

## **Health Advisory**

### **E-Cigarette/Vaping Associated Lung Injury (EVALI) Update: Reporting Guidelines and CDC Guidance**

October 21, 2019

As of October 15, 2019 the Pennsylvania Department of Health has reported 61 confirmed and probable cases of EVALI to the Centers for Disease Control and Prevention (CDC) including 1 confirmed death, with an additional 66 cases under investigation. The CDC has received 1,479 confirmed and probable case reports with 33 deaths. Of the national cases, 70% are male, the median age is 23 years and the majority of cases have been hospitalized. As part of this ongoing investigation, the Philadelphia Department of Public Health (PDPH) is issuing this health advisory to provide instructions on identifying and reporting local cases along with additional guidance from the CDC on storing clinical specimens and caring for patients with suspected EVALI.

#### **Summary Points**

- The CDC, Food and Drug Administration (FDA), and state and local health departments are investigating this ongoing multistate outbreak.
- New cases continue to be reported and the cause(s) of the lung injury remains unknown.
- Clinical providers should identify and report suspect cases using the attached report form.
- Refer to [CDC guidance](#) when caring for and evaluating patients with suspected EVALI.
- Store blood, urine and bronchoalveolar lavage (BAL) fluid according to [CDC guidelines](#).

Based on national reporting, patients with EVALI have experienced respiratory symptoms (cough, shortness of breath, or chest pain), gastrointestinal symptoms (abdominal pain, nausea, vomiting, or diarrhea) or non-specific constitutional symptoms (fatigue, fever, or weight loss) within 90 days of vaping or using e-cigarette products. Symptoms typically develop over a period of days but can manifest over several weeks. Fever, tachycardia, and elevated white blood cell count have been reported in the absence of an identifiable infectious disease. Radiologic findings typically show bilateral pulmonary infiltrates and diffuse ground-glass opacities. Many patients required supplemental oxygen, some required assisted ventilation and oxygenation, and some were intubated. The CDC has released [interim guidance](#) for healthcare providers evaluating and caring for patients with suspected EVALI as well as an updated [case definition](#) to assist in identifying patients.

#### **Managing Suspect Cases:**

- Identify suspect cases by asking all patients who present with pulmonary symptoms about use of e-cigarettes and vaping products. Confirm vaping activities occurred within 90 days of illness onset.
  - Consider all possible causes of illness. A respiratory virus panel and tests for bacterial pathogens should be ordered. Evaluate for other possible causes of illness (e.g., infectious, rheumatologic, neoplastic) as clinically indicated.
- Report suspect cases by completing the attached reporting form if e-cigarette product use is suspected as a possible etiology or exacerbating factor for their illness and obtain a detailed substance use history.
- Collect and store urine and bronchoalveolar lavage (BAL) fluid according to recently released [CDC guidance](#). Instructions on shipping samples to the Bureau of Laboratories (BOL) or CDC for testing are not currently available.
- Inform patients that they may be contacted by public health investigators and advise them not to discard vaping products including devices, substances, or packaging from products used in 90 days prior to illness onset.
- Refer patients who are concerned about harmful effects from e-cigarette products, to call the Poison Control Center at: 1-800-222-1222.

**Report cases of severe pulmonary disease of unclear etiology and a history of e-cigarette product use within the past 90 days of illness onset to PDPH.** Complete the attached case report form and send to PDPH by email to: [ACD@phila.gov](mailto:ACD@phila.gov), or by fax to: 215-238-6947. For additional information about this investigation, please call the PDPH Division of Disease Control at 215 685 6741 during normal business hours.

## Pulmonary Disease Associated with E-cigarette Product Use or Vaping Initial Suspect Case Report Form

Pennsylvania state and local health departments are investigating cases of unexplained vaping associated severe pulmonary illness. Please complete this form and send it to the Philadelphia Department of Public Health by Fax #215-238-6947 or email securely to: [ACD@phila.gov](mailto:ACD@phila.gov).

Reporter Information			
Reporter Name:	Report Date (Mo., Day, Yr.) ___/___/___		
Reporter Title:	Reporter Phone #:		
Facility/Organization Name:	Email:		
Patient Information			
Name (Last, First, M.I.):	Gender: <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> Transgender		
Phone Number:	DOB (Mo., Day, Yr.): ___/___/___		
Home Address:	City:	State:	ZIP:
E-Cigarette/Vaping Information	Facility Information		
Did the patient vape or use e-cigarettes in the 3 months (90 days) before symptom onset? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know  Vaping products available? (e.g., cartridges, pods, tanks) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know	Hospitalized: <input type="checkbox"/> Yes <input type="checkbox"/> No Facility Name: _____	Admission Date: ___/___/___ Discharge Date: ___/___/___	
	ICU <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know		
	Deceased <input type="checkbox"/> Yes <input type="checkbox"/> No	Date: ___/___/___	
Clinical Information			
Date of Symptom Onset (Mo., Day, Yr.): ___/___/___	Symptoms: <input type="checkbox"/> Cough <input type="checkbox"/> Chest tightness <input type="checkbox"/> Vomiting <input type="checkbox"/> Nausea <input type="checkbox"/> Shortness of Breath <input type="checkbox"/> Other _____		
Influenza PCR/rapid test	<input type="checkbox"/> Neg	<input type="checkbox"/> Pos	<input type="checkbox"/> Don't Know
Respiratory Viral Panel	<input type="checkbox"/> Neg	<input type="checkbox"/> Pos	<input type="checkbox"/> Don't Know
Other pulmonary microbiological test results ( <i>S. pneumoniae</i> , <i>Legionella pneumophila</i> , etc.):			
Chest CT Scan:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Date: Abnormalities :
Chest X-ray:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Date: Abnormalities:
Autopsy performed	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Pathology specimens available (e.g., autopsy, lung biopsy)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Notes:			

Send to the Philadelphia Department of Public Health by Fax #215-238-6947 or email securely to: [ACD@phila.gov](mailto:ACD@phila.gov).