

Van Do-Reynoso, MPH, PhD *Director*  
Suzanne Jacobson, CPA *Chief Financial Officer*  
Paige Batson, MA, PHN, RN *Deputy Director*  
Douglas Metz, DPM, MPH *Deputy Director*  
Polly Baldwin, MD, MPH *Medical Director*  
Henning Ansorg, M.D. *Health Officer*

August 12, 2019

## Provider Alert

### Severe Acute Pulmonary Disease Associated with Cannabis or Cannabidiol Oil Vaping

#### Key Messages:

- Since June 2019, 7 cases of severe acute pulmonary disease requiring hospitalization and respiratory support among previously healthy adults have been reported to the Kings County Health Officer. This number of cases greatly exceeds the number otherwise expected since June.
- A reported common exposure among these patients is that they have been vaping cannabis or cannabidiol (CBD) oils. At this time, no infectious cause has been identified.
- Clinicians who become aware of cases similar to those described are asked to report them to their local health department through electronic reporting via CalRedie [and](#) by calling 805-681-5280 24/7.
- If the patient has product in hand, please collect, hold, and contact the local health department by calling 805-681-5280 so that the product and device can be tested.

#### Current Situation

Since June 2019, at least 7 cases of severe acute pulmonary disease in previously healthy adults were reported from a Kings County hospital. Cases were among residents of multiple counties. The patients presented with progressive respiratory distress, sometimes initially diagnosed with pneumonia or bronchitis, and some with preceding fevers and gastrointestinal symptoms. All cases failed to respond to an initial course of antibiotic treatment. All patients required admission to the hospital with significant respiratory support, including high-flow oxygen, bilevel positive airway pressure (BIPAP), or intubation with mechanical ventilation. Diagnoses included pneumonitis and acute respiratory distress syndrome (ARDS). Patients have improved with systemic steroids. Evaluation for infectious etiologies has been negative to date in all patients.

The California Department of Public Health (CDPH) is currently supporting the affected Local Health Jurisdiction's in their investigations. All patients reported vaping in the weeks prior to hospital admission, and a reported common exposure between these patients is that they have been vaping cannabis or CBD oils. The names and types of products used remain unknown, and patient interviews are ongoing. Other states have reported recent similar cases.

## **Background**

Vaping refers to the increasingly popular practice of inhaling vapor from an e-cigarette device, which works by heating a liquid that can contain nicotine, marijuana, or other drugs. The long-term health impacts of vaping are unknown. The liquids used in e-cigarettes are largely unregulated, and they can contain toxic chemicals that can cause lung damage.

## **Case Definition**

A case is defined as meeting the following criteria:

- Severe acute pulmonary disease (including but not limited to pneumonitis and ARDS);
- Requiring admission to a hospital and respiratory support (including but not limited to high-flow oxygen, BIPAP, or intubation with mechanical ventilation);
- No infectious etiology defined;
- Recent history of vaping;
- Symptom onset on or after June 1, 2019.

## **Recommendations for Providers**

- Clinicians are asked to remain alert for potential cases among persons presenting with:
  - Severe acute pulmonary symptoms and recent history of vaping.
  - Patients seen in primary care and initially diagnosed with pneumonia or bronchitis, but who did not respond to antibiotics.
- Clinicians who become aware of cases similar to those described above are encouraged to report them to their local health department through electronic reporting via CalRedie and by calling 805-681-5280 24/7