

Health Advisory

Severe Pulmonary Disease Associated with Using E-Cigarette and Vaping Products: Reporting Guidelines

September 23, 2019

As of September 17, 2019, the Centers for Disease Control and Prevention (CDC) has received 530 reports of lung injury associated with use of e-cigarettes or vaping products. As part of an ongoing national investigation to determine the extent of this outbreak and to identify the specific cause(s), the Philadelphia Department of Public Health (PDPH) is issuing this health advisory to provide instructions to the clinical community to identify and report local cases.

E-cigarettes can contain harmful or potentially harmful substances, including nicotine, heavy metals (e.g., lead), volatile organic compounds, and cancer-causing chemicals. Additionally, some e-cigarette products are used to deliver

illicit substances and may be modified for uses that could increase their potential harm. Based on reports from several states, patients have experienced respiratory symptoms (cough, shortness of breath, or chest pain), and some have also experienced gastrointestinal symptoms (nausea, vomiting, or diarrhea) or non-specific constitutional symptoms (fatigue, fever, or weight loss). Symptoms typically develop over a period of days but sometimes can manifest over several weeks. Fever, tachycardia, and elevated white blood cell count have been reported in the absence of an identifiable infectious disease. Many patients have sought initial care in ambulatory settings, some with several visits, before hospital admission. 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.

Identify suspect cases:

- Ask 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.
- If e-cigarette product use is suspected as a possible etiology or exacerbating factor for their illness, obtain a detailed substance use history and complete the attached reporting form.
- Consider all possible causes of illness in patients reporting respiratory and gastrointestinal symptoms and use of e-cigarette products. Evaluate for other possible causes of illness (e.g., infectious, rheumatologic, neoplastic) as clinically indicated.
- Identify previously evaluated patients with pulmonary disease where vaping history was known and report these cases.
- 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, 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.

SUMMARY POINTS

- 530 cases of severe pulmonary disease associated with vaping have been reported to CDC nationwide including 7 deaths.
- This is an ongoing multi-state outbreak with an active investigation to determine the extent and specific cause(s).
- Identify and report all suspect cases to the Philadelphia Department of Public Health by completing the attached case reporting form.

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.

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.