

Electronic Cigarettes



What Are Electronic Cigarettes?

Electronic cigarettes, commonly referred to as vapes, are battery operated devices that heat a liquid into an aerosol that is inhaled. This aerosol is commonly called vapor, however, the presence of particles suspended in the gas means it is an aerosol.

They can range in size from as small as a battery to the size of a cell phone. When the user inhales the aerosol, they consume nicotine or other substances, which can also be inhaled by other people nearby.

E-cigarettes come in many designs and colors. Some brands resemble common household items, like USB sticks or highlighters. They also come in a variety of flavors designed to appeal to new users and young people.

Types of E-Cigarettes

All e-cigarettes include a battery, heater, and a place to hold the vaping liquid. There are three categories that vaping devices fall into:

- **Disposable e-cigarettes:** These devices are prefilled with vaping liquid. They may be rechargeable. They are designed to be thrown out once the liquid is gone.
- **Refillable e-cigarettes:** These devices are rechargeable. When the liquid runs out, the tank can be opened and refilled.
- **E-cigarettes with a pre-filled pod or cartridge:** These e-cigarettes are rechargeable and come pre-filled with replaceable cartridges containing liquid.

Some e-cigarettes are used with tetrahydrocannabinol (THC), the psychoactive chemical found in marijuana, instead of nicotine.

- Electronic cigarettes are battery operated devices that heat liquid into an aerosol.
- E-cigarette aerosol is not harmless water vapor: it contains heavy metals, flavorings, and cancer causing chemicals.
- In the US, youth use electronic cigarettes more than any other tobacco product.
- Adults: Call 1-800-QUIT-NOW
- Youth ages 13-17: Text "Start My Quit" to 36072

Other Names for Electronic Cigarettes

E-cigarettes go by many names. These include vapes, vape pens, Juul, mods, dab rigs or pens, and electronic nicotine delivery systems (ENDS).

What is in E-Cigarettes?

The aerosol produced by e-cigarettes is **not** harmless water vapor. E-cigarettes and their aerosol contain a variety of harmful substances.

- Nicotine - A highly addictive chemical that can harm brain development.
- Flavorings - These flavors may be safe when ingested but they can cause serious harm to the lungs when inhaled.
- Tiny particles that can get deep into the lungs.
- Heavy metals such as lead, nickel and tin.
- Volatile organic compounds such as benzene and toluene.
- Cancer-causing chemicals such as formaldehyde.



Wheeler

CONNECTICUT
Clearinghouse
a program of the Connecticut Center
for Prevention, Wellness and Recovery

800.232.4424 (phone)
www.ctclearinghouse.org

A Library and Resource Center on Alcohol, Tobacco, Other Drugs, Mental Health and Wellness

What Are the Health Effects of Electronic Cigarettes?

No tobacco product is good for the body. The long-term health effects of using e-cigarettes are not yet known. However, the contents of e-cigarettes are associated with health complications.

Most e-cigarettes contain nicotine, a highly addictive chemical. Nicotine is toxic to fetuses in the womb, and damages the developing brain and lungs. It is also a health hazard to pregnant women and children.

The aerosol from electronic cigarettes also contains a variety of chemicals associated with cancer and lung disease. It is also a lung irritant, which may worsen allergies or breathing conditions such as asthma.

Some users of e-cigarettes have experienced seizures. These cases have mostly occurred among youth and young adults as a result of nicotine poisoning. When there is too much nicotine in the body, it can have toxic effects. E-cigarettes have more nicotine than a regular cigarette, making nicotine poisoning more likely. Vape liquids can also cause nicotine poisoning by being absorbed through skin.

In addition to the aerosol, the e-cigarette itself can pose health and safety issues. Defective or overheated batteries have been known to cause fires or explosions. Most explosions have occurred during charging.

Electronic Cigarette Use in Youth

Electronic cigarettes have become increasingly popular among youth and young adult populations. In the US, more teens use e-cigarettes than any other tobacco product.

There are many factors associated with youth e-cigarette use. These include:

- Accessibility of e-cigarette products.
- Social influences.
- Adolescent brain sensitivity to nicotine.
- Availability of flavored products.
- Targeted marketing.

Tobacco and e-cigarette companies market these products in a way that makes them seem appealing or less harmful than they are. They have also developed flavorings to make the aerosol taste better and draw in youth, including fruity and candy-like flavors. The improved taste combined with the addictive properties of nicotine encourage continued use.

Nicotine is highly addictive. It is especially harmful to the parts of the adolescent brain that are responsible for impulse control, learning, mood, and attention. These areas do not finish developing until age 25, so vaping during teen years can be especially detrimental to brain development.

Ready to Quit? For Free and Confidential Support is Available

Adults: Call 1-800-QUIT-NOW

Youth 13-17: Text "Start My Quit" to 36072

Connecticut Resources

CT Department of Mental Health and Addiction Services

www.ct.gov/DMHAS

Vape Free CT

<https://vapefreect.org/>

Drug Free CT

<https://www.drugfreect.org/>

24/7 Access Line

1.800.563.4086

2-1-1 of Connecticut

www.211ct.org or call 2-1-1

National Resources

Substance Abuse and Mental Health Services Administration

www.samhsa.gov

National Institute on Drug Abuse (NIDA)

www.nida.nih.gov

