



VAPING —AND— E-CIGARETTES

WHAT WE KNOW

Vapes, also known as e-cigarettes or electronic nicotine delivery systems (ENDS), are battery-operated devices that people use to inhale an aerosol or mist. This aerosol typically contains flavorings and other chemicals along with nicotine, THC, CBD, or any combination of these substances. Originally considered a safe alternative to help with smoking cessation, vaping and e-cigarettes have been linked with severe lung damage. The CDC reports a total of 2,807 confirmed cases of e-cigarette/vaping-associated lung injury (EVALI), with 68 deaths as of February 2020¹, prompting a nationwide examination of the risks associated with vaping.

WHAT'S SO BAD ABOUT THEM?

Vapes/e-cigarettes work by using a heating chamber to vaporize a small amount of liquid so it can be inhaled. Most vape liquids contain substances such as propylene glycol and glycerin as base ingredients to create the vapor. Another common ingredient in vape liquids is diacetyl, whose exposure is strongly associated with bronchiolitis obliterans, often called “popcorn lung”².

Even as vape manufacturers began moving away from using diacetyl in their liquids, recent studies have shown another substance to be associated with EVALI. A vitamin E compound was identified in the lung fluid of 48/51 presumed EVALI cases³. Although the exact mechanism of damage to the lung is unclear, it is known that lipids (e.g., oils such as vitamin E), although safe for topical use, are highly toxic when inhaled.

OKAY...BUT WON'T IT HELP ME QUIT?

E-cigarettes are NOT approved by the FDA as a quit aid. Studies that investigated the efficacy of e-cigarettes as a tool for smoking cessation have not shown consistent results. There is also limited research on the long-term effects of e-cigarettes in comparison with other tobacco-containing products⁴.

WHAT CAN I DO TO STOP SMOKING/VAPING?

The first step in your journey to becoming nicotine-free is to speak with your healthcare provider. Together, you can create a plan that best suits you and your lifestyle. This may include a combination of different therapies such as:

NRT (nicotine replacement therapy)

Nicotine gum, patches, lozenges, inhalers, nasal spray

Helpful Resources:

- [quitSTART App](#)
- [QuitGuide App](#)
- [smokefree.gov](#)

Counseling:

Telephone/Online:

- 1-800-QUIT-NOW
- [Livehelp.cancer.gov](#)
(chat with a smoking cessation counselor)

In-person:

- Ask your doctor about local smoking cessation support groups/counselors
- Find a therapist on [psychologytoday.com](#)



VAPING AND COVID-19

Although no official link between vaping and COVID-19 has been confirmed, evidence suggests that vapers may be more susceptible to respiratory infections. Vaping suppresses immune functioning in the lungs and triggers an inflammatory response, further exacerbating inflammation from diseases such as COVID-19. Besides the pathological risks, the hand-to-mouth act of using a vape also spreads the virus by providing a shuttle for harmful microorganisms. The virus may also travel through second-hand smoke or vapor, as it carries respiratory droplets⁵.



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Citations:

1. https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html
2. <https://www.ncbi.nlm.nih.gov/pubmed/26642857>
3. <https://www.nejm.org/doi/full/10.1056/NEJMoa1916433>
4. <https://www.ncbi.nlm.nih.gov/pubmed/31452888>
5. <https://www.scientificamerican.com/article/smoking-or-vaping-may-increase-the-risk-of-a-severe-coronavirus-infection/>