

8 Facts To Know About Nicotine and E-Cigarettes

Vaping might be a way for some adults to stop smoking, but for teens, **it's a way to start.**

1

E-CIGARETTES CONTAIN HARMFUL CHEMICALS

E-cigarettes often contain **nicotine**, which can harm brain development in children and young adults.

They may also contain **heavy metals** like lead, nickel, tin, and **ultrafine particles (UFP)** that are inhaled deep into the lungs and can cause chronic disease.

2

NICOTINE IS HIGHLY ADDICTIVE

Nicotine is one of the **most addictive substances** and is **very difficult to stop using**. Dependence varies from person-to-person.

The teen brain is **highly sensitive** to the addictive effects of nicotine, and the **long-term effects of e-liquids** are not clear.

3

NICOTINE IN E-CIGARETTES CAN AFFECT THE BRAIN AND HEART

Nicotine is a **neurotoxin**. It is harmful to the **brain** and can lead to negative effects.

If liquid nicotine is accidentally ingested, it can cause **vomiting, seizures, and serious effects on the heart**.

E-cigarettes have **different levels of nicotine**, and that can change how strong the side effects are.

4

DESPITE LAWS, E-CIGARETTES CAN STILL BE EASY TO GET

Despite the 2019 **Tobacco 21 law** restricting the sale of tobacco products in the United States to **those over 21 only**, online and in-person stores may not always ask for **identification**, and online sellers may not check a customer's age at the time of sale.

5

E-CIGARETTES COME IN BRIGHT COLORS AND MANY FLAVORS

The bright colors, flavors and smells of e-liquids can be **appealing to both teens and small children**. Many containers are **not child-resistant**. In 2020, the FDA restricted flavors in reusable e-cigarettes to just menthol and tobacco, however, **disposable vapes are unrestricted**.

6

NICOTINE USE AND DELIVERY CAN BE DISCREET

Vaping **does not produce a smell like other tobacco products**, and devices often look like pens, highlighters, key fobs, or flash drives.

Oral nicotine pouches are small packets placed between the lip and gum—usually the upper lip—and are very discreet. See supplemental details below.

7

E-CIGARETTES ARE BEING USED TO VAPE THC

Many young people also use **vaping devices to consume cannabis products**.

In 2024, nearly **17.6%** of 12th graders reported that they **vaped marijuana in the past year**.

8

SEVERE LUNG INJURIES ARE ASSOCIATED WITH VAPING THC

The Centers for Disease Control and Prevention reported in February 2020 that more than **2,800 people** have acquired an **acute lung injury** or died related to the use of vaping THC. See supplemental details below.

The latest data from 2024 shows the percentage of teens who reported they had ever vaped nicotine regularly was:

9.6% for 8th grade students (up from 4.7% in 2022),
15.4% for 10th grade students (up from 8.7% in 2022), and
21% of 12th grade students (up from 15% in 2022).

ORAL NICOTINE POUCHES

Small, rectangular nicotine packets are placed between the lip and gum, often under the upper lip. As the pouches dissolve, nicotine is released from them into the bloodstream through the mouth. They are available in a variety of flavors that may appeal to youth. Like e-cigarettes, nicotine pouches vary in strength but often contain high levels of nicotine.

LUNG INJURIES

Investigations are ongoing, but vaping THC has been linked to severe lung injuries. Injuries can include breathing problems, lung damage, airway inflammation, trouble getting oxygen into blood, limited lung function, and even death. There is no specific treatment, so stopping exposure and supportive care are the only options.

If you have any concerns about being exposed to nicotine or any other harmful substance, please call the Drug and Poison Information Center at 1-800-222-1222. We can learn more about your situation, and walk you through what to do next. We have experts available 24/7/365 to provide confidential, non-judgemental advice.

