Electronic Cigarettes

What is an electronic cigarette?

The term electronic cigarette (e-cigarette) refers to any electronic device that can be used to deliver nicotine or other substances to the person inhaling from the device, including e-cigarettes, e-cigars, e-pipes, e-hookahs, vape pens, personal vaporizers, and other electronic nicotine delivery devices. Some devices look similar to cigarettes and even have a tip which lights up when the user inhales. Some are refillable and rechargeable, while others are disposable. The liquid solution, which is vaporized to deliver nicotine, comes in many flavors and nicotine levels, including a 0% nicotine option. Cartridges generally contain 10-20 milligrams of nicotine; however, their contents can be highly variable. Use of an e-cigarette is often referred to as "vaping" rather than "smoking."

- According to the U.S. Food and Drug Administration (FDA), electronic cigarettes, or e-cigarettes, are devices that allow users to inhale a vapor containing nicotine or other substances.ⁱ
- Unlike traditional cigarettes, e-cigarettes are generally battery-operated and use an atomizer to heat liquid from a cartridge until it becomes a chemical-filled aerosol.
- E-cigarettes are often available in flavors that may appeal to children and teens, including cotton candy, bubble gum, chocolate, strawberry, and mint.ⁱⁱ
- There are almost 500 different brands of e-cigarettes on the market today, and e-cigarettes come in 7,700 different flavors. iii
- The class of e-cigarettes also includes e-hookahs, e-pens, e-cigars and other electronic products, all of which would be subject to FDA oversight.

What are the health effects of E-Cigarettes? Are they regulated?

As e-cigarettes are a relatively new product, there is limited research about them. While e-cigarettes do not contain tobacco, they do contain nicotine, which is derived from tobacco, and consequently, a federal court has determined e-cigarettes can be regulated as a tobacco product. The FDA has announced its intent to regulate e-cigarettes, but currently there is no oversight over labeling of ingredients, nicotine content, safety, or possible use as a cessation aid. The liquid nicotine solution can be dangerous to children or pets if ingested. The number of calls to poison control centers about the ingestion of e-cigarette liquids more than doubled in 2014, compared with 2013, according to the data from the American Association of Poison Control Centers. Children under the age of 6 years old were the victims in more than half the cases.

Even with limited research, there is reason to believe that these products can cause harm. Certain toxic metals, including nickel and chromium, which could be harmful if inhaled, have been found to be present in e-cigarettes. Additionally, there have been incidents of batteries exploding or causing fires. Research on the health effects of secondhand vapor is new and evolving. It may be some time before the complete range of health effects associated with the use of these products and to those exposed to secondhand vapor is documented. At one time in history, smoking in buildings and vehicles was considered safe practice, but years of research have proven otherwise.

Where can e-cigarettes legally be used? Who can buy them?

The Smoke-Free Illinois Act was written before e-cigarettes were on the market, and does not address their use in places where smoking is prohibited. Communities throughout Illinois and in other states are working to pass local ordinances prohibiting the use of e-cigarettes products in public places. Business and organizations may also adopt voluntary policies that prohibit the use of e-cigarettes, indoors or outdoors, on their property. As of July 1, 2015, smoking, including use of e-cigarettes, is prohibited on all campuses of State-supported institutions of higher education, including buildings, grounds, parking lots, and vehicles owned by institutions. Enclosed research laboratories are exempt. As of October 1, 2015, the following Illinois municipalities have passed ordinances restricting the use of e- cigarettes in public places where smoking is prohibited: Arlington Heights, Chicago, Deerfield, DeKalb, Elk Grove Village, Evanston, Naperville, Oak Park, Ogle County, Schaumburg, Skokie, and Wilmette. As of January 1, 2016, Illinois law will prohibit sales and distribution of alternative nicotine products to youth under age 18.

What other concerns exist about e-cigarettes?

Kid-friendly flavors, such as cherry and chocolate, are banned by the FDA for conventional cigarettes because of their potential to appeal to children, but this is not the case with e-cigarettes. E-cigarettes come in many flavors, which may increase the appeal for youth. Because many e-cigarettes look like conventional cigarettes and emit a vapor that looks like traditional cigarette smoke, e-cigarettes also have the potential to affect social norms and public perception of smoking among youth and young adults that the tobacco control community has worked so hard to change. Laws that restrict cigarette advertising do not include e-cigarettes; thus, ads are appearing in magazines, on television, and in other public places, affecting the social norm regarding these products and potentially social norms about smoking overall.

Are e-cigarettes a proven cessation aide?

There is limited research on the effectiveness of e-cigarettes as a cessation aide and their long-term safety has not been studied. The FDA has not approved any e-cigarettes as a safe or effective method to help smokers quit. The U.S. Public Health Service has found that the seven therapies approved by the FDA in combination with cessation counseling is the most effective way to help smokers quit. These approved products, which have been studied for effectiveness and side effects, are widely available. For more information about tobacco cessation and available cessation therapies, contact the Illinois Tobacco Quitline at 1-866-QUIT YES (1-866-784-8937).

ⁱ U.S. Food and Drug Administration. "E-Cigarettes: Questions and Answers." September 9, 2010. Available at: http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm225210.htm.

ⁱⁱ U.S. Food and Drug Administration. "FDA Warns of Health Risks Posed by E-Cigarettes." July 23, 2009. Available at: http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm173401.htm.

iii Zhu SH et al. "Four hundred and sixty brands of e-cigarettes and counting: implications for product regulation." Tobacco Control. July 2014; 23 Suppl 3:ii3-ii9.