

# FACT SHEET: E-CIGARETTES AND VAPES

RaisingHealthyTeens.org



E-cigarettes, also known as vapes, vape pens, or e-cigs, are devices that heat liquid into an aerosol that is inhaled. This e-liquid often contains nicotine along with many other harmful ingredients. Vapes may look like pens, USB drives, or highlighters and may be used for highly concentrated marijuana and other drugs.

Young people who use e-cigarettes are three times more likely to smoke traditional cigarettes.

## Q & A

### What's in them?

E-cigarettes may contain more than 2,000 chemicals, including propylene glycol, found in antifreeze; diacetyl, a chemical linked to lung disease; benzene, found in car exhaust; and heavy metal particles, such as lead. These chemicals are particularly harmful when they are heated and inhaled directly into the lungs, bypassing the body's filtration system.<sup>1</sup>

### Why are they marketing to young people?

Vapes come in flavors that appeal to kids because the younger they use them the more likely they will become customers for life. Teens are more sensitive to nicotine and can feel dependent earlier than adults. About three out of four adolescents who try tobacco products will end up addicted to nicotine as adults.<sup>2</sup>

### What are the signs that someone is using an e-cigarette or vape?

Flavored e-cigarettes may give off a sweet smell of fruit, mint or bubble gum. The chemicals found in them may result in a dry mouth, cough and even nose bleeds. Being virtually odorless and smoke-free, they can be hard to detect. Finding chargers or empty e-liquid containers may also indicate that a family member is using them.

### Why aren't they regulated?

In 2017, the FDA ruled vapes should be regulated; however, companies have until 2022 for their products to comply with FDA standards.

## THE DANGERS OF SECOND AND THIRD HAND SMOKE



Second hand smoke from vapes contains nicotine, volatile organic compounds, and other harmful chemicals which can cause cancer, asthma, and heart disease.



Third hand smoke is the residue left behind on surfaces and in the air contaminating everyone that comes into contact with it—and is especially dangerous for young children and animals.

**In California, the minimum age to purchase tobacco products, including e-cigarettes, e-juice and all vaping accessories is 21. All tobacco products are prohibited anywhere smoking is prohibited. This provides protection from dangerous second-hand smoke.**

## E-CIGS AND THE TEEN BRAIN



Because a young person's brain is still developing until about age 24, it is easier for them to become addicted to nicotine. Nicotine is absorbed quickly into the body and goes directly to the brain, activating areas of the brain that make one feel satisfied and happy. Both smoking and vaping nicotine put teens at risk for becoming lifelong smokers.<sup>3</sup> Using nicotine during the teen years can rewire the brain to become more easily addicted to other drugs. It can also have long-lasting effects on brain development, making it harder for teens to concentrate, learn, and control their impulses.

1. *E-Cigarettes Use Among Youth and Youth Adults. A Report by the Surgeon General*  
([https://e-cigarettes.surgeongeneral.gov/documents/2016\\_SGR\\_Fact\\_Sheet\\_508.pdf](https://e-cigarettes.surgeongeneral.gov/documents/2016_SGR_Fact_Sheet_508.pdf))
2. *Preventing Tobacco Use Among Youth and Young Adults. A Report by the Surgeon General*  
(<https://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/factsheet.html>)
3. *The National Academies of Sciences Engineering Medicine and the Truth Initiative* (<https://truthinitiative.org>)