

E-cigarettes are popular with youth

- **Almost half (47%)** of high school students have tried e-cigarettes and **23%** currently use them.⁵
- **E-cigarettes** are the most commonly used tobacco product among Montana youth.⁵
- **82% of US kids** who have ever used e-cigarettes say they use the product “because they come in flavors I like.”¹⁴
- Between 2016-2017, **15,586 distinct e-cigarette flavors** were found being sold on websites, over double the amount being sold from 2013-2014.¹⁵
- Research shows that kids who use e-cigarettes are **4 times** more likely to smoke cigarettes in the future than kids who do not use e-cigarettes.¹

E-cigarettes contain nicotine

- **99%** of e-cigarettes sold in US convenience stores contain nicotine.²
- JUUL, an e-cigarette popular with teenagers that looks like a flash drive, contains nicotine.

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What are e-cigarettes?

- Electronic Cigarettes are devices that heat a liquid into an aerosol that the user inhales. The liquid almost always contains nicotine as well as flavoring, propylene glycol, glycerin, and other ingredients.
- Electronic cigarettes, also known as e-cigarettes include **Vape Pens, Pod Mods, Vaporizers, Cig-A-Likes, E-cigars, E-pipes, E-hookahs and JUULs.**

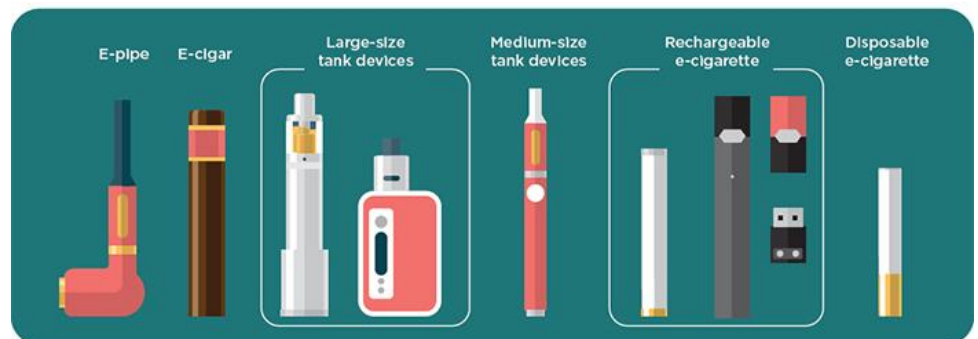


Image source: Centers for Disease Control and Prevention; About Electronic Cigarettes

What are the risks of using e-cigarettes?

- **E-cigarettes almost always contain nicotine²**, a highly addictive and unsafe substance that affects the developing brain.
- Youth use of nicotine in any form is **unsafe** because the teenage brain is still developing through early adulthood.
- JUUL has as much nicotine in one cartridge ‘pod’ as an entire pack of cigarettes.⁶
- Scientists are still learning about the long-term health effects of e-cigarettes.



Electronic Cigarettes, Youth & Nicotine

Nicotine is bad for developing adolescent and teenage brains

- Nicotine is highly addictive and harmful to brain development.³
- Nicotine exposure in youth causes both long-term structural and functional changes in the brain.⁸
- Nicotine impacts the development of brain circuits and neurons, changing the way the brain works.^{11,12}
- Nicotine exposure can lead to long-lasting effects like lower impulse control and mood disorders.⁹
- Nicotine in e-cigarettes can prime young brains for addiction to other drugs, such as cocaine and methamphetamine.⁹

E-cigarettes contain chemicals that are inhaled as an aerosol and we do not know the potential harm of these chemicals.

- In addition to nicotine, electronic cigarettes can contain heavy metals, ultrafine particles and cancer-causing agents like acrolein.⁴
- The chemicals contained in the aerosol of e-cigarettes have not been deemed safe for inhalation.
- Some e-cigarette manufacturers **falsely claim** that the use of propylene glycol, glycerin and food flavorings is safe because they have been deemed safe for consumption through the FDA definition of “Generally Recognized as Safe” (GRAS) but GRAS status applied to additives for use in foods for eating, not for aerosols for inhalation.¹³

Sources

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