

Just the FACTS: Vaping and Juuling

What parents and caregivers need to know!

As part of the Hull High School health curriculum, Hull students learn to identify harmful substances like nicotine, and are taught refusal skills to remain healthy. In Health and Wellness classes, students build upon their scientific understanding of the risks of vaping, and analyze how industry marketing strategies attempt to influence adolescents to use harmful nicotine products.

As a parent or caregiver, the following information is critical for you to know as we work together as a community to keep all kids safe. Please contact your child's health and wellness teacher for more information.



What is vaping? What is Juuling?

Vapes (sometimes called e-cigarettes) are devices used to ingest aerosolized liquid nicotine, liquid THC from marijuana, flavorings, or a combination. While styles vary, all vape devices consist of a battery, an atomizer with a heating coil, and an absorbent material that absorbs a liquid called "e-juice." The e-juice may contain nicotine, THC, flavoring, and always contains a variety of chemicals. There is no such thing as a vape with "harmless water vapor."



The battery allows the atomizer to heat the liquid which creates an aerosol vapor that is breathed into the lungs and breathed out into the air repeatedly - sometimes forming large aerosol clouds. Like our young people, parents could spend some time on YouTube to get a better sense of the pervasive vape culture. Conduct searches for vape cloud contests, product reviews, and how-to videos.

Vape products were originally created by the tobacco industry, and approved by the FDA, to help adult smokers quit cigarette smoking. Some 10 years later, an unintended consequence of this new invention emerged – youth use. Tobacco companies soon saw the opportunity to replace lost customers of cigarette smoking, which has been steadily declining over the last 40 years. Now, there are thousands of e-juice flavor options such as Crème, Cucumber, and Mango - a marketing tactic to lure new customers that is especially appealing to young people. Many consumers are unaware of the harms from vaping. Vaping nicotine may be safer than smoking cigarettes, but only for those who already smoke. The long-term health effects of vaping are unknown. And although vaping is promoted as a "cutting down" strategy for adult smokers, there is limited evidence that vaping helps anyone discontinue their nicotine use.

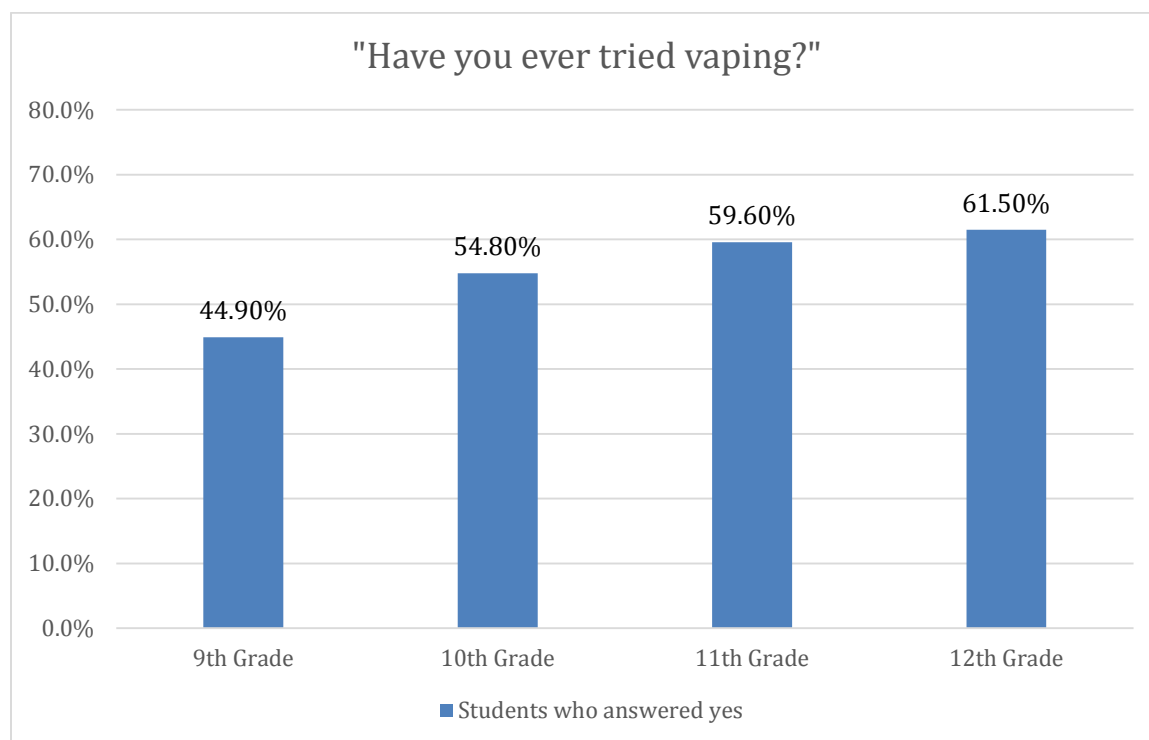
There are different styles and brands, but the hottest vape product on the market right now is the JUUL vape, pictured at right, from www.juul.com. JUULs, as they are called, are appealing to the youth and college market for several reasons: sleek look; slim size; equipped with a USB charger; easy to use pods in desirable flavors; low cost (around \$40); and high function. Basically, JUULs are discreet and they work well: the technology creates a strong "throat hit" and delivers bursts of nicotine to the user. One pod – which might be shared with a group of friends in one hangout, or consumed over the course of a few days by an individual user – contains 5% nicotine, the same amount of nicotine in an entire pack of cigarettes. New products are constantly entering the market, including newcomers, Phix, Rubi Kandy Pens, and others.

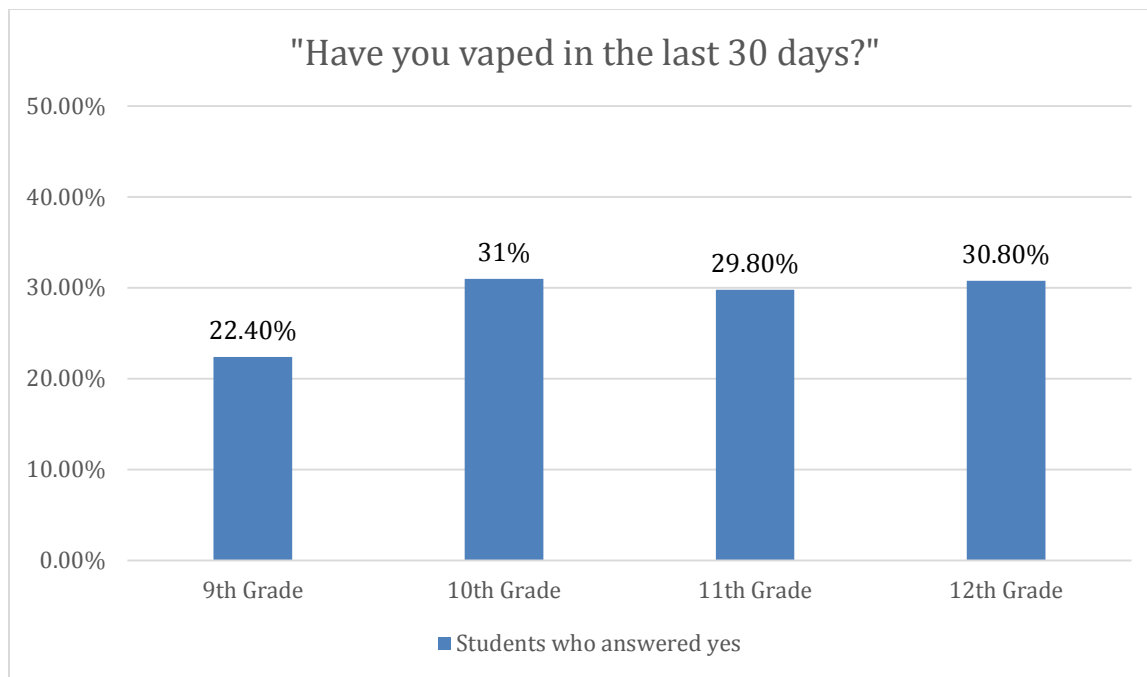


How common is vaping?

There has been a dramatic increase in the use of vapes by youth in the last few years (tripling among US HS students between 2013 and 2014). Vaping is now the most common way to use nicotine in the United States. The tobacco industry is marketing to young people with fruity flavorings, cool technical devices, and a vape culture that is not branded like a tobacco product. Massachusetts Attorney General Maura Healey has launched an investigation to examine JUUL's efforts to audit its own website and other online retailers that sell its products to see how effective they are at preventing minors from accessing JUUL and JUUL-compatible products. The investigation will explore what JUUL does, if anything, to stop online retailers that fail to verify a purchaser's age and prevent minors from purchasing its products or those that are compatible or similar. The attorney general is also reviewing industry practices that are causing harm to minors. The FDA and other public health organizations are working to strengthen policies that protect youth.

During a recent advisory period, Hull High School students were asked, "Have you ever tried vaping?" and "Have you vaped in the past month?" and results of the anonymous survey are below. We will continue to closely monitor trends and adapt our school policy, health curriculum, and supports accordingly.





In comparison, according to the 2017 Statewide Youth Health Survey, 20% of MA high school students report using a vape in the past 30 days, which is considered "current use."

How harmful is vaping?

- **Nicotine is highly addictive** – No matter how it is ingested (smoked, chewed or vaped), nicotine itself is addictive. Nicotine has even stronger rewarding effects in adolescents than adults. All JUUL products (and 95% of all vape products) contain large amounts of nicotine. The earlier teens start using any product with nicotine, the stronger their addiction will be and the harder it will be for them to quit, according to the American Academy of Pediatrics, AAP. **Adolescents can develop symptoms of nicotine dependence such as increased tolerance and inability to stop using, as well as withdrawal symptoms like headaches, irritability, and difficulty sleeping, after only a few weeks of vaping.** Early use of vapes is also linked to cigarette smoking, meaning it is fairly common to use both eventually.
- Isn't it safer than smoking? Probably, yes, but only for those who already smoke cigarettes! Many cancer harms result from combustible nicotine (smoked cigarettes), so non-combustible (vaped) nicotine is probably not as harmful. Still, there is no evidence that vaping helps anyone discontinue nicotine even though it is promoted as a 'cutting down' strategy for adult smokers.
- It's just too new to tell what the long-term health consequences of vaping will be. **We do know from research that the chemicals found in vapes are not harmless to the user or the people around them.** All vape flavorings contain chemicals and toxins. There is no such thing as "harmless water vapor" vapes.
- The aerosols produced by the chemicals in e-juice, enter into the user's lungs and **leave chemical residue behind.** These may include propylene glycol, glycerin, flavorings, nicotine and other harmful chemicals and toxins, some known to cause cancer.
- **Ear, eye, and throat Irritation** is common among people who vape. Coughing and throat-clearing are common signs of youth use.
- **Popcorn lung**, or bronchiolitis obliterans, is an incurable medical condition that results from long term exposure to a flavoring chemical called diacetyl that is found in both traditional cigarettes and many e-juice products. Breathing in diacetyl may scar the

smallest air passageways, causing coughing and shortness of breath. <https://ehp.niehs.nih.gov/15-10185/#tab1>

- **Correlated to polysubstance use and adult addiction** – The early use of any substance – most commonly nicotine, alcohol or marijuana – increases the likelihood of *other* substance use *and* the chance of having a substance use disorder as an adult. There is no “gateway drug” that causes a young person to use another drug. But there is strong evidence that using anything early increases chances of addiction later in life. (<http://www.jhsph.edu/news/news-releases/2000/smoking-drugs.html>)
- **Some vape devices explode and may cause burns.** Batteries can malfunction and cause vape devices to catch on fire or explode during use. This is common with cheaper models that have “mechanical mods” - as well as among inexperienced users.
- **Third-hand smoke** refers to the chemicals in the vaporized aerosol that remain on surfaces and in dust, which remain and react with other chemicals in the environment to form toxic chemicals that are known to cause health problems.

If it's illegal, how are they getting it?

- The most common means for a young person to acquire any substance – legal or otherwise – is through a **social source, meaning a friend or relative**. Often, a good friend will offer the item to try. Kids need some “go-to” lines to use in these situations to avoid that first use. It’s even plausible that the friend who is offering will be discouraged from continued use. No one wants to use alone - and teenagers care a lot about what their friends think about them.
- Legal purchase age for nicotine and vape products used to vary from town to town. **In the Town of Hull, buyer must be 21 years of age** and show a valid ID. Governor Baker recently signed a new law which raises the legal age to buy tobacco products statewide from 18 to 21. The new law broadens existing prohibitions on public smoking to include e-cigarettes and prohibits the use of tobacco products on the grounds of any public or private school. Additionally, any entity that offers health care services or employs licensed health care providers is prohibited from selling tobacco products in Massachusetts.
- **Vape shops** are now common in Massachusetts. Hull Police will continue to conduct compliance checks at local tobacco retailers such as **convenience stores** to prevent underage sales. Vape shops, medical marijuana dispensaries, and soon, adult use marijuana stores, will be more common across Massachusetts. Parents should expect more access to vape products in the years ahead, with teens asking a legal-age friend or relative to buy vapes/supplies for them at retail stores.
- Many **online vendors** – particularly re-sellers on eBay- sell vape devices and e-juice without age verification. Underage youth may use Visa Gift Cards purchased at stores like CVS, with PayPal accounts that they have set up on their own (or with someone else’s identification) to procure vapes illegally online. Look out for small packages delivered to your home, since e-juice pods will need to be replaced frequently.

What can do if my child is vaping?

- **Intervene immediately** –It is ideal to interrupt early experimentation before a habit or dependence sets in, especially since we know dependence on nicotine develops so quickly. Sometimes young people are simply bored, curious, or are participating so they can fit in or feel cool. Regardless of the reasons provided, early use is a major risk factor for a host of problem behaviors later and should not be taken lightly. Remember, most young people are not vaping. If your child is vaping, it’s reason for concern.

- All teenagers make mistakes, it's completely normal and can be an opportunity to learn. Even when serious mistakes happen, try to keep your emotions in check. Take time to cool off then **express your disappointment, anger, or frustration calmly**. Believe it or not, kids do not want to disappoint their parents, so this is often an effective approach, especially early on.
- Next, establish **clear rules & consequences** for having vape paraphernalia or for using nicotine. The long-term threat of addiction is usually not compelling for a young person. Think of immediate consequences that will affect your child right away. As you come up with **your own family rules**, consider the health impacts listed above, as well as:
 - Vapes and paraphernalia are not allowed on Hull Public School property
 - School suspension and loss of privileges may occur. See School Handbook for details
 - Zero tolerance consequences for student athletes who are caught vaping per the MIAA, including 25% game suspension and loss of captaincy for one year
- Ask your pediatrician or counselor for **nicotine cessation strategies**, including:
 - **Prescription nicotine replacement therapies (NRT) such as patches, gums, and lozenges are often recommended for adolescents who are unable to stop on their own.** The American Academy of Pediatrics now supports the use of nicotine replacement products to help adolescents who are daily cigarette or e-cigarette users to quit. These nicotine replacement products can be prescribed by your primary care doctor (pediatrician or family doctor), or through one of the specialty treatment programs listed below.
 - Supplement with online support tools found at: <https://teen.smokefree.gov>, such as the **QuitSTART app** and **SmokeFree for Teens** texting app
 - Look for in-person **nicotine cessation support groups** that are tailored for adolescents.



What if he/she won't stop?

Get professional help. If the behavior continues despite monitoring and consequences, there are likely underlying reasons. Pursue a specialty counseling route as soon as possible. Many people misuse substances as a way of coping with anxiety, stress, or depression. These individuals are also at greater risk for addiction, so it's important to treat the "why" before serious problems set in.

There are several youth programs in the Boston area that offer a Comprehensive Assessment to determine problem severity, particularly if your child is also using alcohol, marijuana or another substance. Consider any of the following **specialty programs that offer comprehensive assessment, treatment, and case management services for families:**

ARMS at MGH - Addiction Recovery Management Service (for ages 14-26); 617 643-4699
 ASAP at Children's Hospital - Adolescent Substance Addiction Program, 617 355-2727
 Beth Israel Deaconess Clinic, Dr. Kevin Hill, 617 667-1504
 Catalyst Clinic at Boston Medical Center (up to age 25) 617 414-6655
 McLean Hospital, Belmont, 800.333-0338; and Middleborough, 774.419-1000

Support is also critical for the parents to manage stress and effectively support their child. Certain parenting skills are proven to work in motivating a child toward reducing their use or initiating treatment. An online training for loved ones in the **Community Reinforcement and**

Family Training (CRAFT) approach is available through Allies in Recovery. Set up your own free account at www.alliesinrecovery.net, using your Hull zip code.

Never worry alone. Involve trusted parents, teachers, coaches, your pediatrician, school counselor and other adults who can help you support your child's health and well-being.

Additional resources

<http://makesmokinghistory.org/dangers-of-vaping/>

<https://e-cigarettes.surgeongeneral.gov/>

<http://med.stanford.edu/tobaccopreventiontoolkit/E-Cigs.html>

Adapted from Scituate Facts

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Thank you to the Scituate Public Schools for sharing this information and for allowing the Hull Public Schools to adapt for use.