What Are E-Cigarettes?

Electronic Cigarettes are battery powered devices that provide an inhaled dosage of nicotine. They consist of three components: a replaceable nicotine cartridge, which also acts as a mouthpiece, a vaporizer that produces a mist for inhalation, and a battery.[1] They are also known as e-cigarettes, vapors, vape pens, personal vaporizers, and nicotine vaporizers.[2] Electronic hookahs and hookah pens are similar products.[3]

A 2012 study revealed that the awareness and use of e-cigarettes are increasing. Approximately 6 in 10 adults were aware of e-cigarettes in 2011 compared with 4 in 10 adults in 2010. Moreover, in 2011, 6.2 percent of all adults and 21.2 percent of current smokers had ever used e-cigarettes, double the number estimated in 2010.[4] Between 2011 and 2012, youth e-cigarette use more than doubled.[5]

Because the products are not submitted to the FDA for evaluation and testing, it is unknown what chemicals or dosage of nicotine a particular brand or product contains.[6,7]

Since March 2011, electronic cigarettes have been considered tobacco products in Colorado for the purposes of furnishing them to minors under the age of 18. It is illegal for anyone to sell an electronic cigarette, or any other tobacco product, to a minor.[8]

What's in an E-Cigarette?

Power pack (rechargeable battery or other power source)

Vaporizer (heating element vaporizes propylene glycol and nicotine solution into a mist)

Mouthpiece (cartridge containing solution of nicotine, propylene glycol, and sometimes flavorings)

1. "FDA and Public Health Experts Warn About Electronic Cigarettes." *U.S. Food and Drug Administration.* 22 July 2009. Retrieved 24 June 2013. Online.
2. "E-Cigarettes: Safe Enough to Help You Quit?" *Health.com.* 26 February 2010. Retrieved 24 June 2013. Online.
3. "Hookahs." C*enters for Disease Control.* 14 June 2013. Retrieved 25 June 2013. Online.
4. King, Brian; Suhana Alam; Gabbi Promoff; Rene Arrazola; and Shanta Dube. "Awareness and ever use of electronic cigarettes among U.S. Adults, 2010-2011." *Nicotine and Tobacco Research.* Oxford University Press. January 18, 2013. Print.
5. Corey, Catherine, *et al*. "Electronic Cigarette Use Among Middle and High School Students - United States, 2011-2012." *Morbidity and Mortality Weekly Report* 6 September 2013: 729-730. Online.
6. "FDA and Public Health Experts Warn About Electronic Cigarettes." *U.S. Food and Drug Administration.* 17 April 2013. Retrieved 25 June 2013. Online.
7. Cobb, Nathan; M. Justin Byron; David Abrams; and Peter Shields. "Novel Nicotine Delivery Systems and Public Health: The Rise of the 'E-Cigarette.'" *American Journal of Public Health.* December 2010. Retrieved 27 June 2013. Online.
8. "Furnishing cigarettes or tobacco products to minors." *Colorado Revised Statutes*, Sec. 18-13-121. Retrieved 16 June 2013. Online.

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What Do I Need to Know About E-Cigarettes?

Can e-cigarettes help me quit smoking?

There is not sufficient evidence that e-cigarettes help smokers quit, nor are they approved by the Food and Drug Administration as a cessation medication.[1] Instead, you can ask your doctor about several forms of nicotine replacement therapy (NRT) that have been proven to help with quit attempts:

- Nicotine patches, gum, inhalers, lozenges, and nasal spray [2,3]
- Bupropion SR (prescription medication) [2,3]
- Varenicline (prescription medication) [2,3]

You can also ask about individual, group, or telephone counseling. These treatments have also proven effective and increase in effectiveness as treatment intensity increases. This includes problem-solving and skills training as well as social support delivered as part of treatment.[4]

Though counseling and medications when used independently are effective, a combination of counseling and medication are more effective than either alone.[5]

The Colorado QuitLine (www.coquitline.com or by phone at 1-800-QUIT-NOW) offers both counseling and medication support when you're trying to quit.

Are e-cigarettes are safe to use?

There's no standardization among e-cigarettes, so it's hard to say what's in them. A 2009 FDA study of products available at the time found that some electronic cigarette cartridges contained nitrosamines, which cause cancer.[6] Since that study, many more products have come onto the market. There's no evidence whether e-cigarettes pose more or less risk of cancer than traditional cigarettes. Additionally, the study found some electronic cigarette cartridges contained diethylene glycol, a toxic chemical commonly used in antifreeze.[7]

What we do know for certain is that nicotine is addictive, and results in dependency and withdrawal.[8] The safest thing to do is quit nicotine use altogether: the Colorado QuitLine (www.coquitline.com or by phone at 1-800-QUIT-NOW) can help.

1. "Public Health Focus: Electronic Cigarettes." *U.S. Food and Drug Administration.* 25 April 2013. Retrieved 16 June 2013. Online.
2. "Smoking Cessation." *Centers for Disease Control*. 5 June 2013. Retrieved 24 June 2013. Online.
3. "FDA 101: Smoking Cessation Products." *U.S. Food and Drug Administration*. 12 Dec. 2012. Retrieved 24 June 2013. Online.
4. "Treating Tobacco Use and Dependence: 2008 Update." *U.S. Dept. of Health and Human Services*. May 2008. Retrieved 27 June 2013. Online.
5. "Treating Tobacco Use and Dependence: 2008 Update." *U.S. Food and Drug Administration*. 12 Dec. 2012. Retrieved 24 June 2013. Online.
6. "FDA Warns of Health Risks Posed by E-Cigarettes." *U.S. Food and Drug Administration*. 23 July 2009. Retrieved 16 June 2013. Online.
7. "Summary of Results: Laboratory Analysis of Electronic Cigarettes Conducted By FDA." *U.S. Food and Drug Administration*. 22 July 2009. Retrieved 24 June 2013. Online.
8. "Is Nicotine Addictive?" *National Institute on Drug Abuse*. July 2012. Retrieved 25 June 2013. Online.

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Are There Age Restrictions On E-Cigarettes?

Selling e-cigarettes to minors is illegal, like other tobacco products

Since March 2011, electronic cigarettes have been considered tobacco products in Colorado for the purposes of furnishing them to minors under the age of 18. It is illegal for anyone to sell an electronic cigarette, or any other tobacco product, to a minor.

This includes online retailers, who cannot sell e-cigarettes to minors in Colorado legally regardless of where the retailer is physically located.[1] Additionally, it is illegal for anyone — youth or adult — to use an electronic cigarette on school property in Colorado at any time.[2]

Where Can I Get More Information?

For up-to-date information on electronic cigarettes, check out the U.S. Food and Drug Administration's page at www.fda.gov/NewsEvents/PublicHealthFocus/ucm172906.htm.

For information on overcoming a nicotine addiction, talk to your doctor about quitting options or contact the Colorado QuitLine, at www.coquitline.org or by phone at 1-800-QUIT-NOW.

COLORADO QuitLine™ Be tobacco free

1. "Furnishing cigarettes or tobacco products to minors." *Colorado Revised Statutes*, Sec. 18-13-121. Retrieved 16 June 2013. Online.
2. "Prohibition against the use of tobacco products on school property." *Colorado Revised Statutes*, Sec. 25-14-103.5. Retrieved 25 June 2013. Online.

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