



Facts You Need To Know About E-Cigarettes

What is an e-cigarette?

E-cigarettes can be described best as nicotine delivery devices designed to mimic the experience of smoking tobacco. Powered by batteries, the devices vaporize liquid nicotine, which users inhale in the same way they would cigarettes and other burnable tobacco products.

Electronic cigarettes are not safe.

E-cigarettes are the latest in a long list of dangerous products that foster and maintain nicotine addiction. Modeled to look and feel like conventional cigarettes, e-cigarettes produce aerosol-containing nicotine, ultrafine particles and low levels of carcinogenic and otherwise toxic materials.¹ The use of e-cigarettes threatens the health of users as well as anyone who may be exposed to the aerosol.

The number of calls to poison control centers regarding e-cigarette nicotine-infused liquids rose sharply every month between September 2010 and February 2014, from just one call per month to as many as 215 -- that's a rise from 0.3 percent to 41.7 percent of all emergency calls. As many as 51.1 percent of those calls involved accidental poisoning of kids under the age of 5 (roughly 42 percent involved adults age 20 or older) [source: [CDC](#)].

E-cigarettes and their battery components have exploded in homes and automobiles, leaving some individuals burned. A Florida man was severely injured when his e-cigarette exploded in his mouth.² A three-year-old Utah child was severely burned from an e-cigarette-caused explosion.³

Despite the marketing claims by e-cigarette manufacturers that their products are safer than smoking tobacco, researchers are finding e-cig users experience diminished lung function, airway resistance and cellular changes, regardless of whether or not they currently (or every) smoke cigarettes. And, in the lab, cells exposed to e-cigarette vapor show unhealthy changes similar to cells exposed to tobacco smoke.

http://clincancerres.aacrjournals.org/content/20/2_Supplement/B16.abstract

Electronic cigarettes present special dangers to children.

Since they come in a wide variety of enticing flavors, like pumpkin spice and chocolate, e-cigarettes are particularly appealing to children. The U.S. Centers for Disease Control and Prevention has reported that middle and high school youth e-cigarette use more than doubled between 2011 and 2012, and roughly 1.8 million students have tried e-cigarettes.⁴ Although tobacco companies are prohibited from marketing cigarettes to children, currently no regulations exist that outlaw tobacco companies from marketing e-cigarettes to children, (although the CDC has proposed such a rule in April 2014).

According to the CDC, e-cigarette use among youth "is a serious concern because the overall impact of e-cigarette use on public health remains uncertain. In youths, concerns include the potential negative impact of nicotine on

¹ ANR E-Cigarette Factsheet, <http://www.no-smoke.org/pdf/ecigarette-secondhand-aerosol.pdf>

² <http://abcnews.go.com/Health/electric> or <http://abcnews.go.com/Health/electric?cid=15645605>

³ <http://nation.time.com/2013/09/25/burned-toddler-shows-need-for-e-cigarette-regulation/>

⁴ http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a6.htm?s_cid=mm6235a6_w

adolescent brain development, as well as the risk for nicotine addiction and initiation of the use of conventional cigarettes or other tobacco products.”⁵

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Health experts agree e-cigarettes offer an entry way for children to become addicted to cigarettes. A scientific study of nearly 40,000 youth found that adolescents who used e-cigarettes were more likely to smoke cigarettes and less likely to quit smoking.⁶

New product same marketing.

Authorities have long fought against tobacco industry addiction schemes—advertising designed to attract young children, women, and minority groups—that resulted in the vast majority of adult smokers having started their habit between the ages of 11 and 13.⁷ The tobacco industry’s own internal documents reveal that marketing schemes are designed to ensure that for every person killed by their products at least two more become addicted. In 2006, the federal government successfully convicted Big Tobacco corporations of colluding in violating federal racketeering laws in pursuit of lifelong addicts.⁸ Yet evidence shows manufacturers are using the same tactics with e-cigarettes.⁹ The nation’s largest cigarette manufacturers (Altria, Phillip Morris, Reynolds and Lorillard) have all invested in e-cigarette companies.¹⁰

E-cigarettes are not effective quitting aids

The vast majority of current smokers say they want to quit. Big Tobacco works hard to foil public health programs to end tobacco addiction. One of Big Tobacco’s longstanding practices is to use “bait and switch” tactics, offering up literature and programs about quitting that are scientifically known to be ineffective. E-cigarettes are not effective quitting aids, according to the results of several recent research studies.¹¹

What are the potential harms from being exposed to e-cigarette smoke?

E-cigarettes are relatively new products, and yet already scientists have discovered that the aerosols users inhale as well as those contained in their exhaled components contain highly dangerous substances. For example, at least 10 chemicals found in e-cigarette aerosols are carcinogens or reproductive toxins.¹² The aerosol contains heavy metals, including chromium, nickel and tin.¹³ Ten e-cigarette aerosol chemicals are on California’s Proposition 65 list of carcinogens and reproductive toxins.¹⁴

What have communities and states done to limit human exposure to e-cigarettes?

As of January 2, 2014, 108 municipalities and three states include e-cigarettes as products that are prohibited from use in smokefree environments.¹⁵ Ten other states have otherwise restricted the use of e-cigarettes. Some countries, including Australia, Canada, Israel and Mexico, as well as some U.S. cities like Los Angeles, Chicago and New York, have banned electronic cigarettes or restricted their use in some public venues.

⁵ *Ibid.*

⁶ <http://archpedi.jamanetwork.com/article.aspx?articleid=1840772>

⁷ <http://www.tobaccofreekids.org/research/factsheets/pdf/0127.pdf>

⁸ <http://publichealthlawcenter.org/topics/special-collections/verdict-findings-united-states-v-philip-morris-collection>

⁹ http://www.tobaccofreekids.org/tobacco_unfiltered/post/2013_10_02_ecigarettes

¹⁰ <http://blogs.wsj.com/corporate-intelligence/2014/02/03/more-e-cigarettes-in-the-hands-of-big-tobacco/>

¹¹ <http://www.latimes.com/science/sciencenow/la-sci-sn-ecigarette-claims-20140324-story.html>

¹² ANR E-Cigarette Factsheet, <http://www.no-smoke.org/pdf/ecigarette-secondhand-aerosol.pdf>

¹³ <http://no-smoke.org/pdf/ecigarette-secondhand-aerosol.pdf>

¹⁴ *Ibid.*

¹⁵ ANR list, <http://www.no-smoke.org/pdf/ecigslaws.pdf>

In April 2014, the U.S. Food and Drug Administration proposed rules to regulate e-cigarettes similarly to conventional cigarettes and other tobacco products. These regulations would include prohibiting sales to minors, requiring retailers to verify purchasers' ages and enforcing penalties for retailers who sell to minors. In addition, warning labels about nicotine addiction would be required, as well as disclosure to the FDA of all ingredients.