TO: Healthcare Providers, Hospitals, Off-Campus Emergency Departments, Substance Use Disorder/Mental Health Agencies, College and University Health Clinics, and Local Health Departments

FROM: New York State Department of Health

HEALTH ADVISORY:
Unexplained Vaping-associated Pulmonary Illness

For healthcare facilities/hospitals, please distribute to the Emergency Department, Director of Nursing, Medical Director, Director of Psychiatry, Director of Pharmacy, and Laboratory Service.

Summary
This advisory is to inform you of an emerging health threat of severe pulmonary disease associated with the use of vape products. This message includes information on case presentation and steps to take if you suspect lung disease in patients reporting use of vape products.

Current Situation
Cases of severe pulmonary disease have been reported in New York State (NYS) among patients who reported recent use of vape products. As of the date of this alert, 10 cases have been reported from various areas of NYS, including the Capital District, downstate, and western region. Patients have ranged in age from 18-49 years old. Detailed information about the reported vape products used is still being investigated, including the name and type of products as well as where they were obtained and the method of delivery and use. However, many cases have reported the use of tetrahydrocannabinol (THC)-containing vape products, as well as other vaping products, in the weeks to months prior to presentation.

Similar cases of severe pulmonary disease associated with vape product use have been reported in several other states, and NYS is working with the Centers for Disease Control and Prevention as part of the epidemiological and laboratory investigation. While no deaths have been reported to date, some patients have had progressive respiratory compromise requiring endotracheal intubation.

Clinical Presentation and Findings:
Cases have reported various symptoms upon presentation, including:

- Cough
- Pleuritic chest pain
- Shortness of breath
- Fever
- Headache
- Fatigue
- Nausea
- Diarrhea
- Anorexia
- Weight loss
Symptom onset has ranged from days to weeks prior to presentation, and all cases have consistently reported regular use of various vape products. At this time, all reported NYS cases have required hospitalization, however patients may present with less severe symptoms in outpatient and emergency department settings.

Chest radiographs have demonstrated bilateral opacities, typically in the lower lobes. Computed tomography (CT) imaging of the chest has shown diffuse bilateral ground-glass opacities, often with subpleural sparing. Bronchoscopy findings have been unremarkable, and evaluation for infectious etiologies have been negative in nearly all patients.

**Treatment:**
At this time there is no specific treatment for patients presenting with symptoms and findings consistent with vaping-associated pulmonary disease and in which other likely causes of illness have been ruled out. Treatment is supportive. Some patients have had progressive respiratory compromise requiring supportive care including endotracheal intubation and systemic steroids. Other cases have self-resolved with close clinical monitoring and minimal supportive care over several days.

**Case Reporting and Coordination:**
Providers should remain alert for potential cases among patients who present with progressive respiratory symptoms, especially in those without a history of respiratory illness. If patients with these symptoms present for care, providers should ensure a thorough substance use history is obtained, including attention to inhalation drug use, particularly vape products.

All cases of suspected severe lung disease potentially associated with vape products should be reported to both the New York State Department of Health (NYSDOH) and the Poison Control Centers (PCC) in New York State. Providers should determine the name(s) of recently used vape products and whether the actual product(s) used remain available for testing. NYSDOH and PCC staff can assist in determining the need for product testing and provide instructions on where to send samples to assist in the investigation of potential etiologies.

New York State Department of Health, Duty Officer: 1-866-881-2809

Poison Control contacts:
- New York Regional Poison Control Centers: 1-800-222-1222
- Upstate: [http://www.upstate.edu/poison](http://www.upstate.edu/poison)
- New York City: [https://www1.nyc.gov/site/doh/health/health-topics/poison-control.page](https://www1.nyc.gov/site/doh/health/health-topics/poison-control.page)