



Health Alert: Severe Pulmonary Illness Among Persons Who Report Vaping

Update: September 5, 2019

Background

The Texas Department of State Health Services (DSHS) continues to investigate severe pulmonary illness among people who have reported vaping*. Some cases in Texas have reported vaping products containing nicotine and/or tetrahydrocannabinol (THC). Similar cases have occurred in multiple other states, some resulting in hospitalization.

DSHS is working with local health departments, other states, and the Centers for Disease Control and Prevention to better characterize case demographics, clinical characteristics, and exposures.

Clinical Presentation

Individuals experienced respiratory symptoms including cough, shortness of breath, and fatigue. Some also experienced nausea, vomiting, and diarrhea. Symptoms worsened over a period of days or weeks before admission to the hospital. Illness severity has varied, and in some cases, severe lung disease has been reported. Many patients have required supplemental oxygen. Some have required assisted ventilation and oxygenation, and some were intubated.

Evaluation for infectious diseases was negative in all cases and no alternative diagnosis (*e.g.*, rheumatologic or neoplastic process) has been identified as the underlying cause of illness.

Radiologic findings have varied. On imaging, chest radiographs have demonstrated bilateral opacification, and CT imaging has demonstrated diffuse ground-glass opacification. Radiographic abnormalities have not been present in all patients upon initial presentation.

*Inhalation drug use with an electronic device (*e.g.*, electronic nicotine delivery system (ENDS), electronic cigarette, e-cigarette, vaporizer, vape(s), vape pen, dab pen, or other device) or dabbing to inhale substances (*e.g.*, nicotine, marijuana, THC, THC concentrates, CBD, synthetic cannabinoids, flavorings, or other substances).

Disease Reporting

Cases with similar clinical presentation and history of vaping should be reported to DSHS by calling 512-422-0925 (24 hours a day, 7 days a week).

Texas Health and Safety Code Ch. 161 (Sec. 161.0211) requires DSHS to conduct epidemiologic or toxicologic investigations of human illnesses or conditions and of environmental exposures that are harmful or believed to be harmful to the public health.

Recommendations for Clinicians

Health care professionals should:

- Where appropriate, ask patients about history of inhalation drug use with electronic devices. If possible, inquire about the types of products used and methods of use.
- Be aware that the illness can worsen over time and some suspect cases have required high-level intensive care and respiratory support.
- During patient assessment, ensure that “vape”, “vaping”, or “e-cigarette” is noted in the chief complaint history when applicable.
- If vaping products used by the patient are available, ask that they be set aside (not used) in case it is needed for testing.
- At the direction of the U.S. Food and Drug Administration (FDA), DSHS will coordinate product specimen submission related to this investigation. If you have collected samples, please contact DSHS at 512-422-0925 for sample submission instructions.

Additional recommendations for clinicians from the Centers for Disease Control and Prevention are available here: <https://emergency.cdc.gov/han/han00421.asp>.

Recommendations for the Public

While this investigation is ongoing, if you are concerned about these specific health risks, consider refraining from using e-cigarette products. People who experience difficulty breathing, cough, or other symptoms in the days or months after vaping should seek immediate medical attention.

Additional recommendations for the public from the Centers for Disease Control and Prevention are available here: <https://emergency.cdc.gov/han/han00421.asp>.

For More Information

For questions:

DSHS Environmental Surveillance and Toxicology Branch
512-776-7268 or 512-422-0925
epitox@dshs.texas.gov

Get the facts about electronic cigarettes

www.dshs.texas.gov/tobacco/E-Cigarettes/

Information for Health Care Providers on adolescents and E-cigarette use

www.txhealthsteps.com/static/courses/escape-the-vape/sections/section-1-1.html