

# familydoctor.org

## WHAT IS JUUL®?

JUUL is a brand of electronic cigarette (e-cigarette) or vaping device.1

JUUL (pronounced jewel) looks like a USB drive, and is promoted as an alternative to combustible cigarettes and existing e-cigarettes or vaping devices.<sup>1</sup>

"JUULing" is the term used when using JUUL.1

#### How does JUUL work?

**JUUL contains nicotine.** JUUL cartridges, called pods, contain flavored oils that turn into vapor when heated.<sup>2</sup> Each pod contains roughly the same amount of nicotine as a pack of cigarettes.<sup>1,2</sup>

JUUL has interchangeable pods with an assortment of flavor options. The nicotine form is referred to as nicotine salts. The taste and sensation of the nicotine salts

are more similar to conventional cigarettes, making JUUL different than other types of e-cigarettes.¹ However, inhaling vapor from nicotine salts goes down smooth and doesn't produce irritation in the chest and lungs that combustible cigarettes do.³

**JUUL** has a higher concentration of nicotine than many other e-cigarette **options.**<sup>1</sup> Listed as 5% nicotine by weight, JUUL has more than twice the amount of nicotine concentrate. Other brands of e-cigarettes, typically have concentrations of 2.4% or less.<sup>1</sup>

### What is the threat to youth?

Similar to other e-cigarettes, JUUL comes in a variety of flavors, including fruit medley, mango, cool mint, and crème brûlée. Most youth who experiment with tobacco begin with a flavored product, as the flavors appeal to youth.

Youth are particularly aware of JUUL, as nearly 1 in 5 students age 12 to 17 have seen JUUL used in school.<sup>6</sup>

Since **JUUL resembles a USB flash drive**, it is increasingly used by students in classrooms, hallways, restrooms, and at school sporting events.<sup>7</sup>

Sixty-three percent of JUUL users age 15 to 24 did not know JUUL contains nicotine. 8 Youth may start using e-cigarettes because they believe they are harmless. **Nicotine**, a key ingredient in tobacco products, is an addictive drug.

Tobacco use by and around children and adolescents is a particular concern due to increased risk for addiction and passive exposure. Smoking is a known cause of cancer, heart disease, stroke, and chronic obstructive pulmonary disease. Young people who use e-cigarettes, such as JUUL, are more likely to transition to combustible cigarettes.<sup>9</sup>

#### References

- Public Health Law Center at Mitchell Hamline School of Law. Public health concerns about youth & young adult use of JUUL. www.publichealthlawcenter.org/blogs/2018-02-19/public-health-concerns-about-youth-young-adult-use-juul. Accessed June 25, 2018.
- 2. Truth Initiative. What is JUUL? www.truthinitiative.org/news/what-is-juul. Accessed June 25, 2018.
- Belluz J. Juul, the vape device teens are getting hooked on, explained. www.vox.com/science-and-health/2018/5/1/17286638/juul-vaping-e-cigarette. Accessed June 25, 2018.
- Ambrose BK, Day HR, Rostron B, et al. Flavored tobacco product use among US youth aged 12-17 years, 2013-2014. JAMA. 2015;314(17):1871-1873.
- Feirman SP, Lock D, Cohen JE, Holtgrave DR, Li T. Flavored tobacco products in the United States: a systematic review assessing use and attitudes. Nicotine Tob Res. 2016;18(5):739-740.
- Truth Initiative. Nearly 1 in 5 youth say they have seen JUUL used in school. www.truthinitiative.org/news/nearly-1-5-youth-say-they-have-seen-juul-used-school. Accessed June 25, 2018.
- NBC News. Why 'juuling' has become a nightmare for school administrators. www.nbcnews.com/health/kids-health/why-juuling-has-become-nightmare-school-administrators-n860106. Accessed June 25, 2018.
- Willett JG, Bennett M, Hair EC, et al. Recognition, use and perception of JUUL among youth and young adults. [published ahead of print April 18, 2018]. Tob Control. Accessed June 25, 2018.
- The National Academies of Sciences, Engineering, and Medicine. Public health consequences of e-cigarettes. Consensus study report. Highlights. www.nap.edu/resource/24952/012318ecigaretteHighlights.pdf. Accessed June 25, 2018.