INFLUENZA AND OTHER RESPIRATORY VIRUS REPORTING FOR 2019-2020

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

- Pediatric Deaths from influenza among children age 0-17
- Deaths from respiratory syncytial virus among children age 0-4
- Any suspected case of novel influenza
- Outbreaks of influenza or acute respiratory illness occurring in institutions or congregate settings
- Outbreaks assessed as having public health importance (e.g. case(s) that have recent exposure to swine, recent travel to an area where novel influenza is circulating, or contact with a confirmed case of novel influenza)

Similar to the 2018-2019 influenza season, the following situations are not reportable: ICU hospitalizations of persons with influenza or influenza deaths among adults ages 18-64.

HEALTH CARE WORKER VACCINATION ORDER

On September 23, 2019, Santa Cruz County Health Officer Dr. Gail Newel ordered all licensed health care facilities and Emergency Medical Services providers to implement a mandatory influenza vaccination program. It states that facilities must ensure that all health care workers either receive an annual flu vaccine or, if they decline, wear a mask while working in patient care areas. The order is effective from October 31 to March 31 and may be extended as needed. A link to the order is posted on the Health Services Agency’s website here.

Since infected health care workers (HCWs) can transmit the virus to their vulnerable patients, vaccinating HCWs is expected to protect medically fragile patients, as well as reduce employee absenteeism during influenza season. According to the Centers for Disease Control and Prevention, mandatory vaccination policies with a masking option has been shown to increase HCW vaccination rates to above 90%.

VACCINATION

Annual influenza vaccination is recommended for everyone age 6 months and older, regardless of risk group or vaccine type. As long as flu viruses are circulating in the community, it’s not too late to vaccinate your patients. However, CDC and the Advisory Committee on Immunization Practices (ACIP) recommend adults and children (including those 6 months to 8 years of age who need 2 doses) receive their influenza vaccinations by the end of October.

For a complete list of recommendations and vaccine products for 2019-20, refer to this table. Please note that the U.S. Food and Drug Administration (FDA) approved a change in dose volume and age requirements for Fluzone Quadrivalent and Afluria Quadrivalent, which is noted in the footnotes of the table.

There are three types of influenza vaccine: inactivated influenza vaccine (IIV), live attenuated influenza vaccine (LAIV nasal spray), and recombinant influenza vaccine (RIV). Depending on the type of vaccine, it may be available in a trivalent formulation with 3 strains, and/or a quadrivalent formulation with 4 strains. There is no preferential recommendation for trivalent versus quadrivalent vaccine; either is acceptable. However, all regular-dose flu shots and recombinant vaccines will be quadrivalent this season.

Similar to last season, the ACIP recommends the live attenuated influenza vaccine – “Flu Mist”. In prior seasons, LAIV had not been very effective against H1N1. However, an update to the vaccine virus in production suggests LAIV to be effective.

Per CDC’s 2019-2020 ACIP recommendations, persons with an egg allergy should receive any of the licensed, recommended influenza vaccine (IIV, LAIV nasal spray, or RIV) that is appropriate for their age and health status. The selected vaccine should be administered in an inpatient or outpatient medical setting (i.e. clinics, physician offices).
For additional information on vaccination recommendations, commonly asked questions, and resources, please visit CDC’s website.

**INFLUENZA ANTIVIRAL MEDICATION**

There are four FDA-approved antiviral medications this season, which include: oseltamivir (also known as Tamiflu®), zanamivir (Relenza®), peramivir (Rapivab®), and baloxavir marboxil (Xofluza®). More information about treatment options can be found on CDC's Antiviral Medication: Summary for Clinicians or the Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management of Seasonal Influenza Guidelines.

CDC recommends that hospitalized patients and outpatients at high risk for serious complications be given antivirals as soon as possible, regardless of lab results. Treatment with antivirals works best within 48 hours of illness onset and has been proven to prevent serious flu complications.

While annual influenza vaccination is the best way to prevent influenza, antiviral medication can be considered for chemoprophylaxis to prevent influenza in certain situations. However, CDC does not recommend widespread or routine use of antiviral medications for prophylaxis, in order to limit the possibility that antiviral-resistant viruses could emerge. Antivirals may also cause significant side effects. 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 (even if they have already 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, 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 influenza reporting (page 1) should be sent to the Santa Cruz County Public Health Lab, to characterize circulating strains causing severe illness or outbreaks through rRT-PCR testing. For questions about submitting specimens, contact the Health Services Agency Lab at (831) 454-5445.

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

- Specimens should be collected within 24–72 hours of symptom onset and no later than 5 days after symptom onset. 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).

**COMMUNICABLE DISEASE UNIT:** (831) 454-4114 (phone), (831) 454-5049 (fax)