with a history of severe allergic reaction to egg (any symptom beside hives) should be vaccinated in a medical setting supervised by a provider who is able to recognize and manage severe allergic conditions. Beginning with this 2019 – 20 season, two vaccine brands contain zero traces of egg: the recombinant vaccine, Flublok®, and the cell culture-grown vaccine, Flucelvax®.

Health Care Workers (HCW): Annual influenza vaccination of HCW provides important benefits:

- Reduces staff absenteeism during periods of high influenza activity when healthcare facilities are most burdened with caring for influenza patients.
- Reduces likelihood of HCW transmitting influenza to patients and helps protect patients with the highest vulnerability to influenza complications.

HCW include (but are not limited to) physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual staff not employed by the healthcare facility, and other persons (e.g., clerical, dietary, housekeeping, laundry, security, maintenance, administrative, billing and volunteers) not directly involved in patient care but who can become infected or transmit influenza infection in a healthcare setting.

California law (Health & Safety Code §1288.7 / Cal OSHA §5199) mandates either flu vaccination or a signed declination form for all acute-care hospital workers and most other HCW including skilled nursing facility, long-term care facility, and clinic and office-based staff.



By order of the Health Officer, dated September 5, 2019, all hospitals, skilled nursing, and other long-term care facilities in San Francisco must require their HCW to receive an annual flu vaccination or, if they decline, to wear a mask in patient care areas during the influenza season. See

<https://www.sfcddcp.org/wp-content/uploads/2018/10/2019-2020-Flu-Masking-Memo-SF-FINAL-09.05.2019.pdf>

- For HCW in all healthcare settings not specifically covered by the order (including but not limited to ambulatory and community clinics, medical offices, emergency medical services providers, home health providers, pharmacies, and dialysis centers), SFDPH strongly recommends implementation of a mandatory flu vaccination policy.

Pneumococcal Vaccination: The CDC recommends the routine administration of 13-valent pneumococcal conjugate vaccine (Pneumovax13[®]) for all infants. Pneumovax13 and the 23-valent pneumococcal polysaccharide vaccine (Pneumovax23[®]) are indicated for many children and adults with immunocompromising and chronic medical conditions.

The CDC Advisory Committee on Immunization Practices concluded in June 2019 that due to a marked decline in invasive pneumococcal disease among those aged ≥ 65 years since the advent of routine pneumococcal immunization of infants, Pneumovax13 will no longer be routinely recommended for everyone aged ≥ 65 years (<https://www.cdc.gov/vaccines/acip/recommendations.html>). The change will be effective once ACIP publishes its recommendation that Pneumovax13 vaccination of those aged ≥ 65 years should be based on “shared clinical decision making” between the patient and provider. Everyone aged ≥ 65 years should still receive a dose of Pneumovax23.

CDC maintains a website (<https://www.cdc.gov/vaccines/vpd/pneumo/hcp/who-when-to-vaccinate.html>) and an app (<https://www.cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html>) to assist clinicians with the sequence and timing of pneumococcal vaccination of children and adults.

Antiviral Chemoprophylaxis

CDC will update its specific influenza antiviral recommendations for 2019 – 20 as additional information becomes available. Check <https://www.cdc.gov/flu/professionals/antivirals/index.htm>.

Chemoprophylaxis Recommendations: Oral oseltamivir or inhaled zanamivir are 70 – 90% effective in preventing influenza and are useful adjuncts to vaccination. Chemoprophylaxis is recommended if it can be initiated within 48 hours after exposure to influenza, among:

- Persons with severe immune deficiencies or persons receiving immunosuppressive medications who might not respond to influenza vaccination.
- Persons at high risk of influenza complications who have a contraindication to influenza vaccination, or who were exposed to a person with influenza within the first 2 weeks following vaccination.
- Residents of institutions such as nursing homes who may have been exposed to influenza at the facility, regardless of whether they have received influenza vaccine. Chemoprophylaxis should also be considered for unvaccinated institutional staff.



Antiviral chemoprophylaxis should continue for the duration of potential exposure to a person with influenza, and until 7 days after the last known exposure. In addition, for institutional outbreaks, the minimum duration of chemoprophylaxis is 14 days.

Infection Control Precautions for Healthcare Settings

All healthcare facilities should adopt standard and droplet precautions when caring for patients with ILI, or with suspected or confirmed seasonal influenza infection. Specifically:

- All patients with fever and cough should wear a (surgical) face mask.
- In addition to standard precautions, staff entering the exam room of any patient with ILI should wear a (surgical) face mask.
- Isolate patients with ILI as soon as possible, ideally in a private exam room or at a distance of at least 6 feet from others.
- When a patient with influenza symptoms stays in a healthcare facility, isolation precautions should be continued for 7 days after illness onset or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer.
- When patients with suspected or confirmed influenza are to be subjected to aerosol-generating procedures, airborne precautions should be added to standard and droplet precautions.

See www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm for detailed guidance on infection prevention strategies for seasonal influenza.

For the more highly pathogenic avian flu strains (H7N9, H5N1, and other avian flu strains), standard plus contact and airborne precautions are recommended (www.cdc.gov/flu/avianflu/novel-flu-infection-control.htm).

Reminders and Resources

SFDPH flu pages: www.sfcddp.org/infectious-diseases-a-to-z/d-to-k/influenza-flu/

CDPH flu pages: www.cdph.ca.gov/Programs/CID/DCDC/pages/immunization/influenza.aspx

To report influenza deaths and/or cases or outbreaks as described above, call SFDPH Communicable Disease Control Unit at (415) 554 – 2830 or fax (415) 554 – 2848.

Within San Francisco, the public can call 311 for basic information about influenza.

Definition of influenza-like illness (ILI): Fever $\geq 100^{\circ}$ F (37.8° C) and cough and/or sore throat, in the absence of a known cause other than influenza.



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