

# The Dangers of JUUL: What Schools Need To Know

There are many teens and young adults who use JUUL®, a small vape or e-cigarette device. In this handout, you will learn the dangers of JUUL®. You will also learn how to prevent your students from “JUULing” and how to help if they do use JUUL®.

## What is JUUL®?

JUUL® is a small electronic cigarette (also called a vape pen or e-cigarette) with a cartridge on the end. The cartridge (also called a **JUULpod®**) contains liquid **nicotine**, **benzoic acid**, and other chemicals that turn into fine particles when inhaled into the lungs. The benzoic acid and nicotine in a JUULpod® is more concentrated than a typical e-cigarette cartridge. Because of these chemicals, nicotine levels in the blood can be higher than those from cigarettes.

## How Common is JUUL® and Vaping Among Teens and Young Adults?

JUUL® is very common among teens and young adults. **About 2 out of every 10 high school students in Massachusetts vape.** By senior year, almost 3 out of every 10 vape. Teens who vape are 4 times more likely to begin using traditional tobacco products (such as cigarettes) later in life.

## Why is JUUL® Popular Among Teens?

JUUL® is popular among teens because it is small, sleek and easy to use. It is also easier to hide in school and other public places.



Picture of a JUUL device.

## Did you know...?

Tobacco companies know that if teens and young adults begin using their products before the age of 21, it's much more likely they'll have a lifelong customer. In fact, almost all adult tobacco users started before the age of 21.

## Why is JUUL® Especially Dangerous for Teens and Young Adults?

There are many reasons why JUUL® is especially dangerous to teens and young adults. **The most important reason is that the teen and young adult brain is very sensitive to nicotine.**

Nicotine changes the way the brain works over time by forming **addictive pathways** (connections in the brain that become addicted to nicotine). The younger a teen starts smoking or vaping, the harder it will be to quit. Some teens can become addicted to the amount of nicotine in just half of a JUULpod®.

## What Are the Other Health Risks of JUUL®

The other health risks of JUUL® include:

- Asthma
- Eosinophilic pneumonitis (unable to breathe due to swelling of the lung)
- Various cancers, caused by chemicals, such as N-Nitrosornicotine
- Long-term changes in how the brain works (such as creating addictive pathways in which the brain craves nicotine and other illicit drugs)

## How Can I Prevent My Students From Using JUUL® Or Other Tobacco Products?

Here are tips to help you prevent your students from using JUUL® or other tobacco products:

- **Teach about the harms of vaping.** Vaping is not only a bad habit but it also a drug of abuse. Many health classes mention e-cigarettes but do not treat it seriously. In fact, nicotine is the most common drug used by high school students.
- **Talk about the science behind early nicotine use and how it can be a gateway to future drug use.** Know that many of these e-cigarette devices can be used to vape marijuana. Talk about how industry messages and promotions can make youth more likely to use e-cigarettes. *Do not show the images from the tobacco industry as these may induce the behaviors you are trying to prevent.* Instead, disseminate the alternative messages, narratives, and images created by researchers to discourage adolescent use.
- **Enact a tobacco-free zone** around all schools (including e-cigarettes).
- **Encourage your local Board of Health** to enforce tobacco 21 regulation. See the community prevention guide that goes with this handout.
- **Publicize your zero tolerance policy for vaping.** If a student is caught vaping, treat it as an offense like drinking or using other drugs on campus. Get help for students who are currently addicted by working with your school nurse or counselors.
- **Be on the lookout for other eCigarette devices.** Suorin, Phix, and Bo are also hot right now with adolescents.

## Did you know...?

One store that sells tobacco products can stock enough product to supply an entire high school. It is never okay to push tobacco products on children, teens and adults to make money.

## How can I prevent vaping in my community?

Here are tips you can use to help prevent vaping in your community:

- **Ask your town or city's Board of Health to strictly enforce the new Tobacco 21 law** (a law that makes it illegal for retailers to sell to those under age 21). Ask if the Board of Health does compliance checks for each store that sells tobacco at least 4 times per year.
- **If you notice any stores selling tobacco products to those under age 21**, report it to the Attorney General's office by calling 617-727-8400.
- **Encourage your local Board of Health to increase fines for selling to those under 21:**
  - o First offense: \$1000
  - o Second: \$2000 or third: \$3000
  - o Second and third offenses should include revocation of a store's retail license to sell tobacco for increasing periods of time
- Urge your local Board of Health to join with 120 Massachusetts cities and towns who have already made flavored tobacco products legal only in age 21 and over tobacco stores. Flavorings are one of the principal reasons adolescents initiate vaping.

Sources: 1. YRBSS 2017 2. *E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General*, 2016, and the Centers for Disease Control and Prevention (website on Electronic Cigarettes [https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/index.htm](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm)) 3. *Public Health Consequences of E-Cigarettes a Report of the National Academies of Sciences 2018.*

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