

- [Skip to main page content](#)
- [Skip to search](#)
- [Skip to topics menu](#)
- [Skip to common links](#)

HHS U.S. Department of Health and Human Services

[FDA](#)

U.S. Food and Drug Administration

Protecting and Promoting *Your* Health

- [A to Z Index](#)
- [Follow FDA](#)
- [FDA Voice Blog](#)

Search FDA

- [Popular Content](#)
- [Home](#)
- [Food](#)
- [Drugs](#)
- [Medical Devices](#)
- [Radiation-Emitting Products](#)
- [Vaccines, Blood & Biologics](#)
- [Animal & Veterinary](#)
- [Cosmetics](#)
- [Tobacco Products](#)

For Consumers

- [Print this page](#)
- [Share this page](#)
- [E-mail this page](#)
- [Home](#)
- [For Consumers](#)
- [Consumer Updates](#)

[Consumer Updates](#) [Animal & Veterinary](#) [Children's Health](#) [Cosmetics](#) [Dietary Supplements](#) [Drugs](#) [Food](#) [Medical Devices](#) [Nutrition](#) [Radiation-Emitting Products](#) [Tobacco Products](#) [Vaccines, Blood & Biologics](#) [Articulos en Espanol](#)

FDA Warns of Health Risks Posed by E-Cigarettes

Search the Consumer Updates Section



[Get Consumer Updates by E-mail](#)

[Consumer Updates RSS Feed](#)

[Print & Share \(PDF 424 K\)](#)

The Food and Drug Administration (FDA) has joined other health experts to warn consumers about potential health risks associated with electronic cigarettes.

Also known as "e-cigarettes," electronic cigarettes are battery-operated devices designed to look like and to be used in the same manner as conventional cigarettes.

Sold online and in many shopping malls, the devices generally contain cartridges filled with nicotine, flavor, and other chemicals. They turn nicotine, which is highly addictive, and other chemicals into a vapor that is inhaled by the user.

"The FDA is concerned about the safety of these products and how they are marketed to the public," says Margaret A. Hamburg, M.D., commissioner of food and drugs.

The agency is concerned that

- e-cigarettes can increase nicotine addiction among young people and may lead kids to try other tobacco products, including conventional cigarettes, which are known to cause disease and lead to premature death
- the products may contain ingredients that are known to be toxic to humans
- because clinical studies about the safety and efficacy of these products for their intended use have not been submitted to FDA, consumers currently have no way of knowing 1) whether e-cigarettes are safe for their intended use, or 2) about what types or concentrations of potentially harmful chemicals or what dose of nicotine they are inhaling when they use these products.

The potential health risks posed by the use of e-cigarettes were addressed in a July 22, 2009, phone conference between Joshua M. Sharfstein, M.D., principal deputy commissioner of food and drugs; Jonathan Winickoff, M.D., chair of the American Academy of Pediatrics Tobacco Consortium; Jonathan Samet, M.D., director of the University of Southern California's Institute for Global Health; and Matthew T. McKenna, M.D., director of the Office on Smoking and Health at the national Centers for Disease Control and Prevention.

Conference participants stressed the importance of parents being aware of the health and marketing concerns associated with e-cigarettes. It was stated that parents may want to tell their children and teenagers that these products are not safe to use.

Of particular concern to parents is that e-cigarettes are sold without any legal age restrictions, and are available in different flavors (such as chocolate, strawberry and mint) which may appeal to young people.

In addition, the devices do not contain any health warnings comparable to FDA-approved nicotine replacement products or conventional cigarettes.

During the phone conference, which was shared with the news media, FDA announced findings from a laboratory analysis that indicates that electronic cigarettes expose users to harmful chemical ingredients.

FDA's Division of Pharmaceutical Analysis—part of the agency's Center for Drug Evaluation and Research—analyzed the ingredients in a small sample of cartridges from two leading brands of e-cigarette samples.

One sample was found to contain diethylene glycol, a toxic chemical used in antifreeze. Several other samples were found to contain carcinogens, including nitrosamines.

[back to top](#)

Agency Actions

FDA has been examining and detaining shipments of e-cigarettes at the border and has found that the products it has examined thus far meet the definition of a combination drug device product under the Federal Food, Drug, and Cosmetic Act. The agency has been challenged regarding its jurisdiction over certain e-cigarettes in a case currently pending in federal district court.

FDA is planning additional activities to address its concerns about electronic cigarettes.

Meanwhile, health care professionals and consumers may report serious adverse events or product quality problems with the use of e-cigarettes to FDA through the [MedWatch](#) program, either online or by phone at 1-800-FDA-1088.

This article appears on [FDA's Consumer Updates page](#), which features the latest on all FDA-regulated products.

Date Posted: July 23, 2009; Reviewed Sept. 17, 2013

[back to top](#)

For More Information

- [FDA and Public Health Experts Warn About Electronic Cigarettes](#) [ARCHIVED]
- [Electronic Cigarettes \(e-Cigarettes\)](#)

Related Consumer Updates

- [E-Cigarettes: Questions and Answers](#)
- [FDA 101: Smoking Cessation Products](#) [ARCHIVED]
- ["Light" Tobacco Products Pose Heavy Health Risks](#)
- [What Are You Smoking \(or Chewing or Inhaling\)?](#)
- [Less Risky Tobacco Product? Only if the Science Says So](#)
- [Why Do People Use Tobacco? Looking for Answers](#)
- [Why is the Great American Smokeout Important?](#)
- [FDA Modernizing Regulatory Science](#)
- [FDA Unveils New Cigarette Health Warnings](#)
- [Regulating Tobacco: Q&A with Former CTP Director Lawrence Devton, M.S.P.H., M.D.](#) [ARCHIVED]

Page Last Updated: 11/16/2013

Note: If you need help accessing information in different file formats, see [Instructions for Downloading Viewers and Players](#).

FDA

- [Accessibility](#)
- [Careers](#)

FRED UPTON, MICHIGAN
CHAIRMAN

HENRY A. WAXMAN, CALIFORNIA
RANKING MEMBER

ONE HUNDRED THIRTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3641

November 4, 2013

The Honorable Margaret A. Hamburg, M.D.
Commissioner of Food and Drugs
U.S. Food and Drug Administration
10903 New Hampshire Avenue
Silver Spring, MD 20993

Dear Commissioner Hamburg:

We wrote to you in September to urge you to take action to regulate electronic cigarettes, also known as “e-cigarettes,” citing our concern that use of e-cigarettes among adolescents has increased rapidly.¹ We are now writing to bring to your attention one reason for this disturbing increase of e-cigarette use by youth: there is growing evidence that e-cigarette manufacturers are taking advantage of the absence of regulation to market their products to young smokers. In fact, e-cigarette manufacturers appear to be using exactly the same advertising and promotional techniques that were used for decades by cigarette manufacturers to hook teenagers on their products.

To illustrate what is happening, we have compiled a side-by-side presentation of cigarette and e-cigarette marketing practices at democrats.energycommerce.house.gov.

Television Advertisements

Unlike traditional cigarettes, e-cigarettes are not subject to the federal ban on television advertising. Several e-cigarette manufacturers have taken advantage of this loophole to air advertisements during events with heavy teen and young adult viewership. NJOY, an e-cigarette manufacturer, has advertised during the Super Bowl, the Academy Awards, and on ESPN, reaching a general audience of “at least 10 million viewers,” many of them children, teens, or young adults. The NJOY ads have also “been accepted by cable channels owned by Discovery Communications and Viacom ... as well as local broadcast stations in markets like Chicago,

¹ Letter from Rep. Henry A. Waxman to Commissioner Margaret Hamburg, Food and Drug Administration (Sept. 16, 2013) (online at democrats.energycommerce.house.gov/sites/default/files/documents/Hamburg-Adolescent-Use-of-E-Cigarette-2013-9-16.pdf).

Dallas, Los Angeles, New York, San Francisco, and Seattle.”² Television ads for Blu e-cigarettes have aired nationally on Comedy Central, whose target audience is young males, including on Comedy Central's *Workaholics*, a top-rated show among 18 to 24 year olds.³

The e-cigarette companies have also used celebrities to promote their products. Lorillard, which makes Blu e-cigarettes, has run TV ads featuring Jenny McCarthy and Stephen Dorff over 8,000 times.⁴

These television ads used by e-cigarette manufacturers are eerily similar to television advertisements from cigarette manufacturers from the 1950s and 1960s. At our website, democrats.energycommerce.house.gov, you can compare these ads side-by-side. The e-cigarette ads from today and the cigarette ads from decades ago both send the same unmistakable message: smoking is cool and sexy. Over 50 years ago, R.J. Reynolds ran a TV ad featuring Lee Marvin, the actor who once portrayed action heroes and hardboiled detectives. In the advertisement, Mr. Marvin works out with a punching bag before extolling the virtues of Pall Mall cigarettes.⁵ Last year, Lorillard ran an ad with actor Stephen Dorff, who is described as “oozing machismo” and “inhaling with swagger.”⁶ In the ad, Mr. Dorff asserts, “It’s time we take our freedom back.”

In the 1950s, R.J. Reynolds ran a TV ad with actress Eva Gabor endorsing Camel cigarettes. Ms. Gabor stares at the camera and says in a sultry voice, “Let’s go somewhere where we can be comfortable, and I tell you why – I smoke Camels.”⁷ Earlier this year, Lorillard ran an ad with Jenny McCarthy, the former Playboy model, in which she also seductively stares

² *Campaigns for E-Cigarettes Borrow From Tobacco’s Heyday*, New York Times (Dec. 5, 2012) (online at www.nytimes.com/2012/12/06/business/media/campaigns-for-electronic-cigarettes-borrow-from-their-tobacco-counterparts.html?pagewanted=print).

³ *In the Tastes of Young Men, Humor Is Most Prized, a Survey Finds*, New York Times (Feb. 19, 2012) (online at www.nytimes.com/2012/02/20/business/media/comedy-central-survey-says-young-men-see-humor-as-essential.html).

⁴ iSpot.tv, *Blu Cigs TV Spot Featuring Stephen Dorff* (online at www.ispot.tv/ad/7YDZ/blu-cigs-featuring-stephen-dorff); iSpot.tv, *Blu Cigs TV Spot Featuring Jenny McCarthy* (online at www.ispot.tv/ad/7q7i/blu-cigs-featuring-jenny-mccarthy).

⁵ Pall Mall Advertisement (est. 1950s) (online at <http://democrats.energycommerce.house.gov/index.php?q=page/e-cigarette-flashbacks>).

⁶ *Big Tobacco back in TV viewers’ faces as FDA cuts in*, USA Today (Sept. 4, 2013) (online at www.usatoday.com/story/news/nation/2013/09/03/big-tobacco-tv-ecigarette-ads/2608427/).

⁷ Camel Cigarettes Advertisement (est. 1950s) (online at <http://democrats.energycommerce.house.gov/index.php?q=page/e-cigarette-flashbacks>).

at the camera and says “I love being single” before explaining how with Blu e-cigarettes she doesn’t have to “worry about scaring that special someone away.”⁸

Print Advertisements

E-cigarette magazine advertisements feature celebrities and utilize sex appeal and images of nightlife environments – clubs, parties, and bars – as well as messages designed to appeal to adolescents. These are the same techniques used by tobacco companies decades ago. The Campaign for Tobacco Free Kids has noted that these ads “feature today’s equivalents of the Marlboro Man and the Virginia Slims woman, depicting e-cigarette use as masculine, sexy or glamorous.”⁹

These e-cigarette advertisements are not restricted to magazines with adult readerships. For example, Fin and Blu e-cigarette ads have both appeared in *Rolling Stone*, which was once “a mainstay of tobacco advertising” due to high youth readership.¹⁰

At our website, democrats.energycommerce.house.gov, you can compare these ads side-by-side. One suggestive Blu e-cigarette ad published in magazines last year is the spitting image of a 1933 Lucky Strike ad, with both ads showing women leaning back into the embrace of fashionable men. One Lucky Strike ad from 1930, which bears a striking resemblance to a Blu ad from last year, claimed that Luckies remove “irritants that cause throat irritation and coughing.”¹¹ The Blu ad touts that e-cigarettes produce “no tobacco smoke and no ash ... making it the ... smarter alternative to regular cigarettes.” A 1959 Pall Mall ad and a 2013 XEO ad – with the tagline “What’s Your Taste” – both use images of fresh, healthy fruits to sell tobacco and e-cigarettes. Other ad pairing examples on our website share similar themes, showing cigarette smokers from decades ago or e-cigarette users today enjoying themselves in airplanes, automobiles, and boats.

⁸ Blu Electronic Cigarettes Advertisement (2013) (online at <http://democrats.energycommerce.house.gov/index.php?q=page/e-cigarette-flashbacks>).

⁹ Campaign for Tobacco-Free Kids, *CDC Survey Finds Youth E-Cigarette Use More than Doubled from 2011-2012, Shows Urgent Need for FDA Regulation* (Sept. 5, 2013) (online at www.tobaccofreekids.org/press_releases/post/2013_09_05_ecigarettes).

¹⁰ National Cancer Institute, *Themes and Targets of Tobacco Advertising and Promotion* (online at cancercontrol.cancer.gov/brp/tcrb/monographs/19/m19_5.pdf).

¹¹ Lucky Strike Advertisement (1930) (online at <http://democrats.energycommerce.house.gov/index.php?q=page/e-cigarette-flashbacks>).

Cartoon Imagery

Traditional cigarette manufacturers used cartoon characters to promote their products before they were banned under the Tobacco Master Settlement Agreement. R.J. Reynolds's long-time use of Joe Camel is one prominent example.¹² E-cigarette manufacturers are now using the same techniques. For example, eJuiceMonkeys.com and Magic Puff City E-cigarettes both use cartoon monkeys to sell e-cigarettes. Blu's website has featured a cartoon character "Mr. Cool." Blu also produced a web video featuring the same cartoon character in a cartoon storyboard visual format. Our website displays the similarities.

Sports Sponsorships

E-cigarette manufacturers are sponsoring numerous sporting events and athletes. These e-cigarette manufacturer sponsorships are similar to those of cigarette manufacturers who sponsored numerous sporting events before they were banned from name brand sponsorship of certain events under the Tobacco Master Settlement Agreement and later by the Family Smoking Prevention and Tobacco Control Act.¹³

Before the sponsorship ban, cigarettes had "long been a tradition at NASCAR," with R.J. Reynolds sponsoring the Winston Cup for over three decades and Philip Morris sponsoring the Marlboro Grand Prix, among other popular auto racing events.¹⁴ Motor sports once received "70% of all tobacco sports sponsorship," helping "tobacco brands become distinctly associated

¹² Magic Puff City E-cigarettes, *Disposable Vanilla* (online at cityecigarettes.com/index.php/products/disposable-e-cigarettes/disposable-225.html); eJuiceMonkeys, *Twitter page* (online at twitter.com/eJuiceMonkeys); Stanford School of Medicine, *Joe Camel* (online at tobacco.stanford.edu/tobacco_main/images.php?token2=fm_st138.php&token1=fm_img4072.php&theme_file=fm_mt015.php&theme_name=Targeting%20Teens&subtheme_name=Joe%20Camel).

¹³ Family Smoking Prevention and Tobacco Control Act, Pub. L. No. 111-31.

¹⁴ PR Newswire, *blu eCigs Brings Sleek New Look To Rahal Letterman Lanigan Racing's No. 15 IndyCar At Houston Grand Prix Event* (Sept. 26, 2013) (online at www.prnewswire.com/news-releases/blu-ecigs-brings-sleek-new-look-to-rahall-letterman-lanigan-racings-no-15-indycar-at-houston-grand-prix-event-225371251.html); *NASCAR Now Smokeless, New Law Prevents Tobacco From Sports Advertising*, Bleacher Report (June 2, 2010) (online at <http://bleacherreport.com/articles/400529-nascar-now-smokeless-new-law-prevents-tobacco-from-sports-advertising>); *Tobacco's Imprimatur Is Less Bold, but Still on Cultural Events*, New York Times (June 21, 1999) (online at www.nytimes.com/1999/06/21/arts/tobacco-s-imprimatur-is-less-bold-but-still-on-cultural-events.html?pagewanted=all&src=pm).

with the lifestyles” of racecar drivers.¹⁵ Today, in the absence of cigarette manufacturer sponsorship, e-cigarette makers have eagerly stepped in and begun to blanket racing events with free e-cigarette samples and racecar drivers with sponsorship deals.

E-Swisher and its “e-Swisher Racing Team” is the primary sponsor of NASCAR driver Reed Sorenson.¹⁶ Green Smoke has sponsored NASCAR driver T.J. Bell at the Sprint Cup Series and the Coca Cola 600 race.¹⁷ And Blu, as the primary sponsor of RLL Racing’s No. 15 Indy Car, distributes e-cigarette samples at racing events like the Houston Grand Prix.¹⁸ On our website, you can compare the cigarette brand advertising once plastered on racecars to the similar e-cigarette advertisements covering racecars today.

Event Promotions

E-cigarettes are also promoting their products through sponsorship of youth-oriented events. Blu has sponsored numerous major music festivals, including South by Southwest, Bonnaroo, Sasquatch! Music Festival, Governors Ball, and HARD Summer L.A. At these festivals, Blu operates an “eCigs Vapor Lounge” where attendees can win VIP tickets, watch exclusive artist performances from “top performers in the indie, rock, and hip-hop genres,” and sample e-cigarettes.¹⁹

¹⁵ Pamela M. Ling et al., *Branding the Rodeo: A Case Study of Tobacco Sports Sponsorship*, American Journal of Public Health (Jan. 2010) (online at www.ncbi.nlm.nih.gov/pmc/articles/PMC2791245/); National Cancer Institute, *Themes and Targets of Tobacco Advertising and Promotion* (online at cancercontrol.cancer.gov/brp/tcrb/monographs/19/m19_5.pdf).

¹⁶ Reed Sorenson, *E-Swisher Expands Partnership With Reed Sorenson And The Motorsports Group In Nascar Nationwide Series* (Apr. 23, 2013) (online at reedsorenson.com/news/13/e-Swisher-Expands-Partnership-with-Reed-Sorenson-and-The-Motorsports-Group-in-NASCAR-Nationwide-Series.html).

¹⁷ Green Smoke, *Green Smoke Makes NASCAR History* (online at blog.greensmoke.com/nascar/green-smoke-makes-nascar-history.htm); Green Smoke, *We’re Sponsoring T.J. Bell In This Year’s Coca Cola 600 NASCAR Race* (online at blog.greensmoke.com/electronic-cigarettes/we%E2%80%99re-sponsoring-tj-bell-in-this-years-coca-cola-600-nascar-race.htm).

¹⁸ PR Newswire, *blue Cigs Brings Sleek New Look To Rahal Letterman Lanigan Racing’s No. 15 IndyCar At Houston Grand Prix Event* (Sept. 26, 2013) (online at www.prnewswire.com/news-releases/blu-ecigs-brings-sleek-new-look-to-rahall-letterman-lanigan-racings-no-15-indycar-at-houston-grand-prix-event-225371251.html).

¹⁹ *blu eCigs Announces Sponsorship of Sasquatch! Music Festival*, PR Newswire (May 20, 2013) (online at <http://www.prnewswire.com/news-releases/blu-ecigs-announces-sponsorship-of-sasquatch-music-festival-208127521.html>).

E-cigarette manufacturers have also held numerous widely attended promotional events and sponsored many other activities to market their products to youthful audiences. This summer, South Beach Smoke “stood with an estimated half a million people at the Miami Heat’s victory parade” distributing e-cigarette coupons.²⁰ NJOY has distributed e-cigarettes at the New York and London Fashion Weeks.²¹ Fin has sponsored the “FoodaBluz” food and blues festival, and e-Swisher has sponsored The World Series of Poker.²²

These promotional efforts are similar to those used by large cigarette manufacturers for decades. These manufacturers had “long used sponsorship of music concerts popular with young people to promote its products,” with tobacco advertising prominent at events like the Essence Music Festival and Kool Jazz Festival.²³ Tobacco brands like Marlboro, Camel, and Kool sponsored concerts and events.²⁴ Over a decade ago, the *New York Times* reported that tobacco sponsorship of music and other events at bars in major cities had “become an increasingly entrenched feature of American night life.”²⁵ On our website, you can compare the music festival advertising and promotional material of cigarette and e-cigarette companies.

Conclusion

FDA’s delay in regulating e-cigarettes is creating a loophole that manufacturers are exploiting to target young users. The e-cigarette manufacturers are using many of the exact same advertising and promotional techniques used for decades by cigarette manufacturers to hook

²⁰ *South Beach Smoke Distributes NO HATE ZONE Flyers at Miami Heat Parade*, Wall Street Journal (June 25, 2013) (online at online.wsj.com/article/PR-CO-20130625-905056.html).

²¹ *Fashion Week and E-cigarettes: The Jury’s Still Out*, New York Magazine (Sept. 12, 2013) (online at nymag.com/thecut/2013/09/fashion-week-and-e-cigarettes-jurys-still-out.html).

²² BusinessWire, *e-Swisher e-Cigarettes Bet Big with World Series of Poker Partnership* (July 11, 2013) (online at www.businesswire.com/news/home/20130711006389/en/e-Swisher-e-Cigarettes-Bet-Big-World-Series-Poker%C2%AE); Fin, *Fin E-Cigs Help Make First Foodabluz a Hit* (May 1, 2013) (online at www.fincigs.com/2013/05/fin-e-cigs-help-make-first-foodabluz-a-hit/).

²³ *U.S. Bands Must Smash Tobacco Sponsorship*, Huffington Post (Sept. 28, 2010) (online at www.huffingtonpost.com/matt-myers/us-bands-must-smash-tobac_b_741676.html); Stanford Research into the Impact of Tobacco Advertising, *Music and Tobacco Marketing* (Aug. 6, 2013) (online at www.youtube.com/watch?v=zFN2hJGa7UM).

²⁴ *Tobacco’s Imprimatur Is Less Bold, but Still on Cultural Events*, New York Times (June 21, 1999) (online at www.nytimes.com/1999/06/21/arts/tobacco-s-imprimatur-is-less-bold-but-still-on-cultural-events.html?pagewanted=all&src=pm).

²⁵ *Id.*

The Honorable Margaret A. Hamburg, M.D.

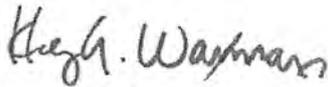
November 4, 2013

Page 7

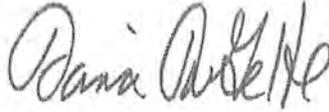
teenagers on their products. These include TV advertisements, magazine advertisements, sport and event sponsorships, and even the use of cartoon characters.

We believe FDA action is essential to ensure that e-cigarette makers stop targeting the nation's youth. We recognize that there is a debate about the value of e-cigarettes as an alternative for addicted adults. But whatever the merits for adult smokers, these addictive products should not be used by teenagers. The companies' practices show that they are not capable of self-regulation. FDA must act now to protect children from their unscrupulous marketing campaigns.

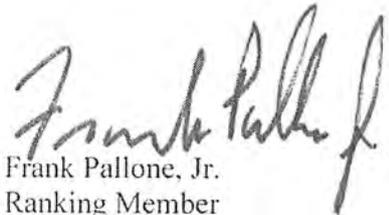
Sincerely,



Henry A. Waxman
Ranking Member



Diana DeGette
Ranking Member
Subcommittee on Oversight
and Investigations



Frank Pallone, Jr.
Ranking Member
Subcommittee on Health

ONE HUNDRED THIRTEENTH CONGRESS
Congress of the United States
House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115

Majority (202) 225-2927
Minority (202) 225-3641

September 16, 2013

The Honorable Margaret A. Hamburg, M.D.
Commissioner
U.S. Food and Drug Administration
10903 New Hampshire Avenue
Silver Spring, MD 20993

Dear Commissioner Hamburg:

Earlier this month, the Centers for Disease Control and Prevention (CDC) released new data showing that the percentage of adolescents who use electronic cigarettes, or “e-cigarettes,” is growing rapidly.¹ According to the CDC report, over 1.7 million U.S. middle and high school students tried e-cigarettes last year. We are writing to urge the Food and Drug Administration (FDA) to act quickly to appropriately regulate these products.

The authors of the CDC’s report — who are all from either the FDA’s Center for Tobacco Products or the CDC’s Office on Smoking and Health — cite serious concerns about the health effects of the use of e-cigarettes. For instance, they indicate that e-cigarettes may contain potentially harmful constituents, including irritants and animal carcinogens.² They also raise concerns about the potential negative effects “on adolescent brain development, as well as the risk for nicotine addiction.”³ In an earlier study, FDA found that e-cigarette vapor samples contained toxic chemicals “such as diethylene glycol, an ingredient used in antifreeze.”⁴

¹ Centers for Disease Control and Prevention, *Notes from the Field: Electronic Cigarette Use Among Middle and High School Students – United States, 2011-2012* (Sept. 6, 2013) (online at www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a6.htm?s_cid=mm6235a6_w).

² *Id.*

³ *Id.*

⁴ Food and Drug Administration, *FDA and Public Health Experts Warn About Electronic Cigarettes* (July 22, 2009) (online at www.fda.gov/NewsEvents/Newsroom/%20PressAnnouncements/ucm173222.htm).

Despite these health concerns, e-cigarettes are currently completely unregulated. Manufacturers of e-cigarettes are taking advantage of this regulatory loophole to target children. Manufacturers of traditional cigarettes are banned from introducing flavoring into their products to attract children, but this prohibition does not apply to e-cigarettes. As a result, some e-cigarette makers are producing products with kid-friendly flavors such as “Cherry Crush” and “Cookies & Cream Milkshake.”⁵

Unlike traditional cigarettes, e-cigarettes are also not subject to the federal ban on television advertising. Advertising spending on products like e-cigarettes has skyrocketed from \$2.7 million in 2010 to \$20.8 million last year, using tactics like celebrity endorsements and sports sponsorships to glamorize smoking. According to the American Lung Association, these products are being directly marketed to kids, “which could result in a lifelong addiction to nicotine.”⁶

The new CDC report shows the dangerous impacts these practices are having. Use of e-cigarettes by youth doubled in just one year from 2011 to 2012.⁷ Moreover, the CDC data suggest that e-cigarettes could be serving as a gateway product to nicotine addiction. Over 20% of the middle school students who reported using e-cigarettes said they had never tried traditional cigarettes.⁸ According to the authors of the CDC report, “This raises concern that there may be young people for whom e-cigarettes could be an entry point to use of conventional tobacco products, including cigarettes.”⁹ As CDC Director Tom Frieden stated when the report was

⁵ *E-cigarettes may have a place – just not with minors*, Boston Globe (July 12, 2013) (online at www.bostonglobe.com/opinion/editorials/2013/07/11/cigarettes-may-have-place-just-not-with-minors/a1JcHjP5LJZL6k7cLjQ8OK/story.html).

⁶ *Rise Is Seen in Students Who Use E-Cigarettes*, New York Times (Sept. 5, 2013) (online at www.nytimes.com/2013/09/06/health/e-cigarette-use-doubles-among-students-survey-shows.html?pagewanted=print); *FDA Oversight Badly Needed*, New York Times (Aug. 20, 2013) (online at www.nytimes.com/roomfordebate/2013/08/20/the-ambiguous-allure-of-the-e-cig/fda-oversight-of-e-cigs-badly-needed); *Electronic cigarettes growing in popularity with teens*, Los Angeles Times (Sept. 6, 2013) (online at www.latimes.com/science/la-sci-e-cigarettes-20130906,0,2387959.story); *State of Tobacco Control 2013*, American Lung Association (Jan. 16, 2013) (online at www.stateoftobaccocontrol.org/sotc-2013-report.pdf).

⁷ Centers for Disease Control and Prevention, *Notes from the Field: Electronic Cigarette Use Among Middle and High School Students – United States, 2011-2012* (Sept. 6, 2013) (online at www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a6.htm?s_cid=mm6235a6_w).

⁸ *Id.*

⁹ Centers for Disease Control and Prevention, *E-cigarette use more than doubles among U.S. middle and high school students from 2011 to 2012* (Sept. 5, 2013) (online at www.cdc.gov/media/releases/2013/p0905-ecigarette-use.html).

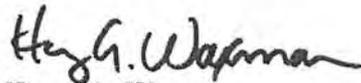
The Honorable Margaret A. Hamburg, M.D.
September 16, 2013
Page 3

released, "Many teens who start with e-cigarettes may be condemned to struggling with a lifelong addiction to nicotine and conventional cigarettes."¹⁰

We recognize that some believe e-cigarettes could advance public health if addicted smokers switch to e-cigarettes from traditional cigarettes. Others advance the idea that e-cigarettes could help provide a pathway to smoking cessation. We do not dismiss these ideas, but they need to be proven. In 2009, Congress enacted the Family Prevention and Tobacco Control Act to give FDA the authority to make science-based decisions about products like e-cigarettes.¹¹ Certainly, these dangerous products should not be marketed to children.

As a first step, FDA needs to assert jurisdiction over e-cigarettes. We know you have been working on these "deeming" regulations for years. But as the new CDC report makes clear, continued delay comes with a large public health cost. That is why we are writing to urge you to accelerate your efforts. With over a million youth now using e-cigarettes, FDA needs to act without further delay to protect public health.

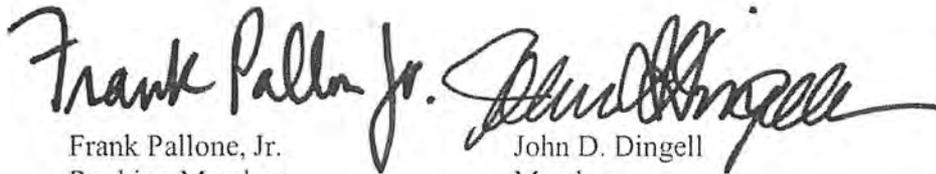
Sincerely,



Henry A. Waxman
Ranking Member
Committee on Energy and
Commerce



Diana DeGette
Ranking Member
Subcommittee on Oversight and
Investigations



Frank Pallone, Jr.
Ranking Member
Subcommittee on Health

John D. Dingell
Member
Committee on Energy and
Commerce

¹⁰ *Id.*

¹¹ Family Smoking Prevention and Tobacco Control Act, Pub. L. No. 111-31.

HSPH News

Harvard School of Public Health > HSPH News > HSPH in the News > **Tobacco control news: e-cigarette health risks; decline in Greek smoking rates**

Tobacco control news: e-cigarette health risks; decline in Greek smoking rates

E-cigarettes affect airways

A new study finds that electronic cigarettes, marketed as safer alternatives for nicotine fixes than tobacco products, carry health risks of their own. Researchers from the Center for Global Tobacco Control at Harvard School of Public Health (HSPH), working with colleagues in Greece, asked healthy adult smokers to smoke an electronic cigarette for five minutes. After taking breathing tests, subjects showed signs of airway constriction and inflammation.

“This is the first evidence that just one (e-cigarette) use can have acute physiologic effects,” lead researcher Constantine Vardavas, a visiting scientist at HSPH, told *Reuters Health*. “More studies on the long-term effects are needed,” he said.

Higher taxes, less smoking

Tax hikes on cigarettes appear to finally be making a dent in the smoking habits of Greeks, who are among the world’s heaviest smokers. Bans on smoking in public places are widely ignored and little enforced, but HSPH’s [[Gregory N. Connolly]] is encouraged by the 16% drop in the number of those lighting up over the past year. Connolly, director of the HSPH Center for Global Tobacco Control, recently presented a report on the “Greek Tobacco Epidemic” at a conference in Athens. He believes that public awareness campaigns about the dangers of tobacco are beginning to make a mark with the Greek people.

Referring to Greek youth, Connolly told the *SETimes*, “[Foreign tobacco companies] are sending a message that smoking is cool, but it’s killing them.”

Read *Reuters Health* article

Read *SETimes* article

Learn more

Greece Goes Smoke-Free in Restaurants, Bars with HSPH Support (HSPH feature)

Making Smoking History Worldwide (*Harvard Public Health Review*)



National Association
of Attorneys General

PRESIDENT

J.B. Van Hollen
Wisconsin Attorney General

PRESIDENT-ELECT

Jim Hood
Mississippi Attorney General

VICE PRESIDENT

Marty Jackley
South Dakota Attorney General

IMMEDIATE PAST PRESIDENT

Douglas Gansler
Maryland Attorney General

EXECUTIVE DIRECTOR

James McPherson

September 24, 2013

The Honorable Margaret Hamburg, Commissioner
U.S. Food and Drug Administration
10903 New Hampshire Avenue
Silver Spring, MD 20993

Re: FDA Regulation of E-Cigarettes

Dear Commissioner Hamburg,

The undersigned Attorneys General write to urge the Food and Drug Administration (FDA) to take all available measures to meet the FDA's stated deadline of October 31, 2013, to issue proposed regulations that will address the advertising, ingredients, and sale to minors of electronic cigarettes (also known as e-cigarettes).

State Attorneys General have long fought to protect their States' citizens, particularly youth, from the dangers of tobacco products. For example, every State Attorney General sued the major cigarette companies for the harm their products caused. With the protection of our States' citizens again in mind, the undersigned Attorneys General write to highlight the need for immediate regulatory oversight of e-cigarettes, an increasingly widespread, addictive product.

As you know, e-cigarettes are battery-operated products designed to deliver nicotine to the user by heating liquid nicotine, derived from tobacco plants, along with flavors and other chemicals, into a vapor that the user inhales. The nicotine found in e-cigarettes is highly addictive, has immediate bio-chemical effects on the brain and body at any dosage, and is toxic in high doses.¹

E-Cigarette Sales are Growing Exponentially Using Marketing that Includes Television

Sales of e-cigarettes have grown rapidly in the United States, and after doubling every year since 2008, sales in 2013 are now accelerating even faster and projected to reach \$1.7 billion.² The cost of e-cigarettes has fallen

¹ U.S. Surgeon General, U.S. Department of Health and Human Services, *The Health Consequences of Smoking: Nicotine Addiction* (1988); Emergency Response Safety and Health Database, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, http://www.cdc.gov/niosh/ershdb/EmergencyResponseCard_29750028.html

² Compare Josh Sanburn, *Can Electronic Cigarettes Challenge Big Tobacco?*, Time.com, Jan. 8, 2013, available at <http://business.time.com/2013/01/08/can-electronic-cigarettes-challenge-big-tobacco/>, (estimating 2013 sales at \$1 billion), with Stuart Elliot, *E-Cigarette Makers' Ads Echo Tobacco's Heyday*, New York Times, Aug. 29, 2013, available at <http://www.nytimes.com/2013/08/30/business/media/e-cigarette-makers-ads-echo-tobaccos-heyday.html>, (estimating 2013 sales at \$1.7 billion).

dramatically, as well, making them more affordable, and thus more attractive to young people. Unlike traditional tobacco products, there are no federal age restrictions that would prevent children from obtaining e-cigarettes, nor are there any advertising restrictions.

Along with the growth of e-cigarette sales, there has also been a growth of e-cigarette advertising over the past year. For example, in this year's Super Bowl broadcast, NJOY e-cigarettes purchased a 30-second television advertisement slot which reached at least 10 million viewers in certain markets and reportedly translated into a dramatic 30-40% increase in sales.³ The advertisement depicted an attractive man smoking an e-cigarette that looked just like a real cigarette. Since then, advertisements for e-cigarettes have regularly appeared on primetime television, making it easier for those advertisements to reach children. Moreover, e-cigarettes are not being marketed as smoking cessation devices, but rather as recreational alternatives to real cigarettes. Consumers are led to believe that e-cigarettes are a safe alternative to cigarettes, despite the fact that they are addictive, and there is no regulatory oversight ensuring the safety of the ingredients in e-cigarettes.

E-Cigarettes Appeal to Youth

E-cigarettes contain fruit and candy flavors -- such as cherry, chocolate, gummy bear, and bubble gum -- that are appealing to youth. The FDA has banned such flavors from cigarettes and should take the same action regarding e-cigarettes. E-cigarettes and refills of the liquid nicotine solution used with e-cigarettes can easily be ordered online without age verification. By intentional use or mistaken ingestion from the non-child resistant containers, e-cigarettes and liquid nicotine refills can deliver dangerously high doses of liquid nicotine to youth.

In addition to flavors, e-cigarette manufacturers, such as eJuiceMonkeys.com and Magic Puff City E-cigarettes, use cartoon monkeys to sell e-cigarettes,⁴ even though for many years, the major manufacturers of traditional cigarettes have been banned from using cartoons to advertise. Finally, e-cigarette manufacturers, such as White Cloud Cigarettes, offer reusable e-cigarette "skins" -- known as Vapor Jackets -- that are intended to make the e-cigarette desirable or fashionable and are available in a variety of patterns that appeal to children, one of which uses images from the popular video game, Angry Birds.⁵

Further, data from the 2011 and 2012 National Youth Tobacco Surveys (conducted by the Centers for Disease Control and Prevention) show that e-cigarette use among students doubled in the last year. Specifically, one in 10 high school students reported that they had tried an e-cigarette in the last year -- up from one in 20 in 2011, and 1.8 million middle and high school students said they had tried e-cigarettes in 2012.⁶ The increased usage among young people

³ Benjamin Wallace, *Smoke Without Fire*, New York Magazine, April 28, 2013, available at <http://nymag.com/news/features/e-cigarettes-2013-5/>.

⁴ See <http://ejuicemonkeys.com/> and <http://cityecigarettes.com/>

⁵ See <http://www.whitecloudelectroniccigarettes.com/accessories/vapor-jackets/>

⁶ Catherine Corey, *Notes from the Field: Electronic Cigarette Use Among Middle and High School Students – United States, 2011-2012*, Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report, September 6, 2013, available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a6.htm?s_cid=mm6235a6_w

echoes the growth among adult users, and researchers indicated that aggressive marketing campaigns, in part, drove the increase.⁷

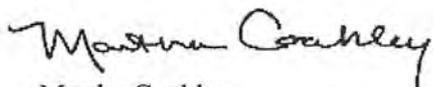
The FDA has Authority to Regulate E-cigarettes and Protect the Public

In the Tobacco Control Act, Congress recognized that nicotine is an addictive drug, and virtually all new users of tobacco products are under the age of eighteen and are therefore too young to legally purchase such products. Congress further found that tobacco advertising and marketing contributes significantly to the teenage use of nicotine-containing tobacco products. To help prevent children from using tobacco products, the Tobacco Control Act imposed restrictions on advertising and marketing to youth. These restrictions should be applied to e-cigarettes, as well, to safeguard children from nicotine addiction and other potential health effects of e-cigarettes.

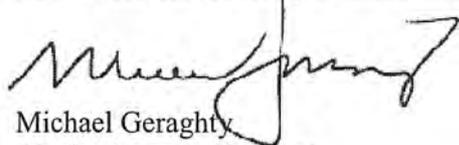
The FDA has authority to regulate electronic cigarettes as “tobacco products” under the Tobacco Control Act, as they are products “made or derived from tobacco” that are not a “drug,” “device,” or combination product. Case law, such as *Sottera, Inc. v. Food & Drug Administration*, 627 F.3d 891 (D.C. Cir. 2010), further supports the contention that e-cigarettes are “made or derived from tobacco” and can be regulated as “tobacco products” under the Tobacco Control Act.

We ask the FDA to move quickly to ensure that all tobacco products are tested and regulated to ensure that companies do not continue to sell or advertise to our nation’s youth.

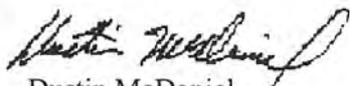
Very respectfully yours,



Martha Coakley
Massachusetts Attorney General



Michael Geraghty
Alaska Attorney General



Dustin McDaniel
Arkansas Attorney General



Mike DeWine
Ohio Attorney General

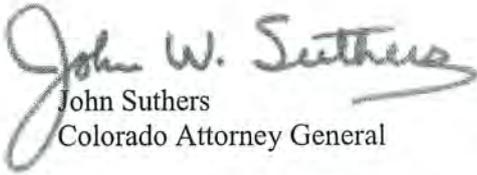


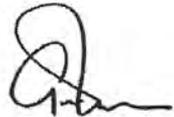
Tom Horne
Arizona Attorney General

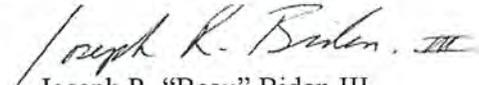


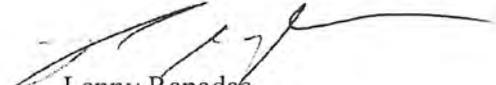
Kamala Harris
California Attorney General

⁷ Sabrina Tavernise, *Rise Is Seen in Students Who Use E-Cigarettes*, New York Times, September 5, 2013, available at <http://www.nytimes.com/2013/09/06/health/e-cigarette-use-doubles-among-students-survey-shows.html>

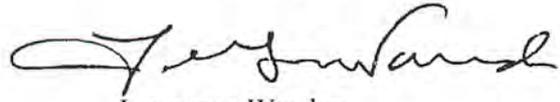

John Suthers
Colorado Attorney General


George Jepsen
Connecticut Attorney General

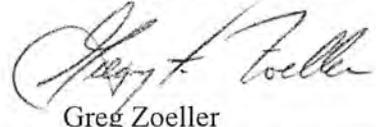

Joseph R. "Beau" Biden III
Delaware Attorney General

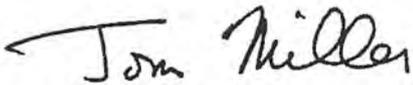

Lenny Rapadas
Guam Attorney General

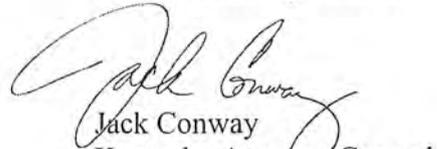

David Louie
Hawaii Attorney General

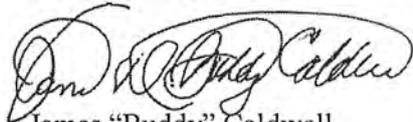

Lawrence Wasden
Idaho Attorney General

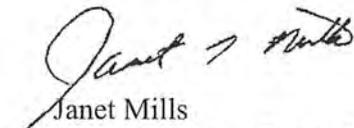

Lisa Madigan
Illinois Attorney General

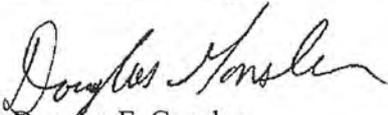

Greg Zoeller
Indiana Attorney General

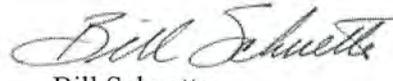

Tom Miller
Iowa Attorney General

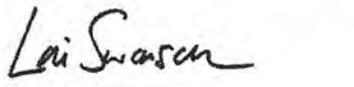

Jack Conway
Kentucky Attorney General

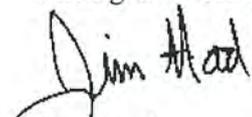

James "Buddy" Caldwell
Louisiana Attorney General


Janet Mills
Maine Attorney General

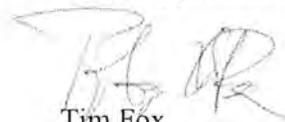

Douglas F. Gansler
Maryland Attorney General


Bill Schuette
Michigan Attorney General


Lori Swanson
Minnesota Attorney General

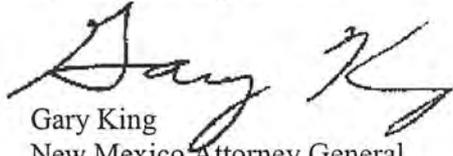

Jim Hood
Mississippi Attorney General


Chris Koster
Missouri Attorney General

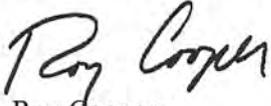

Tim Fox
Montana Attorney General



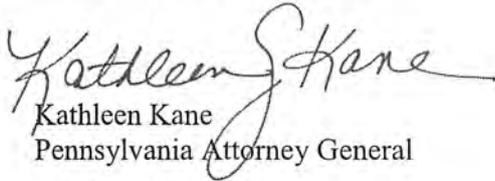
Catherine Cortez Masto
Nevada Attorney General



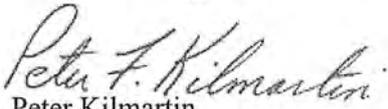
Gary King
New Mexico Attorney General



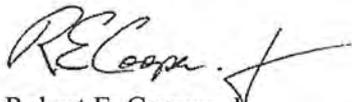
Roy Cooper
North Carolina Attorney General



Kathleen Kane
Pennsylvania Attorney General



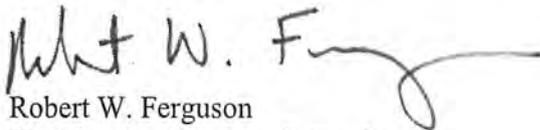
Peter F. Kilmartin
Rhode Island Attorney General



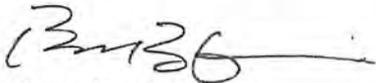
Robert E. Cooper, Jr.
Tennessee Attorney General



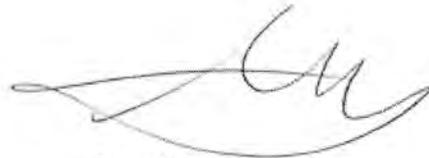
William H. Sorrell
Vermont Attorney General



Robert W. Ferguson
Washington Attorney General



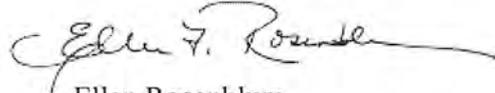
Bruce B. Kim
Hawaii Office of Consumer
Protection Executive Director



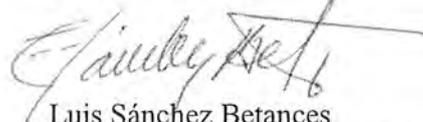
Joseph Foster
New Hampshire Attorney General



Eric T. Schneiderman
New York Attorney General



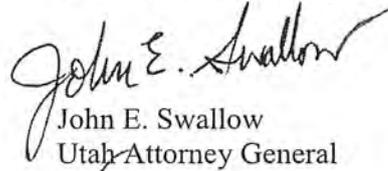
Ellen Rosenblum
Oregon Attorney General



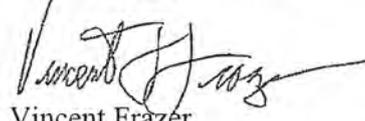
Luis Sánchez Betances
Puerto Rico Attorney General



Marty J. Jackley
South Dakota Attorney General



John E. Swallow
Utah Attorney General



Vincent Frazer
Virgin Islands Attorney General



Peter K. Michael
Wyoming Attorney General

Featured Research

from universities, journals, and other organizations

Study documents secondhand exposure to nicotine from electronic cigarettes

Date: December 12, 2013

Source: Roswell Park Cancer Institute

Summary: Study compared emissions from electronic and conventional cigarettes, and found that secondhand exposure to nicotine from e-cigarettes is on average 10 times less than from tobacco smoke.

Share This

- > Email to a friend
- > Facebook
- > Twitter
- > Google+
- > Print this page
- > More options

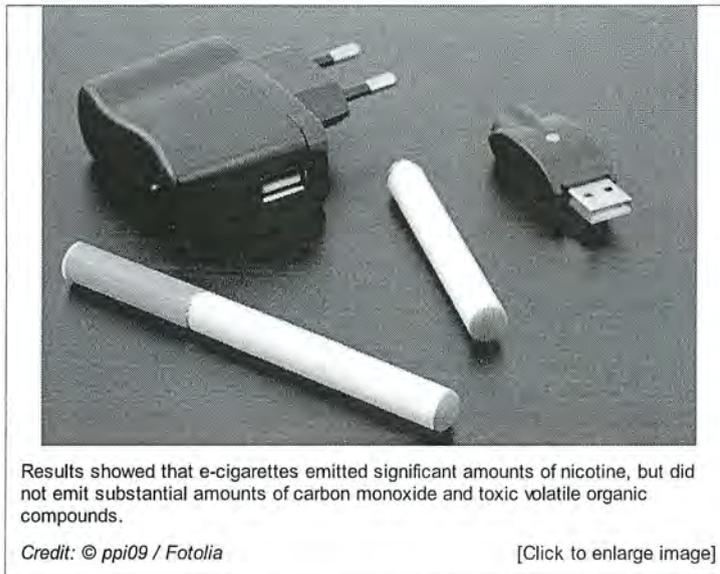
Related Topics

Health & Medicine

- > Smoking
- > Lung Cancer
- > Public Health Education
- > Teen Health
- > Health Policy
- > Pregnancy and Childbirth

Related Articles

- > Tobacco smoking
- > Nicotine
- > Tobacco
- > Smoke
- > Formaldehyde
- > Emphysema



Electronic cigarettes, when used indoors, may involuntarily expose non-users to nicotine, according to a study led by Maciej Goniewicz, PhD, PharmD, of Roswell Park Cancer Institute (RPCI) and published by the journal *Nicotine and Tobacco Research*.

Electronic cigarettes (e-cigarettes) are consumer products designed to generate nicotine aerosol, or vapor, without the combustion of tobacco. When an e-cigarette user takes a puff, the nicotine solution is heated, and the vapor is taken into the lungs. Researchers examined e-cigarette vapor from three different brands of e-cigarettes using a smoking machine in controlled exposure conditions. They also compared secondhand smoke exposure of e-cigarette vapor and tobacco smoke generated by dual users.

Results showed that e-cigarettes emitted significant amounts of nicotine, but did not emit substantial amounts of carbon monoxide and toxic volatile organic compounds. The level of secondhand exposure to nicotine depended on the e-cigarette brand. Additionally, the emissions of nicotine from e-cigarettes were significantly lower than those of conventional tobacco cigarettes. The U.S. Surgeon General found that there is no safe level of secondhand tobacco smoke, but has not evaluated health risk from secondhand exposure to e-cigarette vapors.

"To our knowledge, this is one of the first studies to measure the air concentrations of nicotine and volatile organic compounds and compare the emissions from electronic and conventional tobacco cigarettes," said Dr. Goniewicz, a researcher and Assistant Professor of Oncology in RPCI's Department of Health Behavior. "Our data suggest

Like 125

Tweet 17

9

Breaking News:

Urban Land, Humans Increase Songbirds' Illness

THE WILLIS LAW GROUP
A LEGAL DEFENSE FIRM

Don't Break the Bank.
The Willis Law Group Identifies Core Legal Issues and Diligently Strives to Minimize your Legal Costs.

[LEARN MORE](#)

Related Stories

Electronic Cigarettes Should Be Treated Like Tobacco

Feb 28 2013 — Pennsylvania physicians recommend that electronic cigarettes be treated from a legislative and educational perspective just like tobacco ... > full story

Preteens Surrounded by Smokers Get Hooked on Nicotine, Study Suggests

Jan 13 2011 — Exposure to secondhand smoke can create symptoms of nicotine dependence in non-smoking preteens, according to a new study. The study also found that tweens who repeatedly observe a parent, sibling, ... > full story

Secondhand Smoke May Increase Vulnerability to Nicotine Addiction

May 2, 2011 — Exposure to secondhand smoke, such as a person can get by riding in an enclosed car while someone else smokes, has a direct, measurable impact on the brain -- and the effect is similar to what ... > full story

E-Cigs Less Dangerous Than Traditional Cigarettes, Researcher Claims

Dec 16 2010 — In a new report that bucks the concerns raised by the Food and Drug Administration, a researcher concludes that electronic cigarettes are much safer than real cigarettes and show promise in the fight ... > full story

'Safe' Cigarettes Are as Hazardous as Tobacco, Researchers Demonstrate

May 2 2010 — Using a technique they developed to document the harmful effects of tobacco products, researchers have found that so-called "safer" cigarettes made without tobacco or nicotine may be more ... > full story

> more related stories

Trending Topics

from the past week

Health & Medicine

- > Gynecology
- > Pregnancy and Childbirth



that secondhand exposure to nicotine from e-cigarettes is on average 10 times less than from tobacco smoke. However, more research is needed to evaluate the health consequences of secondhand exposure to nicotine from e-cigarettes, especially among vulnerable populations including children, pregnant women and people with cardiovascular conditions."

Study observations also include: • This study focused on nicotine and a limited number of chemicals released from e-cigarettes. Future research should explore emissions and exposures to other toxins and compounds identified in e-cigarettes such as formaldehyde, acetaldehyde and acrolein. • Data also are needed to determine whether secondhand exposure to e-cigarette vapors results in reinforcement of nicotine addiction. • More research is needed to investigate whether the vapor from e-cigarettes is deposited on surfaces to form 'thirdhand' e-cigarette vapor.

"Questions remain regarding the health impact of e-cigarettes among smokers and nonsmokers. It remains unclear whether young people will see e-cigarette use as a social norm and if e-cigarettes will be used as sources of nicotine in places with smoking bans, thus circumventing tobacco-free laws," said Andrew Hyland, PhD, Chair of the Department of Health Behavior at RPCI. "This study and others can guide policymakers as decisions are made about the regulation of the nicotine delivery devices."

Story Source:

The above story is based on materials provided by Roswell Park Cancer Institute. Note: Materials may be edited for content and length.

Journal Reference:

1. J. Czogala, M. L. Goniewicz, B. Fidelus, W. Zielinska-Danch, M. J. Travers, A. Sobczak. **Secondhand Exposure to Vapors From Electronic Cigarettes.** *Nicotine & Tobacco Research*, 2013; DOI: 10.1093/ntr/ntt203

Cite This Page:

MLA APA Chicago

Roswell Park Cancer Institute. "Study documents secondhand exposure to nicotine from electronic cigarettes." ScienceDaily. ScienceDaily, 12 December 2013. <www.sciencedaily.com/releases/2013/12/131212141948.htm>.

Share This

- > Email to a friend
- > Facebook
- > Twitter
- > Google+
- > Print this page
- > more options

Want To Quit Cigarettes?

www.pfizer.com/SmokingCessation

Discover A Prescription Medicine That May Help You Quit Smoking.

- > Epigenetics
- > Menopause
- > Kidney Disease
- > Lymphoma
- > STD
- > Urology

Mind & Brain

- > Depression
- > Gender Difference
- > ADD and ADHD
- > Addiction
- > Multiple Sclerosis
- > Social Psychology
- > Stroke
- > Borderline Personality Disorder

Living & Well

- > Pregnancy and Childbirth
- > Staying Healthy
- > Teen Health
- > Gender Difference
- > Relationships
- > Sexual Health
- > Fertility
- > Parenting



**THE WILLIS
LAW GROUP**
A LEGAL DEFENSE FIRM



**Don't Break
the Bank.**

The Willis Law Group
Identifies Core Legal Issues
and Diligently Strives to
Minimize your Legal Costs.



LEARN MORE

In Other News

... from NewsDaily.com

Science News

- > Germany to abstain in EU vote on new GMO maize
- > Wide gap between New Delhi, Beijing smog policies
- > Bill Nye: Bible doesn't tell Earth's true history
- > Bears, eagles, seals: How endangered animals fare
- > Rare owl stolen from Washington bird sanctuary

Health News

- > Dutch gene therapy pioneer raises \$82 million in U.S. IPO
- > As quality control violations rise, FDA chief heads to India
- > US drugstore giant CVS to stop selling cigarettes
- > US drugstore giant CVS to remove cigarettes from store shelves
- > India's Ranbaxy faces more regulatory scrutiny after U.S. ban

Environment News

- > U.S. Farm Belt digging out from snowstorm; cold spell ahead
- > 2013 sixth-hottest year, confirms long-term warming: UN
- > Global wind capacity up 12.4 percent in 2013: industry data
- > Cargo ship breaks up off French coast
- > 2013 sixth hottest year, confirms long-term warming: UN

Technology News

- > Many U.S. companies lax with data security: Illinois Atty General
- > Nadella must renew the world's faith in Microsoft
- > New Microsoft chief underlines Indian-bred success abroad
- > EU accepts Google anti-trust pledges
- > Exclusive: Former HP stars Bradley, Donatelli on

More Health & Medicine News

Wednesday, February 5, 2014

Featured Research

from universities, journals, and other organizations

Meal Times Could Have a Significant Effect on the Levels of Triglycerides in the Liver

Feb. 5, 2014 — New findings in mice suggest that merely changing meal times could have a significant effect on the levels of triglycerides in the liver. The results of this study not only have important ... > [full story](#)

- > Mice; Liver Disease; Cholesterol; Triglycerides

- > Meal Times: Significant Effect On Health?
- > Cat Bites On Hand: Hospitalization Common
- > Autism Clues: Attention Gene in Chimps
- > Predicting Cardiovascular Events in Sleep Apnea
- > Brain Study: We Take Risks, Can't Stop
- > Mental Health Pros: Better With Experience
- > Obesity in Men Linked to Colon Cancer Risk
- > New Fruitfly Sleep Gene Promotes Need to Sleep
- > Shivering, Exercise Converts White Fat to Brown
- > Lyme Disease Rash Helps Predict Bacteria Spread

[View all stories](#) | [older top stories](#) >

Featured Videos

from AP, Reuters, AFP, and other news services



CVS Pharmacies Pull Tobacco Products / Jdar Sage From US Stores



Launch



Too Much Sugar Could Triple Heart Disease Death Risk



FDA Targets Teens in New Anti-Smoking Ads

Save/Print: [Print icon] [Share icon] Share: [Email icon] [Facebook icon] [Twitter icon] [Google+ icon] [More icon]

Subscribe for Free

Get the latest Health & Medicine News:

- > [Email icon] Email Newsletter
- > [RSS icon] RSS Feed

Search ScienceDaily

Number of stories in archives: 140,361

Find with keyword(s):

Search

Enter a keyword or phrase to search ScienceDaily for related topics and research stories.

About Nicotine Withdrawal

www.pfizer.com/SmokingCessation

Learn More & Discover An Rx Option That May Help You Quit Smoking.

Free Subscriptions

Get the latest science news with ScienceDaily's free email newsletters, updated daily and weekly. Or view hourly updated newsfeeds in your RSS reader:

- > [Email icon] Email Newsletters
- > [RSS icon] RSS Feeds

Get Social & Mobile

Keep up to date with the latest news from ScienceDaily via social networks and mobile apps:

- > [Facebook icon] Facebook
- > [Twitter icon] Twitter
- > [Google+ icon] Google+
- > [Apple icon] iPhone
- > [Android icon] Android
- > [Web icon] Web

Have Feedback?

Tell us what you think of ScienceDaily -- we welcome both positive and negative comments. Have any problems using the site? Questions?

- > [Speech bubble icon] Leave Feedback
- > [Phone icon] Contact Us

[About ScienceDaily](#) | [Editorial Staff](#) | [Awards & Honors](#) | [Contribute News](#) | [Advertise with Us](#) | [Privacy Policy](#) | [Terms of Use](#)
 Copyright 2013 by ScienceDaily, LLC. or by third-party licensors, whose rights are hereby acknowledged. All rights reserved by their respective owners.
 Content on this website is for informational purposes only. It is not intended to provide medical or other professional advice.
 Views expressed here do not necessarily reflect those of ScienceDaily, its staff, its contributors, or its partners.

Mobile: iPhone Android Web

Follow: Facebook Twitter Google+

Subscribe: RSS Feeds Email Newsletters

HEALTH PHYSICAL/TECH ENVIRONMENT

SOCIETY/EDUCATION QUIRKY

Enter keyword or phrase ...

Search

Featured Research

from universities, journals, and other organizations

Electronic cigarettes are unsafe and pose health risks, study finds

Date: December 5, 2010

Source: University of California - Riverside

Summary: How safe are electronic cigarettes or "e-cigarettes"? To address this question, researchers evaluated five e-cigarette brands and found design flaws, lack of adequate labeling, and several concerns about quality control and health issues. They conclude that e-cigarettes are potentially harmful and urge regulators to consider removing e-cigarettes from the market until their safety is adequately evaluated.

Share This

- > Email to a friend
- > Facebook
- > Twitter
- > Google+
- > Print this page
- > More options

Related Topics

Health & Medicine

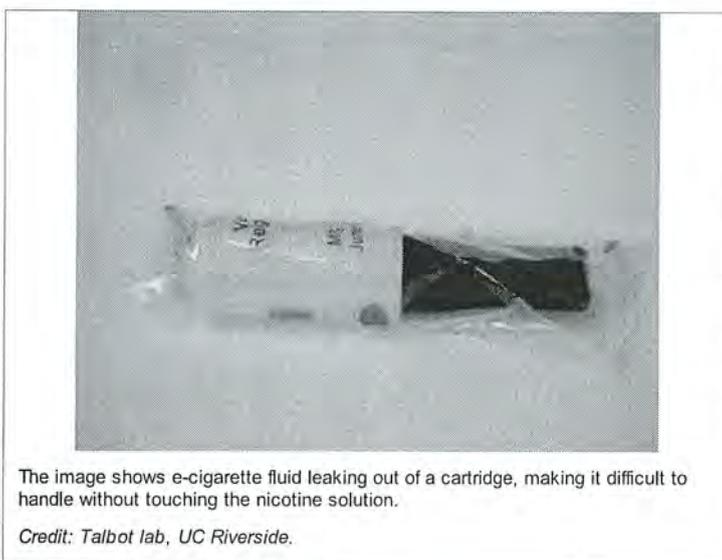
- > Smoking
- > Lung Cancer
- > Public Health Education

Plants & Animals

- > Soil Types
- > Biology
- > Food

Related Articles

- > Tobacco smoking
- > Placenta
- > Meat analogue
- > Obesity
- > Indoor air quality
- > Public health



The image shows e-cigarette fluid leaking out of a cartridge, making it difficult to handle without touching the nicotine solution.

Credit: Talbot lab, UC Riverside.

Electronic cigarettes (or e-cigarettes), also called "electronic nicotine delivery systems," are increasingly used worldwide even though only sparse information is available on their health effects. In the United States, e-cigarettes are readily available in shopping malls in most states and on the Internet. But how safe are e-cigarettes?

To address this question, researchers at the University of California, Riverside evaluated five e-cigarette brands and found design flaws, lack of adequate labeling, and several concerns about quality control and health issues. They conclude that e-cigarettes are potentially harmful and urge regulators to consider removing e-cigarettes from the market until their safety is adequately evaluated.

Unlike conventional cigarettes, which burn tobacco, e-cigarettes vaporize nicotine, along with other compounds present in the cartridge, in the form of aerosol created by heating, but do not produce the thousands of chemicals and toxicants created by tobacco combustion. Nothing is known, however, about the chemicals present in the aerosolized vapors emanating from e-cigarettes.

"As a result, some people believe that e-cigarettes are a safe substitute for conventional cigarettes," said Prue Talbot, the director of UC Riverside's Stem Cell Center, whose lab led the research. "However, there are virtually no scientific studies on e-cigarettes and their safety. Our study -- one of the first studies to evaluate e-cigarettes -- shows that this product has many flaws, which could cause serious public health problems in the future if the flaws go uncorrected."

Study results appear in this month's issue of *Tobacco Control*.

Talbot, a professor of cell biology and neuroscience, was joined in the study by Anna Trchounian, the first author of the research paper. Together, they examined the design, accuracy and clarity of labeling, nicotine content, leakiness, defective parts, disposal, errors in filling orders, instruction manual quality and advertizing for the

Like 209

Tweet 31

2

Breaking News:

Jackdaw Birds Communicate With Their Eyes



THE WILLIS LAW GROUP
A LEGAL DEFENSE FIRM

Don't Break the Bank.

The Willis Law Group Identifies Core Legal Issues and Diligently Strives to Minimize your Legal Costs.



LEARN MORE

Related Stories



Doctors Unaware That More Teens Turning to E-Cigarettes

Dec 12 2013 — Many clinicians are unfamiliar with or uncomfortable with addressing the use of e-cigarettes with their young patients, finds a new ... > full story

Electronic Cigarettes Should Be Treated Like Tobacco

Feb 19 2013 — Pennsylvania physicians recommend that electronic cigarettes be treated from a legislative and educational perspective just like tobacco ... > full story

What Should You Know About E-Cigarettes?

Oct 23 2013 — E-cigarettes are becoming increasingly popular and widely available as the use of regular cigarettes drops. Recently, the Centers for Disease Control and Prevention (CDC) reported that e-cigarette ... > full story

Electronic Cigarettes Hold Promise as Aid to Quitting, Study Finds

Feb 7 2011 — Researchers report that electronic cigarettes are a promising tool to help smokers quit, producing six-month abstinence rates nearly double those for traditional nicotine replacement ... > full story

E-Cigs Less Dangerous Than Traditional Cigarettes, Researcher Claims

Feb 19 2010 — In a new report that bucks the concerns raised by the Food and Drug Administration, a researcher concludes that electronic cigarettes are much safer than real cigarettes and show promise in the fight ... > full story

> more related stories

Trending Topics

from the past week

Health & Medicine

- > Gynecology
- > Pregnancy and Childbirth
- > Epigenetics

Nicotine Withdrawal Signs

www.pfizer.com/S...

Learn More & Discover An Rx Option That May Help You Quit Smoking.

following brands of e-cigarettes: NJOY, Liberty Stix, Crown Seven (Hydro), Smoking Everywhere (Gold and Platinum) and VapCigs.

Their main observations are that:

- Batteries, atomizers, cartridges, cartridge wrappers, packs and instruction manuals lack important information regarding e-cigarette content, use and essential warnings;
- E-cigarette cartridges leak, which could expose nicotine, an addictive and dangerous chemical, to children, adults, pets and the environment;
- Currently, there are no methods for proper disposal of e-cigarettes products and accessories, including cartridges, which could result in nicotine contamination from discarded cartridges entering water sources and soil, and adversely impacting the environment; and
- The manufacture, quality control, sales, and advertisement of e-cigarettes are unregulated.

The study was funded by a grant to Talbot from the University of California Tobacco-Related Disease Research Program (TRDRP).

"More research on e-cigarettes is crucially needed to protect the health of e-cigarette users and even those who do not use e-cigarettes," said Kamlesh Asotra, a research administrator at UC TRDRP. "Contrary to the claims of the manufacturers and marketers of e-cigarettes being 'safe,' in fact, virtually nothing is known about the toxicity of the vapors generated by these e-cigarettes. Until we know any thing about the potential health risks of the toxins generated upon heating the nicotine-containing content of the e-cigarette cartridges, the 'safety' claims of the manufactureres are dubious at best.

"Justifiably, more information about the potential toxic and health effects of e-cigarette vapors is necessary before the public can have a definitive answer about the touted safety of e-cigarettes. Hopefully, in the near future, scientists can provide firm evidence for or against the claimed 'safety' of e-cigarettes as a nicotine-delivery tool."

About electronic cigarettes:

E-cigarettes consist of a battery, a charger, a power cord, an atomizer, and a cartridge containing nicotine and propylene glycol. When a smoker draws air through an e-cigarette, an airflow sensor activates the battery that turns the tip of the cigarette red to simulate smoking and heats the atomizer to vaporize the propylene glycol and nicotine. Upon inhalation, the aerosol vapor delivers a dose of nicotine into the lungs of the smoker, after which, residual aerosol is exhaled into the environment.

Story Source:

The above story is based on materials provided by University of California - Riverside. Note: Materials may be edited for content and length.

Cite This Page:

MLA APA Chicago

University of California - Riverside. "Electronic cigarettes are unsafe and pose health risks, study finds." ScienceDaily. ScienceDaily, 5 December 2010. <www.sciencedaily.com/releases/2010/12/101203141932.htm>.

Share This

- > Email to a friend
- > Facebook
- > Twitter
- > Google+
- > Print this page
- > more options

MyFax Online Fax Service

www.myfax.com/FreeTrial

Send & Receive Faxes Through Email. Only \$10/Month, Get a 30 Day Trial!

- > Menopause
- > Kidney Disease
- > Lymphoma
- > STD
- > Urology

Mind & Brain

- > Depression
- > Gender Difference
- > ADD and ADHD
- > Addiction
- > Multiple Sclerosis
- > Social Psychology
- > Stroke
- > Borderline Personality Disorder

Living & Well

- > Pregnancy and Childbirth
- > Staying Healthy
- > Teen Health
- > Gender Difference
- > Relationships
- > Sexual Health
- > Fertility
- > Parenting

In Other News

... from NewsDaily.com

Science News

- > Wide gap between New Delhi, Beijing smog policies
- > Bill Nye: Bible doesn't tell Earth's true history
- > Bears, eagles, seals: How endangered animals fare
- > Rare owl stolen from Washington bird sanctuary
- > Corbett's 4th budget takes risks to boost spending

Health News

- > Merck Q4 net drops 14 pct. on generic competition
- > GlaxoSmithKline signals better 2014 as drug R&D improves
- > CVS Caremark plans to stop tobacco products sales
- > CVS to become first major U.S. drugstore to drop cigarettes
- > Polio vaccination starts in Syria's besieged Yarmuk camp

Environment News

- > 2013 sixth hottest year, confirms long-term warming; UN
- > Global wind capacity up 12.4 percent in 2013: industry data
- > Bloomberg to plug mayors' climate progress to motivate world leaders
- > California lawmakers preparing \$644 mln drought relief bill
- > Speed appeal: top male cyclists rated more attractive

Technology News

- > EXCLUSIVE-Former HP stars Bradley, Donatelli on brink of exit -sources
- > U.S. mobile data traffic to jump nearly 8-fold by 2018 -Cisco
- > Time Warner 4Q net income falls 12 pct

More Health & Medicine News

Wednesday, February 5, 2014

Featured Research

from universities, journals, and other organizations

Predicting Cardiovascular Events in Sleep Apnea

Feb. 4, 2014 — Obstructive sleep apnea generally is associated with increased risk for cardiovascular disease. Obstructive sleep apnea is usually measured using the apnea-hypopnea index, the number of times

- > Predicting Cardiovascular Events in Sleep Apnea
- > Brain Study: We Take Risks, Can't Stop
- > Mental Health Pros: Better With Experience
- > Obesity in Men Linked to Colon Cancer Risk
- > New Fruitfly Sleep Gene Promotes Need to Sleep

that ... > full story

> Obstructive Sleep Apnea; Sleep Disorder Research; Sleep Disorders; Insomnia Research

- > Shivering, Exercise Converts White Fat to Brown
- > Lyme Disease Rash Helps Predict Bacteria Spread
- > Device Enables Blind to 'See' Colors, Shapes
- > Testing Nanomedicine On a Microchip
- > Beating Pain and Painkillers: New Treatment

- > Google closes in on deal in EU antitrust case
- > Google improves antitrust offer, EU says deal in sight

| older top stories >

Featured Videos

from AP, Reuters, AFP, and other news services



'Made for iPhone' Hearing Aid Set for Launch



Too Much Sugar Could Triple Heart Disease, Death Risk



High Hopes for Space Grown Stem Cells



Cancer Cases Set to Rise by Half by 2030: UN



Subscribe for Free

Get the latest Health & Medicine News:

- > Email Newsletter
- > RSS Feed



How To Grow Your Lashes

Try this one weird trick and take your lashes to their full potential without a doctor

Search ScienceDaily

Number of stories in archives: 140,361

Find with keyword(s):

Search

Enter a keyword or phrase to search ScienceDaily for related topics and research stories.

Eat THIS... Kill High Blood Pressure

[video]

Save/Print: Share:



Free Subscriptions

Get the latest science news with ScienceDaily's free email newsletters, updated daily and weekly. Or view hourly updated newsfeeds in your RSS reader:

- > Email Newsletters
- > RSS Feeds

Get Social & Mobile

Keep up to date with the latest news from ScienceDaily via social networks and mobile apps:

- > Facebook
- > Twitter
- > Google+
- > iPhone
- > Android
- > Web

Have Feedback?

Tell us what you think of ScienceDaily -- we welcome both positive and negative comments. Have any problems using the site? Questions?

- > Leave Feedback
- > Contact Us

About ScienceDaily | Editorial Staff | Awards & Reviews | Contribute News | Advertise with Us | Privacy Policy | Terms of Use
Copyright 2013 by ScienceDaily, LLC or by third-party sources, where indicated. All rights controlled by their respective owners.
Content on this website is for informational purposes only. It is not intended to provide medical or other professional advice.
Views expressed here do not necessarily reflect those of ScienceDaily, its staff, its contributors, or its partners.

Featured Research

from universities, journals, and other organizations

Perceived benefits of electronic cigarettes may lead to higher experimentation rates

Date: January 8, 2014

Source: Elsevier

Summary: Despite years of anti-smoking education and legislation, tobacco use still remains an important public health issue in the United States. In 2010, 25.2% of all adults and 35.6% of young adults reported current tobacco use. While anti-tobacco efforts continue across the country, the introduction of electronic cigarettes has been marketed as a less harmful alternative to cigarettes and also as a smoking cessation aid.

Share This

- > Email to a friend
- > Facebook
- > Twitter
- > Google+
- > Print this page
- > More options

Related Topics

Health & Medicine

- > Smoking
- > Lung Cancer
- > Mental Health Research
- > Public Health Education
- > Teen Health
- > Children's Health

Related Articles

- > Tobacco smoking
- > Nicotine
- > Tobacco
- > Yoga (alternative medicine)
- > COPD
- > Pear

Despite years of anti-smoking education and legislation, tobacco use still remains an important public health issue in the United States. In 2010, 25.2% of all adults and 35.6% of young adults reported current tobacco use. While anti-tobacco efforts continue across the country, the introduction of electronic cigarettes (e-cigarettes) has been marketed as a less harmful alternative to cigarettes and also as a smoking cessation aid.

E-cigarettes supply nicotine through inhaled water vapor. While the addictiveness and long-term effects of using e-cigarettes as a nicotine delivery system are unknown, many people anecdotally believe that they are safer than traditional tobacco products. According to a new study published in the February issue of the *American Journal of Preventive Medicine*, the belief that e-cigarettes pose less of a health risk may lead to increased experimentation with e-cigarettes among young adults.

Investigators from the Division of Epidemiology and Community Health, University of Minnesota looked at whether or not there was a relationship between perceived notions about the harmfulness of e-cigarettes relative to cigarettes and subsequent e-cigarette use among young adults. Investigators surveyed 1379 participants from the Minnesota Adolescent Community Cohort who had never used e-cigarettes. The initial baseline survey explored their opinions about e-cigarettes and their effect on health relative to cigarettes or their usefulness as an aid to stop smoking. Then, a follow-up survey conducted one year later asked participants if they had experimented with e-cigarettes.

"Participants who agreed e-cigarettes can help people quit smoking and those who agreed that e-cigarettes are less harmful than cigarettes were more likely than those who did not agree to subsequently report experimenting with e-cigarettes. These associations did not vary by gender or smoking status," says study lead author Kelvin Choi, PhD.

Specifically, the follow-up study found that 7.4% of participants who had never used an e-cigarette at baseline reported subsequently using an e-cigarette, with 21.6% among baseline current smokers, 11.9% among baseline former smokers, and 2.9% among baseline nonsmokers reporting use.

"The study showed that 2.9% of baseline nonsmokers in this U.S. regional sample of young adults reported ever using e-cigarettes at follow-up, suggesting an interest in e-cigarettes among nonsmoking young adults," explains Dr. Choi. "This is problematic because young adults are still developing their tobacco use behaviors, and e-cigarettes may introduce young adults to tobacco use, or promote dual use of cigarettes and smokeless tobacco products."

While the risks associated with long-term e-cigarette use are largely unknown, recent studies suggest that they can significantly increase plasma nicotine levels, which means they are potentially as addictive as cigarettes. "This study also suggested that about 12% of former young adults smokers at baseline were re-introduced to nicotine through e-cigarettes. Future prospective studies including adults of all ages are needed to confirm these findings related to e-cigarette use among nonsmokers and former smokers, and to determine the role of e-cigarettes on relapse of smoking," adds Dr. Choi.

This link between beliefs about e-cigarettes and subsequent experimentation can be used to guide future anti-nicotine and anti-smoking campaigns that encompass the new technology of e-cigarettes. "Understanding the specific beliefs that predict subsequent e-cigarette experimentation allows us to focus on these beliefs when

Like

Tweet 12

+1 0

Related Stories

44% of Adults Worry E-Cigarettes Will Encourage Kids to Start Smoking Tobacco

— Adults nationwide are concerned about the use of e-cigarettes by children and teens, with 44 percent indicating worries that the devices will encourage kids to use tobacco ... > full story

Electronic Cigarettes Should Be Treated Like Tobacco

— Pennsylvania physicians recommend that electronic cigarettes be treated from a legislative and educational perspective just like tobacco ... > full story

Researchers to Study How Young Adults Use E-Cigarettes, Snus

— Researchers are studying how young adults use hookahs, snus, electronic cigarettes, and other new tobacco ... > full story

Electronic Cigarettes Hold Promise as Aid to Quitting, Study Finds

— Researchers report that electronic cigarettes are a promising tool to help smokers quit, producing six-month abstinence rates nearly double those for traditional nicotine replacement ... > full story

E-Cigs Less Dangerous Than Traditional Cigarettes, Researcher Claims

— In a new report that bucks the concerns raised by the Food and Drug Administration, a researcher concludes that electronic cigarettes are much safer than real cigarettes and show promise in the fight ... > full story

> more related stories

Trending Topics

from the past week

Health & Medicine

- > Gynecology
- > Pregnancy and Childbirth
- > Epigenetics
- > Menopause

designing public health messages," concludes Dr. Choi. "Results from this study suggest that messages about the lack of evidence on e-cigarettes being cessation aids, and the uncertainty of the risks associated with e-cigarette use may discourage young adults, particularly young adult nonsmokers and former smokers, from experimenting with e-cigarettes."

Story Source:

The above story is based on materials provided by Elsevier. Note: Materials may be edited for content and length.

Journal Reference:

- 1. Kelvin Choi, PhD; Jean L. Forster, PhD. Beliefs and Experimentation with Electronic Cigarettes: A Prospective Analysis Among Young Adults. *American Journal of Preventive Medicine*, February 2014

Cite This Page:

MLA APA Chicago

Elsevier. "Perceived benefits of electronic cigarettes may lead to higher experimentation rates." ScienceDaily. ScienceDaily, 8 January 2014. <www.sciencedaily.com/releases/2014/01/140108081035.htm>.

Share This

- > Email to a friend
- > Facebook
- > Twitter
- > Google+
- > Print this page
- > more options

Ready To Quit Smoking?

www.pfizer.com/SmokingCessation

Learn About A Non-Nicotine Rx Pill That May Help You Quit Smoking.

- > Kidney Disease
- > Lymphoma
- > STD
- > Urology

Mind & Brain

- > Depression
- > ADD and ADHD
- > Child Psychology
- > Learning Disorders
- > Infant and Preschool Learning
- > Steroids
- > Addiction
- > Alcoholism

Living & Well

- > Teen Health
- > Parenting
- > Pregnancy and Childbirth
- > Staying Healthy
- > Cosmetic Surgery
- > Fertility
- > Gender Difference
- > Sexual Health



2014 Porsche Cayman Base

Great Deal

\$57,880

VIEW



2006 Porsche 911 Carrera S ...

Great Deal

\$44,000

VIEW

More Health & Medicine News

Wednesday, February 5, 2014

Featured Research

from universities, journals, and other organizations

Predicting Cardiovascular Events in Sleep Apnea

Feb. 4, 2014 — Obstructive sleep apnea generally is associated with increased risk for cardiovascular disease. Obstructive sleep apnea is usually measured using the apnea-hypopnea index, the number of times that ... > full story

- > Obstructive Sleep Apnea; Sleep Disorder Research; Sleep Disorders; Insomnia Research

- > Predicting Cardiovascular Events in Sleep Apnea
- > Brain Study: We Take Risks, Can't Stop
- > Mental Health Pros: Better With Experience
- > Obesity in Men Linked to Colon Cancer Risk
- > New Fruitfly Sleep Gene Promotes Need to Sleep
- > Shivering, Exercise Converts White Fat to Brown
- > Lyme Disease Rash Helps Predict Bacteria Spread
- > Device Enables Blind to 'See' Colors, Shapes
- > Testing Nanomedicine On a Microchip
- > Beating Pain and Painkillers: New Treatment

older top stories >

Featured Videos

from AP, Reuters, AFP, and other news services



'Made for iPhone' Hearing Aid Set for Launch



Too Much Sugar Could Triple Heart Disease, Death Risk



High Hopes for Space Grown Stem Cells



Cancer Cases Set to Rise by Half by 2030: UN

In Other News

... from NewsDaily.com

Science News

- > Bears, eagles, seals: How endangered animals fare
- > Rare owl stolen from Washington bird sanctuary
- > Corbett's 4th budget takes risks to boost spending
- > Bill Nye defends evolution in Kentucky debate
- > DuPont adds weather, new trading to precision farming program

Health News

- > Chinese scientists sound warning over new bird flu
- > New wave of heroin claims Hoffman and others
- > Boxing, MMA meet to support head injury research
- > Brain-dead Canadian woman kept on life support to save fetus
- > Child traffic deaths drop 43 percent over decade

Environment News

- > Bloomberg to plug mayors' climate progress to motivate world leaders
- > California lawmakers preparing \$644 million drought relief bill
- > Speed appeal: top male cyclists rated more attractive
- > 400 dolphins dead on Peru beaches
- > Oregon minnow to be first U.S. fish delisted because of recovery

Technology News

- > Was Microsoft smart to play it safe with CEO pick?
- > Pope's Latin tweets surprise with roaring success
- > 'Orwellian' Internet curbs go before Turkish parliament
- > Twitter faces critical earnings test
- > Sony in talks to sell loss-making Vaio PC business: source

Subscribe for Free

E-cigarettes' growing popularity poses danger to kids

Laura Ungar, The (Louisville, Ky.) Courier-Journal 6 a.m. EST January 5, 2014

Scientists are raising concerns about the effects of e-cigarettes' "secondhand vapor" on children.



(Photo: Michael Clevenger, The (Louisville, Ky.) Courier-Journal)

SHARE

622
CONNECT

<https://twitter.com/intent/tweet?url=http://usat.ly/1dmsF5U&text=E-cigarettes%20growing%20>

147
TWEET

LOUISVILLE, Ky. -- Billed as a safer, cleaner way to get a nicotine fix, electronic cigarettes are surging in popularity. But some doctors and researchers say these smoking substitutes are far from harmless — especially to children.

More teens are trying these products, even as scientists increasingly raise concerns about the effects of e-cigarettes' "secondhand vapor" on children.

In addition, the liquid nicotine used in the devices, which comes in flavors such as bubblegum and cola, is being blamed for a growing number of poisonings across the nation.

"Accidental exposure by children to e-cigarettes is a public health concern that we need to take seriously," said LaQuandra Nesbitt, director of the Louisville Metro Department of Public Health and Wellness, which will soon recommend age restrictions on the devices. "Parents need to be aware of the potential dangers to their children."

The battery-operated units contain cartridges filled with nicotine, flavor and other chemicals, which are heated to create a vapor inhaled by the user. Starter kits can cost \$60-\$80, five-packs of cartridges can run around \$10, and sales of e-cigarettes have doubled to more than \$1.5 billion in the past year.

But problems among children also have risen.

Ashley Webb, director of the Kentucky Regional Poison Control Center of Kosair Children's Hospital, said the center received more than 40 calls involving e-cigarette poisonings in 2013, up from nine in 2012 and one in 2010. Nationally, there were 427 such exposures in 2012, according to the latest annual report from the National Poison Data System. Meanwhile, the 2012 National Youth Tobacco Survey shows that recent e-cigarette use nearly doubled in one year among U.S. high school students, rising from 1.5% in 2011 to 2.8% smoking them in 2012.

While Indiana prohibits sales of e-cigarettes to minors, Kentucky and the federal government do not. But a soon-to-be-released report from the Louisville health department recommends restricting the sale of e-cigarettes to Jefferson County minors.

The U.S. Food and Drug Administration is also considering whether to regulate e-cigarettes. The agency issued a warning in 2009 that the devices were being marketed to youth, but does not regulate the products unless they make therapeutic claims.

"It's really up to individual store owners not to sell to children," said Troy LeBlanc, owner of Derb E Cigs in Jeffersontown, who won't sell to anyone younger than 18. "I wouldn't be opposed to government age restrictions."

LeBlanc said e-cigarettes can be beneficial for adults, helping them quit tobacco smoking, which is documented to be more dangerous.

Ray Story, chief executive officer of the Tobacco Vapor Electronic Cigarette Association, agreed they're an effective smoking substitute, saying the industry designs and markets the devices for adults. He said the vapor is harmless, and it's up to adults to keep children from the e-liquid, which can sicken them.

"At the end of the day, everything's attractive to kids," Story said. "If you're an adult, it's a matter of choice. But we have to safeguard those who don't have the ability to safeguard themselves."

Webb said parents often don't think of nicotine as a poison, so they may leave liquid e-cigarette cartridges within reach of children.



The warning label on the e-cigarette fluid states "Must be 18 years or older to purchase, contains nicotine," and "Keep out of children's reach." (Photo: Michael Clevenger, The (Louisville, Ky.) Courier-Journal)

Children are getting ahold of e-cigarettes and taking them apart, she said. "They either ingest the liquid or get it onto their skin. Even on the skin, the nicotine is absorbed."

She said toddlers and preschoolers sometimes lick the containers or drink the liquid, enticed by the flavoring.

"Kids will eat most anything," said George Rodgers, associate medical director of the poison control center.

Ingesting e-liquid can give children a harmful or even deadly dose of nicotine. Rodgers said many cartridges contain more than 14 milligrams, enough to cause harm.

"And since children are not used to consuming nicotine, their symptoms may be more severe at lower levels," he said.

Symptoms include hyperactivity, flushing, sweating, headache, dizziness, rapid heart rate, vomiting and diarrhea. Even small amounts on a child's skin can cause irritation and a burning sensation. In very severe cases, a child's heart rate and blood pressure may drop dangerously low, resulting in a coma or even death.

Webb said there have been no deaths so far among cases her center has handled, but children have ended up in the emergency room.

Story said his organization has pushed for safety packaging, and e-liquid refills come with tamper-evident caps.

LeBlanc said some of his products now come with child-resistant caps, and "we're transferring everything to child-resistant."

"All of our liquids have a warning on them to keep out of the reach of children," he added.

Jenny Haliski, an FDA spokeswoman, said federal regulations now apply only to conventional cigarettes and other tobacco products, but her agency is considering new rules that may cover e-cigarettes.

Stephen Wright, Kosair hospital's medical director, said people should be cautious.

"Since the industry is still so new, we don't yet know all of the long-term health effects of e-cigarettes to the user, in addition to any effects of secondhand vapor," he said. "We do know that not smoking anything — especially around children — is always the best bet."

SHARE

622
CONNECT

147

TWEET

[https://twitter.com/intent/tweet?url=http://usat.ly/1dmsF5U&text=E-cigarettes%20growing%20popularity%20poses%20danger%](https://twitter.com/intent/tweet?url=http://usat.ly/1dmsF5U&text=E-cigarettes%20growing%20popularity%20poses%20danger%20)

Medical Daily

Search all of MD

SEARCH

HOME US / WORLD CONSUMER NEWS POLICY / BIZ SCIENCE / TECH DRUGS HEALTHY LIVING CONDITIONS

TOURMALINE-AL1



Do You Have Relapsed and/or Refractory AL Amyloidosis?
We are now recruiting participants for the Tourmaline phase 3 study.

MILLENNIUM
THE NATURE HEALTHCARE COMPANY

LEARN MORE +

HOME > HEALTHY LIVING

E-Cigarettes Expose Non-Smokers To Significant Nicotine Emission; Dangers Remain Unknown

By Sabrina Bachai | Dec 15, 2013 03:23 PM EDT

E-Mail Print

TAGS nicotine, e-cigarettes, smoking, cigarettes

0 Currently, there are about four million Americans who use battery powered cigarettes, according to the Tobacco Vapor Electronic Cigarette Association. And for the past several years the e-cigarette craze has become increasingly popular because of its [convenience](#). The battery-powered devices, however, may have negative effects for those who are around the person smoking.



(Shutterstock.) Smoking e-cigarettes could have negative effects for those exposed to second-hand smoke, however, the risks are only regarding nicotine exposure.

MUTE

1
0
Share According a new study in the journal *Nicotine and Tobacco Research*, e-cigarette smoke exposes non smokers to significant amounts of nicotine through the air. The risks of second-hand nicotine remain unstudied, according to the study.

The study was conducted using three brands of e-cigarettes, and the researchers looked into what their smoke was releasing into the air. They found that the second-hand smoke had high concentrations of nicotine, but it did not contain other harmful chemicals. Scientists used a smoke machine to simulate the smoking of a cigarette, and measured the concentrations of nicotine and other compounds such as carbon monoxide. Five male participants were then asked to smoke both tobacco and e-cigarettes in a room that measured contaminant exposure. While the nicotine emissions were 10 times less in e-cigarettes versus regular tobacco, they still proved to be a significant source of second-hand exposure. But, unlike conventional cigarettes, carbon monoxide and other volatile compounds were not released.

The study backs up previous data gathered by the U.S. Food and Drug Administration (FDA). "The FDA report found nine contaminants versus the 11,000 contained in a tobacco cigarette, and noted that the level of toxicity was shown to be far lower than those of tobacco cigarettes," ABC News reported. Nevertheless, long-term use could still

TOURMALINE-AL1



Do You Have Relapsed and/or Refractory AL Amyloidosis?

We are now recruiting participants for the Tourmaline phase 3 study.

MILLENNIUM
THE NATURE HEALTHCARE COMPANY

LEARN MORE +

MOST POPULAR STORIES

How Do Cancer Cells Thrive When Starved For Oxygen?



Drug Candidate Carbavance May Protect America From Terror, Drug-Resistant Bacteria



15 Minutes Of Shivering May Have Same Effect As 1 Hour Of Exercise



pose a threat. Even though the threat of other chemical compounds is only present in a very limited fashion, inhaling nicotine may still pose health risks — we just don't know.

In a section of the study called "Unanswered Questions and Future Research," the authors call for a deeper analysis of whether secondhand nicotine inhalation could be harmful for at risk populations. "We found no publications on the cardiovascular effects of passive exposure to e-cigarette vapors or on the health effects of secondhand exposure to e-cigarette vapors among vulnerable population, including children, pregnant women, and people with cardiovascular conditions," the authors write.

Follow Us Like Follow

The American Cancer Society (ACS) believes that inhaling anything but natural air has side effects, but the organization is not quite sure how harmful these effects will be in the future. "Studies have shown that e-cigarettes can cause short-term lung changes that are much like those caused by regular cigarettes," the ACS writes on its website. "But long-term health effects are still unclear."

Source: Sobczak A, Travers M, Czogala J, et al. Secondhand Exposure to Vapors From Electronic Cigarettes. *Nicotine & Tobacco Research*. 2013.

E-Mail Print

Like Tweet Share 1

FROM AROUND THE WEB



Don't risk a cent in bitcoin, stocks, bonds, ETFs, gold, or property until you see this urgent video



401(k) money managers desperately hope you don't find out about this - free video reveals why



JFK and FDR had 1 weird trick that can let you retire 100% tax-free.



Why millionaires are now shunning bitcoin for this alternative currency.



"These Foods Kill Your Brain"



2013: The Best Sunless Tanners: You Won't Believe The Results



Women have been urged to cease posting these kinds of photos on social media.



The FDA has approved a solution for snoring & sleep apnea that does not require a cumbersome CPAP.

ADVERTISEMENT

Bird Flu Virus's Genetic Makeup Disrobed By Scientists



McDonald's Canada Gives Tour Of Chicken Nugget Facility [VIDEO]



Why It's Important To Turn Your Engine Off Before Getting It On



Device Uses Sponges To Seal Gunshot Wounds In 15 Seconds



LATEST

Epidurals Can Increase Delivery Time By Up To 2 Hours



Hospitals Make Their Own Rules, Then Break Them



Food Blogger Demands Subway Remove Chemical From Bread, Chain Claims It Took Action Before Petition [VIDEO]



Teen With Autism Asks Ellen To Prom: 'Say Yes To Esteban!' [VIDEO]



Top Trends

1 Comment Medical Daily



- 1 Depression
- 2 Immune System
- 3 Genetics
- 4 Cancer
- 5 Dementia
- 6 Alzheimer's
- 7 Anxiety Disorder
- 8 Sexual Health
- 9 Tuberculosis
- 10 Addiction

Sort by Newest

Stagnant Report



Join the discussion...



Pope of Parma · 2 months ago

I still don't wish to inhale vapor produced by others around me, just as I feel that they don't have to inhale exhaust from me, no matter what the composition may be. I wouldn't bring spray cans of paint indoors and begin painting away either, legal as it may be.

1 ^ | 1 < · Reply · Share



IN CASE YOU MISSED IT...

Consumer News



Music Study Does Not Make Children Smarter

Drugs



Insulin Pill Is Breakthrough In Diabetes Treatment, Provides New Way For Body To Lower Blood Glucose

US/World



Top 7 Craziest Medical Photos Of 2013 [PHOTOS]

Consumer News



Vitamins And Supplements Waste Your Money, Physicians Say

Public Health & Epidemiology

Nicotine & Tobacco Research

ntr.oxfordjournals.org

Nicotine Tob Res (2013) doi: 10.1093/ntr/ntt203

First published online: December 11, 2013

Secondhand Exposure to Vapors From Electronic Cigarettes

Jan Czogala, PhD¹, Maciej L. Goniewicz, PharmD, PhD^{1,2}, Bartłomiej Fidelus, PharmD¹, Wioleta Zielinska-Danch, PhD¹, Mark J. Travers, PhD² and Andrzej Sobczak, PhD^{1,3}

+ Author Affiliations

Corresponding Author: Maciej L. Goniewicz, PhD, Department of Health Behavior, Division of Cancer Prevention and Population Science, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263, USA. Telephone: 716-845-8541; Fax: 716-845-1265; E-mail: maciej.goniewicz@roswellpark.org

Received July 5, 2013.

Accepted November 10, 2013.

Abstract

Introduction: Electronic cigarettes (commonly referred as e-cigarettes) are designed to generate inhalable nicotine aerosol (vapor). When an e-cigarette user takes a puff, the nicotine solution is heated and the vapor taken into lungs. Although no sidestream vapor is generated between puffs, some of the mainstream vapor is exhaled by e-cigarette user. The aim of the study was to evaluate the secondhand exposure to nicotine and other tobacco-related toxicants from e-cigarettes.

Materials and Methods: We measured selected airborne markers of secondhand exposure: nicotine, aerosol particles (PM_{2.5}), carbon monoxide, and volatile organic compounds (VOCs) in an exposure chamber. We generated e-cigarette vapor from 3 various brands of e-cigarette using a smoking machine and controlled exposure conditions. We also compared secondhand exposure with e-cigarette vapor and tobacco smoke generated by 5 dual users.

Oxford Index

About the Index

 Show related links

concentrations of nicotine emitted by various brands of e-cigarettes ranged from 0.82 to 6.23 $\mu\text{g}/\text{m}^3$. The average concentration of nicotine resulting from smoking tobacco cigarettes was 10 times higher than from e-cigarettes (31.60 ± 6.91 vs. 3.32 ± 2.49 $\mu\text{g}/\text{m}^3$, respectively; $p = .0081$).

Conclusions: Using an e-cigarette in indoor environments may involuntarily expose nonusers to nicotine but not to toxic tobacco-specific combustion products. More research is needed to evaluate health consequences of secondhand exposure to nicotine, especially among vulnerable populations, including children, pregnant women, and people with cardiovascular conditions.

Tuesday, January 7, 2014

NYDailyNews.com / Health

Jobs Classifieds Contests Reader Offers Home Delivery Services Apps Newsletters

news politics sports showbiz opinion

More of Living : EVENTS | HEALTH | HOMES | FOOD | HOROSCOPES | COMICS & GAMES | LIVING PICS | FASHION PICS

HEALTH

Secondhand vapor from e-cigarettes contains nicotine but not other toxins: study

Whether electronic cigarettes are harmful to health continues to be a topic of debate, and smoking them indoors was recently banned in New York City. Now a new study finds vapor from e-cigs contains lower levels of nicotine than tobacco cigarettes and less harmful particulate matter.

Comments (7)

REUTERS

FRIDAY, JANUARY 3, 2014, 5:12 PM

94

39

2



SHARE THIS URL:

nydn.us/1cscKBQ



CHRISTOPHER FURLONG/GETTY IMAGES

Public health experts are concerned that e-cigarettes may encourage more young people to smoke, but a new study finds that the secondhand effects of the vapor, at least, do not present the same health hazards as tobacco cigarettes.

People standing near someone using an e-cigarette will be exposed to nicotine, but not to other chemicals found in tobacco cigarette smoke, according to a new study.

E-cigarettes, or electronic cigarettes, create a nicotine-rich vapor that can be inhaled, or 'vaped.'

Researchers and regulators have questioned whether e-cigarettes are a smoking cessation aid or may lure more young people toward smoking, as well as what effects they have on health.

RELATED: BLOOMBERG BANS E-CIGARETTES INDOORS AS SMOKERS LIGHT UP

RELATEDSTORIES

E-cigarettes may help people quit smoking regular cigarettes: study

Smokers' skin may age faster than non-smokers', study of twins finds

Menthol cigarette smokers have more strokes, says study

E-cigarettes packed with marijuana oil set to boom in Colorado

powered by **Inform**

"There is ongoing public debate whether e-cigarettes should be allowed or prohibited in public spaces," study co-author Maciej Goniewicz told Reuters Health in an email.

Goniewicz is a cancer researcher in the Department of Health Behavior at the Roswell Park Cancer Institute in Buffalo, New York.

"E-cigarettes contain variable amounts of nicotine and some traces of toxicants. But very little is known to what extent non-users can be exposed to nicotine and other chemicals in situations when they are present in the same room with users of e-cigarettes," Goniewicz said.

RELATED: E-CIGARETTES COULD SAVE LIVES, EUROPEAN CONFERENCE TOLD

He and his colleagues conducted two studies of secondhand exposure to e-cigarette vapors in a laboratory. Their results were published in *Nicotine and Tobacco Research*.

In the first study, the researchers used an electronic smoking machine to generate vapor in an enclosed space. They measured the amount of nicotine as well as carbon monoxide and other potentially harmful gases and particles in the chamber.

The second study included five men who regularly smoked both tobacco cigarettes and e-cigarettes. Each man entered a room and smoked his usual brand of e-cigarette for two five-minute intervals over an hour while the researchers measured air quality. The room was cleaned and ventilated and the experiment was repeated with tobacco cigarettes.

RELATED: E-CIGARETTE STARTS FIRE IN IDAHO HOUSE

The researchers measured nicotine levels of 2.5 micrograms per cubic meter of air in the first study. Nicotine levels from e-cigarettes in the second study were slightly higher at about 3.3 micrograms per cubic meter. But tobacco cigarette smoking resulted in nicotine levels ten times higher at almost 32 micrograms per cubic meter.

"The exposure to nicotine is lower when compared to exposure from tobacco smoke. And we also know that nicotine is relatively safer when compared to other dangerous toxicants in tobacco smoke," Goniewicz said.

E-cigarettes also produced some particulate matter, but regular cigarettes produced about seven times more. E-cigarettes didn't change the amount of carbon monoxide or other gases in the air.

RELATED: STATE ATTORNEYS GENERAL URGE FDA CRACKDOWN ON E-CIGARETTE SALES

"What we found is that non-users of e-cigarettes might be exposed to nicotine but not to many toxicants when they are in close proximity to e-cigarette users," said Goniewicz.

"It is currently very hard to predict what would be the health impact of such exposure," he added.

He said more research is needed to find out how the current findings correspond to "real-life" situations, when many people might be using e-cigarettes in a room with restricted ventilation.

RELATED: BOY BURNED AFTER MOM'S CHARGING E-CIGARETTE EXPLODES

"This is an interesting piece and points in the direction that a number of other studies are pointing, though it begins to expand the evidence on the potential effects to others," Amy Fairchild told Reuters Health in an email.

Fairchild was not involved in the new research, but has studied how e-cigarette use might impact views on regular cigarettes at the Columbia University Mailman School of Public Health in New York.

She said the study suggests e-cigarettes are far safer, both in terms of toxins and nicotine, than tobacco cigarettes when it comes to the health effects on bystanders - although more research is needed to know for sure.

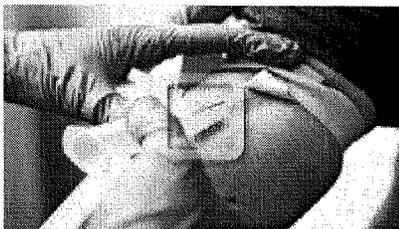
"In locales considering extending smoking bans to e-cigarettes, I think that these data weaken the case for more sweeping bans," Fairchild said. "And so this begins to answer the question about why e-cigarettes are considered better: they reduce risks to both the user and to the bystander when compared to tobacco cigarettes."

Fairfield said the concern about vaping ultimately revolves around whether e-cigarettes are going to change broader patterns of smoking at the population level.

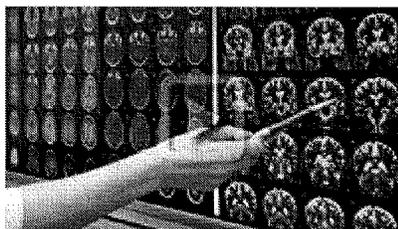
"There are potential harms, including promoting continued smoking of cigarettes and renormalizing cigarette smoking behaviors," Goniewicz said. "Regulatory agencies around the world will need to make a number of regulatory decisions about product safety that could have major effects on public health."

Goniewicz has received funding from a drug company that makes medications to aid smoking cessation. Another study author has received funds from an e-cigarette manufacturer.

FEATURED VIDEOS



HIV
What is HIV, and how is it transmitted?



Bipolar Disorder
Learn about the "highs and lows" of Bipolar Disorder.



Diabetes
Learn more about diabetes.

POST A COMMENT »

Hopes for a healthy cigarette may be nothing more than a pipe dream. A new study suggests that e-cigarettes may contain a level of carcinogens comparable to regular cigarettes.

In recent years, e-cigarettes have become a popular alternative for smokers. The devices use heat to vaporize nicotine but do not actually contain tobacco.

For smokers trying to kick their habit, or at least reduce health risks, e-cigarettes appeared to provide a desirable third way, allowing smokers to get their nicotine fixes while avoiding most of the health risks commonly associated with smoking, including cancer.

However, a report released in France's National Consumer Institute magazine on Monday says that many e-cigarettes actually contain "a significant quantity of carcinogenic molecules."

According to the study, researchers found that 3 in 10 e-cigarettes contain levels of formaldehyde and acrolein that are nearly equal to levels found in standard cigarettes.

"This is not a reason to ban them, but to place them under better control," National Consumer Institute's editor in chief Thomas Laurenceau said.

As The Wall Street Journal reports, the U.S. Food and Drug Administration is already considering new potential regulations for e-cigarettes, including a ban on online sales. Because e-cigarettes do not actually emit tobacco smoke, users have largely been able to avoid restrictions applied to traditional smokers.

On Tuesday, the Seal Beach, Calif., City Council announced it was placing a 45-day ban on e-cigarette vendors so the city could spend more time examining the potential health risks of the devices.

However, proponents of e-cigarettes say there is just as much, if not more, evidence suggesting that vaporized nicotine is not only less harmful, but has helped countless cigarette smokers give up their habit.

"I am a ex-smoker (35 years). I tried many times to quit with no success." Michael Eveliegh, owner of Oklahoma based Royal Vapor told Yahoo! News in an email interview. "E-cigs are the only thing that worked! Please know that the tobacco company's and their lobbyists are trying to discredit and confuse the issue," he said. "3 in 10 E-cigs contain levels of formaldehyde, which ones? What flavors? What nicotine level? These are vital to understanding if there is really a cause for concern or not."

The e-cigarette market has been booming. In 2012, the e-cigarette industry recorded more than \$1 billion in sales, with profits expected to reach \$10 billion within five years. Some estimate that e-cigarette sales could surpass traditional cigarette sales in the next few decades.

The Verge notes that a recent report from Wells Fargo pointed to the public's belief that e-cigarettes are healthier than traditional smoking as the reason behind their surge in popularity, describing their growth potential as a "promising opportunity" for investors.

"E-cigarettes are more than just a fad," reads an excerpt from the report. "E-Cigarettes' appeal stems from a variety of perceived advantages over traditional cigarettes, most commonly the perceptions that e-cigarettes are healthier, cheaper, and can be used almost anywhere."

However, the future of the e-cigarette industry could change with those potential FDA regulations coming as soon as this fall.

"It is true that more research is needed on the health effects of e-cigarettes," Mitch Zeller, director of the FDA's Center for Tobacco Products, told the WSJ. "However, we do not need more research on whether e-cigarettes should or should not be included in proposed FDA regulations."



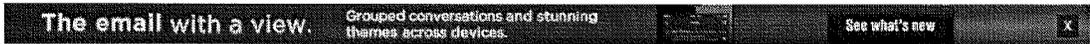
INTRODUCING BANK DEPOSITS TO **NRE/NRO** Accounts within 4 hours when sent during Indian banking hours. **XOOM** Send Money

Speed of service subject to local banking rules and system availability. Your funds available for payment by bank of XOOM will follow banking partner's verification systems. May not be available for all transactions. For transactions rules, see during Indian bank processing hours: Monday to Friday 9:00 A.M. - 4:00 P.M. (IST) and Saturday 9 A.M. - 10 noon (IST).

E-cigarettes' perceived benefits may lead to higher experimentation rates

By ANI | ANI - 9 hours ago

Washington, Jan. 8 (ANI): Researchers have suggested that the belief that e-cigarettes pose less health risk could lead to



The email with a view. Grouped conversations and stunning themes across devices. See what's new

Investigators from the Division of Epidemiology and Community Health, University of Minnesota surveyed 1379 participants from the Minnesota Adolescent Community Cohort who had never used e-cigarettes.

The initial baseline survey explored their opinions about e-cigarettes and their effect on health relative to cigarettes or their usefulness as an aid to stop smoking. Then, a follow-up survey conducted one year later asked participants if they had experimented with e-cigarettes.

Study lead author Kelvin Choi, PhD, said that participants who agreed e-cigarettes can help people quit smoking and those who agreed that e-cigarettes are less harmful than cigarettes were more likely than those who did not agree to subsequently report experimenting with e-cigarettes.

Specifically, the follow-up study found that 7.4 per cent of participants who had never used an e-cigarette at baseline reported subsequently using an e-cigarette, with 21.6 per cent among baseline current smokers, 11.9 per cent among baseline former smokers, and 2.9 per cent among baseline nonsmokers reporting use.

Choi said that the study showed that 2.9 per cent of baseline nonsmokers in this U.S. regional sample of young adults reported ever using e-cigarettes at follow-up, suggesting an interest in e-cigarettes among nonsmoking young adults.

A new study has been published in the American Journal of Preventive Medicine. (ANI)

Tobacco Facts.

Cigarettes Smoking Effects. Tobacco news and cigarettes information.

New York Moves Towards Total E-Cigarette Ban

Posted on [April 29, 2010](#) | [133 Comments](#)

The New York State Assembly has voted overwhelmingly 125-0 to ban e-cigarettes [e-cigs]; a product which has already been banned in Australia, Brazil, Canada, Israel, Mexico, and New Zealand, restricted in Finland, Malaysia, and Singapore, pending restriction in the UK as a drug, and the subject of law suits by attorneys general in several states, says public interest law professor John Banzhaf, Executive Director of Action on Smoking and Health (ASH).

The decision followed an email sent by Action on Smoking and Health (ASH) to New York's legislators seeking to correct misinformation they apparently received from marketers and others. ASH previously helped persuade New Jersey and Suffolk County, NY, to ban the use of e-cigarettes in no-smoking sections.

ASH's email noted that the FDA, the only agency both authorized and qualified to evaluate whether e-cigs are both safe and effective, has reported that e-cig use poses "acute health risks," that "the dangers posed by their toxic chemicals . . . cannot seriously be questioned," and that e-cigs have caused a wide variety of potentially serious problems "including racing pulse, dizziness, slurred speech, mouth ulcers, heartburn, coughing, diarrhea, and sore throat." It ruled they are "illegal"

Virtually all of the major national and well-respected medical and antismoking organizations have also voiced strong concerns about the risks posed by e-cigarettes, and urged restrictions on their sales. These include the American Cancer Society, American Heart Association, American Lung Association, Campaign for Tobacco-Free Kids, Americans for Nonsmokers' Rights, and the Association for the Treatment of [Tobacco Use](#) and Dependence.

ASH also pointed out that the FDA, in its own words, "is concerned that electronic cigarettes, cigars, or pipes may introduce young people to nicotine use which may lead to an increase in the use of conventional [tobacco products](#) with well-known, adverse, health consequences. Additionally, it is unclear what health effects these products could have on users or if misuse or product failure could lead to nicotine poisoning or other serious adverse health consequences."

The FDA also warned that "conference participants stressed the importance of parents being aware of the health and marketing concerns associated with e-cigarettes. It was stated that parents may want to tell their children and teenagers that these products are not safe to use. . . . Of particular concern to parents is that e-cigarettes are sold without any legal age restrictions, and are available in different flavors (such as chocolate, strawberry and mint) which may appeal to young people. . . . In addition, the devices do not contain any health warnings comparable to FDA-approved nicotine replacement products or conventional cigarettes."

Although some users claim that the products helped them to quit smoking, ASH countered by citing the FDA's own findings: "at this time, we are not aware of any data establishing electronic cigarettes, cigars, or pipes as generally recognized among scientific experts as safe and effective. . . . There may be a perception among some users that electronic cigarettes, cigars, or pipes are safer alternatives to conventional tobacco products. There may also be a perception that these products are a safe and effective means to quit smoking conventional forms of tobacco. However, FDA is not aware of any scientific data to support those perceptions."

Michael Eriksen, ScD, the former director of CDC's Office of Smoking and Health and an FDA adviser warned: "I have seen no evidence that people switch from tobacco cigarettes to e-cigarettes or other smokeless tobacco products. If you look at how smokeless products are marketed, they are sold as something to use at times you can't smoke. The implication is you will increase nicotine exposure, not reduce smoking."

ASH also raised concerns not yet addressed by the FDA: the extent to which the vapor exhaled by e-cig users — including propylene glycol (a respiratory irritant used in antifreeze and known to cause respiratory tract infections), nicotine (a deadly and addictive drug which can help trigger heart attacks), and other substances the FDA labels as "carcinogens" and "toxins" — could threaten the health of nearby nonsmokers.

ASH cited a typical reaction from a sensitive bystander: "My first exposure to e-cigarettes was last year in a hospital. Smokers were made to go outside but 3 e-smokers plus 2 staff were using the e-cigarettes inside . . . I have lupus and the vapor irritated my nose, eyes, throat, and chest, plus the nicotine was making me feel nauseous so there must have been significant quantities in the side-vapor."

ASH, America's first antismoking organization, and the one which started the nonsmokers' rights movement by first getting smoking restricted and ultimately banned on airplanes and in many public places, believes that nonsmokers should not be subjected to the vapors emitted by e-cig users unless and until they have conclusively been shown to be completely safe, even to children, the elderly, those at increased risk, and those with special medical problems.

Public interest law professor John Banzhaf of ASH, argues that there is no possible justification for subjecting the great majority of Americans who are nonsmokers to the totally unnecessary risks posed by a mixture of toxins and carcinogens. Even if e-cigarettes did help some smokers quit — which the FDA denies — "it's your monkey, keep him off my back."

PROFESSOR JOHN F. BANZHAF III
Professor of Public Interest Law at GWU,
FAMRI Dr. William Cahan Distinguished Professor,
FELLOW, World Technology Network, and
Executive Director and Chief Counsel
Action on Smoking and Health (ASH)
America's First Antismoking Organization
2013 H Street, NW

Electronic cigarettes pose health risks, study finds

Date: 2010-12-03
Contact: Iqbal Pittalwala
Phone: (951) 827-6050
Email: iqbal@ucr.edu

Electronic cigarettes (or e-cigarettes), also called "electronic nicotine delivery systems," are increasingly used worldwide even though only sparse information is available on their health effects. In the United States, e-cigarettes are readily available in shopping malls in most states and on the Internet. But how safe are e-cigarettes?

To address this question, researchers at the University of California, Riverside, evaluated five e-cigarette brands and found design flaws, lack of adequate labeling, and several concerns about quality control and health issues. They conclude that e-cigarettes are potentially harmful and urge regulators to consider removing e-cigarettes from the market until their safety is adequately evaluated.

Unlike conventional cigarettes, which burn tobacco, e-cigarettes vaporize nicotine, along with other compounds present in the cartridge, in the form of aerosol created by heating, but do not produce the thousands of chemicals and toxicants created by tobacco combustion. Nothing is known, however, about the chemicals present in the aerosolized vapors emanating from e-cigarettes.

"As a result, some people believe that e-cigarettes are a safe substitute for conventional cigarettes," said Prue Talbot, the director of UC Riverside's Stem Cell Center, whose lab led the research. "However, there are virtually no scientific studies on e-cigarettes and their safety. Our study — one of the first studies to evaluate e-cigarettes — shows that this product has many flaws, which could cause serious public health problems in the future if the flaws go uncorrected."

Study results appear in this month's issue of Tobacco Control.

Talbot, a professor of cell biology and neuroscience, was joined in the study by Anna Trtchounian, the first author of the research paper. Together, they examined the design, accuracy and clarity of labeling, nicotine content, leakiness, defective parts, disposal, errors in filling orders, instruction manual quality and advertizing for the following brands of e-cigarettes: NJOY, Liberty Stix, Crown Seven (Hydro), Smoking Everywhere (Gold and Platinum) and VapCigs.

Their main observations are that:

- Batteries, atomizers, cartridges, cartridge wrappers, packs and instruction manuals lack important information regarding e-cigarette content, use and essential warnings.
- E-cigarette cartridges leak, which could expose nicotine, an addictive and dangerous chemical, to children, adults, pets and the environment.
- Currently, there are no methods for proper disposal of e-cigarettes products and accessories, including cartridges, which could result in nicotine contamination from discarded cartridges entering water sources and soil, and adversely impacting the environment.
- The manufacture, quality control, sales, and advertisement of e-cigarettes are unregulated.

The study was funded by a grant to Talbot from the University of California Tobacco-Related Disease Research Program (TRDRP).

"More research on e-cigarettes is crucially needed to protect the health of e-cigarette users and even those who do not use e-cigarettes," said Kamlesh Asotra, a research administrator at UC TRDRP. "Contrary to the claims of the manufacturers and marketers of e-cigarettes being 'safe,' in fact, virtually nothing is known about the toxicity of the vapors generated by these e-cigarettes. Until we know any thing about the potential health risks of the toxins generated upon heating the nicotine-containing content of the e-cigarette cartridges, the 'safety' claims of the manufactureres are dubious at best.

"Justifiably, more information about the potential toxic and health effects of e-cigarette vapors is necessary before the public can have a definitive answer about the touted safety of e-cigarettes. Hopefully, in the near future, scientists can provide firm evidence for or against the claimed 'safety' of e-cigarettes as a nicotine-delivery tool."

UC TRDRP supports research that focuses on the prevention, causes, and treatment of tobacco-related disease and the reduction of the human and economic costs of tobacco use in California.

About electronic cigarettes:

E-cigarettes consist of a battery, a charger, a power cord, an atomizer, and a cartridge containing nicotine and propylene glycol. When a smoker draws air through an e-cigarette, an airflow sensor activates the battery that turns the tip of the cigarette red to simulate smoking and heats the atomizer to vaporize the propylene glycol and nicotine. Upon inhalation, the aerosol vapor delivers a dose of nicotine into the lungs of the smoker, after which, residual aerosol is exhaled into the environment.

The University of California, Riverside (www.ucr.edu) is a doctoral research university, a living laboratory for groundbreaking exploration of issues critical to Inland Southern California, the state and communities around the world.

Reflecting California's diverse culture, UCR's enrollment has exceeded 20,500 students. The campus will open a medical school in 2012 and has reached the heart of the Coachella Valley by way of the UCR Palm Desert Graduate Center. The campus has an annual statewide economic impact of more than \$1 billion.

ADD THIS TO YOUR SOCIAL BOOKMARKS

 Blink	 Digg	 Google	 Spurl
 Del.icio.us	 Furl	 Simpy	 Y! MyWeb
 Facebook	 Newsvine	 Slashdot	 Technorati

© 2007 Regents of the University of California
1111 Franklin St., Oakland, CA 94607-5200

Electronic cigarettes can be life-threatening for small children, caution experts, who noticed a recent surge in the number of children being rushed to the emergency room for accidentally ingesting the e-cigarette liquid.



[View Full Image](#)

lindsay-fox/Flickr

Electronic cigarettes pose poisoning risk to small children

"Accidental exposure by children to e-cigarettes is a public health concern that we need to take seriously," LaQuandra Nesbitt, director of the Louisville Metro Department of Public Health and Wellness, told USA TODAY. "Parents need to be aware of the potential dangers to their children."

Most of the products available in the market lack any child-resistant caps and contain high doses of nicotine. Even a low exposure to the nicotine in the e-cigarettes can cause adverse health outcomes including coma and death, USA TODAY [reported](#).

Related Articles

Meditation as Effective as Medication in Treating Depression, Anxiety

'American Horror Story-Coven' SPOILERS: Fiona Brings Stevie Nicks to Out Misty as Next Supreme

'The Hunger Games', 'The Hobbit' other Films to watch out for this 2014 [VIDEOS/PHOTOS]

Related Topics

Cancer

Poison Control Center of Kosair Children's Hospital, added to the website.

Even though e-cigarettes haven't claimed any lives, there exist reports of a significant number of children seeking medical help for experiencing fast heartbeat, headache, vomiting, sweating, hyperactivity, flushing, dizziness and diarrhoea after swallowing the liquid.

E-cigarettes have always been a topic of discussion since it was first launched in the Chinese markets in 2004. The main purpose was helping people quit smoking.

They soon received wide attention and became very popular. According to the supporters, e-cigarettes are [safer than traditional cigarettes](#) as they provide less nicotine than the latter, and do not contain the cancer-causing toxins or produce harmful substances associated with smoking real cigarettes (tar and carbon monoxide).

However, they were not fully free from concerns. A team of American researchers reported recently that e-cigarettes cannot help stop smoking, on the other hand, can turn youngsters into [dual smokers](#), making them smoke more nicotine. Reports show that like the second-hand smoke associated with cigarettes, the e-cigarettes produce second-hand vapour that can irritate eyes, nose and throat.

However, latest [research](#) has also shown that the second-hand exposure to nicotine provided by e-cigarettes is 10 times lesser than the traditional cigarettes.

"At the end of the day, everything's attractive to kids," explained Ray Story, chief executive officer of the Tobacco Vapor Electronic Cigarette Association.

"They either ingest the liquid or get it onto their skin. Even on the skin, the nicotine is absorbed," Ashley Webb, director of the Kentucky Regional

Must Read



Protests Over Anti-Islamic Movie Spreading In Asia; Indonesia Sees Violence



Worldwide Cloud Services Market To Surpass \$109 Billion In 2012

E-cigarettes' growing popularity poses danger to kids

Laura Ungar, The (Louisville, Ky.) Courier-Journal 6 a.m. EST January 5, 2014

Scientists are raising concerns about the effects of e-cigarettes' "secondhand vapor" on children.



(Photo: Michael Clevenger, The (Louisville, Ky.) Courier-Journal)

SHARE

463
CONNECT

(<https://twitter.com/intent/tweet?url=http://usat.ly/1dmsF5U&text=E-cigarettes%20growing%20popularity%20poses%20d>)

LOUISVILLE, Ky. -- Billed as a safer, cleaner way to get a nicotine fix, electronic cigarettes are surging in popularity. But some doctors and researchers say these smoking substitutes are far from harmless — especially to children.

More teens are trying these products, even as scientists increasingly raise concerns about the effects of e-cigarettes' "secondhand vapor" on children.

In addition, the liquid nicotine used in the devices, which comes in flavors such as bubblegum and cola, is being blamed for a growing number of poisonings across the nation.

"Accidental exposure by children to e-cigarettes is a public health concern that we need to take seriously," said LaQuandra Nesbitt, director of the Louisville Metro Department of Public Health and Wellness, which will soon recommend age restrictions on the devices. "Parents need to be aware of the potential dangers to their children."

The battery-operated units contain cartridges filled with nicotine, flavor and other chemicals, which are heated to create a vapor inhaled by the user. Starter kits can cost \$60-\$80, five-packs of cartridges can run around \$10, and sales of e-cigarettes have doubled to more than \$1.5 billion in the past year.

But problems among children also have risen.

Ashley Webb, director of the Kentucky Regional Poison Control Center of Kosair Children's Hospital, said the center received more than 40 calls involving e-cigarette poisonings in 2013, up from nine in 2012 and one in 2010. Nationally, there were 427 such exposures in 2012, according to the latest annual report from the National Poison Data System. Meanwhile, the 2012 National Youth Tobacco Survey shows that recent e-cigarette use nearly doubled in one year among U.S. high school students, rising from 1.5% in 2011 to 2.8% smoking them in 2012.

While Indiana prohibits sales of e-cigarettes to minors, Kentucky and the federal government do not. But a soon-to-be-released report from the Louisville health department recommends restricting the sale of e-cigarettes to Jefferson County minors.

The U.S. Food and Drug Administration is also considering whether to regulate e-cigarettes. The agency issued a warning in 2009 that the devices were being marketed to youth, but does not regulate the products unless they make therapeutic claims.

Written a Book?

Claim Your FREE *Writer's Guide to Publishing* and learn how to publish your book now.

Claim Your Guide



117

TWEET

HEALTH AND WELLNESS (/TOPIC/D2591A44-DFD9-4D0D-AF7A-CC0B3B92CBB0/HEALTH-AND-WELLNESS/)



Cameron Diaz offers advice on getting your best body
(/story/news/nation/2014/01/06/cameron-diaz-the-body-book/4292405/)

Nanci Hellmich

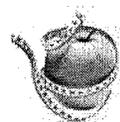
(/story/news/nation/2014/01/06/cameron-diaz-the-body-book/4292405/)



Evidence shows cognitive rest aids concussion recovery
(/story/news/nation/2014/01/06/concussion-cognitive-rest/4308971/)

Michelle Healy

(/story/news/nation/2014/01/06/concussion-cognitive-rest/4308971/)



Diet book authors offer advice for losing weight
(/story/news/nation/2014/01/05/diet-book-authors-advice/4073481/)

Nanci Hellmich

(/story/news/nation/2014/01/05/diet-book-authors-advice/4073481/)



Flu now widespread in the United States
(/story/news/nation/2014/01/03/flu-widespread-h1n1-swine-flu/4305595/)

Elizabeth Weise

(/story/news/nation/2014/01/03/flu-widespread-h1n1-swine-flu/4305595/)

E-cigarettes' growing popularity poses danger to kids

"It's really up to individual store owners not to sell to children," said Troy LeBlanc, owner of Derb E Cigs in Jeffersontown, who won't sell to anyone younger than 18. "I wouldn't be opposed to government age restrictions."

LeBlanc said e-cigarettes can be beneficial for adults, helping them quit tobacco smoking, which is documented to be more dangerous.

Ray Story, chief executive officer of the Tobacco Vapor Electronic Cigarette Association, agreed they're an effective smoking substitute, saying the industry designs and markets the devices for adults. He said the vapor is harmless, and it's up to adults to keep children from the e-liquid, which can sicken them.

"At the end of the day, everything's attractive to kids," Story said. "If you're an adult, it's a matter of choice. But we have to safeguard those who don't have the ability to safeguard themselves."

Webb said parents often don't think of nicotine as a poison, so they may leave liquid e-cigarette cartridges within reach of children.



[Six cancer centers to share \\$50 million research gift \(/story/news/nation/2014/01/06/540-million-gift-cancer-research/4303471/\)](#)

Karen Weintraub

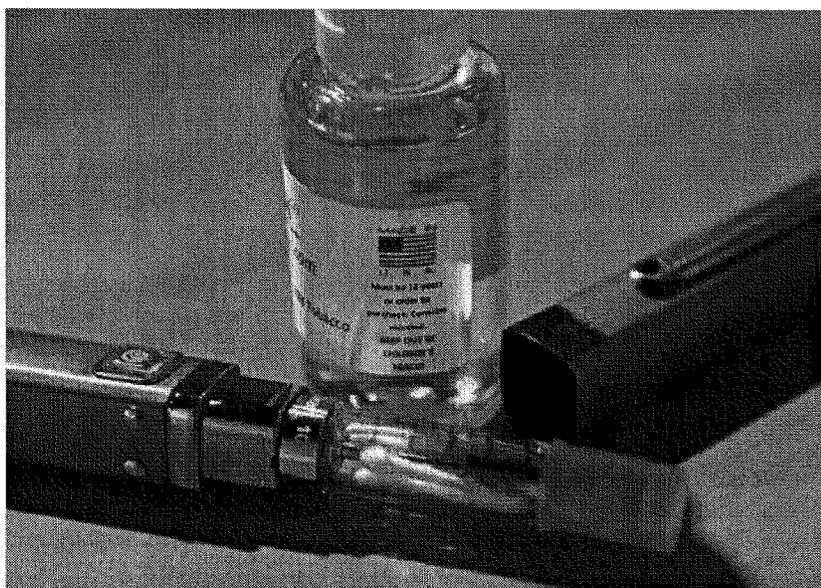
[\(/story/news/nation/2014/01/06/540-million-gift-cancer-research/4303471/\)](#)



[Want to shape up for the New Year? Here's how and why \(/story/news/nation/2013/12/29/exercise-health-new-year/4042055/\)](#)

Nanci Hellmich

[\(/story/news/nation/2013/12/29/exercise-health-new-year/4042055/\)](#)



The warning label on the e-cigarette fluid states "Must be 18 years or older to purchase, contains nicotine," and "Keep out of children's reach." (Photo: Michael Clevenger, The (Louisville, Ky.) Courier-Journal)

Children are getting ahold of e-cigarettes and taking them apart, she said. "They either ingest the liquid or get it onto their skin. Even on the skin, the nicotine is absorbed."

She said toddlers and preschoolers sometimes lick the containers or drink the liquid, enticed by the flavoring.

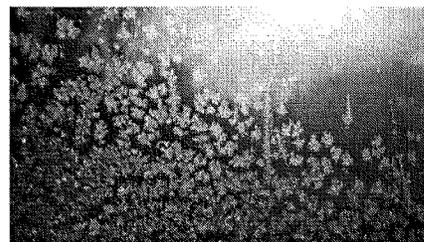
"Kids will eat most anything," said George Rodgers, associate medical director of the poison control center.

Ingesting e-liquid can give children a harmful or even deadly dose of nicotine. Rodgers said many cartridges contain more than 14 milligrams, enough to cause harm.

"And since children are not used to consuming nicotine, their symptoms may be more severe at lower levels," he said.

Symptoms include hyperactivity, flushing, sweating, headache, dizziness, rapid heart rate, vomiting and diarrhea. Even small amounts on a child's skin can cause irritation and a burning sensation. In very severe cases, a child's heart rate and blood pressure may drop dangerously low, resulting in a coma or even death.

USA NOW



[Wanda's cinematic video/4355298/watch-USA-NOW-cold-weather-tricks-usa-now/](#)
Jan 07, 2014

E-cigarettes' growing popularity poses danger to kids

Webb said there have been no deaths so far among cases her center has handled, but children have ended up in the emergency room.

Story said his organization has pushed for safety packaging, and e-liquid refills come with tamper-evident caps.

LeBlanc said some of his products now come with child-resistant caps, and "we're transferring everything to child-resistant."

"All of our liquids have a warning on them to keep out of the reach of children," he added.

Jenny Haliski, an FDA spokeswoman, said federal regulations now apply only to conventional cigarettes and other tobacco products, but her agency is considering new rules that may cover e-cigarettes.

Stephen Wright, Kosair hospital's medical director, said people should be cautious.

"Since the industry is still so new, we don't yet know all of the long-term health effects of e-cigarettes to the user, in addition to any effects of secondhand vapor," he said.

"We do know that not smoking anything — especially around children — is always the best bet."

Written a Book?

Claim Your FREE *Writer's Guide to Publishing* and learn how to publish your book now.

[Claim Your Guide](#)

SHARE

463

CONNECT

TWEET

TWEET

<https://twitter.com/intent/tweet?url=http://usat.ly/1dmsF5U&text=E-cigarettes%20growing%20popularity%20poses%20d>

11. Are electronic cigarettes (e-cigarettes) safe to use?

As the safety and efficacy of e-cigarettes have not been fully studied, consumers of e-cigarette products currently have no way of knowing whether e-cigarettes are safe for their intended use, how much nicotine or other potentially harmful chemicals are being inhaled during use, or if there are any benefits associated with using these products. Further research is needed to assess the potential public health benefits and risks of electronic cigarettes.

Currently, only e-cigarettes that are marketed for therapeutic purposes are regulated by the FDA Center for Drug Evaluation and Research.