

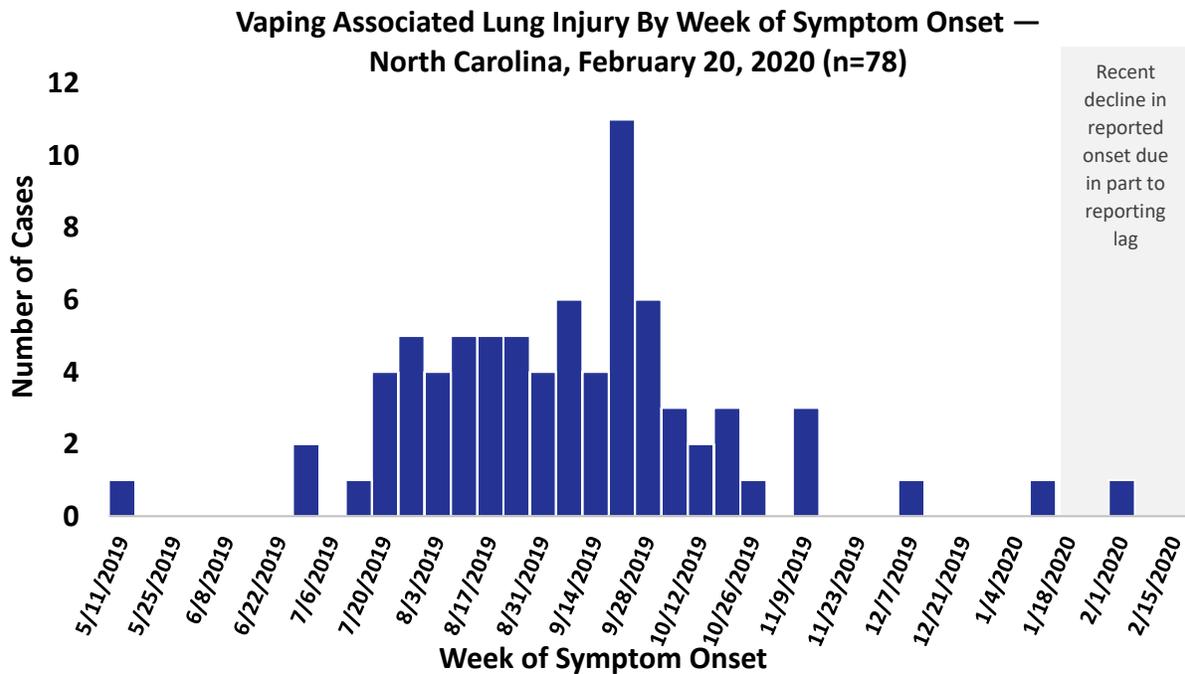
# North Carolina E-cigarette, or Vaping, Product Use Associated Lung Injury Data (final update)

As of Thursday, February 20, 2020, 78 cases of e-cigarette, or vaping, product use associated lung injury (EVALI) have been reported in North Carolina. No deaths have been reported in the state. This is part of a [national investigation](#) in which all 50 states, the District of Columbia, and 2 U.S. territories (Puerto Rico and U.S. Virgin Islands) have reported 2,758 hospitalized cases of EVALI, including 64 deaths, as of February 4, 2020. **February 20, 2020 marks the end of this investigation; this is the final update.**

NCDHHS continues to urge people not to use e-cigarette or vaping products, especially those that contain tetrahydrocannabinol (THC). People who use e-cigarettes or vaping products should not obtain them through informal sources and should not modify or add any substances.

## Data from 78 Case-Patients

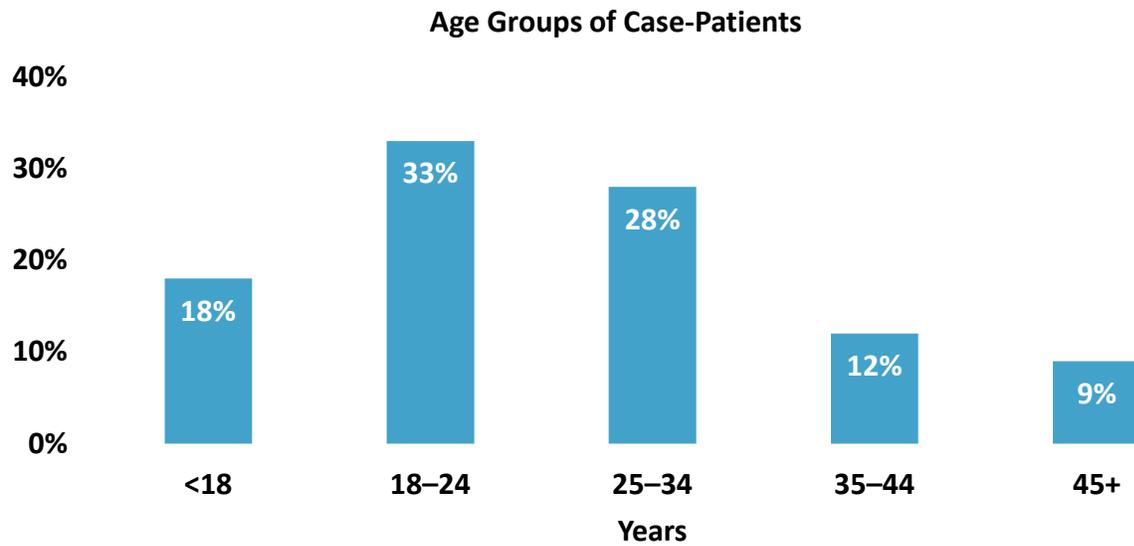
Below is the number of cases by week of symptom onset. Cases have been consistently occurring since mid-July.



Most case-patients are male.



The median age of case-patients is 24 and ranges from 13–72. Seventy-nine percent of case-patients are under 35 years.

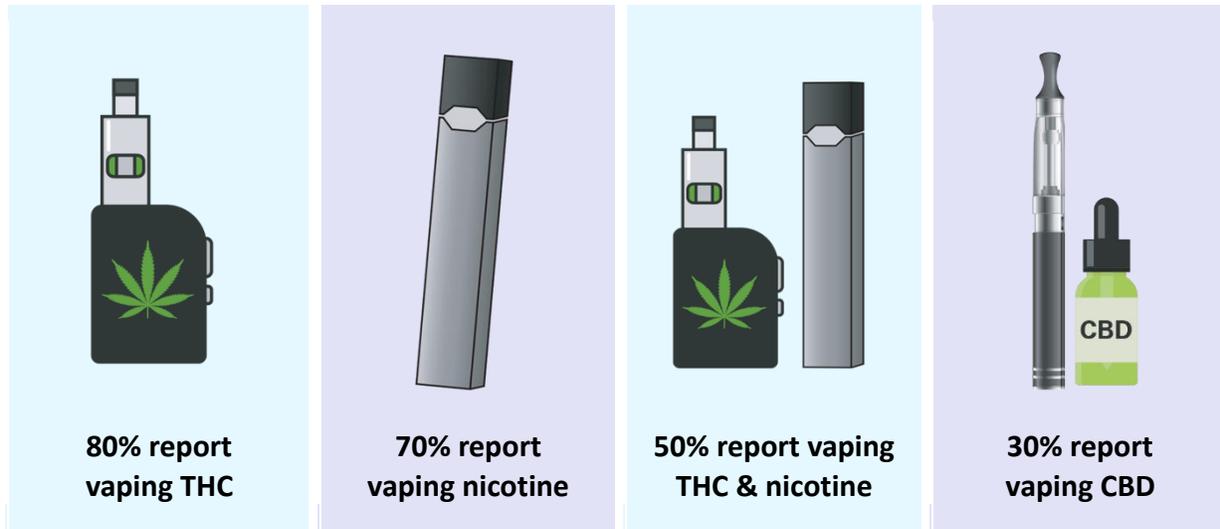


Most case-patients presented with respiratory and gastrointestinal symptoms. Ninety-six percent were admitted to the hospital.

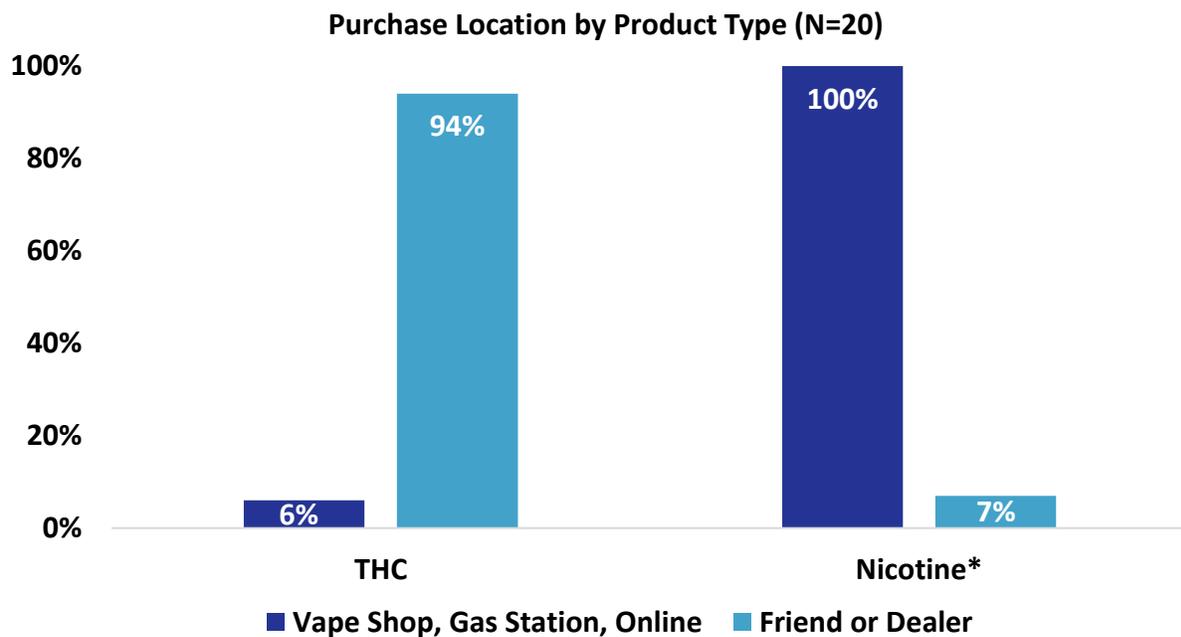
Symptoms and outcomes of case-patients with e-cigarette, or vaping, product use associated lung injury (N=78)	
	N (%)
<b>Symptoms</b>	
Cough	70 (90)
Shortness of breath	66 (85)
Chest pain	27 (35)
Gastrointestinal (nausea, vomiting, or diarrhea)	63 (81)
<b>Outcomes</b>	
Admitted to hospital	75 (96)
Care in intensive care unit	32 (41)
Intubation	12 (15)

## Data from 20 Case-Patient Interviews

A subgroup of case-patients with EVALI in North Carolina were interviewed to obtain more detailed information on potential exposures. Twenty case-patients were interviewed. Most reported vaping tetrahydrocannabinol (THC), the main psychoactive compound in marijuana. Many patients reported vaping multiple substances.



Seventy-five percent of case-patients reported using e-cigarettes, or vaping, devices with pre-filled pods or cartridges. All case-patients who reported vaping nicotine purchased from a vape shop, gas station or online. One case-patient additionally reported obtaining nicotine products from a friend or dealer. In contrast, most case-patients who reported vaping THC obtained products from a friend or dealer.



\*Nicotine purchase locations add to >100% because some patients purchased products at multiple locations

## Data from 82 E-cigarette, or Vaping, Product Samples

A small group of case-patients with EVALI in North Carolina submitted e-cigarette, or vaping, products for testing at the North Carolina State Laboratory of Public Health. Almost all products contained THC or CBD.

Laboratory test results of products submitted by case-patients with e-cigarette, or vaping, product use associated lung injury (N=82)	
	N (%)
Tetrahydrocannabinol (THC) or Cannabidiol (CBD)	74 (90)
Nicotine	7 (9)
Vitamin E Acetate	54 (66)
Terpenes	54 (66)
Glycerol	17 (21)
Menthol	5 (6)