TO: Vermont Health Care Providers  
FROM: Mark Levine, MD, Commissioner of Health

Severe Vaping-associated Pulmonary Illness

Background
Since June 2019 multiple states and the Centers for Disease Control and Prevention (CDC) have been investigating cases of severe pulmonary illness associated with e-cigarette product use, or "vaping", primarily among adolescents and young adults. One death has been reported. In many cases patients report a gradual start of symptoms, including cough, shortness of breath, and fatigue. Symptoms may worsen over a period of days or weeks before hospital admission. Other symptoms reported by some patients included fever, chest pain, weight loss, nausea and diarrhea. Chest radiographs showed bilateral opacities, and CT imaging of the chest demonstrated diffuse ground-glass opacities, often with sub-pleural sparing.

In many cases patients have reported use of tetrahydrocannabinol (THC)-containing products, however no specific product has been identified in all cases nor has any product been conclusively linked to the illnesses. Even though cases appear similar, it isn’t clear whether these cases have a common cause or if they are different diseases with similar presentations.

Available evidence suggests that an infectious disease is not a principle cause of the illnesses. Antibiotic treatment has not been effective, but the use of systemic steroids has improved symptoms. Aggressive supportive care in these suspected cases is warranted, and in severe cases, pulmonary, infectious disease and critical care specialists should be consulted.

Requested Actions
• Consider all possible causes of illness in patients presenting with these symptoms, even if they report a history of e-cigarette product use. Evaluate and treat for other likely causes of illness (i.e. infectious or other) as clinically indicated.

• Report cases of significant respiratory illness of unclear etiology and a history of inhalational drug use (including vaping or smoking of any plant or chemical) in the 90 days prior to symptom onset to the Health Department at 802-863-7240.

For assistance with management of patients suspected of having illness related to recreational, illicit, or other drugs, call the poison control center at 1-800-222-1222.

For information about cessation resources for your patients, visit HealthVermont.gov/wellness/tobacco or 802quits.org/providers – or contact the Vermont Health Department Tobacco Control Program at tobaccovt@vermont.gov.

If you have any questions please contact the HAN Coordinator at 802-859-5900 or vthan@vermont.gov.
HAN Message Type Definitions

*Health Alert:* Conveys the highest level of importance; warrants immediate action or attention.

*Health Advisory:* Provides important information for a specific incident or situation may not require immediate action.

*Health Update:* Provides updated information regarding an incident or situation; unlikely to require immediate action.

*Info Service Message:* Provides general correspondence from VDH, which is not necessarily considered to be of an emergent nature.