



2016-17 INFLUENZA SEASON

County of Santa Cruz ~ Public Health Division

www.santacruzhealth.org/flu

Issue #1 | Published on Dec. 22, 2016



Public Health
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Santa Cruz County

In the United States, flu season typically occurs in the fall and winter, mainly from October to March -- though it most often peaks between December and February. The Centers for Disease Control and Prevention (CDC) publishes a weekly flu surveillance report from October to May, called “[Flu View](#),” with multiple sources of flu-related data. The California Department of Public Health also summarizes flu activity weekly, and as of Dec 10, 2016, statewide activity is considered *sporadic*. California data is updated weekly, and available at: [http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza\(Flu\).aspx](http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza(Flu).aspx).

Locally, flu activity increased around Thanksgiving, based on data from local sentinel providers. There have not yet been any reports of outbreaks or severe illness, which are reportable events (see below).

REPORTING TO PUBLIC HEALTH

The following events are legally required to be reported to the Santa Cruz County Communicable Disease Unit. Please report using a Confidential Morbidity Report (CMR), available at SantaCruzHealth.org/CDUnit

- **NEW!!** Deaths from respiratory syncytial virus in children <5 years of age
- Deaths from influenza among persons age 0-64
- ICU hospitalization of persons with influenza among persons age 0-64
- Any suspected case of novel influenza
- Outbreaks of influenza or acute respiratory illness occurring in institutions or congregate settings

VACCINATION

Annual influenza vaccination is recommended for **everyone age 6 months and older**, regardless of risk group, to ensure protection throughout the 2016-17 influenza season. People should begin getting vaccinated soon after flu vaccine becomes available. However, as long as flu viruses are circulating in the community, it's not too late to get vaccinated. For a complete list of recommendations and vaccine products for 2016-17, see:

www.cdc.gov/mmwr/volumes/65/rr/rr6505a1.htm

This season, the vaccine's A (H3) strain and the B strain are different from last year (see Figure 1). There are two types of vaccines: trivalent with 3 strains, and quadrivalent with 4 strains. There is no preferential recommendation for trivalent versus quadrivalent vaccine; either is acceptable.

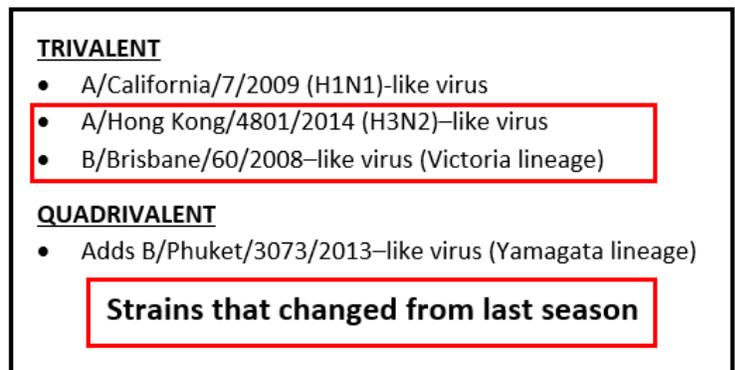
The Advisory Committee on Immunization Practices (ACIP) recommends that live attenuated influenza vaccine “Flu Mist” should not be used this season due to concerns regarding low effectiveness in the past couple of seasons

HEALTH CARE WORKERS

On September 7, 2016, Santa Cruz County Health Officer Dr. Arnold Leff ordered all licensed healthcare facilities and Emergency Medical Services providers to implement a mandatory influenza vaccination program. It states that facilities must ensure that all healthcare workers either receive an annual flu vaccine or, if they decline, wear a mask while working in patient care areas. The order covers the typical flu season, which is defined as October 31, 2016 to March 31, 2017. The order may be extended as needed. See the order here: santacruzhealth.org/Portals/7/Pdfs/Alerts/2016FluOrder.pdf

Since health care workers (HCWs) both are at risk for infection and can transmit the virus to their vulnerable patients, vaccinating HCWs protects medically fragile patients and reduces employee absenteeism during influenza season. Mandatory vaccination with masking policies has been shown to increase HCW vaccination rates to above 90%.

Figure 1: 2016-17 Seasonal Flu Vaccine Strains: Trivalent (3 strains) and Quadrivalent (4 strains), United States





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INFLUENZA ANTIVIRAL MEDICATION

Recommendations for the 2016-17 season have not changed substantially from the 2015-16 recommendations. For a complete list of current recommendations, visit <https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>. In summary, influenza antiviral medication can be used to **treat** influenza or **prevent** influenza within 48 hours of exposure. The treatment can reduce illness severity, shorten duration of illness and hospitalization, and reduce risk of complications and mortality from influenza. All hospitalized patients and all outpatients at high risk for serious complications should be treated as soon as possible -- ideally, **within 48 hours of symptom onset** when treatment is most effective, regardless of lab results. Those at high risk for influenza-related complications include:

- Children under 2 years and Adults 65 and older
- Persons with chronic pulmonary, cardiovascular, renal, hepatic, hematological, neurologic, and metabolic disorders
- Persons with immunosuppression, including from medications or by HIV infection
- Women who are pregnant or postpartum (within 2 weeks after delivery)
- Persons younger than 19 who are receiving long-term aspirin therapy
- American Indians / Alaska Natives
- Persons who are morbidly obese (BMI > 40)
- Residents of nursing homes and other chronic-care facilities

Although annual influenza vaccination is the best way to prevent influenza, antiviral medications are approximately 70% to 90% effective in preventing influenza and are useful adjuncts to influenza vaccination. However, CDC does not recommend widespread or routine use of antiviral medications for chemoprophylaxis, so as to limit the possibilities that antiviral resistant viruses could emerge. The following are examples of situations where chemoprophylaxis is recommended if it can be initiated within 48 hours after exposure to influenza:

- Persons with severe immune deficiencies who might not respond to influenza vaccination
- Persons at high risk of influenza complications who have a contraindication to influenza vaccination
- Residents of institutions, such as nursing homes, regardless if they have received influenza vaccine, once influenza cases have been identified at the facility (i.e., outbreaks); chemoprophylaxis should also be considered for unvaccinated staff

SPECIMEN COLLECTION & TESTING

Influenza testing is indicated when it will help guide clinical decision-making. Testing may be most useful in hospitalized and/or critically ill patients. Rapid influenza diagnostic tests (RIDTs) may be used to help with diagnosis; however, RIDTs vary in sensitivity and specificity (ranging ~50–70%), thus negative results of RIDTs do not exclude influenza virus infection in patients with signs and symptoms suggestive of influenza. For more information on signs, symptoms and diagnostic testing, visit: <https://www.cdc.gov/flu/professionals/diagnosis/labrolesprocedures.htm>.

Specimens on cases that meet the criteria for “Reporting to Public Health” (page 1) should be sent to the Santa Cruz County Public Health Lab to characterize circulating strains causing severe illness or outbreaks. For questions about submitting specimens, contact the Public Health Lab at (831) 454-5445.

Specimen Collection Instructions for RT-PCR to send to Public Health:

- Specimens should be collected within the first 24–72 hours of onset of symptoms and no later than 5 days after onset of symptoms. The specimens should be kept refrigerated at 4°C and sent on cold packs if they can be received by the laboratory within 3 days of the date collected. If samples cannot be received by the laboratory within 3 days, they should be frozen at -70°C or below and shipped on dry ice.
- Upper respiratory samples suitable for RT-PCR include: nasopharyngeal (NP) swabs, nasal swabs, throat swabs, nasal aspirate, nasal washes, NP wash, and NP aspirate. For patients hospitalized with pneumonia, specimens from the lower respiratory tract should also be obtained. Lower respiratory tract samples suitable for RT-PCR include: bronchoalveolar lavage, bronchial wash, tracheal aspirate, and lung tissue.
- Swab specimens should be collected using swabs with a synthetic tip (e.g., polyester or Dacron®) and an aluminum or plastic shaft. Swabs with cotton tips and wooden shafts are NOT recommended. Specimens collected with swabs made of calcium alginate are NOT acceptable. Place appropriate swab specimen in a standard container with 2–3 ml of viral transport media (VTM).