

August 21, 2019

## Health Alert: Severe Pulmonary Disease Among People Who Reported Vaping

Georgia Department of Public Health Requests Reports of Cases of Severe Acute Pulmonary Disease Associated with Vaping

### Summary

- As of August 19, 2019, multiple states have reported cases of severe pulmonary disease requiring hospitalization and respiratory support among previously healthy children and adults.
- A common exposure reported among these patients is that they have been vaping (i.e., use of e-cigarette devices to aerosolize substances for inhalation) nicotine and/or tetrahydrocannabinol (THC)-containing products. At this time, no infectious cause has been identified.
- DPH is currently investigating possible cases reported in Georgia.
- Clinicians who see or have recently seen cases similar to those described above should report them to Georgia Poison Center (GPC) at 1-800-282-5846.

### Clinical Presentation

Patients have presented with respiratory symptoms including cough, shortness of breath, and fatigue. Symptoms worsened over a period of days or weeks before admission to the hospital. Other symptoms reported by some patients included fever, chest pain, weight loss, nausea, vomiting, and diarrhea. Chest radiographs showed bilateral opacities, and CT imaging of the chest demonstrated diffuse ground-glass opacities, often with sub-pleural sparing. Evaluation for infectious etiologies was negative among nearly all patients and patients did not improve with antibiotic therapy. Some patients experienced progressive respiratory compromise requiring mechanical ventilation but subsequently improved with corticosteroids.

### Potential Exposures

All patients have reported vaping in the weeks and months prior to hospital admission. Many have acknowledged recent vaping of nicotine and/or THC-containing products; however, no specific product has been identified by all cases, nor has any product been conclusively linked to this clinical syndrome.

### Actions Requested of Healthcare Providers

Clinicians should always inquire about potential drug (legal and illicit) use as part of a general history. When patients present with respiratory or pulmonary illness, especially of unclear etiology, clinicians should ask about the use of e-cigarette products (devices, liquids, refill pods and/or cartridges) for vaping. If possible, inquire about the types of drugs (legal or illicit) used and methods of drug use (e.g., smoking, vaping).

DPH is requesting that clinicians report cases of significant respiratory illness of unclear etiology and a history of vaping to GPC at 1-800-282-5846.

It is important to consider all possible causes of illness in patients presenting with these symptoms, even if they report a history of e-cigarette product use. Clinicians should evaluate and treat for other likely causes of illness (e.g., infectious or other) as clinically indicated. If a vaping product is suspected as a possible etiology of a patient's illness, it is important to inquire what type of product as well as if the patient is:

- using commercially available devices and/or liquids (i.e. bottles, cartridges or pods);
- sharing e-cigarette products (devices, liquids, refill pods and/or cartridges) with other people;
- re-using old cartridges or pods (with homemade or commercially bought products); or
- heating the drug to concentrate it and then using a specific type of device to inhale the product (i.e., dabbing)

Healthcare providers should also ask patients about any retained product, including devices and liquids, in order to ascertain availability for possible testing to be coordinated by the local/state health department.

#### **ACTION STEPS:**

**Clinicians:** Clinicians who become aware of cases similar to those described above should report them to GPC at 1-800-282-5846.

**Local health departments:** Please forward to hospitals and clinics in your jurisdiction.

**Hospitals and clinics:** Please distribute to pulmonologists, infectious disease doctors, infection preventionists, emergency department physicians, intensive care physicians, neurologists, radiologists, primary care providers, and pediatricians.

- Information on electronic cigarettes and similar devices:  
[https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/index.htm](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm)
- For assistance with management of patients suspected of illness related to recreational, illicit, or other drugs: Call GPC at 1-800-282-5846.