

[IMAGE]

What You Need to Know About Vaping

By Bart N. Green, DC, MEd, PhD, Kevin Rose, DC, MPH and Claire Johnson, DC, MEd, PhD

Editor's Note: This article has been modified from the original, which was directed toward a professional (doctor) audience.

Smoking can be harmful in so many ways. Not only are there a multitude of negative health consequences from smoking, but recent research even shows a connection between smoking and back pain.¹ Thus, any aid that can help people stop smoking is of interest. However, what happens if the aid causes new problems? The health impact, use and safety of electronic cigarettes (e-cigarettes) are still under investigation. We offer a brief overview on this important public health issue.

1. What Is Vaping?

When someone smokes traditional cigarettes, they inhale the smoke of burning tobacco. However, someone using an electronic device, such as an electronic cigarette, inhales vaporized chemical liquids – thus the term *vaping*.

The liquids in e-cigarettes often contain nicotine or other drugs, as well as scents or flavors to increase the pleasure of the experience. E-cigarettes are now the most commonly used smoking product by U.S. youth² and the number of users continues to rise.

2. What Are the Arguments in Favor of Vaping?

vaping - Copyright © Stock Photo / Register Mark Vaping is considered an option to reduce the harmful effects of traditional tobacco cigarette smoking and as an aid to help people quit. The thought is that e-cigarettes might help someone step down to lower levels of addictive substances (e.g., nicotine) and reduce the amount of carcinogens inhaled. Some studies have shown the use of e-cigarettes may help some people to reduce or stop smoking.³

3. What Are the Potential Harms of Vaping?

Although e-cigarettes do not use burning tobacco, they still contain harmful substances. Issues with vaping include:

- Intake of vaporized substances in e-cigarettes may be harmful.⁴⁻⁶
- E-cigarettes have vapors that can include formaldehyde, acetaldehyde and metal nanoparticles.⁷
- E-cigarette devices could potentially be used to intake illegal or other potentially harmful drugs,⁸ such as synthetic drugs or cannabis.⁹⁻¹⁰
- Secondhand vapors are harmful to those who are exposed.⁴⁻⁵
- There is potential harm with short-term use, although the effects of long-term use on health are unknown.
- Targeting minors with bright colors and candy flavors, and re-establishing the culture that smoking is "cool" or "safe," may entice youth to start or continue smoking.
- The potential exists for physical danger from e-cigarettes (e.g., explosions and burns).

4. What Can You Do to Learn More?

In addition to speaking with your doctor, helpful resources on e-cigarettes include the following:

- The U.S. Surgeon General has a ["Know the Risks" fact sheet](#) on youth and e-cigarettes.
- The American Heart Association has a [fact sheet](#) on e-cigarettes and public health.
- The Centers for Disease Control and Prevention (CD) has a [website](#) with information for patients.
- The American Lung Association has a [statement](#) on e-cigarettes.
- The American Public Health Association has a [policy statement](#) on the regulation of e-cigarettes.

5. So, Is Vaping Good or Bad?

Although vaping is touted as an aid for smoking cessation to help those who are addicted to tobacco, this does not mean vaping is harmless. Harms may be experienced by the person vaping, as well as those who are inhaling the vapors secondhand. The best thing for your health is to refrain from smoking at all – electronic or tobacco.

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