

The Dangers of JUUL: What Families Need to Know

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

WHAT IS JUUL®?

JUUL® is a small electronic cigarette (also called a vape product 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® are more concentrated than a typical vape **cartridge** (also called a **pod**). 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 easier to hide in school and other public places. The pods also come in various flavors that appeal to teens.

Did you know...?

Nicotine use can lead to common mood disorders in teens and young adults, such as anxiety or depression. All vape devices have some nicotine, even if the label says it does not contain nicotine.

WHY IS JUUL® ESPECIALLY DANGEROUS FOR TEENS AND YOUNG ADULTS?

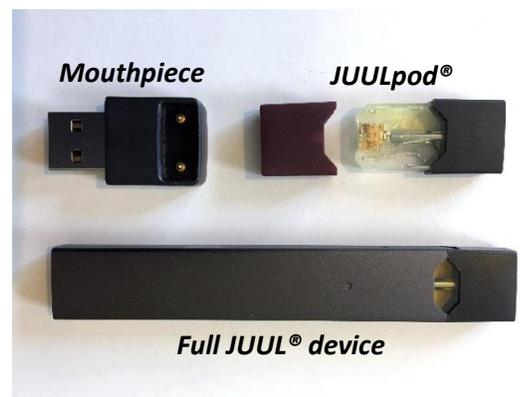
There are many reasons why JUUL® is especially dangerous to teens and young adults. **The most important reason is that the teen and young adult brain is very sensitive to nicotine.**

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-Nitrosomonocotine
- Long-term changes in how the brain works (such as creating addictive pathways in which the brain craves nicotine and other illicit drugs)



Picture of a JUUL®. Photo courtesy of Jonathan Winickoff, MD, of MGHfC.

HOW CAN I PREVENT MY CHILD FROM USING JUUL® OR OTHER TOBACCO PRODUCTS?

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

- **Set a good example for your child.** If your child sees you avoiding the use of JUUL® and other tobacco products, it is more likely they will do the same.
- **Discuss the harms of vaping at home.** Let others know that you do not approve using or experimenting with JUUL® and other tobacco products. For more information, talk with your child's care team or visit www.teen.smokefree.gov.

MY CHILD OR I VAPE. WHERE CAN I LEARN MORE ABOUT QUITTING?

If you or your child vapes, **talk to the doctor or pediatrician** about resources and specific ways to quit using tobacco products and help stop nicotine addiction.

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.

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

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 strictly enforces the new Tobacco 21 law** (a law that makes it illegal for people under age 21 to purchase tobacco products). Ask if the Board of Health checks each store that sells tobacco at least 4 times per year.
- **If you notice any stores selling tobacco products to people 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 to the following for selling to those under 21:**
 - First offense selling tobacco products to those under age 21: \$1000 fine and one week suspension of the store's tobacco retail license.
 - Second or third offense: Revocation of the store's retail license for increasing periods of time and fines of \$2000-3000
- **Urge your local Board of Health to ban the sale of flavored tobacco products, including mint and menthol.** That is saving hundreds of kids from tobacco addiction in those towns.



Watch a video about vaping from Adolescent and Young Adult Medicine at MGHFC. *Video courtesy of Vidscrip®.*

Visit www.massgeneral.org/children/e-cigarettes/video-default.aspx

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) 3. *Public Health Consequences of E-Cigarettes a Report of the National Academies of Sciences* 2018.

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For more information please call

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