It's time to come clean about vaping
by Aaron Weiner, PhD

Ask any parent or teacher right now about the biggest drug trend among teens, and they'll all give you the same answer: vaping. What started as an isolated new fad has now gone mainstream. We're now facing down an epidemic that could wipe away the progress we've made from decades of hard work to reduce teen smoking rates.

If you look at our history, the current trends are even more concerning. In 2011, only 1.5 percent of high school students had ever vaped, and in 2016 that number had risen to 11.3 percent. In our most recent data from 2018, a staggering 20.8 percent of high school students now endorse having vaped in the past year alone. That number is up a staggering 78 percent from 2017, with 1.5 million new kids vaping.

And, to make matters worse, the surge in vaping has led more students to smoke cigarettes. High school cigarette use was up about 33 percent from 2017, reversing a trend of decline that had been steady for many years.

How does vaping affect health?

Despite rumors that persist among youth, vaping is not healthy, and it's not benign, either. Vaping has numerous negative health implications. Strong scientific evidence indicates:

- Vapor aerosol, both first- and second-hand, from e-cigarettes contains numerous toxic substances, as well as heavy metals.
- The chemicals in e-cigarette vapor causes DNA damage and mutagenesis. This is the biological process that leads to cancer.
- Vaping nicotine is addictive. Studies have shown that kids who vape are also more likely to smoke cigarettes, and when they do, those kids smoke more than they otherwise would.
- Accidental contact with e-liquid on your skin can cause serious negative health effects, including seizures. Accidental ingestion can result in death.

Truly, the only person who should ever even think about vaping is someone already addicted to cigarettes. If you are already poisoning your body with cigarettes, you'll be poisoning yourself a little bit slower by vaping, as the toxins are fewer than in cigarettes. For smokers, it's a step in the right direction.

For everyone else, and especially for kids, it's a huge step in the wrong direction. Vaping and smoking put someone on a health trajectory that could take numerous years off their lives, as well as lower the quality of life during those years.

What's driving this trend?

Big money, and an industry that, even right now, is not being regulated in any meaningful way.

Companies that profit from addiction have always used the same tactics: market towards youth, as their minds and hearts are more vulnerable to influence; confuse the public about whether or not their product is safe; and push to deregulate and create legal loopholes to make as much money as possible.

The vaping industry, much like tobacco and marijuana, is no different. They all use the same playbook.

As an example, let's look at flavored “e-juice” (e-cig liquid). The Tobacco Control Act of 2009 allowed the FDA to regulate tobacco, and one of the first things they did was ban all flavors from cigarettes other than menthol. Why? Because flavors appeal to kids, and had been cited as one of the primary reasons why kids smoked cigarettes in the first place.
How then can websites sell e-juice with flavors such as strawberry cheesecake, kiwi berry and watermelon? Because e-liquid is nicotine, not tobacco, and so the FDA can't regulate it. These companies know exactly what they're doing and, as of now, our lawmakers have not been able to push through industry special interests to make a change, despite the fact that 85 percent of kids who use vaporizers say they use flavors.

The hypocrisy of JUUL

It's unfortunately not just off-brand vape products that market to kids. The vaping industry's largest player, JUUL, is complicit. JUUL makes vaping devices that have an appealing form factor for kids: they fit in the palm of your hand and look like a flash drive, which makes them very easy to conceal and use in school settings. But beyond that, they also offer flavors, just like other vape vendors, such as mango, cucumber, creme and fruit.

Their PR department often says that JUUL's youth use rate is a surprise to them, and that JUUL is designed just for current, adult, smokers. How then do they explain their early advertising campaigns, where they were clearly targeting a younger audience? Or their current flavor offerings, exploiting the loophole?

A recent study found that teens are 16 times more likely to use JUUL than adults. When that's the case, and when JUUL controls 68 percent of the e-cigarette market, talk is cheap.

JUUL got a big holiday present this year: a $12.8 billion investment from Big Tobacco company Altria, the makers of Marlboro. When some JUUL employees expressed concern over having a large part of the company owned by Big Tobacco, JUUL appeased them by giving every single employee of JUUL an average holiday bonus of $1.3 million dollars from the Altria deal. You read that right: every employee of JUUL received a bonus from the Altria deal, at an average of $1,300,000 per employee.

What's the price to make someone to quiet down and keep working? I don't know, but $1.3 million will go a long way.

If JUUL wants us to believe they're not running the same game plan as Big Tobacco, literally selling out to them is not a convincing way to do it.

What can parents do?

If you're concerned about all this as much as I am, the most important thing you can do is speak out.

First, if you're a parent, let your kids know the truth about vaping. They've likely gotten most of their information from their friends, the industry, and/or their media circles on the internet, none of which will give them the information they need to make thoughtful, educated decisions about their health. Shine a light on what's really going on, and your kids will listen.

Second, reach out to your federal legislators over phone or email. A new congress is about to start, and lawmakers have a chance to plant their flag on issues and drive initiatives forward. If they hear from the constituents who elected them that our children need protection, that the vaping industry needs regulation, they will listen.

And lastly, if a member of your family is struggling with an addiction issue, know that there is help available if you reach out. Linden Oaks Behavioral Health provides free assessments, and will connect you with resources, with us or otherwise. Nobody, and no family, should have to feel alone when trying to fight addiction.

For information on addiction or to get in touch with our assessment center, give us a call at 630-305-5027.
Marijuana Use and Teens: What Parents Need to Know

The teen years are a time of rapid growth, exploration, and onset of risk taking. Taking risks with new behaviors provides kids and teens the opportunity to test their skills and abilities and discover who they are. But, some risk behaviors—such as using marijuana—can have harmful and long-lasting effects on a teen’s health and well-being.

**Marijuana and the teen brain**

Unlike adults, the teen brain is actively developing and often will not be fully developed until the mid 20s. Marijuana use during this period may harm the developing teen brain.

- **Problems** with memory and learning.
- **Difficulty thinking** and problem solving.
- **Impaired** coordination.
- **Difficulty** maintaining attention.

**Negative effects on school and social life**

Marijuana use in adolescence or early adulthood can have a serious impact on a teen’s life.

**Decline in school performance.**

Students who smoke marijuana may get lower grades and may more likely to drop out of high school than their peers who do not use.

**Impaired driving.**

Driving while impaired by any substance, including marijuana, is dangerous. Marijuana negatively affects a number of skills required for safe driving, such as reaction time, coordination, and concentration.

**Increased risk of mental health issues.**

Marijuana use has been linked to a range of mental health problems in teens such as depression or anxiety. Psychosis has also been seen in teens at higher risk like those with a family history.

**Potential for addiction.**

Research shows that about 1 in 6 teens who repeatedly use marijuana can become addicted, which means that they may make unsuccessful efforts to quit using marijuana or may give up important activities with friends and family in favor of using marijuana.

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**FAST Facts**

- **24%**
  - DuPage County 12th graders who reported having used marijuana in the past 30 days.

- **1 in 6 teens** who repeatedly use marijuana can become addicted.
  - CDC

- **2X-3X times more potent today.**
  - AACAP

**Research shows that marijuana use can have permanent effects on the developing brain when use begins in adolescence, especially with regular or heavy use.**

- Frequent or long-term marijuana use is linked to school dropout and lower educational achievement.

- Marijuana is 2-3 times more potent today.
Marijuana Use and Teens
What Parents Need to Know

The teen years are a time of rapid growth, exploration, and onset of risk taking. Taking risks with new behaviors provides kids and teens the opportunity to test their skills and abilities and discover who they are. But, some risk behaviors—such as using marijuana—can have harmful and long-lasting effects on a teen’s health and well-being.

References


The term “addiction” is used to describe compulsive drug seeking despite negative consequences. However, we recognize that “addiction” is not considered a specific diagnosis in the fifth edition of The Diagnostic and Statistical Manual of Mental Disorders (DSM-5)—a diagnostic manual used by clinicians that contains descriptions and symptoms of all mental disorders classified by the American Psychiatric Association (APA). Rather the DSM-5 uses the term substance use disorder. However, throughout this document addiction is used synonymously with having a substance use disorder for ease of language recognition and understanding.
Vaping Fact Sheet

What is Vaping?
Vaping is the act of inhaling and exhaling the aerosol, often referred to as vapor, produced by an e-cigarette or similar device. While regular cigarette use has decreased, vaping has increased among teens and is now considered an epidemic. Vaping products come in many flavors, which can attract youth, and can also contain nicotine or THC, the psychoactive property found in marijuana that produces the high. - Partnership for Drug-Free Kids

Common Names
E-cigs, E-hookahs, Mods, Vape Pens, Vapes, Tank Systems

What are the Risks?
Vaping chemicals used in the liquids can be more concentrated and dangerous. Youth who vape are 4X more likely to begin smoking traditional cigarettes.

Body Risks
- Higher blood pressure
- Increased heart rate
- Ear, eye and throat irritation

Inhibit Healthy Brain Development
- Nicotine use in early adolescents causes changes in the brain that make life-long addiction much more likely
- Can impact parts of the brain responsible for decision making and impulse control

Tips to Recognize Vaping

Odor: Unlike traditional cigarettes, e-cigarettes do not have a pungent smell. E-liquids come in a wide variety of flavors such as mint, fruit punch, and vanilla.

Unfamiliar devices: E-cigarettes were first invented to be disposable and look like traditional cigarettes. They have now evolved and often resemble pens, cell phone cases and the most commonly found shape USB drives, such as the JUUL. The easiest way to spot these devices is to look for holes (mouthpiece).

Batteries and Chargers: These devices have a battery component and need to be charged. Pay attention to unfamiliar chargers or batteries laying around.

Increased thirstiness: Propylene Glycol (PG), the main substance in e-cigarettes is a hygroscopic substance, meaning it binds or holds water. The PG in e-liquid will extract water from your mouth, nose & eyes which can lead to dehydration.

Metallic wires and cotton wicks: If you find organic cotton, empty plastic vials or thin metallic coils lying in your child’s room, this could also be a red flag.

Nearly 20% of DuPage County middle and high school students report using a vaping product within the past 30 days - Illinois Youth Survey, 2018

Resources:
e-cigarettes.surgeongeneral.gov
www.cdc.gov/tobacco/basic_information/e-cigarettes/pdfs/Electronic-Cigarettes-Infographic-508.pdf
www.centeronaddiction.org/e-cigarettes/recreational/vaping/whatvaping

www.dupageplt.org