

## E-cigarettes – Information & Facts

### 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. E-cigarettes come in many shapes and sizes.

### What are other names for e-cigarettes?

E-cigarettes are also known as e-cigs, e-hookahs, mods, vape pens, vape tank systems, and electronic nicotine delivery systems.

### What are the types of e-cigarettes?

E-cigarettes often come in several sizes, types, and colors. Some e-cigarettes are made to resemble regular cigarettes, cigars, or pipes while others resemble pens, USB sticks, and other everyday items. The products which are intentionally designed to resemble small electronic devices are often compact and allow for discreet use – at home, in school hallways and bathrooms, and even in classrooms.



### What is in an e-cigarette?

E-cigarettes hold pre-filled pods that the user adds to the device. The pods generally contain nicotine, water, propylene glycol, and flavor. These liquids produce an aerosol which users inhale from the device and exhale. The aerosol can contain harmful substances including:

- Nicotine
- Ultra-fine particles
- Volatile organic compounds
- Cancer-causing chemicals
- Toxic metals such as lead and arsenic

### **Are e-cigarettes addictive?**

E-cigarettes contain nicotine which is a highly addictive substance. According to the Surgeon General, because the brain isn't fully developed until age 25, youth and young adults are disproportionately at risk for long-term, long-lasting effects of exposing their developing brains to nicotine. These risks include nicotine addiction, mood disorders, and permanent lowering of impulse control. Nicotine also changes the way synapses are formed, which can harm the parts of the brain that controls learning and attention (CDC, 2014).

Teens can get addicted more easily than adults. The nicotine in e-cigarettes and other tobacco products can also prime the adolescent brain for addiction to other drugs such as cocaine (SmokefreeTeen.gov, 2019). E-cigarette use among youth and young adults is strongly linked to the use of other tobacco products, such as regular cigarettes, cigars, hookah, and smokeless tobacco.

### **Are e-cigarettes regulated?**

The Food and Drug Administration's (FDA) Center for Tobacco Products has the authority to regulate the manufacture, import, packaging, labeling, advertising, promotion, sale, and distribution of electronic nicotine delivery systems. The FDA does not have authority to regulate vaping accessories.

The FDA's current enforcement activities are focused on the sale of e-cigarettes to minors both in stores and online, and holding manufacturers accountable for making products that appeal to youth.

### **Are e-cigarettes safe?**

According to the Centers for Disease Control and Prevention, e-cigarettes are not safe for youth, young adults, pregnant women, or adults who do not currently use tobacco products. E-cigarette aerosol is not harmless. It can contain harmful ingredients.

The FDA has not approved e-cigarettes as smoking cessation devices and there is limited research available regarding the long-term health effects of e-cigarette use.

### **Is exposure to e-cigarette/vaping aerosol safe?**

According to the Surgeon General, the aerosol from e-cigarettes can contain harmful and potentially harmful chemicals, including nicotine; ultrafine particles that can be inhaled deep into the lungs; flavoring such as diacetyl, a chemical linked to a severe lung disease; volatile organic compounds such as benzene, which is found in car exhaust; and heavy metals, such as nickel, tin, and lead.

### **Where can I get more information about e-cigarettes?**

More information about e-cigarettes can be found at [https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/index.htm](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm)