Health Advisory: Severe Lung Injury Associated with Vaping June-July 2020

Minnesota Department of Health, Fri, July 24 12:00 CDT 2020

Action Steps

Local and tribal health department: Please forward to hospitals, clinics, urgent care centers, emergency departments, and convenience clinics in your jurisdiction.

Hospitals, clinics and other facilities: Please forward to infection preventionists, infectious disease physicians, emergency department staff, hospitalists, primary care clinicians, and all other health care providers who might see patients with acute respiratory symptoms.

Health care providers:

- Ask patients who present with pulmonary symptoms about vaping
- When treating patients with pulmonary symptoms who report a history of vaping, consider consultation with a pulmonologist
- Let patients know that MDH may be interested in speaking with them and collecting products to test for suspected toxicants
- Report suspected cases to MDH as soon as possible using the online form located at Vaping-Associated Lung Injuries: Information for Health Professionals

Background

The Minnesota Department of Health has been alerted to 11 suspected cases of e-cigarette or vaping product use-associated lung injury (EVALI) in June-July among adolescents and adults who report vaping. Adolescents and young adults who experienced severe lung injury after vaping have also been identified recently in California. Patients presented for care with symptoms suspicious for severe COVID-19 infection, including cough and shortness of breath but SARS-CoV-2 testing did not confirm the infection. Patients endorsed history of vaping and symptoms improved with systemic steroid therapy for EVALI. Evaluation for infectious diseases was negative in all patients. Symptoms have resulted in hospitalizations with some patients requiring invasive ventilation.

Most patients report vaping THC with or without additional nicotine -based products. Product names are not all known but have included KRT, Dragon’s Breath, and Dank. Previous reports have linked Vitamin E acetate in illicit THC based products with the severe lung injury.

EVALI Clinical Presentation and Evaluation

Clinical presentation includes shortness of breath, cough, fever, malaise and gastrointestinal symptoms (nausea, vomiting, abdominal pain or diarrhea). Other symptoms reported by some patients included headache, dizziness, and chest pain. Chest radiograph typically demonstrates bilateral opacities and CT imaging typically demonstrates diffuse ground glass opacification with some degree of subpleural sparing. Leukocytosis and elevated C-reactive protein are often noted, with negative infectious studies including SARS-CoV-2 testing. Most patients were treated with systemic steroids. Clinicians should ask patients who present with pulmonary symptoms about
vaping. Consultation with pulmonologists should be considered when treating patients who have pulmonary symptoms who report a history of vaping. Because symptoms are consistent with an infection, thorough evaluation for infectious diseases, including SARS-CoV-2, should be conducted.

**Patient Education**

People should avoid vaping illicit THC products and modifying vaping products. As a general rule, young people and pregnant women should avoid vaping, and patients should be informed about the harms of vaping. MDH and CDC have extensive information on this at [MDH E-Cigarettes and Vaping](https://www.health.state.mn.us/mhs/hai/vaping/index.html) and [CDC Electronic Cigarettes](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm)

Patients with a history of vaping who are experiencing pulmonary symptoms should seek clinical care.

**Questions or Concerns**

For questions or concerns, please contact:

- Nate Wright at 651-201-4237 or nate.wright@state.mn.us
- Cory Cole at 651-201-4237 or cory.cole@state.mn.us
- Report suspected cases at [Vaping Associated Lung Injuries: Information for Health Professionals](https://www.health.state.mn.us/mhs/hai/vaping/index.html)

A copy of this HAN is available at: [MDH Health Alert Network](https://www.health.state.mn.us/mhs/hai/vaping/index.html)

The content of this message is intended for public health and health care personnel and response partners who have a need to know the information to perform their duties.