

# Marijuana Vaping by Youth: Understanding Access and Risks

► Nearly one-third of high school students and a quarter of middle school students who use electronic cigarettes have used marijuana in a device. Learn the health risks and signs of use.



Over the past few years, there has been an increase in youth using electronic nicotine delivery devices, also known as e-cigarettes or vapes. With this has come a dramatic increase in the use of these devices to smoke marijuana. Vaping marijuana may appeal to youth for two key reasons:

- Vaping may be perceived as a safer alternative to the traditional method of smoking marijuana (joints, blunts, pipes).
- Vaping is easier to hide from adults because it has less odor.

Knowing the means of access, health risks, and signs of use can keep you educated and ready to intervene if necessary.

## How is marijuana vaped?

- Marijuana is usually vaped in the form of crushed cannabis flowers or THC-concentrates (oil or wax).
- Marijuana can be vaped in refillable/rechargeable devices or preloaded disposable devices with flavors like Mango, Passion Fruit, and Blueberry Kush.



## What are the health risks?

- Concentrations of THC in hash oil and waxes can be 4 to 30 times more than in dried marijuana.
- Some THC vape juice contains cutting agents similar to those used in e-cigarettes. These are added to improve vape cloud production. The most common cutting agents include polyethylene glycol (PEG), propylene glycol (PG), and vegetable glycerin (VG). When vaporized at high temperatures, both PEG and PG break down into the carcinogens formaldehyde and acetaldehyde, which cause cancer and lung disease. These cutting agents can dry out the mouth and make asthma and allergies worse.



## What are the signs that your child might be vaping marijuana?

- You see small liquid cartridges around the house or in their personal belongings. Marijuana e-liquid for the device is generally thick and has a yellow/gold color.
- You notice unfamiliar USB devices, batteries, chargers, and gel jars.
- Your teen has unusually bloodshot eyes, dry mouth, slower reaction time, or coordination problems.
- Your teen demonstrates an unusual increase in appetite.
- Your teen shows a decrease in activities he or she once enjoyed.

- Vitamin E acetate is also used as an additive. Vitamin E acetate is strongly linked to the lung disease EVALI (e-cigarette or vaping-associated lung injury).
- National and state data from reports and product sample testing of patients with lung-related illnesses found that 82 percent of hospitalized patients reported using THC-containing products and 33 percent reported exclusive use of THC-containing products (as of January 14, 2020).
- During adolescence, ages 13 to 21, the brain and organs are still developing. Chronic marijuana use during adolescence has been associated with impaired brain development, which can adversely affect learning and memory.
- Symptoms including cough, mucus, wheezing, and difficulty breathing can develop over time.
- Addiction research shows that 9 out of 10 adults struggling with addiction issues started using nicotine, alcohol, marijuana, opioids, and other substances before the age of 21.



## What can you do?

Educate yourself and have a conversation with your children about the health risks and dangers of vaping. Ask them about their knowledge of vaping and if they have tried e-cigarettes. Listen to their response. It is important to help them understand the risks of vaping at an early age and why they should not vape.

## How do youth get access to marijuana juice, wax, or oil?

- THC-containing devices can be purchased from commercial (e.g., legal vape shops) or informal sources (friends, family, or in-person or online dealers).
- 78 percent of youth reported getting products only from informal sources (family/friends, dealers, online, or other sources).
- 16 percent of youth reported getting products only from commercial sources (recreational and/or medical dispensaries, vape or smoke shops, stores, and pop-up shops).
- 6 percent of youth reported getting products from both commercial and informal sources.



**Adrienne Duke**, *Extension Specialist* and Associate Professor; **Jayden Valderrama**, Undergraduate Research Assistant; and **Kelli Graham**, Undergraduate Research Assistant, all in Human Development and Family Studies, Auburn University

For more information, contact your county Extension office. Visit [www.aces.edu/directory](http://www.aces.edu/directory).

Trade and brand names used in this publication are given for information purposes only. No guarantee, endorsement, or discrimination among comparable products is intended or implied by the Alabama Cooperative Extension System. The Alabama Cooperative Extension System (Alabama A&M University and Auburn University) is an equal opportunity educator and employer. Everyone is welcome! Please let us know if you have accessibility needs.

Revised November 2022, FCS-2429

© 2022 by the Alabama Cooperative Extension System. All rights reserved.

[www.aces.edu](http://www.aces.edu)