VAPING

What School Professionals Need to Know to Help Protect Children, Teens and Young Adults

Partnership to End Addiction

Introduction

Vaping has become one of the most popular forms of substance use among young people, despite growing evidence of its health risks and harms. Vaping is the act of inhaling and exhaling the aerosol produced when using an electronic vapor device. Typically, the ingredients include nicotine, flavorings and other chemicals, many of which are toxic. Some vaping products contain marijuana or other drugs.

According to the U.S. Centers for Disease Control and Prevention (CDC), 4.6% of middle school students and 10% of high school students reported vaping in the past 30 days in 2023. These rates have shown a consistent decline since 2019 when 10.5% of middle school students and 27.5% of high school students reported vaping. Among these students who reported vaping, 11.4% of middle school students and 29.9% of high school students said they did so daily. This is despite growing awareness about the dangers of vaping.

As school professionals, we want to do all that we can to reduce the negative effects of vaping on our students' developing brains, affecting their learning and future opportunities. Whether a child has not yet tried vaping, has already begun to vape or vapes regularly, this guide can help you. We break down what vaping is, why it appeals to youth, what the health risks are and what you can do to protect young people from its harms.

What Is in This Guide?

1 in 4 high school students who report vaping do so daily.

CDC's National Youth Tobacco Survey, 2023

Common vaping devices

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What is Vaping?

Vaping is the act of inhaling and exhaling the aerosol that is produced by an electronic vapor device when it heats up its liquid ingredients. More formally, these products are sometimes referred to as electronic cigarettes, or e-cigarettes. Less formally, some simply call them "vapes." The contents of most vaping liquids (e-liquids) include nicotine, flavoring chemicals and other chemicals. Some vaping products contain (or are modified to contain) marijuana or THC, the psychoactive ingredient in marijuana.

What do vaping devices look like?

Vaping products, or vapes, come in many shapes and designs. Original devices intentionally looked like cigarettes, cigars or pipes so that they would feel familiar and appealing to smokers. Larger devices, known as tank systems or "mods," do not look like cigarettes or other tobacco products but can be customized or modified by the consumer to have different flavors, nicotine doses or temperature limits. Today, vapes are small and discreet and resemble modern technology products, such as USB sticks/flash drives or cell phones, and other everyday objects like a pen, eraser or lipstick. Some are disposable while others can be reused by charging the device in the USB port of a computer or outlet charger and by replacing the e-liquid, either by filling the chamber or by using a replacement pre-filled pod or cartridge.

Vaping is illegal for anyone under the age of 21, according to federal law and many state and local laws.
The 21-age limit applies to all tobacco/nicotine products and to all marijuana products in states where marijuana is legal.

Some vaping devices look like regular cigarettes, cigars or pipes, while others resemble USB sticks, guitar picks, small cellphones, lipstick, watches or other everyday items and tech devices.

What is being vaped?

Although many substances can be vaped, teens and young adults most commonly vape flavored e-liquids with nicotine or marijuana (THC). Currently, the most popular device is the disposable vape at 61% use, followed by refillable pods or cartridges at 16% use. Nine out of 10 youth who report vaping use flavored vapes and over half of them report using 'ice' flavored vapes.

Thousands of flavoring chemicals. Vapes come in thousands of tasty, unmistakably child-friendly flavors, many with fun and enticing names. The flavors mask the harsh taste of nicotine and other chemicals contained in the e-liquid, making it easier to inhale the aerosol. Sweet, fun flavors like gummy bear and cotton candy often remind teens of happy childhood experiences, making them feel harmless. Recent crackdowns on flavors by federal, state and local governments have begun to shift the landscape of preferred vaping products among youth. Now that flavors, aside from menthol and tobacco, are generally banned in pod-based or closed-system devices like JUUL, loopholes in the regulations are driving kids to flavored disposable vapes that have even higher nicotine content and come in countless enticing flavors.

High levels of nicotine. Nicotine doses can range from 2mg/ml to more than 59mg/ml, and some companies are engaging in "a nicotine arms race," trying to raise the dose to levels that exceed those found in regular cigarettes or competing vapes.

Other chemicals, metals and ultrafine particles. The aerosol, which many teens believe is harmless water vapor, actually consists of many chemicals, heavy metals and fine particles – many of which are toxic and dangerous – and seep deep into the lungs and bloodstream when vaping.

Marijuana or other drugs. Increasingly, marijuana ingredients are found in vapes, including THC (the psychoactive compound in marijuana that creates a sense of being high), the leaf form of marijuana, or CBD. Vapes are sometimes used to inhale other drugs as well.

1 pack of cigarettes
(20 mg of inhaled nicotine)

=20
cigarettes

1 JUUL pod
(~41.3 mg of nicotine
~65% transfer efficiency)

~13–30
cigarettes

1 Puff Bar
(~50 mg of nicotine)

=40–50
cigarettes

1 disposable vape
(200 mg of nicotine)

=100+
cigarettes

Perceived Accessibility and Risk

It is relatively easy for youth to get vape products despite efforts to reduce access among young people. Selling any tobacco product, including e-cigarettes, to anyone under age 21 is illegal according to federal law, as of December 2019. However, clerks at tobacco shops, vape stores, gas stations and convenience stores do not always follow the law. The 2023 Monitoring the Future survey found that 34% of 8th grade students and 76% of 12th grade students thought it was 'very easy' to access vapes. A national survey of middle and high school students found that, among those who reported using e-cigarettes in the past 30 days, 57% of high schoolers said they got them from friends and 22.2% said they bought them at a convenience store. Although few kids buy them online, another study found that doing so is pretty easy with a 90% success rate, since website age gates are easy to get around.

Would be "fairly easy" or "very easy" to get:	8th Grade	10th Grade	12th Grade
Vaping device	34.1%	54.7%	75.6%
E-liquid with nicotine	31.9%	52.1%	72.6%
See "great risk" in:	**8th Grade**	**10th Grade**	**12th Grade**
Vaping nicotine occasionally	23.2%	25.5%	29%
Vaping nicotine regularly	50.2%	57.2%	50.4%

Monitoring the Future Survey, 2023

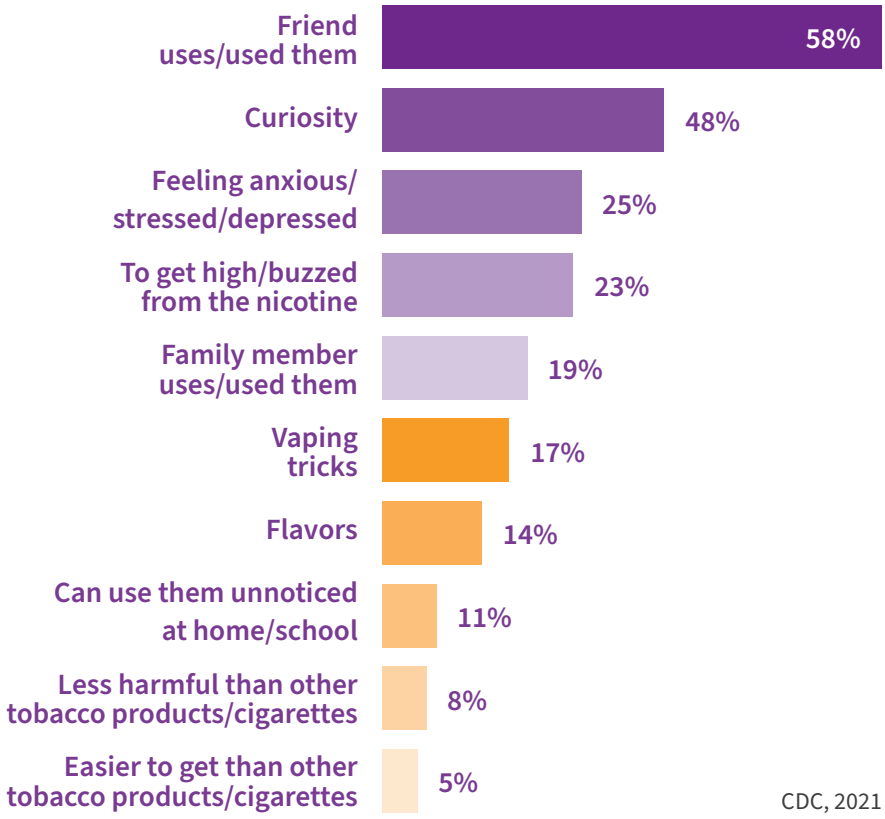
What is Vaping's Appeal?

Most vapes are discreet, easy to hide and generally seen as cool and relatively harmless. They come in thousands of tasty flavors that help cover the harsh taste of the chemicals and override the sense that these products might be harmful. They also produce a brief positive sensation or 'head rush' that some people like.

Most also have very high doses of nicotine, which can rapidly make those who vape develop an addiction or become dependent on the product. Some young people are also drawn to the "vape tricks" and "cloud competitions," where they form cloud-like shapes or patterns when exhaling the vape's aerosol. These tricks are usually performed with modifiable devices, or 'mod' style vapes. People will breathe aerosol deep into their lungs and then exhale it through their ears, eyes or nose.

Vaping is also made to look appealing by major companies who employ strategic marketing tactics like using influencers, social media, and exciting advertisements to entice young people. For example JUUL was a widely popular device among young people who vaped because they directly targeted social media for all of their advertisements, going to the source of where kids spend their time and receive information. JUUL employed similar tactics as old cigarette ads by glamorizing vaping through celebrity endorsements and seemingly fun ad campaigns highlighting appealing fruity, sweet flavored vapes. In recent years, since most of its flavored vapes have been banned, JUUL has decreased in popularity but other illegal disposable flavored vapes have taken JUUL's place in popularity among youth.

Teens say they vape for many reasons. Curiosity is one, and peer pressure is another. They see friends or family members vaping and they are drawn to the appealing flavors. For others, it's to do vape tricks. Some also say they do it because they feel it is less harmful than other tobacco products and it's also discreet. A 2021 national survey of middle and high school students who reported using e-cigarettes found that the most commonly selected reasons for use were:



CDC, 2021

Hooking a New Generation

The tobacco industry needs to replace older smokers.

Like cigarette companies, vape companies have focused their efforts on young people. Why? Getting a person to start as a teen can make a lifetime customer. It's well known among health professionals and the tobacco industry alike that adolescence is the peak time period to develop addiction.

The vast majority of adult smokers started smoking during adolescence, with 90% of adults smokers starting before the age of 18. Nearly all people with nicotine addiction began smoking before age 21.

During the teen and young adult years, the brain is undergoing significant changes. Teen brains are becoming more efficient and developing critical thinking skills. Exposure to any addictive product, including nicotine or marijuana, at any early age makes the brain more susceptible to the continued use of the product and addiction.

By planting the seeds for nicotine addiction as early as possible, the tobacco industry has tremendous incentive to bring its decades of experience and insights into how best to hook young people on nicotine and hide the harms associated with nicotine products.

Tobacco companies own most popular vaping products.

The major cigarette companies either have big stakes in or already own many of the more popular vape brands. They are targeting the age group they've traditionally relied on to sustain their business: teens and young adults (as well as current, heavy smokers).

They're also helping to bolster the future market for their cigarettes by addicting young people to nicotine through vaping. They benefit as these same kids switch to cigarette smoking or use both products simultaneously, which most people who vape end up doing.

You can see the shocking similarities between the tobacco and vape industries' marketing tactics by just looking at their advertising campaigns.

Tobacco companies own most popular vaping products

Similar advertising strategies

What are the Health Effects of Vaping?

It is now widely recognized that vaping is unhealthy and dangerous, even if it might not be quite as unhealthy and dangerous as smoking traditional, combustible cigarettes.

The more immediate health effects include coughing and wheezing, behavioral and mood changes, headaches, seizures, vomiting and potential severe lung injury. Vaping also negatively affects teens' attention, learning, and impulse control in a way that can affect them in school, sports and social situations.

Nearly all vapes contain nicotine, one of the most addictive substances, and in many cases as much as or more than in traditional cigarettes. Nicotine negatively affects the cardiovascular system (increasing heart rate and blood pressure and the risk of heart attack and stroke), respiratory/lung functioning (including inflammation, asthma and wheezing) and reproductive organs. People who vape can quickly become addicted and are at increased risk of starting to smoke cigarettes or use other addictive products. Taking in high doses of nicotine can lead to nicotine toxicity, which in severe cases can give rise to seizures as well as nausea, vomiting, diarrhea, excessive salivation, dizziness, respiratory failure, coma and paralysis.

The other ingredients in vapes, including the flavorings, are harmful as well. Most contain cancer-causing and other toxic chemicals, heavy metals and tiny particles that go deep into the lungs and cause lung damage, cell damage and reduced ability to fight off infections.

Although some of the flavoring chemicals have been deemed safe when eating or drinking, **once they are heated to produce an aerosol, they form additional harmful compounds** that have been found to cause lung damage.

Exposure to Nicotine

Nicotine is a stimulant that makes the nervous system prepare the body for physical and mental activity. It causes breathing to become more rapid and shallow, as well as increases heart rate and blood pressure. Nicotine exposure from vaping varies considerably depending upon the contents of the e-liquid, the type of device used and how it is used.

Vaping exposes young people to nicotine at a time when the human brain is most at risk for addiction. Because the brain continues to develop until early adulthood, roughly age 25-30, use of any addictive substance prior to these years is especially risky. Young people who vape are affected more intensely than are adults by nicotine. The adolescent brain reacts differently to nicotine than does the adult brain. Long-term nicotine vaping can reduce attention span and affect other abilities needed for academic success.

Teens experience enhanced locomotor activity (e.g., walking, running, jumping). They are more likely to find the vaping experience to be rewarding, with fewer withdrawal symptoms than adults.

They tend to tolerate high doses well, which can lead to even more use later in life. And it raises the risk of using and becoming addicted to other substances.

Adolescents who vape are 4x more likely to start using cigarettes. Among 12- to 15-year-olds, vaping is associated with a 9x increase in their odds of smoking.

Soneji et al., 2017; 2018

Exposure to toxic chemicals and other harmful ingredients

Vapes contain a number of chemicals, metals and ultrafine particles that are poisonous when they are heated to form an aerosol and then inhaled. For example carcinogens have been found in the metals that appear in the e-liquids and aerosols, primarily from chromium and nickel and, to a lesser extent, from cadmium, lead, and arsenic. Because of their chemical makeup, certain popular flavors – such as cinnamon, vanilla, butter, and mint – are especially harmful. Research shows that when chemical flavorings for vanilla, cherry, citrus and cinnamon mingle with solvents such as polypropylene glycol and glycerol, they create new compounds called acetals, which are linked to irritation and inflammation of delicate lung tissue. So even if a bottle or pod of e-juice is labeled with its ingredients, a person vaping may not know exactly what they are inhaling. Although some of the flavoring chemicals have been deemed safe when eating or drinking, once they are heated to produce an aerosol, they form additional harmful compounds that can cause lung damage. There also is evidence that some metals and other components of vape can seep into the e-liquid and enter the lungs during the heating and inhalation process, causing lung damage ranging from mild to severe, and in some cases, cancer.

There are carcinogens in the metals that appear in the e-liquids, aerosol, and devices, including chromium, nickel, cadmium, lead, and arsenic.

Many young people think that vaping produces clouds of water droplets, but that isn't accurate. It's more like the aerosol from hairspray.

Although the chemicals that have been found in e-cigarette aerosols might be less numerous than those in traditional cigarettes, and although many may be unrecognizable, you are familiar with other places some of these same chemicals can be found.

- For example, propylene glycol can be found in antifreeze products or in substances used to winterize plumbing systems.
- Acetone is commonly found in nail polish remover and as a paint thinner.
- Ethylbenzene is often used to make other chemicals. It's also found in pesticides, synthetic rubber, varnishes, paints and inks.
- Formaldehyde-based solutions are also used in embalming to disinfect and temporarily preserve human and animal remains.
- Rubidium is a chemical that can be used to give fireworks their bright colors.

Addiction

Nicotine is a highly addictive substance. People who vape can quickly become addicted to the nicotine that is in nearly all vapes, and are at increased risk of starting to smoke cigarettes or use other addictive substances. When a person stops vaping, even for a short period, they can experience withdrawal including strong cravings, irritability, fatigue, headache, sleeplessness and difficulty concentrating. These symptoms can be quite intense, driving them right back to the nicotine product, even when they want to quit. Think about how hard it is for an adult smoker to quit: nearly 70% of adult smokers say they want to quit and slightly more than 7% succeed. Vaping is more addictive than smoking because of the higher doses of nicotine and because the concentrated liquid form is more quickly metabolized than the smoked form. In fact, many people who are able to stop smoking cigarettes by switching to vaping find it extremely difficult to quit vaping due to the very high doses of nicotine and the ease of consuming it through vapes.

On a physiological level nicotine, like all drugs, changes the structure and function of the brain. Receptors in the brain grab onto the nicotine molecule – acetylcholine, a neurotransmitter that helps with attention and learning – because it's similar to something we make naturally.

Some people maybe more prone to addiction if there is a family history of addiction, or if other family members are using substances like alcohol, tobacco or drugs at home, a young person's vulnerability increases. Teenagers with anxiety or depression can also succumb more quickly.

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Cigarette smoking

Teens and young adults who vape are significantly more likely than those who do not vape – about four times as likely – to end up smoking traditional cigarettes. This is true of young people who never smoked cigarettes and had no intention of, likelihood to or interest in doing so. In addition teens who used e-cigarettes but never marijuana are at 2-4 times higher odds of trying marijuana. Strong and consistent research also shows that vaping is not a safe or reliable way to quit smoking. For many people, vaping can actually make it more difficult to quit smoking.

Multiple tobacco product use

Young people who vape have five times the likelihood of those who do not vape to use tobacco products such as cigarettes, hookah, cigars or pipes. The majority of people who vape to help them quit smoking end up becoming 'dual users,' smoking in places and situations where they can and vaping in places and situations where smoking is impossible. Dual users, therefore, actually take in more nicotine and other potentially toxic chemicals than people who only vape or only use other tobacco products.

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Injuries and poisonings

Vaping devices, especially those with poor quality batteries that have been stored improperly or have been modified by the user, can malfunction or explode. This results in burns and other injuries. Young people exposed to e-liquids through the mouth, eye or skin contact can experience nicotine poisoning, resulting in vomiting, seizures, brain injury or death.

Cardiovascular, respiratory, reproductive and immunity effects

More and more, nicotine and other chemicals in vapes are being tied to increasing heart rate and blood pressure and the risk of heart attack and stroke, as well as inflammation, asthma and wheezing. They also can cause inflammatory processes and depress immune function in lungs, and are associated with chronic bronchitis and reduced ability to fight off bacterial and viral infections including COVID-19.

Vaping poses a significant risk to young people when it comes to contracting, transmitting and experiencing the health effects of COVID-19. A national survey of adolescents and young adults found that young people who have vaped were 5 times more likely than those who haven't vaped to be diagnosed with the virus and the risk of being diagnosed and experiencing its symptoms was even higher among those who both vaped and smoked cigarettes. Perhaps most importantly, because vaping weakens the cardiovascular, respiratory and immune systems, one's vulnerability to contracting the virus and experiencing its symptoms is elevated among those who vape.

Many vaping devices are manufactured in China without U.S. government or third-party safety checks. The devices may be releasing toxic chemicals, particularly if they are held together with lead or cadmium solder. When the metal coils of electronic cigarettes heat up to turn e-liquids into aerosols, toxic metals can leach into the liquid, leading to a rare condition usually only seen in industrial metal workers known as hard metal lung disease.

Marijuana and Vaping

The practice of using vaping devices to consume marijuana or cannabis products is becoming increasingly widespread. Recent data show that many youth who vape, especially older teens, are not just vaping nicotine. Many are vaping THC, the psychoactive ingredient in marijuana that produces a high. National data from 2022 shows that about 1 in 10 (9.6) of 8th, 10th, and 12th grade students reported vaping marijuana in the past month. Other data shows that the majority (60.3%) of people who reported using marijuana for the first time in the past year were under 21 years old, despite it being illegal for minors.

Different from most plant-based marijuana, the level of THC in marijuana vapes can be far higher. Therefore, vaped marijuana tends to be much more potent than smoked marijuana.

Some marijuana vapes look like nicotine vaping devices (e.g., PAX brand, which resembles JUUL products); come in loose leaf, concentrate or extract forms; are available in youth-friendly flavors and names; and are virtually odorless. The THC inhaled when vaping enters the bloodstream quickly and can lead to overuse, addiction and other negative health consequences. Vaping marijuana can cause bloodshot eyes, dry mouth, increased appetite, mood swings and can increase the risk of depression, psychosis and suicidality.

Marijuana use, regardless of how it is ingested, can have long-lasting effects on the developing teen brain. **Negative effects include:**

- Impaired attention, learning, problem-solving skills, memory and other cognitive functions
- Impaired reaction time and coordination, especially related to driving
- Academic or job difficulties, school dropout
- Increased risk of mental health issues including depression, anxiety and, in some cases, psychosis and suicidal thoughts
- Marijuana use disorder (addiction) and other substance use and addiction

The level of THC in marijuana vapes can be far higher. Therefore, **vaped marijuana tends to be much more potent** than smoked marijuana.

The likelihood of developing a marijuana use disorder, or addiction to marijuana, is about twice as high among teens than among adults who use marijuana.

EVALI - Vaping-Related Lung Injuries

Immediately prior to the COVID-19 pandemic, there was a wave of severe lung injuries and deaths associated with vaping. The condition, known as EVALI (E-cigarette, or Vaping, product use Associated Lung Injury), sickened more than 2,800 people and has led to nearly 70 deaths across the country.

Symptoms include shortness of breath, weight loss, night sweats, fatigue, gastrointestinal problems, low oxygen levels and, in severe cases, lung failure and death. Most cases require admission to a hospital for treatment. Illegal sales appear to be the root in the majority of the tested cases (although several cases have been identified in which the adulterated vaping product came from a regulated marijuana dispensary). More than 150 different brands of THC-containing vapes have been implicated in cases of EVALI, and the ingredient that appears to be primarily responsible is Vitamin E Acetate. This ingredient is generally considered safe for eating in foods such as vegetable oils, cereals, meat, fruits and vegetables, or in vitamin or skin care products. However, it is not safe for inhalation into the lungs.

Since EVALI may be a life-threating condition, a health care professional should be contacted immediately if a child demonstrates the symptoms of EVALI, especially in the absence of a lung infection.

EVALI has sickened more than 2,800 people and has led to **nearly 70 deaths** across the country.

In the event of life-threatening symptoms, call your local poison control center at **1-800-222-1222** or emergency services at **911**.

What are the signs of EVALI and how to respond?

In light of the emergence of EVALI, which has sickened thousands of young people across the country, the Centers for Disease Control and Prevention (CDC) encourages the public to be alert to the signs and symptoms and know how to respond.

Symptoms can include:

- Cough, shortness of breath or chest paint
- Nausea, vomiting, abdominal pain or diarrhea
- Fever, chills or weight loss

Vaping prevention messages to students should include information about this condition. Share these CDC recommendations, which indicate that, in light of its severity and potential fatality, students should not:

- Buy any type of e-cigarette or vaping products, particularly those containing THC, from informal sources, such as friends, family or in-person or online dealers.
- Modify or add any substances to e-cigarette or vaping products that are not intended by the manufacturer, including products purchased through retail establishments.
- Add vitamin E acetate to e-cigarette or vaping products. While it appears that vitamin E acetate is the ingredient responsible for the illnesses, evidence is not yet sufficient to rule out contribution of other chemicals of concern.

If a child is experiencing symptoms consistent with EVALI, **contact a health care provider immediately**.

In the event of life-threatening symptoms, call your local poison control center at **1-800-222-1222** or emergency services at **911**.

What School Professionals Should Know and Do

The following are some indicators that a student may be vaping nicotine or marijuana:

- Frequent trips to the bathroom
- Mood changes before and after leaving the classroom (may be irritable before leaving and seem less stressed upon return)
- Hanging out in bathroom stalls with other students
- Returning to class smelling of minty or sweet scents
- Putting what appear to be thick markers or pens in the mouth
- Using colorful USB-like devices
- Using lanyards or hoodies to hide vaping devices
- Unexplained shifts in mood, behavior, academics

Help, Don't Punish, Students Who Are Vaping

- Recognize that vaping is a health issue, not just a behavioral problem
- Focus on health and safety, not punishment
- Ensure that students have accurate facts: offer a research-based anti-vaping curriculum to students
- Incorporate vaping-related facts and content into the general academic curriculum (e.g., biology, chemistry, psychology courses)
- Create, implement, and enforce tobacco/nicotine-free school policies and prevention programs
- Challenge students' perceived norms (it's not true that 'everyone' vapes)
- Appeal to students' desire for independence by demonstrating industry marketing tactics that target youth and make students dependent on their products

- Sponsor student-led anti-vaping campaigns
- Offer alternative, safer means of having fun, reducing stress and taking risks
- Be vigilant about places on campus where students vape (e.g., check pop-up ceilings in bathrooms where vaping devices may be hidden; school parking lots) so that it becomes difficult for students to vape on campus
- Educate staff, parents/caregivers on the harms of vaping and on how to respond effectively
- Share community and professional resources that can provide assistance
- Familiarize yourself with current policies in your community and what is already being done to address youth vaping

Get Help for Students with Nicotine Addiction

- Get students' perspectives on why they vape, acknowledge the appeal, but help them weigh risks against benefits
- Recognize that addiction is serious and usually too hard for a teen to overcome alone
- Encourage professional help to cut back and quit
- Interventions should address mental health problems, social concerns
- Connect students with online and text messaging programs that can support students trying to quit (e.g., truthinitiative.org/thisisquitting)
- There is no simple treatment for teen vaping; some tobacco cessation methods can work but counseling is often needed to address cravings and triggers

Collect Data

Collecting data on the types of addictive substances students are using can help inform education and intervention efforts and decisions about school policies. Tracking trends in reported use of vaping products can help schools address emerging trends and adjust policies and practices to meet student needs.

Materials and resources for schools

- A companion PowerPoint presentation to this guide is available from Partnership to End Addiction
- CATCH My Breath – CATCH (Coordinated Approach to Child Health). A youth e-cigarette prevention program targeting youth ages 11–18. The program is divided into four sessions lasting 35–40 minutes each and uses a variety of educational strategies. These include cooperative learning groups, group discussions, goal setting, interviews and analysis of mass media.
- The Tobacco Prevention Toolkit – Stanford University School of Medicine. A toolkit for teachers with in-classroom units and lesson plans on e-cigarettes, tobacco and nicotine. The toolkit includes PowerPoints, discussion guides, worksheets and activities.
- ASPIRE – MD Anderson Center. ASPIRE is a free, bilingual and online tool that helps middle and high school teens learn about being tobacco free.
- Vaping: Know the Truth - The Truth Initiative has a prevention curriculum that schools can use.
- Vaping Prevention and Education Resource Center - The U.S. Food and Drug Administration (FDA) has an online hub with free science-based lesson plans and materials for teachers, including how to spot stealth and disposable e-cigarettes and to help students understand the dangers associated with e-cigarette use and nicotine addiction.
- Know the Risks: A Youth Guide to E-cigarettes – A presentation from the Centers for Disease Control and Prevention's Office on Smoking and Health to educate youth on e-cigarettes. This resource is intended for adults who educate or serve youth ages 11–18 and includes a document with talking points.