

# 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.

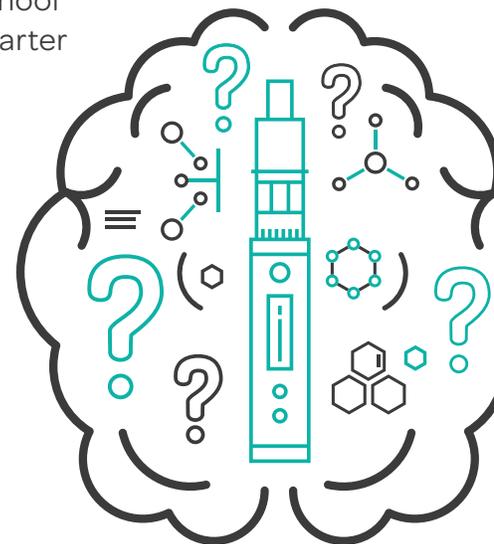


### ON THE RISE

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>