

PENNSYLVANIA DEPARTMENT OF HEALTH

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Update on Outbreak of Lung Injury Associated with E-cigarette Product Use or Vaping and Case Report Form for Reporting to the Pennsylvania Department of Health



DATE:	09/26/2019
TO:	Health Alert Network
FROM:	Rachel Levine, MD, Secretary of Health
SUBJECT:	Update on Outbreak of Lung Injury Associated with E-cigarette Product Use or Vaping and Case Report Form for Reporting to the Pennsylvania Department of Health
DISTRIBUTION:	Statewide
LOCATION:	Statewide
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COUNTY:	Statewide
MUNICIPALITY:	Statewide
ZIP CODE:	Statewide

This transmission is a “Health Advisory”: provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, NURSING, AND LABORATORY STAFF IN YOUR HOSPITAL
EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE
FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE
LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE
PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP.

Summary

- As of September 17, 2019, 530 cases of lung injury associated with the use of e-cigarette products or vaping have been reported to the Centers for Disease Control and Prevention (CDC).
- The Pennsylvania Department of Health (PA DOH) is participating in a multi-state outbreak response to help determine the cause or causes of these severe lung injuries.
- Report cases who have a history of e-cigarette product use, or vaping, within the past 90 days and lung injury of unclear etiology, to the PA DOH. Please use the attached case report form to report cases.
- Fax the attached "Lung Injury Associated with E-cigarette Product Use or Vaping Initial Suspect Case Report Form," to 717-772-6975 or by securely e-mailing the form to ra-dhVapingReporting@pa.gov. If the patient is a known Philadelphia resident, please send the case report form to the Philadelphia Department of Public Health (fax: 215-238-6947 or email: ACD@phila.gov).
- Call PA DOH at 1-877-PA-HEALTH or your local health department if you have any questions.

Case Reporting to Public Health Authorities

Report cases who have a history of e-cigarette product use, or vaping, within the past 90 days and lung injury of unclear etiology to the Pennsylvania Department of Health (PA DOH) or your local health department.

To report: Fax the attached "Lung Injury Associated with E-cigarette Product Use or Vaping Initial Suspect Case Report Form," to 717-772-6975 or by securely e-mailing the form to ra-dhVapingReporting@pa.gov. If the patient is a known Philadelphia resident, please send the case report form to the Philadelphia Department of Public Health (fax: 215-238-6947 or email: ACD@phila.gov).

Recommendations for Clinicians

1. Report cases who have a history of e-cigarette product use, or vaping, within the past 90 days and lung injury of unclear etiology to the PA DOH. Reporting of cases may help CDC and health departments in Pennsylvania determine the cause or causes of these pulmonary illnesses.
2. Ask all patients (or their proxies) who report e-cigarette product, or vaping, use within the last 90 days about signs and symptoms of pulmonary illness.
3. If e-cigarette product use, or vaping, is suspected as a possible etiology of a patient's severe pulmonary disease, obtain detailed history regarding the:
 - Substance(s) used: nicotine, cannabinoids (e.g., marijuana, THC, THC concentrates, CBD, CBD oil, synthetic cannabinoids [e.g., K2 or spice], hash oil, Dank vapes), flavors, or other substances.
 - Substance source(s): commercially refillable e-liquids (e.g., bottles, cartridges, or pods), commercially non-refillable liquids e-liquids, homemade or street sources.
 - Device(s) used: manufacturer; brand name; product name; model; serial number of the product, device, or e-liquid; if the device can be customized by the user; and any product modifications by the user (e.g., exposure of the atomizer or heating coil).
 - Where the devices were purchased.
 - Method of use: aerosolization, dabbing, dripping, or re-use of old cartridges or pods with homemade or commercially bought e-liquids.
 - Sharing e-cigarette or vaping products (devices, liquids, refill pods, or cartridges) with others (to identify other cases).
4. Determine if any remaining product, including devices and liquids, are available for testing. Testing will be coordinated by PA DOH and local health departments through the PA DOH Bureau of Laboratories (BOL). Please email ra-dhVapingReporting@pa.gov to request information for shipping samples to BOL.
5. Consider all possible causes of illness (e.g., infectious, rheumatologic, neoplastic) in patients reporting respiratory, with or without GI, symptoms and e-cigarette product use. Evaluate and treat as appropriate for other possible causes of illness (e.g., infectious, rheumatologic, neoplastic).
6. Clinical improvement of patients with lung injury associated with e-cigarette use, or vaping, has been reported with the use of corticosteroids. The dosing, route of administration, duration, and timing of steroid treatment have varied. The decision to use corticosteroids should be made on a case-by-case basis based on risks and benefits and the likelihood of other etiologies.

7. Lipoid pneumonia associated with inhalation of lipids in aerosols generated by e-cigarettes, or vaping, has been reported based on the detection of lipid-laden alveolar macrophages obtained by bronchoalveolar lavage (BAL) and lipid staining (e.g., oil red O, Sudan Black). The decision about whether to perform a BAL, with or without bronchoscopy, should be based on the overall clinical picture.
8. Lung biopsies have been performed on some patients. The decision about whether to perform biopsy (whether transbronchial or surgical) should be based on the overall clinical picture. If a lung biopsy is obtained, consider lipid staining during pathologic examination.* Because routine tissue processing involves the application of alcohols, which remove lipids, lipid staining is best performed on fresh tissue. Before the procedure, consider consultation with pulmonary, critical care, pathology, or other specialties to inform any evaluation plan. However, conducting routine tissue processing and histopathologic evaluation is still important.

*Additional information on lipid staining is available at:

https://www.cdc.gov/tobacco/basic_information/ecigarettes/severe_lung_disease/healthcare_providers/index.html.

9. Patients who have received treatment for lung injury related to e-cigarette product use, or vaping, should undergo follow-up evaluation as clinically indicated to monitor pulmonary function.

What to Tell Patients

1. Regardless of the ongoing investigation, e-cigarette products should not be used by
 - Youth and young adults.
 - Pregnant women.
 - Adults who do not currently use tobacco products.
2. Additionally, anyone who uses e-cigarette products should
 - Not buy these products off the street (e.g., e-cigarette products with THC, other cannabinoids).
 - Not modify e-cigarette products or add any substances to these products that are not intended by the manufacturer.
 - Monitor yourself for symptoms (e.g., abdominal pain, nausea, vomiting, diarrhea, cough, shortness of breath, chest pain).
 - Promptly seek medical attention if you have concerns about your health.

CDC has information on this outbreak and investigation at https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html.

PA DOH will provide additional updates on this outbreak and investigation as more information becomes available.

Call PA DOH at 1-877-PA-HEALTH or your local health department if you have any questions.

Categories of Health Alert messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of September 26, 2019, but may be modified in the future.