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Saying No to Vaping: What You Should Know About the Dangers of E-Cigarettes

David Prudovsky

Nova Southeastern University, dp1417@mynsu.nova.edu

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Saying No to Vaping

What you should know about the dangers of e-cigarettes

By David Prudovsky, CDA

Smoking is one of the most popular methods of drug intake in the world. Unlike other means of drug abuse, smoking poses a great danger even to those who aren't smoking, known as passive smokers. According to research, children whose parents smoke inside the home have numerous health issues, such as bronchitis and mental health challenges. The cigarette industry continues to grow in revenue and innovation. It's that innovation that has produced e-cigarettes, which provide various advantages for the smoker, including durability, where a smoker can simply recharge and refill. According to the Centers for Disease Control and Prevention (CDC), the use of e-cigarettes is increasingly common among youth.

E-cigarettes are known by a variety of names, including e-cigs, vape pens, mods, tank systems, and more. They may look like regular cigarettes or pipes, or they may resemble a pen or USB stick. Individuals may also use vape pens for marijuana and other drugs.

Fast-Growing Problem

Juuling, an e-cigarette that looks like a USB flash drive, has caught on quickly. In 2017, Juul sales grew to 16.2 million devices sold, up from 2.2 million the year before. Unfortunately, e-cigarettes poses very similar risks to the smokers' health as regular cigarette smoking. E-cigarettes typically use a liquid containing nicotine and other components such as flavorings. The devices use electric power to heat the liquid, turning it into a thick aerosol that is inhaled. Some users have reported that the aerosol has more stimulant on the body than the normal cigarette containing tobacco.

The CDC has analyzed the aerosol to measure the components' effects on the human body. It's not a pretty picture. Nicotine has a number of impacts on the body, including addiction. A 2018 report by the National Academy of Medicine found out that e-cigarette smoking among youth increases the frequency and the number of cigarette smoking in the future. Nicotine also interferes with brain development in people under the age of 25. Youth using e-cigarettes are likely to have developmental issues.

E-cigarettes also contain volatile organic compounds, which are not able to be isolated by various protective



mechanisms in the breathing system, according to CDC studies. The aerosol contains ultrafine particles which, just like the volatile organic compounds, can enter the lungs. These particles are the reason for constant coughs and other breathing problems, such as bronchitis, among smokers. Heavy metals such as nickel, tin, lead, and cancer-causing chemicals from the most dangerous components of the aerosol accumulate in the body and can result in cancer and death. In fact, the flavorings in the e-cigarette are made by a chemical, such as Diacetyl, which has been shown to cause serious lung disease.

Many of the e-cigarettes available now are marketed to be free of these chemicals, especially nicotine, yet actually contain a considerable amount of chemicals. As a result, young people may choose e-cigarettes, convinced that they're a safer option than regular burned cigarettes. While at first glance that may appear to be true, e-cigarettes deliver the chemicals in normal cigarettes in small amounts, which, in the long run, are just as harmful as those in burned cigarettes. Juuls are also fashionable and discreet, and their use may be viewed as a status vs. a bad habit, according to the U.S. Department of Health and Human Services. Their design and their smoke, which is mostly odorless, makes it easier for youth to use them in classrooms or public places without being detected. They can be charged on laptops and other electronic devices easily over a short period of time without being noticed by a parent or teacher.

Saying No to Vaping

continued

What You Can Do

The CDC and other governmental and non-governmental organizations have suggested a number of ways parents, teachers, and others can combat the use of these products among kids and teenagers. Because Food and Drug Administration guidelines and policies take time, parents and teachers are advised to discuss the dangers of e-cigarette use with their students and children (U.S. Department of Health and Human Services).

Schools can bring in health professionals to classrooms and assemblies to warn students about health dangers of e-cigarettes. Schools should also ensure adequate policies are in place banning the possession and use of tobacco products at school. Teachers and school management should reject the tobacco prevention programs sponsored by the tobacco industry, which have been found to promote the use of tobacco instead.

The production, purchase, and use of e-cigarettes is on an upward trend, so preventing their use is essential. Every member of the community, including dental assistants, should be engaged in discussing the dangers of e-cigarette use. Encourage patients to talk with their kids about e-cigarette use and share the surgeon general's guidelines on talking to kids found here: https://e-cigarettes.surgeongeneral.gov/documents/SGR_ECig_ParentTipSheet_508.pdf. The CDC has numerous resources and information about the use of e-cigarettes. Continue to educate yourself and keep patients in the loop about emerging health threats. ↷



David Prudovsky, CDA, has been a licensed dental assistant in Massachusetts since 2016 and has worked in numerous dental practices around the state. He is currently attending Nova Southeastern University where he will earn his B.S. in biology on the Pre-Dental track. He plans to attend dental school in 2020.

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