E-cigarettes, or vaping products are electronic devices used to deliver nicotine, cannabis (THC, CBD), flavorings, chemicals, and other substances. They are known by many different names and come in many shapes, sizes and types. Devices may be referred to as Electronic nicotine delivery systems (ENDS), E-cigs, Vapes, Vape pens, Tanks, Mods, or Pod-Mods. They are powered by a battery that heats liquid or “juice” into an aerosol that is then inhaled into the lungs. Carcinogens (formaldehyde, acetaldehyde, acrolein) and toxic heavy metals (lead, cadmium) have been found in ENDS aerosols.*

Popular products used by youth include Juul, Blu, Suoirin, and Puff Bar. Flavored products are attractive to young people. **Youth e-cigarette users cite flavors as a top reason they began using e-cigarettes, second only to use by a family member or friend.** Among high school students who currently used any type of flavored e-cigarettes, the most commonly used flavor types were fruit (73.1%); mint (55.8%); menthol (37.0%); and candy, desserts, or other sweets (36.4%). **In 2019, the FDA declared youth use of e-cigarettes an “epidemic". Because of the popularity of the Juul among youth, the FDA banned pre-filled e-cigarette "pods" in any flavor except tobacco and menthol. The federal minimum legal age to purchase any type of e-cigarette was raised to 21 the same year.

**Prevalence of Use Among Youth**

Nationwide data from NIDA

In the four years since the Monitoring the Future Survey began including questions on nicotine and marijuana vaping, use of these substances among teens has increased to markedly high levels. From 2017 to 2019, the percentage of teenagers who said they vaped nicotine in the past 12 months roughly doubled for eighth graders from 7.5% to 16.5%, for 10th graders from 15.8% to 30.7%, and for 12th graders from 18.8% to 35.3%. In 2020, the rates held steady at a respective 16.6%, 30.7%, and 34.5%.

**Local Survey Data**

16.3% of middle school and high school students surveyed in our area in 2019 reported past 30 day use of e-cigarettes. The chart above indicates past 30 day vaping compared to smoking among students surveyed.***
Substance Use Harms the Teen Brain

Vaping devices can enable youth to ingest large amounts of nicotine and high concentrations of cannabis/THC. Here are some facts about each of these substances, and the consequences of youth use.

Nicotine

Nicotine levels vary in e-cigarettes. 2 of the most popular products among youth- Juul and Puff Bar contain nicotine salts which allow higher concentrations of nicotine to be delivered with little irritation. One Juul pod or one Puff Bar contains the equivalent of 1 pack of cigarettes.

Nicotine is not safe for youth:
- According to the CDC, nicotine is a naturally occurring toxic substance found in tobacco
- Nicotine is a highly addictive substance
- Because the teen brain is undergoing massive changes, nicotine may rewire the brain, priming it for future addiction to other substances
- Nicotine can contribute to problems with concentration, learning, and impulse control

Cannabis

An e-cigarette can be used to vape cannabis in many forms. Concentrates of cannabis like wax (called DAB) or oil can contain 50-90% THC, the drug's main mind-altering chemical. Dried cannabis contains approximately 20%. These high levels of THC can cause heightened side effects like passing out, extreme paranoia, nausea, vomiting, and nerve-wracking anxiety.

Long-lasting or permanent affects of cannabis use on the developing teen brain can include:
- Difficulty with critical thinking skills like attention, problem-solving and memory
- Impaired reaction time and coordination, especially as it relates to driving
- Decline in school performance
- Increased risk of mental health issues including depression or anxiety and in some cases psychosis where there is family history

What can parents do? Talk to your kids....
- Parents have a significant influence over their children’s decision to experiment with drugs.
- Its never too early to start conversations about drug and alcohol use. Age of onset for substance use can be as early as 9-10 years old. Be direct and honest. Know the facts.
- If your child is using substances, get to the root cause and help them seek treatment and develop healthier coping skills.

This is Quiting is a program sponsored by the Truth Initiative and designed to help youth quit vaping. Text DITCHVAPE to 88709

To learn more about vaping, cannabis and more, visit our website

Talk They Hear you is a program developed by SAMHSA

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