

E-cigarettes and Vaping
Parent Information

What are e-cigarettes?

E-cigarettes are battery operated inhalers that consist of a rechargeable battery; a cartridge called a cartomizer and a LED that lights up at the end when you puff on the device.

Do e-cigarettes contain nicotine?

Yes. They do not contain tobacco.

What is the liquid inhaled?

The main components of a cartridge of “juice” are nicotine, propylene glycol, solvents and flavors.

What is vaping?

Vaping is defined as the act of inhaling water vapor through a personal vaporizer or electronic cigarette. When users draw on the device, the battery heats the liquid, which is then atomized into an inhalable vapor.

How does vaping differ from traditional smoking?

E-cigarettes differ from traditional cigarettes in that they do not contain carcinogens such as arsenic and vinyl chloride. However, some brands contain formaldehyde and other ingredients that can cause cancer. Additionally, there is no secondhand smoke associated with vaping.

What is JUULing?

This is an e-cig that looks like a USB flash drive and is increasingly popular with teens.

The Basics

E-cigarettes are battery-operated devices that can look like a real cigarette or pen. Some with refillable tanks look a bit different. There are hundreds of brands, and they’re sometimes marketed as a way to get your nicotine fix without the danger of cigarettes.

They all work the same basic way:

- They have containers filled with liquid that’s usually made of nicotine, flavorings, and other chemicals.
- A heating device turns the liquid into vapor that you inhale when you take a drag.

Using an e-cig is called “vaping”.

Are they safe?

Most contain the chemical nicotine, which is addictive. When you stop using it, you can go into withdrawal and feel depressed and crabby. Nicotine isn’t good for people with heart problems. Some initial research shows it may hurt your arteries.

It can also:

- Harm the developing brains of kids and could affect memory and attention.
- Damage unborn babies. Pregnant women shouldn’t use anything with nicotine.

But the concerns go beyond nicotine alone.

Some brands contain chemicals including formaldehyde -- often used in building materials -- and another ingredient used in antifreeze that can cause cancer.

Flavors in e-cigs also raise red flags. Some use a buttery-tasting chemical called diacetyl, which is often added to foods like popcorn. When it’s inhaled, it can be dangerous.

Do They Lead Kids to Smoke?

Critics of e-cigarettes fear that vaping will get kids hooked on nicotine and that they'll "graduate" to cigarettes when they want a bigger kick.

Two recent studies suggest a link:

- 1.) A 2016 study in the journal *Pediatrics* found that teens that never smoked but used e-cigs were six times more likely to try cigarettes compared to kids who don't vape.
- 2.) A study in the Journal of the American Medical Association in 2015 found a connection too. Researchers surveyed 2,500 Los Angeles high school students who had never smoked. They found that kids who used e-cigs were more likely than non-users to smoke cigarettes or other tobacco products over the next year.

Regulations

The FDA is regulating e-cigarettes and tobacco products such as hookah tobacco and cigars in the same way as cigarettes and smokeless tobacco. Key rules include:

- No one under age 18 can purchase them – in stores or online.
- Sellers will need to check ID of anyone less than 27 years of age.
- The products can't be sold in vending machines, except for in adult-only facilities.
- Free samples are banned.

E-cigarettes placed on the market after 2007 have to go through an FDA safety and approval review to enter or stay on the market. That could take years, but products can be sold while they wait for approval.

The FDA plans on future rules that will require nicotine warnings and child-resistant packaging for products with e-liquids.

What Else You Should Know About E-Cigs:

They can blow up. There were 134 reports of e-cigarette batteries overheating, catching fire, or exploding between 2009 and January 2016, according to Michael Fleberbaum, an FDA spokesperson. Some people were seriously hurt. The new rules will allow FDA to review the safety of batteries and eventually take action to protect the public.

They can poison people. Liquid nicotine is especially dangerous to young kids. Reports of poisonings are on the rise. Keep all e-cigarettes out of reach of little ones.