

**Just the FACTS:**  
**What parents and caregivers need to know about vaping and juuling**  
December 2017 Update prepared by the Scituate FACTS Coalition



### **What is vaping? What is juuling?**

Vapes (sometimes called e-cigarettes) are devices used to ingest vaporized liquid nicotine, liquid THC from marijuana, flavorings, or a combination. Vape devices consist of a battery, an atomizer with a heating coil, and an absorbent material that absorbs a liquid called “e-juice” that can contain nicotine, THC, flavoring, and always containing a variety of chemicals.

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. Spend some time conducting YouTube searches to view how-to videos, vape cloud contests, and user reviews of vape products to get a sense of the vape culture.

Vape products were created by the tobacco industry to replace lost customers of cigarette smoking, which has been steadily declining over the years. There are literally thousands of e-juice flavor options such as Cool 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. Some people believe that it's safer than smoking, even though there is no science yet to support that theory.

This hottest vape product on the market is the juul vape, pictured above, from [www.juul.com](http://www.juul.com). Juuls, as they are called, are appealing to the youth and college market for several reasons: sleek look; slim, discreet size; comes with a USB charger; easy to use pods in desirable flavors; low cost (around \$40); and high function. Basically, juuls 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 the same amount of nicotine as a pack of cigarettes.

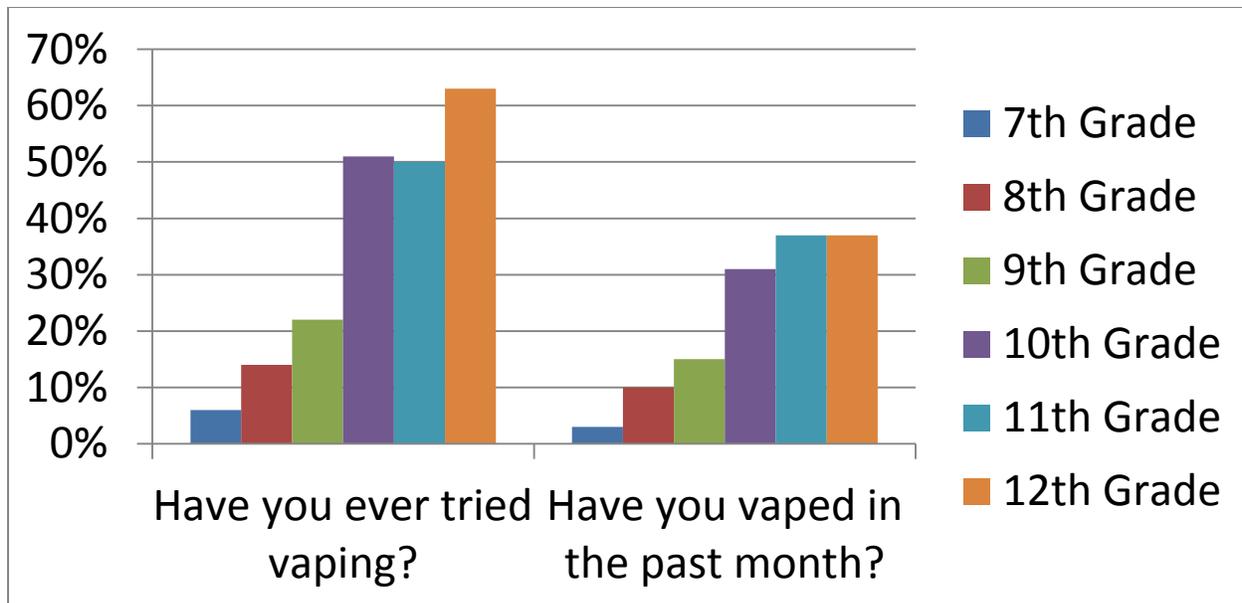


## How common is vaping?

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. While awareness of youth vaping among parents and caregivers has increased recently, as have incidences of possession at Scituate High School, we have not observed an overall increase in youth use over the past three years. "Have you ever tried vaping?" among Scituate High School Students has ranged from 45% in 2015, to 48% in 2016, and 46% in 2017. "Have you vaped in the past month?" answers ranged from 28% in 2015, to 33% in 2016, and 30% in 2017. We will continue to closely monitor trends and adapt our health curriculum and supports accordingly. So, use is up from 5 years ago, but appears to be holding steady.

In Massachusetts, almost half (45%) of all high school students report having tried vaping at some point in their life, and 24% report using a vape in the past 30 days (according to the 2015 Statewide YRBS). By comparison, 46% of Scituate High students report ever vaping (similar rate to state). However, **3 out of 10 Scituate High School students (30%) report vaping in the past 30 days** (according to our 2017 YRBS anonymous survey, this is considered "current use" and is significantly higher than the peer group across Massachusetts (30% vs. 24%). So, vaping is a pronounced area of concern locally: Scituate teens are vaping more.

In Scituate, we see the prevalence of **vaping increase with age** (similar to significant increases in alcohol and marijuana use as our kids get older). **For example, only 3% of 7<sup>th</sup> graders report vaping on a regular basis, while 37% of Scituate High School juniors and seniors vape.** See chart below, statistics are from anonymous student self-reports (YRBS Survey) during the 2016-17 school year. See chart below, statistics are from anonymous student self-reports (YRBS Survey) during the 2016-17 school year.



**Vaping is more common among boys.** Ratio approximately 3:1, boys to girls, among freshmen, sophomores, and juniors at Scituate High School. By senior year, rates are more even across genders. In middle school, the gap is wider, with very few girls ever trying vapes (Lifetime use, 2016-17 YRBS).

We also note that the **type of substance used changes with age** – with most middle school students using flavorings, and most high school students using nicotine. However, since juuls are quickly becoming the device of choice across all age groups, we expect that more middle school students will be exposed to nicotine, since juul does not make “flavoring-only” pods. Vapes are commonly used delivery devices among users of marijuana as well. Our local statistics indicate there is more we can do to intervene early before use escalates.

### How harmful is vaping?

- 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.**
- **Ear, eye, and throat irritation** is common among people who vape.
- **Nicotine is highly addictive** – It doesn't matter how nicotine is ingested, because the nicotine itself is addictive. All juul products contain large amounts of nicotine (up to 5%). 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 the American Academy of Pediatrics, AAP). Only 4% of adolescents who attempt to quit nicotine are successful. Early use of vapes is also linked to cigarette smoking, meaning it is fairly common to use both eventually. There is no evidence that vaping helps anyone discontinue nicotine, even though it is promoted as a ‘cutting down’ strategy for adult smokers.
- 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. Even the flavorings that do not contain nicotine have chemicals and toxins.
- **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 (<https://ehp.niehs.nih.gov/15-10185/#tab1>). Breathing in diacetyl may scar the smallest air passageways, causing coughing and shortness of breath.

- **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 are known to explode.** 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.
- There are **no federal regulations on e-juice products yet**, so there are no child safety precautions on the caps, making them dangerous to others besides the user. Young children accidentally ingest the poisonous e-juice, thinking it’s just cherry juice, etc.
- **Third-hand smoke** refers to the chemicals in vapes/aerosol that remain on surfaces and in dust, even after the vapor and aerosol are gone, which react with other chemicals in the environment to form toxic chemicals that are known to cause health problems.

### What can do if my child is vaping?

- **Intervene immediately** –It is ideal to interrupt early experimentation before a habit or dependence sets in. 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.
- 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 not allowed on Scituate Public School property
  - Illegal to use in public in Scituate
  - Zero tolerance consequences for school sports team participation through the MIAA and Patriot League
  - School suspension and loss of privileges (may include dances, graduation, etc.)
- Determine how you will **monitor the new rules**. Strategies may include cell phone/social media access, bedroom/backpack checks, no sleepovers, or other ideas to ensure non-use. Avoid making empty threats or you’ll lose credibility.

- **Overall monitoring** (The following advice is adapted from [www.drugfree.org](http://www.drugfree.org)):  
1. Know where your teen is at all times – physically and virtually 2. Get to know your kids' friends – and their parents. 3. Find out how your teen plans to spend his or her day. "So... *what're you up to tomorrow?*" 4. Limit the time your child spends without adult supervision. After-school hours are the most high-risk time for teens to be on their own. 5. Use technology to check in with your teens to find out where they are, who they're with and what they're up to. These ideas can be challenging to implement, because your teenager is naturally seeking independence. Try to strike a balance.
- Remember that when things are going well — which will be most of the time - it helps to praise your teenager. Reinforce and **reward positive decisions and behavior**.
- Consider connecting your child with a **counselor**, so he or she may safely explore their reasons for using in the first place, as well as their own motivation to slow down or stop. Scituate residents have access to a free match service through Interface Referral to find a community-based mental health professional that meets your needs. Be sure to request a professional who specializes in adolescents *and* substance use. Start by calling the **William James Interface Referral Service at: 888 244-6843 x 1411**. (Free for residents of the following South Shore communities service: Cohasset, Duxbury, Hanover, Hingham, Kingston, Marshfield, Norwell, Pembroke, Plymouth, and Scituate. Residents of other communities may contact their school counselor, pediatrician and/or insurance company for a list of counselors in the area).
- Ask your pediatrician or counselor for some **nicotine cessation** strategies. Or visit: <https://smokefree.gov/>

### 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 for free. Kids need some go-to lines to use in these situations to avoid that first use. It's plausible that the friend who is offering may 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 vape products varies from town to town, but in most communities the buyer must be 18 years of age and show a valid ID. **In the Town of Scituate, buyer must be 21 years of age** and show a valid ID, per our 2014 tobacco bylaw. Some teens may get a legal-age friend or relative to buy vapes/supplies for them at retail stores. Vape shops, medical marijuana dispensaries, and soon, retail marijuana stores, will be more common across Massachusetts. Parents should expect more access to these products.
- Many **online vendors** also sell vape devices and e-juice. Underage youth may use Visa Gift Cards purchased at stores like CVS, and PayPal accounts that they have set up on their own or with someone else's identification, to procure vapes online. Look out for packages delivered to your home, since e-juice pods will need to be replaced frequently.

## What if he/she won't stop?

Get professional help. If the behavior continues despite monitoring and consequences, there are likely underlying reasons. Pursue the independent counselor 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 a serious problems set in.

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

**ARMS Program at MGH - Addiction Recovery Management Service, Boston** (for ages 14-26)

617 643-4699

[www.addictionanswers.com](http://www.addictionanswers.com)

**ASAP at Children's - Adolescent Substance Abuse Program, Boston**

617 355-2727

<http://www.childrenshospital.org>

**Beth Israel Deaconess Clinic**

Dr. Kevin Hill, Boston

Schedule through Taylor Clooney: [tclooney@bidmc.harvard.edu](mailto:tclooney@bidmc.harvard.edu)

617 667-1504

**Catalyst Clinic at Boston Medical Center, Boston**

This new clinic provides access to a wide range of services including primary care, behavioral health, and support resources for patients up to age 25 and families.

Primary care doctor must be at BMC.

617 414-6655

<https://www.bmc.org/catalyst-clinic>

**McLean Hospital, Belmont**

617-855-3505

**Support is also critical for the parents** to manage their 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 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](http://www.alliesinrecovery.net), using your 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. Our local community coalition, **Scituate FACTS**, offers ongoing education and support opportunities. [www.scituateFACTS.org](http://www.scituateFACTS.org), or email [scituateFACTS@gmail.com](mailto:scituateFACTS@gmail.com).

## Other resources:

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

<http://www.scituatefacts.org/wp-content/uploads/2017/10/11.5.17.Vaping.pdf>

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

## Recent articles:

<https://www.npr.org/sections/health-shots/2017/12/04/568273801/teenagers-embrace-juul-saying-its-discreet-enough-to-vape-in-class>

<https://www.npr.org/sections/health-shots/2017/05/25/530026958/many-adults-dont-think-exposure-to-vaping-is-bad-for-kids>

<https://www.theverge.com/2017/11/16/16658358/vape-lobby-vaping-health-risks-nicotine-big-tobacco-marketing>

<https://www.cbsnews.com/news/more-teens-vaping-as-cigarette-smoking-declines/>

## 2016-17 Youth Risk Behavior Survey Results, Scituate Public Schools, by Grade:

2016-17 YRBS Survey Details	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Have you ever tried vaping?	6%	14%	22%	51%	50%	63%
Have you vaped in the past month?	3%	10%	15%	31%	37%	37%

