

Everyday Health

3 Things You Need to Know About E-Cigarettes

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The smoke still hasn't cleared over battery-powered vaporizers as a safe alternative to traditional cigarettes.

Health experts remain split on how effective and safe electronic cigarettes or e-cigarettes are as a tool to quit smoking.

For the 44 million Americans who smoke, research suggests e-cigarettes might help when it comes to kicking the habit. According to a recent study published in the journal *Addiction*, people are 60 percent more likely to successfully quit smoking with e-cigarettes than by using nicotine patches and gums or by willpower alone. Skeptics, however, point out that the study relies on self-reported smoking cessation and does not demonstrate long-term success.

Similarly, a 2013 study in the *Lancet* found e-cigarettes “modestly effective at helping smokers to quit,” but cautioned that more research is “urgently needed” on overall benefits and harms.

Some critics fear that e-cigarettes, which are not regulated by the U.S. Food and Drug Administration, may increase nicotine addiction and encourage young people to smoke tobacco products. “We’re finding that e-cigarettes are now being used by kids who have never used any nicotine products or cigarettes before and now they’re becoming addicted to nicotine,” said Jonathan Whiteson, MD, assistant professor and director of cardiac rehabilitation at NYU Langone Medical Center.

Others point to research that found detectable levels of carcinogens and harmful chemicals in the vapors emitted by some e-cigarettes. Different brands and models of e-cigarettes deliver varying levels of nicotine and other ingredients, so most consumers don't know what or how much they are inhaling.

Here are 3 things you should know about e-cigarettes:

1. The vapor from e-cigarettes may contain harmful ingredients.

E-cigarettes use a battery to vaporize flavored liquid solutions that often contain nicotine. A 2009 FDA study found that some samples contained the carcinogen nitrosamine and diethylene glycol, a toxic chemical used in antifreeze. Dr. Whiteson advises his patients against using e-cigarettes for smoking cessation because “there are probably other chemicals in them as well which, in themselves, may be carcinogens, which can be toxic to the lungs,” he said.

Whiteson recommends nicotine replacement products that have been tried, tested, and approved by the FDA.

In April, the FDA proposed regulations that would, among other things, ban the sale of e-cigarettes to minors and require that manufacturers register with the FDA and report all ingredients and health warnings. The public comment period has been extended to August 8 after the FDA received significant input on how to regulate e-cigarettes. There is no word yet when such regulations will be finalized.

2. E-cigarettes have made people sick.

The Centers for Disease Control and Prevention earlier this year reported a “dramatic increase” in calls to poison centers related to e-cigarettes. Although they make up less than 2 percent of all tobacco-related sales, e-cigarettes accounted for more than 40 percent of calls made to poison centers in February 2014. More than half of the calls concerned children under the age of five, according to the CDC study. “Infants are putting these liquid cartridges in their mouths and chewing them and ingesting the nicotine,” Whiteson said. Poisoning can occur when the e-cigarette vapor is ingested, inhaled, or comes into contact with a person’s skin or eyes. The adverse health effects include nausea and eye irritation.

3. E-cigarettes may lead to second-hand exposure.

Even though e-cigarettes do not produce smoke like traditional cigarettes, they can still have adverse effects on nearby non-users. “There’s documentation of second-hand and third-hand exposure to nicotine through e-cigarettes,” Whiteson said. “It’s not just the person who’s using it. It’s anyone who’s exposed to that environment.”

A study published in the International Journal of Hygiene and Environmental Health in December 2013 revealed that e-cigarette “vaping” impairs air quality by increasing the levels of nicotine, aluminum, and other pollutants linked to lung and cardiovascular disease.

The FDA, which invites the public to report “adverse events” related to e-cigarettes, has received complaints from people reporting dizziness, eye and skin irritation, and difficulty breathing after exposure to e-cigarette vapors. The American College of Allergy, Asthma, and Immunology cautions that inhaling any irritants, whether smoke or vapors, affects the lungs and can cause asthma attacks in some people.

<http://www.everydayhealth.com/conditions/things-you-need-know-about-e-cigarettes/>