

# TEEN VAPING AND LUNG ISSUES: WHAT'S THE PROBLEM?

## E-CIGARETTE OR VAPING-RELATED LUNG INJURY<sup>1</sup>

- As of February 2020, all 50 states have reported 2,807 cases of e-cigarette or vaping-related lung injury (EVALI).
- 68 deaths have been confirmed in 29 states and the District of Columbia.
- From available data, 66% of cases were male; the median age of patients was 24 years. Over three-quarters (76%) of patients were under the age of 35, making this a teen and young adult problem.
- Cases of EVALI have been declining since September 2019, however, lung issues caused by vaping remain a concern for public health officials.
  - All EVALI patients reported a history of using e-cigarettes, or vaping products.
  - THC vaping devices are implicated in most of the EVALI cases. Vitamin E acetate, an additive in some THC vaping devices, was found in 48 out of 51 lung fluid samples from EVALI patients.

## VAPING AND COVID-19<sup>2</sup>

- Since the outbreak of COVID-19, public health officials have been concerned that vaping (nicotine and/or THC) may increase the likelihood of 1) contracting the disease and 2) more severe illness in those who develop the disease.
- In a study of 13 to 24 year-olds, researchers found that e-cigarette users and dual users of e-cigarettes and cigarettes had significantly higher rates of COVID-19 than non-users.
  - Ever uses of e-cigarettes were 5 times as likely as non-users to report a COVID-19 diagnosis.
  - Ever dual users, as well as past 30-day dual users, were roughly 7 times as likely to report a COVID-19 diagnosis.
- Potential reasons for the link between vaping and greater risk for COVID-19 include being more susceptible to infection due to lung damage from vaping, and the frequent sharing of devices among young people.

## VAPING AND GENERAL LUNG HEALTH<sup>3</sup>

- Research is still emerging about the long-term consequences of vaping on lung health.
- A recent study found that vaping THC was associated with higher odds of bronchitic symptoms (cough, congestion/phlegm, and/or bronchitis) as compared to non-users. Importantly, this was true for all use levels, ranging from ever use to frequent use (3 or more days of use in the past 30 days).
- Frequent users of THC vape products reported higher odds of wheeze, in addition to bronchitic symptoms, as compared to non-users.

1 [https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/severe-lung-disease.html](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html)

2 [https://www.jahonline.org/article/S1054-139X\(20\)30399-2/fulltext](https://www.jahonline.org/article/S1054-139X(20)30399-2/fulltext)

3 <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2774427>