HEALTH ALERT
Influenza & Sepsis

Key Messages:
- Prompt recognition and treatment of sepsis are especially critical during this challenging influenza season
- Early data indicate more than one third of influenza cases in Californians <65 years of age that are fatal or require ICU care reported to CDPH this season were diagnosed with sepsis or secondary bacterial infections
- To protect patients, promptly treat suspected influenza in persons at high risk for developing complications
- Because rapid influenza diagnostic tests (not based on PCR) are often falsely negative, treat suspected influenza even if the rapid test is negative, while waiting for PCR-based test results

Current Situation:
The 2017-2018 influenza season has been unusually challenging and is likely to continue into the spring. Preliminary data have indicated two peaks of influenza activity with more than a third of the 612 fatal and ICU cases in Californians younger than 65 years of age reported to CDPH so far this season diagnosed with sepsis or secondary bacterial infections. Influenza infection can cause sepsis by itself or from secondary infection with group A Streptococcus (S. pyogenes), Streptococcus pneumoniae, Staphylococcus aureus, Neisseria meningitidis, and other bacteria; for example, up to 10% of invasive pneumococcal disease is associated with influenza.

Recommendations:
Promptly treat suspected influenza in persons at higher risk for developing complications, including those with:
- chronic underlying conditions
- children younger than 2 years (although all children younger than 5 years are considered at higher risk for complications from influenza, the highest risk is for those younger than 2 years)
- adults aged 65 years and older
- people with immunosuppression, including that caused by medications or by HIV infection
- women who are pregnant or postpartum (within 2 weeks after delivery)
- American Indians/Alaska Natives
- people with extreme obesity (i.e., body-mass index is equal to or greater than 40)
- residents of nursing homes and other chronic-care facilities
Because rapid influenza diagnostic tests not based on PCR often result in false negatives, treat suspected influenza even if a rapid test is negative, while awaiting more definitive PCR results. See CDC guidance on the prompt treatment of influenza.

**Recognize Sepsis**

Signs and symptoms of sepsis can include any one or a combination of the following:

- Confusion or disorientation
- Fever, shivering, or feeling very cold
- Shortness of breath
- Extreme pain or discomfort
- Tachycardia
- Clammy or sweaty skin

**Act fast if you suspect sepsis.** Initiate antibiotic therapy and frequent monitoring of vital signs. CDC has a number of materials on the timely diagnosis and treatment of sepsis on its sepsis website.

**Prevent Sepsis**

The risk of Influenza and associated sepsis can be reduced through immunization with influenza and pneumococcal vaccines.

- All adults at least 65 years of age are recommended to receive both conjugate (Prevnar13®) and polysaccharide (Pneumovax®) pneumococcal vaccines
- Younger adults with chronic conditions or who smoke are also recommended for pneumococcal immunization
- Use the clinic flyer on pneumococcal vaccine for adults at: eziz.org/assets/docs/IMM-1152.pdf

CDC’s Clinician **Update on the 2017-2018 Influenza Season**, providing free CME credits, can be streamed at: https://emergency.cdc.gov/coca/calls/2018/callinfo_020818.asp

California influenza surveillance reports are updated each Friday at:
www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Flu-Reports.aspx

- Thank you for your efforts to protect the health of Californians!

Sincerely,

Robert M. Levin, MD
Health Officer

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This bulletin is intended to improve the public health in our county by keeping physicians and nurses informed of noteworthy diagnoses, disease trends and other events of medical interest. Another goal of a public health department is to educate. We hope that you will use this information to increase your awareness. Please allow us to continue in our role of speaking to the press so that we may maximize the educational message to the benefit of all citizens of Ventura County.