

VAPING



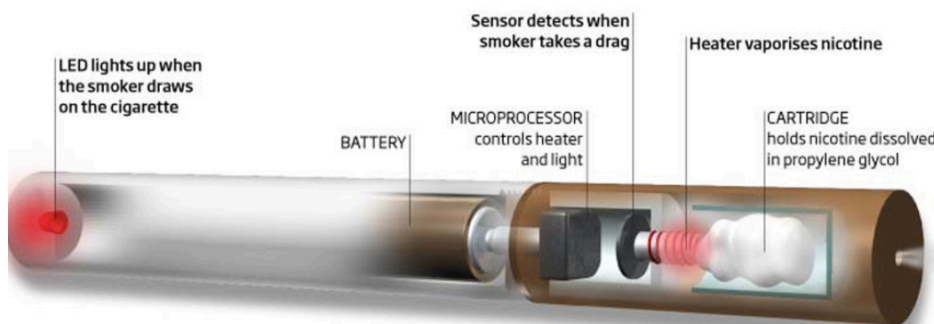
INFORMATIONAL FACT SHEET

WHAT ARE E-CIGARETTES?

Electronic cigarettes, or e-cigarettes, are battery-operated devices that are used to inhale aerosols. E-cigarettes can come in a variety of shapes and sizes. Some resemble the traditional cigarette or cigar pipes, **but many used by teens are more discrete and resemble pens or flash drives**. Many even charge in a USB port. Common nicknames can include: e-cigs, vapes, mods. Common brands include Juul and Suorin.

E-cigarettes are popular among teens and are now the most commonly used form of nicotine among youth in the United States. Their easy availability, alluring advertisements, various e-liquid flavors, and the belief that they are safer than cigarettes have helped make them appealing to this age group. Vaping products are sold in stores and online (often with pre-paid gift cards), although it is illegal for minors to purchase e-cigarettes. **In Excelsior Springs, vape products cannot be sold to anyone under the age of 21.**

HOW DO THEY WORK?



In many e-cigarettes, puffing activates the battery-powered heating device, which vaporizes the liquid in the cartridge or reservoir. The person then inhales the resulting aerosol or vapor (called vaping). The resulting vapor can be almost odorless, which makes it very easy to hide.

WHAT'S IN THE VAPOR?

Vaping juices usually contain a lot of nicotine; most pods contain approximately the same nicotine as a pack of cigarettes, or 200 puffs. Some teens may believe that they are just vaping "water vapor" and not even be aware that their vape juice contains nicotine. Vaping juice also contains a mix of chemicals and sometimes heavy metals. Some examples found in vape aerosols include propylene glycol (antifreeze), formaldehyde, cadmium, chromium, lead, manganese, and nickel. Some vapers also vape THC (marijuana) in order to get high.

A legal warning on the Juul website notes, "This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm." In addition, their website notes, "No tobacco or e-liquid product should ever be considered "safe."

WHAT DO THEY LOOK LIKE?



WHY SHOULD WE BE CONCERNED?

Vaping is not safe. We know that the aerosol utilized for these products contain nicotine and cancer-causing chemicals. Some known health risks linked to nicotine use include nicotine addiction, mood disorders, harm to brain development, and lung disease. Nicotine use can also prime the brain's reward system, putting vapers at risk for addiction to other drugs.

According to the CDC, studies show that non-smoking youth who use e-cigarettes are more likely to try conventional cigarettes in the future than non-smoking youth who do not use e-cigarettes.

HOW DOES NICOTINE AFFECT THE BRAIN?

The nicotine in e-liquids is readily absorbed from the lungs into the bloodstream when a person uses an e-cigarette. Upon entering the blood, nicotine stimulates the adrenal glands to release the hormone epinephrine (adrenaline). Epinephrine stimulates the central nervous system and increases blood pressure, breathing, and heart rate. As with most addictive substances, nicotine activates the brain's reward circuits and also increases levels of a chemical messenger in the brain called dopamine, which reinforces rewarding behaviors. Pleasure caused by nicotine's interaction with the reward circuit motivates some people to use nicotine again and again, despite risks to their health and well-being. Research suggests it can even prime the brain's reward system, putting vapers at risk for addiction to other drugs.

HEALTH EFFECTS ON TEENS?

The teen years are critical for brain development, which continues into young adulthood. Young people who use nicotine products in any form, including e-cigarettes, are uniquely at risk for long-lasting effects. Because nicotine affects the development of the brain's reward system, continued e-cigarette use can not only lead to nicotine addiction, but it also can make other drugs such as cocaine and methamphetamine more pleasurable to a teen's developing brain.

Nicotine also affects the development of brain circuits that control attention and learning. Other risks include mood disorders and permanent problems with impulse control—failure to fight an urge or impulse that may harm oneself or others

Sources: www.drugabuse.gov; www.CDC.gov

TALKING TO YOUR TEENS

Remind them that most teens do not use these products. 75% of teens **DO NOT** use e-cigarettes. If your teen is already addicted to vaping, talk with your doctor about how to quit vaping. Be a good role model. If you currently use tobacco products, try to quit.