

## Health Alert: Severe Pulmonary Illness Among Persons Who Report Vaping

Update: September 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.

**\*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).**

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.

## 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>

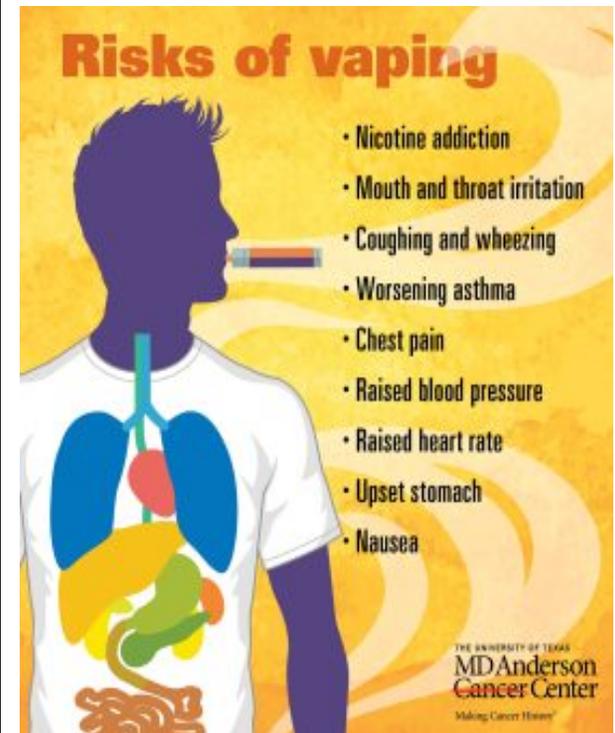
### For More Information

#### For questions:

DSHS Environmental Surveillance and Toxicology Branch 512-776-7268 or 512-422-0925 [epitox@dshs.texas.gov](mailto:epitox@dshs.texas.gov) 3

#### Get the facts about electronic cigarettes

[www.dshs.texas.gov/tobacco/E-Cigarettes/](http://www.dshs.texas.gov/tobacco/E-Cigarettes/)



# Health Alert for Taylor County Medical Providers

## Case Definition

### Confirmed

Using an e-cigarette ("vaping") or dabbing in 90 days prior to symptom onset **AND** Pulmonary infiltrate, such as opacities on plain film chest radiograph or ground-glass opacities on chest CT **AND** Absence of pulmonary infection on initial work-up: Minimum criteria include negative respiratory viral panel, influenza PCR or rapid test if local epidemiology supports testing. All other clinically indicated respiratory ID testing (e.g., urine Antigen for Streptococcus pneumoniae and Legionella, sputum culture if productive cough, bronchoalveolar lavage (BAL) culture if done, blood culture, HIV-related opportunistic respiratory infections if appropriate) must be negative **AND** No evidence in medical record of alternative plausible diagnoses (e.g., cardiac, rheumatologic or neoplastic process).

### Probable

Using an e-cigarette ("vaping") or dabbing in 90 days prior to symptom onset **AND** Pulmonary infiltrate, such as opacities on plain film chest radiograph or ground-glass opacities on chest CT **AND** Infection identified via culture or PCR, but clinical team believes this is not the sole cause of the underlying respiratory disease process **OR** Minimum criteria to rule out pulmonary infection not met (testing not performed) and clinical team\*\* believes this is not the sole cause of the underlying respiratory disease process **AND** No evidence in medical record of alternative plausible diagnoses (e.g., cardiac, rheumatologic or neoplastic process).

## Disease Surveillance & Reporting

Public health surveillance involves systematic collection, analysis, and dissemination of data regarding adverse health conditions. Surveillance involves investigating individual cases as well as epidemics. Only residents of Taylor County are counted in our surveillance. In public health surveillance, data are used to monitor disease trends; detect, respond to, and study new disease threats, outbreaks, or epidemics; identify risk factors; and plan, implement, and assess intervention and prevention services.

Most case reports must include the patient's name, date of birth, sex, race/ethnicity, city of residence, date of onset, physician's name, and method of diagnosis. Surveillance data are obtained from laboratory reports and case investigation forms. Social and demographic information is collected to determine patterns of disease in the population, identify case contacts, and target control measures. Reports should be given to the local public health department's Epidemiology section.

Surveillance is subject to limitations which affect many data collections systems. Under-reporting is a ubiquitous problem, but its extent differs among diseases.

The diseases we report include all of the "Notifiable Conditions" which can be found at:

[dshs.texas.gov/idcu/investigation/conditions/](https://dshs.texas.gov/idcu/investigation/conditions/)

## Disease Reporting - Vaping

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). And so that local public health authorities know of the case you report, please provide us at Abilene-Taylor County Public Health District with pertinent information by calling Epidemiology at 325-676-6355 or 325-437-4556.

# Abilene-Taylor County Public Health District Epidemiology Report

September 2019



Public Health  
Prevent. Promote. Protect.  
Abilene Taylor County  
Public Health District



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Check our Facebook page (Abilene Taylor County Public Health District) and "Like" us for public health, epidemiology, and preparedness information.

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