

# The 101 on ^ e-Cigarettes



American  
Heart  
Association.

Vaping is becoming an increasing epidemic among teens. In 2018, e-cigarette use nearly doubled in high school students.

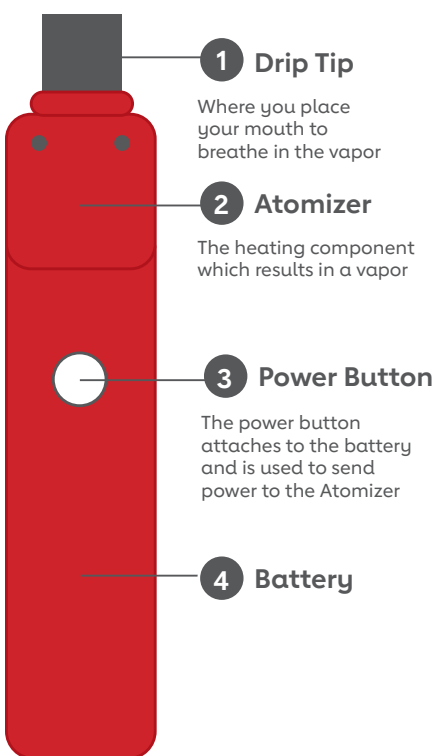


## What is vaping?

Vaping is the **act of inhaling and exhaling the aerosol, often referred to as vapor**, which is produced by an e-cigarette or similar device. The term is used because e-cigarettes do not produce tobacco smoke, but rather an aerosol, **often mistaken for water vapor, that actually consists of fine particles**. Many of these particles contain varying amounts of toxic chemicals, which have been linked to heart and respiratory diseases and cancer.

## What is an e-cigarette?

Electronic cigarettes (e-cigarettes) are **battery-powered devices that can deliver nicotine and flavorings to the user in the form of an aerosol**. Most have a battery, a heating element, and a place to hold a liquid or nicotine salts. Flavors that make e-cigarettes so appealing can have toxic effects themselves, although they are GRAS (generally regarded as safe) when ingested in food or drinks.



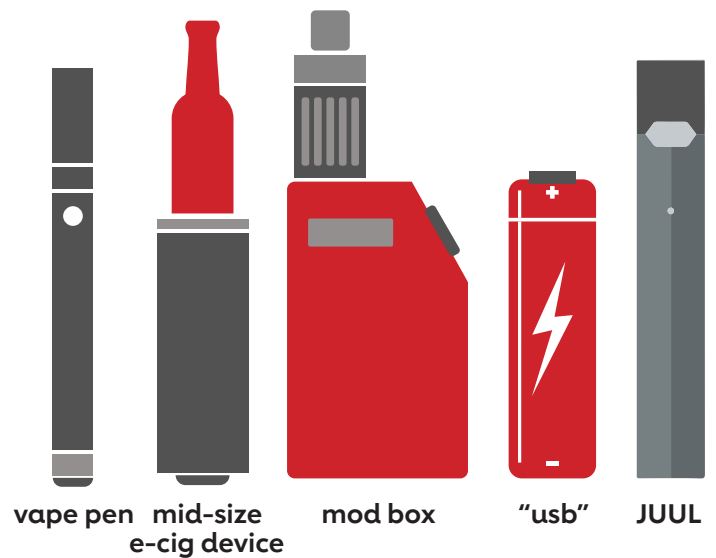
## Why are e-cigarettes unsafe for kids, teens and young adults?

- Nicotine can harm the developing adolescent brain
- e-cigarettes contain nicotine
- Nicotine addiction that occurs with e-cigarette use may lead to transition to use of combustible tobacco products
- Addiction itself, whether to nicotine or other drugs, can drive undesirable behaviors

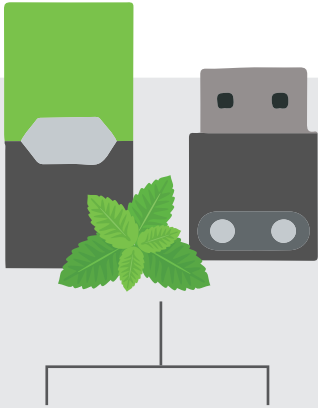


## What do e-cigarettes look like?

E-cigarettes come in a wide variety of shapes and sizes; **mini** (often called cig-a-like), **mid-size**, **vape pens**, **vape pod systems** like JUUL, **e-hookahs**, **e-cigars**, **advanced personal vaporizers** or **mods**; even ones shaped to look like pens and usb drives.



vape pen   mid-size e-cig device   mod box   "usb"   JUUL



The JUUL nicotine refill ("pods") contain as much nicotine as a pack of 20 regular cigarettes. Average pod length varies but can last up to 200 puffs.

## What Is JUUL?

JUUL is a rapidly growing type of e-cigarette that became available in the US in 2015. It now accounts for about 72 percent of the market share of vaping products in the United States.

- JUUL is particularly appealing to adolescents and young adults because it has a slim design **shaped like a USB flash drive** (which makes it easier to hide).
- It comes in different colors, and a wide variety of flavors, including many that appeal to kids.
- **JUUL does not emit large smoke clouds**, making it optimal for discreet use.
- Not only is nicotine high in JUUL pods, it is present in a **benzoic acid salt** rather than a free base which **increases the rate of nicotine delivery** and decreases the harsh sensation in the mouth and throat.

Noting this unprecedented spike in e-cigarette use in youth, in December 2018, the US Surgeon General issued an advisory for parents, teachers and health professionals about the negative health consequences of e-cigarettes in kids.

## What can parents do?

- Do not use any tobacco products
- **Talk with your kids about the dangers of smoking and the importance of avoiding any tobacco use** (conventional cigarettes or e-cigarettes)
- Educate your kids that **e-cigarettes contain nicotine, a HIGHLY addictive substance**
- **Advocate for comprehensive tobacco prevention policies** (that include e-cigarettes)



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