



# Technical Bulletin



**Date:** October 15, 2019  
**Topic:** Characteristics of the Multistate Outbreak of Lung Injury Associated with Using E-cigarette Use, or Vaping  
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**To:** Rural Health Care Providers and Medical Facilities

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## Current Situation

The Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), state and local health departments, and other clinical and public health partners are continuing to investigate a multistate outbreak of a severe lung injury associated with the use of e-cigarette products. As of October 8, 2019, 1,299 lung injury cases associated with the use of e-cigarette products have been reported to CDC from 49 states, the District of Columbia, and 1 territory. Five of these cases have occurred in Nevada (four in Clark County and one in Washoe County). So far twenty-six deaths have been confirmed in 21 states.

## Characteristics

This e-cigarette-use associated outbreak is disproportionately affecting young people, especially males.

- Approximately 70% of reported cases are males.
- Approximately 80% of reported cases are under 35 years of age.
  - 15% of cases are under 18 years of age.
  - 21% of cases are 18 to 20 years of age.
  - 18% of cases are 21 to 24 years of age.
  - 26% of cases are 25 to 34 years of age.
  - 20% of cases are 35 years of age or older.

Among 573 cases with information on substances used in e-cigarettes, or vaping products, in the 30 days preceding symptom onset:

- 76% reported using Tetrahydrocannabinol-containing (THC-containing) products
- 58% reported using nicotine-containing products
- 32% reported exclusive use of THC-containing products
- 13% reported exclusive use of nicotine-containing products

Specific chemical exposures causing this severe lung disease outbreak are currently unknown. While this investigation is ongoing, CDC recommends that persons consider refraining from using e-cigarette, or vaping, products, particularly those containing THC.

## Recommendations for Health Care Providers

- Cases of lung injury of unclear etiology that are associated with a history of e-cigarette or vaping product use within the past 90 days should be reported to their state and local health department. Reporting of lung injury cases associated with using e-cigarettes can help determine the specific cause of these lung injuries.
- Patients who report e-cigarette product use within the last 90 days should be thoroughly evaluated for signs and symptoms of pulmonary illnesses.

- If e-cigarette product use is suspected as a possible cause for a patient’s lung injury, a detailed history of the substances used, sources, and devices used should be obtained and efforts should be made to determine if any remaining product, devices, and liquids are available for testing.
- If available, products or devices used in the 90 days prior to illness should be tested. Product collection and testing should be coordinated through the Nevada State Office of Public Health Informatics and Epidemiology (OPHIE).
- Clinical improvement of patients with severe pulmonary disease associated with e-cigarette use has been reported with the use of corticosteroids. The decision to use corticosteroids should be made on a case-by-case basis.
- Lipoid pneumonia associated with inhalation of lipids in aerosols generated by e-cigarettes has been reported.
- Lung biopsies have been performed on some patients. If a lung biopsy is obtained, lipid staining may be considered during pathologic examination, and is best performed on fresh tissue.
- Patients who have received treatment for severe pulmonary disease related to e-cigarette product use should undergo follow-up evaluation as clinically indicated to monitor pulmonary function.

Submission of fixed lung biopsy tissues or autopsy tissues to CDC for further evaluation should be considered after a lung biopsy or autopsy is performed on a patient suspected of lung injury related to e-cigarette, or vaping, product use.

### **Resources**

1. [CDC’s Poster for Clinical Settings](#)
2. [Laboratory Sample Collection, Storage and Submission Guidance](#)
3. [Specimen Submission Guidance](#)
4. [Presentation for Clinicians](#)
5. [2019 Lung Injury Surveillance Case Definitions](#)
6. [CDC Mortality and Morbidity Weekly Report \(MMWR\) published on September 27, 2019](#)

### **Reporting:**

**The Nevada Division of Public and Behavioral Health (DPBH) is requesting that healthcare providers report cases of lung injury of unclear etiology and a history of e-cigarette product use within the past 90 days. These cases can be reported to DPBH M-F 8:00 AM to 5:00 PM at (775) 684-5911 or afterhours at (775) 400-0333. Case reporting can also be performed by fax at (775) 684-5999.**



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Ihsan Azzam, Ph.D., M.D.  
Chief Medical Officer

### References:

<https://www.cdc.gov/mmwr/volumes/68/wr/mm6839e1.htm>

[https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/severe-lung-disease.html#recommendations-for-hcps](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html#recommendations-for-hcps)