

# E-cigarettes and Severe Lung Injury

The Kentucky Department for Public Health (DPH) is investigating cases of e-cigarette or vaping product use-associated lung injury (EVALI). DPH is working closely with healthcare providers, local health departments, the Centers for Disease Control & Prevention (CDC), the Food & Drug Administration (FDA), and other states to gather information about this outbreak.

## What are the symptoms?

Patients are experiencing respiratory symptoms including cough, shortness of breath, and fatigue. In most cases, these symptoms worsen over a period of days or weeks before admission to the hospital. Some patients have also reported fever, nausea, diarrhea, vomiting, chest pain, and loss of appetite.

## What is the cause of the illness?

The cause or causes of EVALI have not yet been determined, but all reported cases have a history of using e-cigarettes. No one device or substance is associated with all cases. Many identified cases have used e-cigarette products containing THC. While it appears that vitamin E acetate is associated with EVALI, evidence is not yet sufficient to rule out contribution of other chemicals of concern. DPH and CDC are collecting information on the e-cigarette devices and chemicals used in the 90 days prior to illness.

## Who is affected?

As of February 18, 2020, there are at least 2,807 confirmed and probable, hospitalized cases of EVALI across 50 states, plus D.C., the U.S. Virgin Islands, and Puerto Rico. There have been at least 68 deaths, including one death in Kentucky. Most of the cases have occurred in youth and young adults.

## What should you do?

Since the specific cause of EVALI is not yet known, the only way to ensure that you are not at risk while the investigation continues is to refrain from use of all e-cigarette products. If you do use e-cigarettes and you experience symptoms like those reported in this outbreak, seek medical care promptly. Please take your e-cigarette products (device, cartridges, etc.) with you to the doctor.

Learn more at [www.cdc.gov/LungInjury](http://www.cdc.gov/LungInjury). For free help quitting smoking or using e-cigarettes, visit [QuitNowKentucky.org](http://QuitNowKentucky.org), or call 1-800-QUIT-NOW.

**E-cigarettes** are devices that deliver an aerosol to the user by heating a liquid that usually contains nicotine, flavorings, and other chemicals. E-cigarettes can also be used to deliver marijuana or other substances.

Using an e-cigarette is often called "vaping."

Some adults have used e-cigarettes to attempt to quit smoking. However, e-cigarettes are not currently approved by the FDA as an aid to quit smoking. Furthermore, youth are more likely than adults to use e-cigarettes. An estimated 20.8% of high school students have used an e-cigarette in the past 30 days.<sup>1</sup>

<sup>1</sup> Gentzke AS, Creamer M, Cullen KA, et al. *Vital Signs: Tobacco Product Use Among Middle and High School Students — United States, 2011–2018*. MMWR Morb Mortal Wkly Rep 2019;68:157–164.

## Kentucky

Cases Reported for Investigation: 57  
Confirmed: 10  
Probable Cases: 12, including 1 death  
Ruled Out: 14

*Ruled out cases were reported but during investigation were determined not to include a documented history of vaping, or otherwise do not meet the case definition.*

