

## Summary and Action Items

- Severe respiratory illnesses have been seen in adolescents in Wisconsin and Illinois who have reported vaping in the weeks and months prior to onset of illness.
- The Illinois Department of Public Health is requesting that health care providers who are seeing patients with suspected serious respiratory illness and who vape report these to their local health department as soon as possible. If vaping fluid commonly used by the patient is available ask that it be set aside (not used) in case it is needed for testing.

## Background

More than 10 cases of severe pulmonary disease have been reported in adolescents in Wisconsin, primarily in southeastern Wisconsin in the counties of Milwaukee, Waukesha and Winnebago. Three suspect cases have been identified in Illinois (Kane and Cook counties). Information on products used will be collected to try and identify a particular source.

## Potential Exposures

Patients have reported vaping in the weeks to months prior to illness. An investigation has been initiated with interviews of patients to determine if there is a specific component to the vaping liquid or brand of vaping liquid that may be causing this problem or if there are any other common exposures. Products used by cases may contain THC, CBD, nicotine, flavors and other chemicals.

## Symptoms and Imaging

Patients present with respiratory symptoms including cough, shortness of breath and fatigue. Symptoms worsen over a period of days or weeks before admission to the hospital. Other symptoms may include fever, anorexia, pleuritic chest pain, nausea, abdominal pain and diarrhea. Chest radiographs show bilateral opacities, typically in the lower lobes and CT imaging of the chest shows diffuse ground glass opacities, often with subpleural sparing. Evaluation for infectious etiologies were negative in all patients. Some patients had progressive respiratory compromise requiring endotracheal intubation but subsequently improved with systemic steroids.

## Management

At this time, it is unknown what is causing and contributing to the symptoms. Infectious etiologies should be ruled out. Aggressive supportive care is warranted, and in severe cases, it is recommended that pulmonary and critical care specialists are consulted.

## Prevention

At this time, it is unknown what product(s) or chemicals may be linked to these illnesses.

## IDPH and LHD Response

LHDs who hear about suspect cases should notify IDPH for follow up information. IDPH will gather information from local health departments about cases within Illinois to look for any common exposures and more information on products and chemicals linked to the illnesses. Information will be placed on the communicable disease web portal under “vaping” and a Red Cap survey will be created and involved local health departments will be provided access

## Contact

Contact your local health department with suspect cases as soon as possible.

**Target Audience**

Local Health Departments, Infectious Disease Physicians, Hospital Emergency Departments, Infection Control Preventionists, Health Care Providers

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