

## NATIONAL CAPITAL REGION THREAT INTELLIGENCE CONSORTIUM

DC DEPARTMENT OF FORENSIC SCIENCES

Product No. 2<u>019-11-046</u>

November 26, 2019

NTIC SIN No. 6 | HSEC No. 6

## Vape Cartridges Containing THC Linked to Lung Injury

Lung injuries and deaths tied to the use of e-cigarettes or vaping products are likely caused by THC vape cartridges with after-market modifications, especially those that contain thickeners and additives. The US Centers for Disease Control and Prevention (CDC)—which has dubbed this condition EVALI, e-cigarette, or vaping, product use associated lung injury—estimates that vaping has caused lung injury in over 2,100 US residents, from 49 states and the District of Columbia, and has killed more than 40 people. Most of the afflicted were below the age of 35. Six of these cases have occurred in the District, including one reported <u>death</u>.

- According to the CDC, while no single substance has been linked to every case, 83 percent of evaluated patients for whom data is available have reported using vape cartridges containing THC. There is mounting evidence that vitamin E acetate, an additive present in some THC-containing cartridges, is the likely cause of injury.
- Testing at the DC Department of Forensic Sciences Public Health Lab confirms the presence of THC in cartridges tied to five out of six cases in the District; at least one cartridge from

each case also contained vitamin E acetate.

Cartridges obtained from informal sources such as friends or dealers (in person or online) are more likely to contain hazardous chemicals than retailer sold cartridges. Users are cautioned not to use

non-manufactured or modified cartridges, especially those that contain THC.



THC vape cartridge with packaging (Left). Positioning of how cartridge assembles to base (Middle). Close view of cartridge containing residue THC oil (Right). (Source: DC Department of Forensic Sciences)

## Symptoms of E-Cigarette or Vaping Product Use Associated Lung Injury (EVALI)

According to the CDC, EVALI can cause symptoms that resemble pneumonia or the flu, such as:

- Coughing, chest pain, shortness of breath;
- Abdominal pain; nausea, vomiting, diarrhea;
- Fever, chills, fatigue; and
- Unexpected weight loss.

Some patients have reported symptoms manifesting over a few days, while others have reported symptoms taking weeks to develop. *Anyone experiencing these symptoms who has used a vaping product in the past three months should seek immediate medical attention.*