

# VAPING 101:

## WHAT YOU NEED TO KNOW

### THE BASICS

Vaping – the act of inhaling a vaporized liquid from an electronic device – is the latest trend in tobacco use, and it’s alarmingly prevalent among today’s teens.

Despite myths that vapes only contain “harmless water vapor,” that is not the case. There are hundreds of different vape products, which may include a range of ingredients including nicotine, chemical additives, flavorings and THC, the active ingredient in marijuana.

These devices go by many names including e-cigarettes, smokeless cigarettes, vaporizers, vape pens, mods, tanks, cigalikes, JUUL, e-hookah and hookah pens.

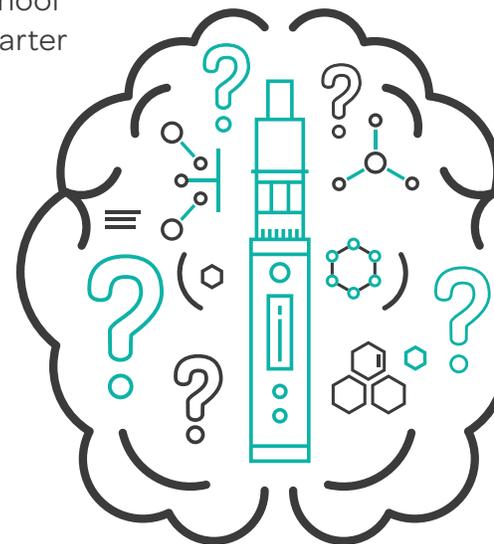


### ON THE RISE

Vaping prevalence is rising rapidly among teens and young adults in Colorado and across the country.<sup>1,2</sup> This is true in spite of the fact that it is illegal to buy vape products until age 18.

- The rate of cigarette smoking among U.S. high school students has dropped 30 percent since 2013 – yet 45 percent of high school students say they have experimented with vaping and a quarter are current users.<sup>3</sup>
- While cigarette smoking rates remained largely unchanged in Colorado between 2012 and 2015, the percentage of Colorado adults who had ever vaped more than tripled, rising from 6.9 to 22.8 percent.<sup>2</sup>

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## HEALTH RISKS

Though some may claim vaping is healthier than traditional tobacco use, that doesn't mean that vaping is safe, especially for young people. Studies have shown that the aerosol vapor from vape products can contain dangerous toxins, including heavy metals and chemicals known to cause cancer and other diseases.<sup>1</sup>

There are also no standard regulations for vape manufacturers. Even with more than 450 different types of vape products sold, no universal standards for product design, ingredients and safety features exist.<sup>4</sup> More troubling, many vape products are owned by big tobacco companies, which have a history of prioritizing sales over safety.<sup>5</sup>

## EFFECTS ON ADOLESCENTS

Especially concerning, vaping causes greater risks for adolescents. Nicotine, the addictive ingredient in cigarettes, is also in most vape products and 100 percent of JUULs. The chemical has a negative impact on adolescent brain development, causing lasting cognitive and behavioral impairments, including effects on working memory and attention.<sup>6</sup>

Additionally, vaping is a predictor of future cigarette smoking. A study of 12th grade students who had never smoked a cigarette found that those who had reported recent vaping were more than four times (4.78) more likely to report past-year smoking one year later.<sup>7</sup>

<sup>1</sup> Electronic Nicotine Delivery Systems Key Facts; U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Retrieved from <https://chronicdata.cdc.gov/Policy/Electronic-Nicotine-Delivery-Systems-Key-Facts-Inf/nwhw-m4ki/data>

<sup>2</sup> 2015 The Attitudes and Behaviors Surveys (TABS) on health, University of Colorado Denver

<sup>3</sup> 2015 National Youth Risk Behavior Survey, U.S. Centers for Disease Control and Prevention. Retrieved from [https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2015/2015\\_us\\_tobacco.pdf](https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2015/2015_us_tobacco.pdf)

<sup>4</sup> E-cigarettes: An Emerging Public Health Challenge, CDC Public Health Grand Rounds, 2015; retrieved from: <https://www.cdc.gov/cdcgrandrounds/pdf/archives/2015/october2015.pdf>

<sup>5</sup> Tobacco Company Quotes on Marketing to Kids, Campaign for Tobacco-free Kids. Retrieved from <https://www.tobaccofreekids.org/research/factsheets/pdf/0114.pdf>

<sup>6</sup> The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. U.S. Department of Health and Human Services. 2014. Retrieved from [https://www.cdc.gov/tobacco/data\\_statistics/sgr/50th-anniversary/index.htm](https://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/index.htm)

<sup>7</sup> E-cigarette use as a predictor of cigarette smoking: results from a 1-year follow-up of a national sample of 12th grade students. Retrieved from <http://tobaccocontrol.bmj.com/content/early/2017/01/04/tobaccocontrol-2016-053291?paper>

# MYTHS VS. FACTS

THERE ARE A LOT OF MYTHS GOING AROUND ABOUT VAPING.  
LET US CLEAR THE AIR FOR YOU.

MYTHS	FACTS
Vaping is a healthy alternative to cigarettes.	Vape e-juice may contain nicotine, chemicals that cause cancer, and can lead to health problems including wheezing, coughing, sinus infections, nosebleeds, shortness of breath and asthma. <sup>1</sup>
Vaping has nothing to do with smoking regular cigarettes.	Young people who took up vaping were more than four times more likely to smoke traditional cigarettes a year later, according to one study. <sup>2</sup>
It's just harmless water vapor.	It's not harmless, and it's not just water vapor. It may contain toxins, potentially cancerous agents and dangerous chemicals like diacetyl, which is known to cause a potentially fatal lung disease called popcorn lung. It most often contains a combination of propylene glycol, vegetable glycerin, flavorings and nicotine. <sup>3,4</sup>
Vapes don't contain nicotine.	<p>A 2015 study found that 99 percent of e-cigarettes sold in U.S. convenience stores, supermarkets, and similar outlets contained nicotine, the same highly addictive substance that is found in regular cigarettes.<sup>5</sup></p> <p>It's worth noting that 100 percent of JUULs – teens' top choice for vaping devices – contain nicotine. And each JUUL pod contains the same amount of nicotine as a whole pack of cigarettes.</p>



<sup>1</sup>More evidence that e-cigs cause asthma on top of the effects of smoking cigs. University of California San Francisco Center for Tobacco Control and Education. Retrieved from <https://tobacco.ucsf.edu/more-evidence-e-cigs-cause-asthma-top-effects-smoking-cigs>

<sup>2</sup>E-cigarette use as a predictor of cigarette smoking: results from a 1-year follow-up of a national sample of 12th grade students. Retrieved from <http://tobaccocontrol.bmj.com/content/early/2017/01/04/tobaccocontrol-2016-053291?paperoc>

<sup>3</sup>Farsalinos KE, Kistler KA, Gillman G, Voudris V., Evaluation of Electronic Cigarette Liquids and Aerosol for the Presence of Selected Inhalation Toxins. Nicotine Tob Res. 2014; 17:168-74.

<sup>4</sup>Electronic Nicotine Delivery Systems Key Facts; U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Retrieved from <https://chronicdata.cdc.gov/Policy/Electronic-Nicotine-Delivery-Systems-Key-Facts-Inf/nwhw-m4ki/data>

<sup>5</sup>Sales of Nicotine-Containing Electronic Cigarette Products: United States, 2015. American Journal of Public Health. Retrieved from [http://ajph.apublications.org/doi/abs/10.2105/AJPH.2017.303660?url\\_ver=Z39.88-2003&rft\\_id=ori%3Arid%3Aacrossref.org&rft\\_dat=cr\\_pub%3Dpubmed&](http://ajph.apublications.org/doi/abs/10.2105/AJPH.2017.303660?url_ver=Z39.88-2003&rft_id=ori%3Arid%3Aacrossref.org&rft_dat=cr_pub%3Dpubmed&)

# FAQS FOR PARENTS AND

# ADULTS WHO WORK WITH YOUTH

## WHAT IS VAPING?

Vaping, sometimes called “Juuling,” is the act of inhaling a vaporized liquid from an electronic device. The vapor commonly contains nicotine, flavoring and other additives. It also can contain THC, the chemical in marijuana that makes the user feel “high.”

## WHAT ARE THE DIFFERENT VAPE PRODUCTS?

Popular terms for vaping devices include JUULs, e-cigarettes, e-cigs, smokeless cigarettes, vaporizers, vape, vape pens, vapor pens, mods, tanks, cigalikes, e-hookah and hookah pens. These vary widely in size, shape and design. Some look like computer flash drives or lighters, while others are bulky and box-like.

## WHAT IS IN VAPE JUICE OR E-LIQUID?

Vape juice, e-liquid, JUULpods – these are all names for the liquid that is vaporized into an aerosol cloud. Vape juice most commonly contains three ingredients: propylene glycol and/or glycerin, chemicals for flavoring and nicotine.

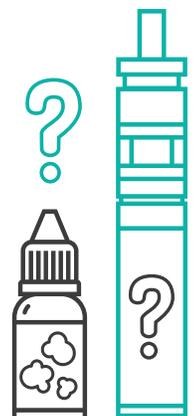
The pods for JUULs, the brand name of the most popular vaping device among teens, contains nicotine 100 percent of the time. The amount of nicotine in one JUULpod has the same amount of nicotine in an entire pack of cigarettes. Some vape pods can also contain THC, the chemical in marijuana that makes the user feel “high.” Complicating the issue, vaping doesn’t give off the telltale smell of smoking marijuana or cigarettes.

## IS VAPING HEALTHIER THAN SMOKING CIGARETTES?

Though some may claim vaping is less dangerous than traditional cigarettes, that doesn’t mean that vaping is safe. In other words, “safer” doesn’t mean safe. Studies have shown that the aerosol vapor can contain dangerous toxins, including heavy metals and chemicals known to cause cancer and other diseases.<sup>1</sup>

And most vape devices contain nicotine, which is highly addictive. Human brain development continues far longer than was previously realized (until age 25),

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and nicotine use during adolescence and young adulthood has been associated with lasting brain impairments, including effects on working memory and attention.<sup>2</sup>

There are also no standard regulations for vape manufacturers. Even with more than 450 different types of vape products, there are no universal standards for product design, ingredients and safety features.<sup>3</sup> More troubling, some vape products are owned by big tobacco companies, which have a history of prioritizing sales over safety.<sup>4</sup>

## **SOME TEENS SAY THEY JUST VAPE FLAVORS, WITHOUT NICOTINE OR THC. IS THAT POSSIBLE?**

While some vapes do not contain nicotine or THC, most do. In fact, 100 percent of JUULs – teens' top choice for vaping devices – contain nicotine. And each JUUL pod contains the same amount of nicotine as a whole pack of cigarettes. Plus, studies have shown that most vaping products labelled "nicotine free" actually contain nicotine.<sup>5</sup> For teens who don't want to become addicted to nicotine, the safest option is not to vape at all.

## **CAN TEENS UNDER AGE 18 LEGALLY VAPE AND BUY THESE PRODUCTS?**

Vape devices and paraphernalia cannot legally be sold to or used by anyone under the age of 18. Some places, including Aspen, have raised the legal age to buy any tobacco products, including vape devices, to age 21.

## **HOW CAN I TELL IF OR WHAT KIDS ARE VAPING?**

That's part of the problem – it can be very hard to tell if a teen is vaping. Not only do manufacturers make discreet devices that resemble flash drives, highlighters and more, but they also do not have the same strong odor that is often a giveaway for parents and teachers. Vaping is so discreet, in fact, that students have been known to vape during class.

## **HOW DO I TALK TO KIDS ABOUT VAPING?**

It can be hard to know where to begin when talking to youth about vaping. We've put together this tip sheet to help you have conversations with youth, which can be found here:

[www.TobaccoFreeCO.org/know-the-facts/talking-to-youth/](http://www.TobaccoFreeCO.org/know-the-facts/talking-to-youth/)

<sup>1</sup> Electronic Nicotine Delivery Systems Key Facts; U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Retrieved from <https://chronicdata.cdc.gov/Policy/Electronic-Nicotine-Delivery-Systems-Key-Facts-Inf/nwhw-m4ki/data>

<sup>2</sup> The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. U.S. Department of Health and Human Services. 2014. Retrieved from [https://www.cdc.gov/tobacco/data\\_statistics/sgr/50th-anniversary/index.htm](https://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/index.htm)

<sup>3</sup> E-cigarettes: An Emerging Public Health Challenge, CDC Public Health Grand Rounds, 2015; retrieved from: <https://www.cdc.gov/cdcgrandrounds/pdf/archives/2015/october2015.pdf>

<sup>4</sup> Tobacco Company Quotes on Marketing to Kids, Campaign for Tobacco-free Kids. Retrieved from <https://www.tobaccofreekids.org/research/factsheets/pdf/0114.pdf>

<sup>5</sup> Sales of Nicotine-Containing Electronic Cigarette Products: United States, 2015. American Journal of Public Health. Retrieved from [http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2017.303660?url\\_ver=Z39.88-2003&rft\\_id=ori%3Arid%3Aacrossref.org&rft\\_dat=cr\\_pub%3Dpubmed&](http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2017.303660?url_ver=Z39.88-2003&rft_id=ori%3Arid%3Aacrossref.org&rft_dat=cr_pub%3Dpubmed&)

# TIP SHEET:

## TALKING TO YOUTH

### ADVICE FOR PARENTS, TEACHERS, COACHES AND MORE

Sometimes it may feel like youth aren't listening to what you say but research shows adults can have a big influence on their behavior. What you think matters to the young people in your life. As an adult they trust, you can impact their choices. What you say, and the example you set, make a difference. The following tips can help you get talking.

#### BEFORE YOU HAVE A CHAT, GET THE FACTS

Because of the wide array of discreet vape devices, it is easier than ever to hide them and use them at school or during school activities. Get a sense of [what vaping devices look like](#) and [separate myth from fact](#) before you start your talk.

#### WHEN YOU'RE READY TO TALK, MAKE SURE YOU START BY LISTENING

Make them feel heard. The most important thing is that your child feels safe talking openly. Consider their opinions and keep the conversation going. Even if you've talked about this topic before, their thoughts can change. Plus, as youth get older, they can feel more pressure from friends and classmates.

#### WHAT IF YOU FIND OUT THEY'RE VAPING?

If your child is caught vaping or admits to vaping, try to stay calm and non-judgmental. This is an excellent opportunity to talk about it and learn why he/she was doing it. Ask questions like, "Tell me more about what led you to vape?" and "What are some of the reasons?" Let them know you are concerned about their vape use progressing, but try to encourage them to keep talking by asking open-ended, non-judgmental questions.

Try to find out if there is a deeper problem. If they vaped more than once, or are currently vaping, try to get a feel for why. For example, determine if/how their relationships with others have changed, if they are under added stress at school, if their grades have changed, or if they're hanging out with a different crowd.

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SOURCE: CDPHE "Good to Know Tips"

\*\* This content piece is based on the Good to Know campaign "Tips for Talking to Students & Athletes" document.



If they show any interest in quitting, congratulate them, and ask which resources or strategies they think might work best for them. Talk to your doctor or suggest they check out the Colorado QuitLine. The QuitLine now serves Coloradans as young as 12 years old who want to quit vaping, smoking or chewing. They can enroll themselves quickly and easily at [www.coquitline.org](http://www.coquitline.org) or 1-800-QUIT-NOW to get coaching, either through chat or over the phone. Coaching is free, confidential, non-judgmental and is shown to increase the chances of quit success.

If you don't think they're vaping, now is the time to start the conversation (before there's a problem). Here's a guide.

## USE TEACHABLE MOMENTS

When you see someone vaping on t.v., or if it comes up in conversation, or even if a friend or family member vapes, it can make starting the conversation easier. Ask them how they feel about it and let them guide your discussion.

## SET CLEAR RULES

Make family, school and sports team rules clear and stick to them. Let them know what will happen if they don't follow them.

## FOCUS ON POSITIVE MESSAGES

Encourage them to make choices that help them achieve their goals.

## REMIND THEM WHAT CAN HAPPEN FOR BREAKING THE RULES

Teens that break school or school activity rules can be suspended or kicked off a team.

## HELP THEM UNDERSTAND THE FACTS

Most vapes contain nicotine, even many that say "nicotine free" on the label. Most teens start out thinking they can stop whenever they want and won't ever become addicted. And lots more start smoking cigarettes, a product that kills half its users. In fact, a teen who vapes is four times more likely to start smoking.

On top of that, teens who JUUL or vape nicotine or THC may have trouble learning and memory issues, as both nicotine and THC have [negative effects on adolescent brain development](#).

## REMIND THEM THEY'RE ROLE MODELS TO OTHER YOUTH

Let them know that younger students and siblings look up to them as examples. How would they feel if a younger sibling got addicted to vaping?

## NOT EVERYONE IS DOING IT

It is easier for youth to say "no" to peer pressure if they know not everyone is doing it. Let them know that more than half of high school and middle school students have never vaped, so they're in good company.

# WHAT SHOULD I DO IF

# I FIND OUT MY CHILD IS VAPING?

## FIRST, GET THE FACTS BEFORE YOU HAVE A CHAT.

Many youth who vape believe that what they're using is just harmless water vapor. In order to understand what they're using and what they're going through, it's important to get informed about vaping before you discuss it.

Most vapes contain nicotine. Many even say "nicotine free" on the label. Most teens start out thinking they can stop whenever they want and won't ever become addicted. And lots more start smoking cigarettes, a product that kills half its users. In fact, a teen who vapes is four times more likely to start smoking.

On top of that, teens who JUUL or vape nicotine or THC from marijuana may have trouble learning and memory issues. Both nicotine and THC have negative effects on adolescent brain development. For more information, visit [tobaccofreeco.org](http://tobaccofreeco.org).

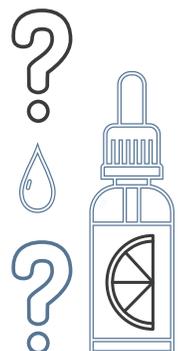
## INVITE YOUR CHILD TO TALK, BE PATIENT AND READY TO LISTEN.

If your child is caught vaping or admits to vaping, try to stay calm and non-judgmental. Listen, don't lecture.

- Try to understand their feelings.
- Avoid showing judgment.
- Keep asking questions and check to make sure you understand.

This is an excellent opportunity to talk about it and learn why they were doing it. Say things like, "Tell me more about what led you to vape." and "What are some of the reasons?" Let them know you are concerned about their vape use becoming more frequent, but try to encourage them to keep talking by asking open-ended, non-judgmental questions.

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## **TRY TO FIND OUT IF THERE IS A DEEPER PROBLEM.**

If they vaped more than once, or are currently vaping, try to get a feel for why. For example, determine if or how their relationships with others have changed, if they are under added stress at school, if their grades have changed, or if they're hanging out with a different crowd.

## **SUPPORT THEM IN QUITTING.**

If they show any interest in quitting, congratulate them, and ask which resources or strategies they think might work best for them. Talk to your doctor or suggest they check out the Colorado QuitLine. The QuitLine now serves Coloradans as young as 12 years old who want to quit vaping, smoking or chewing. They can enroll themselves quickly and easily at [www.coquitline.org](http://www.coquitline.org) or 1-800-QUIT-NOW to get coaching, either through chat or over the phone. Coaching is free, confidential, non-judgmental and is shown to increase the chances of quit success. You can also call the QuitLine yourself to learn more about how to best support your child.

