E-Cigs 2.0: The Next Generation

In the decade-plus since their U.S. introduction, electronic cigarettes, known as e-cigarettes or vapes, drastically evolved. E-cigarettes first resembled conventional cigarettes, and now have morphed into sleek gadgets, like the JUUL pictured at left, that have become the next big thing. Youth love them for the big hit of nicotine and their easily-hidden, deceptive looks. Their resemblance to USB flash drives prompted some schools to ban the drives as teachers can’t tell the difference between the two. Terms like “JUULing or jeweling” and “vaping” have entered the teen vernacular. Users have coined dedicated hash tags on social media and created videos of themselves doing vape tricks or blatantly vaping at school.

So, what’s an e-cigarette?
E-cigarettes are battery-operated devices that contain a mixture of liquid nicotine and other chemicals. The device heats this mixture, called e-juice, producing a nicotine aerosol that is inhaled. E-cigarettes are also called e-hookahs, e-pipes, vape pens, hookah pens or personal vaporizers.

FACT:
Nicotine is harmful to developing brains.
Nicotine interferes with brain development and can have a long-term effect on mental health. Even brief or intermittent nicotine exposure during adolescence can cause lasting damage.\(^1\) E-cigarette use by youth and young adults increases their risk of using conventional cigarettes in the future.\(^2\)

FACT:
E-cigarette use has increased among MN youth.
The youth tobacco usage rate has increased for the first time since 2000. This is because of the increase in the use of e-cigarettes. One in five youth (19.2 percent) currently use e-cigarettes, according to the 2017 Minnesota Youth Tobacco Survey. That is a 49 percent increase since 2014’s survey.\(^3\)

FACT:
E-cigarettes are not approved as a cessation tool.
E-cigarettes have not been proven to be better for quitting than existing programs.\(^2\) For those wanting to quit, there are FDA-approved quit aids such as gum, patches and lozenges, available at little or no cost through insurance companies or Minnesota’s statewide QUITPLAN® Services (www.quitplan.com).
Early e-cigarettes resembled conventional cigarettes and were called "cig-a-likes." They evolved into pen-shaped devices with small tanks that held "e-juice." Tanks got bigger, morphing into the "mods," which give users more control of the device. Now, USB-shaped e-cigarettes such as JUUL and Myblu are often discreetly used by youth and pack a huge nicotine punch.

**FACT: E-cigarettes are marketed toward youth.**

Companies such as JUUL, NJoy, blu and MarkTen target youth with heavy marketing in magazines and social media. In Minnesota, 88.4 percent of students had seen ads promoting e-cigarettes in the past 30 days. E-cigarettes come in a variety of youth-friendly flavors, such as gummy bear, fruit punch, chocolate, cherry crush and mango. (Images courtesy of trinketsandtrash.org)

**FACT:**

E-cigarettes are not harm-free. E-cigarettes contribute to indoor air pollution. Studies have found nicotine, heavy metals, toxins, and carcinogens in e-cigarette aerosol.²

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**SOURCES**


