

## Health Advisory: Severe Acute Lung Disease Among Youth Who Report Vaping

Minnesota Department of Health Tue Aug 13 12:00 CDT 2019

### Action Steps

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

**Hospitals and clinics:** Please distribute to all health care providers in these facilities.

### 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 and conduct a thorough infectious disease evaluation
- Report suspected cases to MDH at 651-201-4237 or 651-201-5449

### Background

The Minnesota Department of Health has been alerted to four suspected cases of severe lung injury among adolescents who report vaping. Adolescents and young adults who experienced severe lung disease after vaping have also been identified in Illinois and Wisconsin. Minnesota patients presented for care with symptoms indicative of pneumonia, including fever, but symptoms did not resolve after broad spectrum antibiotic treatment. Evaluation for infectious diseases was negative in all patients. Symptoms have resulted in hospitalizations lasting multiple weeks, with some patients requiring invasive ventilation.

Patients report vaping both nicotine and THC. Product names are unknown.

### Clinical Presentation and Evaluation

Clinical presentation among Minnesota cases included shortness of breath, fever, cough, malaise and gastrointestinal symptoms (nausea, vomiting, abdominal pain or diarrhea). Other symptoms reported by some patients included headache, dizziness, and chest pain. Chest radiograph demonstrated bilateral opacities and CT imaging demonstrated diffuse ground glass opacification with some degree of subpleural sparing. Leukocytosis and elevated C-reactive protein were noted, but all infectious studies were negative, including samples from bronchoalveolar lavage. Respiratory symptoms worsened until treatment 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 and report a history of vaping.

Because symptoms are consistent with an infection, a thorough evaluation for infectious diseases should be conducted.

### Patient Education

Young people should not use vaping products and e-cigarettes, and adults should be informed about the dangers of such products. 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](mailto:nate.wright@state.mn.us) or
- Terra Wiens at 651-201-5449 or [terra.wiens@state.mn.us](mailto:terra.wiens@state.mn.us)

**Additional Information**

- Learn more about e-cigarettes and vapes at: [www.health.mn.gov/ecigarettes](http://www.health.mn.gov/ecigarettes)

A copy of this HAN is available at <https://www.health.state.mn.us/communities/ep/han/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.