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## ELECTRONIC SMOKING DEVICES

### Introduction

The electronic smoking device industry has evolved and now offers more products than electronic cigarettes, like hookah pens and electronic cigars. Some industry trade groups refer to these products as Personal Electronic Vaporizing Units (PEVUs). Throughout this paper, the term "e-cigarette" is used broadly to include all types of electronic smoking devices.

GASP has many health concerns regarding e-cigarette use and exposure, which are documented in this paper. The U.S. Food & Drug Administration (FDA), U.S. Senator Frank Lautenberg, the World Health Organization, and national advocacy organizations also voice their concerns about e-cigarettes.

Local, county, state and international jurisdictions are restricting or banning the sale or use of e-cigarette products.

### I. Laws and Policies

#### New Jersey restricts e-cigarette sales and use

New Jersey was the first state in the nation to ban the use of e-cigarettes in public places and workplaces, effective March 13, 2010. On January 11, 2010, Governor Corzine signed into law A4227/A4228/S3053/S3054, banning e-cigarette use in public places and workplaces (amended 2006 NJ Smokefree Air Act), and banning e-cigarette sales to people 18 years and younger. The New Jersey Senate and Assembly both voted unanimously in favor of the law. See [http://njgasp.org/sfaa\\_2010\\_w-ecigs.pdf](http://njgasp.org/sfaa_2010_w-ecigs.pdf) and [nileg.state.nj.us/2008/Bills/A4500/4227\\_U1.pdf](http://nileg.state.nj.us/2008/Bills/A4500/4227_U1.pdf).

On August 7, 2013, the New Jersey Department of Health's Office on Local Public Health, in cooperation with the Department's Office on Tobacco Control, issued as a reminder an Administrative Advisory and two handouts that the use of electronic smoking devices is prohibited in indoor public places and work places. [http://www.njgasp.org/NJ\\_State\\_E-cigs\\_Advisory\\_2013.pdf](http://www.njgasp.org/NJ_State_E-cigs_Advisory_2013.pdf)  
[http://www.njgasp.org/NJ\\_Smokefree\\_Air\\_Act\\_and\\_Breathe\\_Easy\\_flyer.pdf](http://www.njgasp.org/NJ_Smokefree_Air_Act_and_Breathe_Easy_flyer.pdf)

The impetus for the New Jersey state law came from a local Board of Health and County Board of Chosen Freeholders. In October 2009, New Jersey's Bergen County Board of County Freeholders passed a resolution banning e-cigarette use in county buildings, at county parks and recreational areas. On November 23, Paramus' Board of Health passed an ordinance restricting e-cigarette use in public places and workplaces, taking effect on December 1, 2009.

#### Other state-wide laws amend smoke-free air act to include e-cigarettes

Effective December 6, 2012, **North Dakota** amended chapter 23-12 to expand the smokefree air act to more public places and workplaces, and included electronic smoking devices in the ban.

It was by voter referendum on Measure 4 (2/3 voted in favor), and includes bingo and gaming facilities as defined by chapter 12.1-28-01. Smoking is defined as "inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, or pipe, or any other lighted or heated tobacco or plant product intended for inhalation, in any manner or in any form. Smoking also includes the use of an e-cigarette which creates a vapor, in any manner or any form, or the use of any oral smoking device for the purpose of circumventing the prohibition of smoking in this Act." Measure 4 is at <https://vip.sos.nd.gov/pdfs/Portals/BallotLanguageMeasure4-Smoking-Nov6,2012.pdf>. Chapter 23-12 is at <http://www.legis.nd.gov/cencode/t23c12.pdf?20131115142855>. Definition of gaming facilities is at <http://www.legis.nd.gov/cencode/t12-1c28.pdf?20131115144000>.

Effective March 12, 2012, **Utah** signed HB245 into law which amended the Utah Indoor Clean Air Act (Rule R392-510.2(5)) adding e-cigarettes to the definition as a tobacco product. <http://le.utah.gov/~2012/htmdoc/hbillhtm/hb0245s03.htm>

### **Other state, county, and local laws restricting e-cigarette sales and use in the U.S. (listed alphabetically, by state)**

- **Alabama: Effective August 1, 2013** bans the sale and use of e-cigarettes to minors under age 19. <http://legiscan.com/AL/bill/HB286/2013>
- **Arizona: Effective September 13, 2013** bans the sale of e-cigarettes to minors under the age of 18. <http://www.kvoa.com/news/new-tobacco-rule-in-arizona-bans-sale-of-e-cigs-to-minors/#>
- **Arkansas:** Effective April 11, 2013 bans the sale and use of e-cigarettes to minors. <http://www.stampoutsmoking.com/wp-content/uploads/2013/05/ACT-1099-e-cigarette-law.pdf>
- **California: On July 29, 2010, the California Attorney General** enters into a Stipulated Consent Agreement with NJOY, an e-cigarette manufacturer and retailer. The Agreement settles the lawsuit filed by the Attorney General, making it unlawful for NJOY to sell e-cigarettes to a minor, along with other restrictions on marketing and sales of e-cigarettes. <http://oag.ca.gov/news/press-releases/brown-announces-electronic-cigarette-makers-agreement-stop-deceptive-marketing>
- **California: On September 27, 2011, Concord City** enacts an ordinance requiring a 17-block downtown business district be 100% smokefree, including banning the use of e-cigarettes. <http://www.ci.concord.ca.us/pdf/citygov/agendas/council/2011/0927/4A.pdf>
- **California: Effective December 4, 2013, Los Angeles** passed a law classifying electronic cigarettes as tobacco products, limiting sale locations and requiring a license to sell. [http://www.njgasp.org/LATimes\\_ecigs\\_tobacco\\_12-4-13.pdf](http://www.njgasp.org/LATimes_ecigs_tobacco_12-4-13.pdf)
- **California: Effective February 9, 2013, Petaluma** bans smoking of e-cigarettes in public places and workplaces. <http://www.petaluma360.com/article/20130108/community/130109651>
- **Colorado: Effective July 1, 2011,** bans the sale of e-cigarettes to minors. [http://www.leg.state.co.us/clics/clics2011a/csl.nsf/fsbillcont3/78CCDD6C6E59B37187257808008013AE?open&file=1016\\_enr.pdf](http://www.leg.state.co.us/clics/clics2011a/csl.nsf/fsbillcont3/78CCDD6C6E59B37187257808008013AE?open&file=1016_enr.pdf)
- **Georgia: Effective January 2011, Savannah** amended their 2010 smokefree air act to include the use of e-cigarettes in public places and workplaces as well as outdoor locations (10 foot buffer zone, outdoor service lines, outdoor dining, playgrounds, etc.)

[http://www.njgasp.org/Savannah\\_SFAO\\_2010.pdf](http://www.njgasp.org/Savannah_SFAO_2010.pdf)

- **Georgia: Effective April 25, 2012, Chatham County** includes e-cigarettes in their smokefree air law for all public places and workplaces.  
<http://www.healthysavannah.org/documents/Chatham%20County%20Smokefree.pdf>
- **Hawaii: Effective May 2, 2013** bans sale of e-cigarettes to minors under 18 years of age and requires tobacco products to be sold face-to-face, not through the internet.  
[http://www.capitol.hawaii.gov/measure\\_indiv.aspx?billtype=HB&billnumber=672&year=2013](http://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=HB&billnumber=672&year=2013)
- **Idaho: As of July 1, 2012** bans the sale of e-cigarettes to minors and bans possession of e-cigarettes by minors.  
<http://legislature.idaho.gov/legislation/2012/H0405.pdf>
- **Illinois: Effective January 1, 2014**, bans the sale of e-cigarettes and alternative nicotine products to people under the age of 18. The law passed August 2013.  
<http://www.nacsonline.com/News/Daily/Pages/ND0819132.aspx#.UinnyRb3A3Z>
- **Illinois: Effective October 28, 2013, Evanston** amended its local "Clean Air Act":
  - bans the use of e-cigarettes in public places and workplaces
  - Requires a \$500/year license to sell at retail tobacco or liquid nicotine products.
  - Can't sell or give tobacco or liquid nicotine products 150 feet from a K-12 school; \$500 1st offense, \$1000 second offense, license revocation for more offenses.
  - Minors cannot be sold or purchase tobacco or liquid nicotine products.
  - Minors cannot possess tobacco or liquid nicotine products in public places.
  - The sale or giving of bidi cigarettes is prohibited to any person, regardless of age.
  - Minors cannot sell tobacco products for a retail licensee.
  - Tobacco and liquid nicotine products are banned from self-service display racks, for sale, display or giving away.
  - Tobacco and liquid nicotine products are banned for sale via vending machines except in non-public places, and are banned from free distribution by a licensee or person in the business at any right of way, park, playground, other city owned property, or any school district, park district or public library  
[http://www.njgasp.org/Evanston\\_IL\\_ecig\\_ban\\_10-28-13.pdf](http://www.njgasp.org/Evanston_IL_ecig_ban_10-28-13.pdf)
- **Illinois: Effective February 14, 2014, Chicago** passed an ordinance to ban e-cigarettes in indoor public places and workplaces and to restrict how and where e-cigarettes can be sold.  
[http://www.njgasp.org/ChicagoTribune\\_ECig\\_Ban\\_1-15-14.pdf](http://www.njgasp.org/ChicagoTribune_ECig_Ban_1-15-14.pdf)
- **Indiana: Effective July 1, 2013** bans the sale and use of e-cigarettes to people under age 18 and puts restrictions on the display and vending of e-cigarettes.  
<http://www.in.gov/legislative/bills/2013/HB/HB1225.2.html>
- **Indiana: Effective December 2012, Indianapolis** amended their smokefree air law to include electronic smoking devices.  
<http://www.indy.gov/eGov/Council/Proposals/Documents/2012/PROP12-136.pdf>
- **Kansas: As of July 1, 2012** bans the sale of e-cigarettes to minors.  
<http://legislature.idaho.gov/legislation/2012/H0405.pdf>
- **Kentucky: Effective June 2011, the city of Bardstown** bans the use of e-cigarettes in public places and workplaces; signed into law on March 9, 2010.  
[http://www.cityofbardstown.org/pdfs-ordinances/Chapter\\_123.pdf](http://www.cityofbardstown.org/pdfs-ordinances/Chapter_123.pdf)

- **Kentucky: Effective September 19, 2011, Bullitt County Board of Health** bans smoking in public places and workplaces, including the use of e-cigarettes (The original law that passed 3/22/10 was appealed but the court sided with the Board of Health). <http://www.bullittcountyhealthdept.com/BOH%20Regulation%2010-01.pdf>
- **Kentucky: Effective June 2011 the city of Glasgow** bans the use of e-cigarettes in public places and workplaces; signed into law in March 2010. <http://blogs.theheart.org/melissa-walton-shirley-blog/2010/3/26/glasgow-kentucky-goes-smoke-free-war-and-peace-part-1>. See also <http://www.ctpost.com/news/article/Madison-County-adds-e-cigarettes-to-smoking-ban-1326985.php>
- **Kentucky: Effective June 6, 2011 Madison County Board of Health** amends its smoking ban ordinance to include a ban on using e-cigarettes in public places and workplaces. [http://www.madisoncountyhealthdept.org/Documents/Community/REVISED\\_MCHR\\_700.pdf](http://www.madisoncountyhealthdept.org/Documents/Community/REVISED_MCHR_700.pdf)
- **Maryland: Effective October 1, 2012** bill HB1272 bans the sale of e-cigarettes to minors under 18. <http://mgaleg.maryland.gov/webmga/frmMain.aspx?tab=subject3&ys=2012rs%2fbillfile%2fhb1272.htm>
- **Massachusetts: Effective January 1, 2014, Ashland** bans the sale of any tobacco and nicotine delivery product to persons under age 21 (minor defined as under 21). The comprehensive policy also requires retail establishments to obtain a permit to sell tobacco or nicotine delivery products (not only FDA approved tobacco cessation products), bans issuing a permit if it is for an establishment located within 500 feet of a school, and will only issue 18 permits total at one time. Ashland also bans self-service and vending machines of tobacco products and nicotine delivery products, requires all humidors in stores to be locked, requires cigars only be sold in 4 packs or more unless each cigar is \$2.50 or more, bans all non-residential RYO machines, and bans free distribution of sample tobacco products or nicotine delivery products. [http://njgasp.org/Ashland\\_MA\\_ageofsale\\_to\\_21\\_1-1-14.pdf](http://njgasp.org/Ashland_MA_ageofsale_to_21_1-1-14.pdf)
- **Massachusetts: Effective December 2011, Boston Public Health Commission** votes to prohibit the use of e-cigarettes in workplaces, and prohibit the sale or distribution of unregulated nicotine delivery products to minors. [http://www.bphc.org/whatwedo/tobacco-free-living/Documents/Amended\\_Clean\\_Air\\_Works\\_Workplace\\_E\\_Cigarette\\_Restrictions\\_Regulation.pdf#search=clean%20air%20works](http://www.bphc.org/whatwedo/tobacco-free-living/Documents/Amended_Clean_Air_Works_Workplace_E_Cigarette_Restrictions_Regulation.pdf#search=clean%20air%20works). **Effective December 30, 2013**, the electronic smoking device ban was extended to include parks, squares, cemeteries and other spaces run by the Parks and Recreation Department. [http://www.njgasp.org/BostonGlobe\\_ParkSmokingBan\\_with\\_ecigs\\_12-31-13.pdf](http://www.njgasp.org/BostonGlobe_ParkSmokingBan_with_ecigs_12-31-13.pdf)
- **Massachusetts: Effective January 2014, the Canton Board of Health** bans the sale of all nicotine products, including e-cigarettes, to people under the age of 21. The regulation passed on August 12, 2013. [http://www.njgasp.org/PatriotLedger\\_Canton\\_ecig\\_sales\\_ageto21\\_8-13-13.pdf](http://www.njgasp.org/PatriotLedger_Canton_ecig_sales_ageto21_8-13-13.pdf)
- **Massachusetts: Effective November 8, 2012, Great Barrington**, updates its Environmental Tobacco Smoke Regulations to include banning e-cigarettes where smoking is already prohibited. [http://www.townofgb.org/Pages/GBarringtonMA\\_Health/TOBACCO REGULATIONS 2012.pdf](http://www.townofgb.org/Pages/GBarringtonMA_Health/TOBACCO REGULATIONS 2012.pdf)
- **Massachusetts: As of February 2, 2014, Lowell Board of Health** bans the smoking of electronic cigarettes in public places and bans the sale to minors.

[http://www.njgasp.org/LowellSun\\_ecig\\_minor\\_ban\\_2-2-14.pdf](http://www.njgasp.org/LowellSun_ecig_minor_ban_2-2-14.pdf)

- **Massachusetts: Effective July 1, 2012, North Adams Board of Health (Lee, Lenox, Stockbridge)** amends its local tobacco regulations to include e-cigarettes. The regulation restricts smoking in public places, sales of nicotine products in pharmacies, and restricts their use by/sales to minors. <http://www.iberkshires.com/story/41141/Tri-Town-Health-Board-Bans-Tobacco-Sales-In-Pharmacies.html>
- **Massachusetts: Effective July 13, 2010, North Attleboro Board of Health** (1) bans the use of nicotine delivery products in workplaces and public places covered by the state law, requires signage; (2) requires nicotine delivery products (e.g. e-cigarettes) be sold face-to-face, an only at a non-mobile retail establishment issued an annual permit by the local Board of Health; (3) bans the sale to minors, requires signage; and (4) bans free distribution and sampling. <http://north-attleboro.ma.us/boh/PDF/Regulations/Nicotine%20Delivery%20Product%20and%20E-Cigarette%20Regulation.pdf>
- **Massachusetts: Effective September 1, 2012 the Saugus Board of Health** voted unanimously on June 5 to ban the sale of e-cigarettes to minors and their use in a public places. <http://www.wickedlocal.com/saugus/news/x2067836337/Saugus-Board-of-Health-restricts-tobacco-sales#axzz2K3abf0bL>
- **Massachusetts: Effective September 1, 2010 the Somerset Board of Health** (1) bans the use of nicotine delivery products in workplaces and public places covered by the state law, requires signage; (2) requires nicotine delivery products (e.g. e-cigarettes) be sold face-to-face (not using self-service displays or vending machines), an only at a non-mobile retail establishment issued an annual permit by the local Board of Health; (3) bans the sale to minors, requires signage; and (4) bans free distribution and sampling. Up to \$300 fine, and suspension of nicotine delivery products permit issued by the local Board of Health. Fines range from \$100 \$300 and 30-day suspension of any and all Board of Health-issued permit. [http://www.njgasp.org/Somerset\\_BdHealth\\_ecig\\_reg\\_9-2010.pdf](http://www.njgasp.org/Somerset_BdHealth_ecig_reg_9-2010.pdf)
- **Massachusetts: Effective October 29, 2009 the South Hadley Board of Health** (1) bans the use of nicotine delivery products in workplaces and public places covered by the state law, requires signage; (2) requires nicotine delivery products (e.g. e-cigarettes) be sold face-to-face, an only at a non-mobile retail establishment issued an annual permit by the local Board of Health; (3) bans the sale to minors, requires signage; and (4) bans free distribution and sampling. [http://www.southhadley.org/Pages/SouthHadleyMA\\_Health/forms/enicappregs](http://www.southhadley.org/Pages/SouthHadleyMA_Health/forms/enicappregs)
- **Minnesota: Effective August 1, 2010** bans the sale of e-cigarettes to minors, banning self-service displays of tobacco products and e-cigarettes except in adult-only facilities, and allowing for municipalities to license and regulate retail sales of e-cigarettes and tobacco products. <http://publichealthlawcenter.org/content:passage-tobacco-modernization-and-compliance-act-2010>  
<https://www.revisor.mn.gov/laws/?id=305&year=2010&type=0>  
[http://www.njgasp.org/Minnesota\\_PR\\_Tob\\_Mod\\_Compl\\_Act-2010.pdf](http://www.njgasp.org/Minnesota_PR_Tob_Mod_Compl_Act-2010.pdf)
- **Minnesota: Effective September 13, 2013, Duluth** prohibits smoking e-cigarettes in places covered by the Minnesota Clean Indoor Air Act. The Minnesota Department of Health supported Duluth's ordinance. <http://www.startribune.com/local/223235121.html>

- **Mississippi: Effective July 1, 2013** bans e-cigarette sales to people under age 18. <http://billstatus.ls.state.ms.us/documents/2013/pdf/HB/0600-0699/HB0613IN.pdf>
- **New Hampshire: Effective July 31, 2010** bans e-cigarette sales to minors. <http://legiscan.com/NH/bill/HB1541/2010>
- **New Jersey: Effective March 13, 2010, New Jersey is the first state in the nation to ban the use of e-cigarettes in public places and workplaces and ban the sale to minors.** On January 11, 2010 New Jersey Governor Corzine signed into the law banning the use of e-cigarettes in workplaces and public places, and banning the sale of e-cigarettes to persons 18 years and younger. The law amended the 2006 NJ Smokefree Air Act. [http://www.njleg.state.nj.us/2008/Bills/A4500/4227\\_U1.PDF](http://www.njleg.state.nj.us/2008/Bills/A4500/4227_U1.PDF)
- **New Jersey: Effective November 23, 2009: Paramus Board of Health** bans the use of e-cigarettes in public places and work places effective December 1, 2009. <http://www.njgasp.org/Electronic%20Cigarettes%20Paramus%20Ordinance%2012-2009.pdf>
- **New Jersey: Effective October 7, 2009 Bergen County Board of Chosen Freeholders** prohibits the use of e-cigarettes at all county parks where children are present, and inside county buildings and county vehicles. [http://www.njgasp.org/Bergen\\_ecigs\\_resolution.pdf](http://www.njgasp.org/Bergen_ecigs_resolution.pdf)
- **New Mexico: Effective February 13, 2014. Santa Fe** outlaws the sale of electronic cigarettes to minors and prohibits their use in bars, restaurants and other public spaces covered under the city's existing smoke-free ordinance. [http://www.santafenewmexican.com/news/health\\_and\\_science/council-puts-strict-limits-on-e-cigarettes/article\\_38fb2bc6-f246-5bd9-b02a-36a63f45a903.html](http://www.santafenewmexican.com/news/health_and_science/council-puts-strict-limits-on-e-cigarettes/article_38fb2bc6-f246-5bd9-b02a-36a63f45a903.html)
- **New York State: Effective January 1, 2013** prohibits electronic smoking within 100 feet of the entrances or exits of any public or private schools and bans the sale of e-cigarettes to minors. Governor Cuomo signed the bill in September 2012; bill sponsor Assemblywoman Linda Rosenthal. <http://newyork.cbslocal.com/2012/09/05/gov-cuomo-signs-new-electronic-cigarette-restrictions-into-law/>
- **New York City: Effective December 30, 2013** Mayor Bloomberg signed the law passed by City Council to include electronic smoking devices with its current smokefree ordinance of other tobacco products. This means that e-cigarettes cannot be smoked in indoor public places and workplaces or in city park and recreational areas. [http://www.njgasp.org/CBS\\_NYC\\_ban\\_ecigs\\_12-19-13.pdf](http://www.njgasp.org/CBS_NYC_ban_ecigs_12-19-13.pdf)
- **New York City: Effective November 19, 2013** Mayor Bloomberg signed into law a bill that bans the sale of electronic smoking devices to persons under age 21. NYC Councilman James Gennaro sponsored the bill. It takes effect in 180 days from the bill signing. [http://www.njgasp.org/Newsday\\_Bloomberg\\_signs\\_ageofsale\\_21\\_11-19-13.pdf](http://www.njgasp.org/Newsday_Bloomberg_signs_ageofsale_21_11-19-13.pdf)
- **New York: Effective February 14, 2012, Cattaraugus County** bans e-cigarette sales to minors and the use of herbal and e-cigarettes in public places and workplaces.
- **New York: Effective November 1, 2009, Suffolk County** bans e-cigarette sales to persons under 19 and the use of e-cigarettes in public places and workplaces. <http://legis.suffolkcountyny.gov/Resos2009/i1347-09.pdf>

- **Oklahoma: Effective January 1, 2014** use of electronic cigarettes will be banned on all state-owned and state-leased properties  
[http://www.njgasp.org/NewsOK\\_OKECigBan\\_12-13.pdf](http://www.njgasp.org/NewsOK_OKECigBan_12-13.pdf)
- **North Carolina: Effective December 1, 2013** bans e-cigarette sales to minors under age 18. <http://www.ncga.state.nc.us/Sessions/2013/Bills/House/PDF/H864v0.pdf>
- **Oregon: The first state to go to court to ban the sale of e-cigarettes in the state using the argument that the companies are misrepresenting the safety of their products by marketing them as a safe alternative to traditional tobacco products. On August 9, 2010,** the Attorney General announces agreement with Florida-based Smoking Everywhere, Inc. and in **July 2009**, two settlements were reached: one prevented two national travel store chains from selling "electronic cigarettes", and the other prevents Sottera, Inc. (distributor of NJOY) to do business in the state.  
<http://www.doj.state.or.us/releases/pages/2010/rel080910.aspx>
- **South Carolina: Effective June 7, 2013** bans e-cigarette sales to minors under age 18.  
[http://www.scstatehouse.gov/sess120\\_2013-2014/prever/3538\\_20130523.htm](http://www.scstatehouse.gov/sess120_2013-2014/prever/3538_20130523.htm)
- **Tennessee: Effective July 1, 2011**, state code 39-17-1504 was amended to include e-cigarettes, making the sale or distribution of them illegal to minors under 18.  
<http://www.capitol.tn.gov/Bills/107/Bill/SB0910.pdf>
- **Texas: Effective 2014, San Marcos** is including e-cigarettes with its smoking ban, which is effective January 1 for municipal facilities, city parks and athletic facilities and effective June 1 for businesses, restaurants and bars.  
<http://www.sanmarcostx.gov/modules/showdocument.aspx?documentid=9647>  
<http://www.myfoxaustin.com/story/24339469/san-marcos-to-ban-smoking-e-cigarettes-in-2014>
- **Texas: Effective February 10, 2014, Lewisville** bans e-cigarette sales to minors.  
<http://www.cityoflewisville.com/index.aspx?page=33&recordid=513>
- **Vermont: Effective July 1, 2013** bans e-cigarette sales to minors under age 18.  
<http://www.leg.state.vt.us/docs/2014/Acts/Act014.PDF>
- **Washington: Effective July 28, 2013** bans the sale to minors under the age of 18.  
<http://apps.leg.wa.gov/documents/billdocs/2013-14/Pdf/Bills/Session%20Laws/House/1937.SL.pdf>
- **Washington: Effective June 23, 2011, Clark County** bans the sale of e-cigarette to minors.  
[http://www.oregonlive.com/clark-county/index.ssf/2011/06/clark\\_county\\_bans\\_sale\\_of\\_e-cigarettes\\_to\\_minors.html](http://www.oregonlive.com/clark-county/index.ssf/2011/06/clark_county_bans_sale_of_e-cigarettes_to_minors.html)
- **Washington: Effective December 16, 2010 King County Board of Health** bans the use of e-cigarettes in public places and work places, restricts the sales of e-cigarettes or any other unapproved nicotine delivery devices only to people 18 and older, and prohibits free or highly discounted electronic smoking devices or unapproved nicotine delivery products. <http://www.kingcounty.gov/healthservices/health/BOH/regulations.aspx>
- **Washington: Effective March 31, 2011 Spokane County and City of Spokane** banned the sale of e-cigarettes to minors.  
<http://www.kxly.com/news/City-County-Roll-Out-Minor-Ban-On-E-Cigarettes/-/101270/682924/-/w1gws4/-/index.html>
- **Washington: Effective June 2, 2011, Tacoma-Pierce County Health Department** (1) bans the use of electronic smoking devices in public places where minors are

permitted, exempt places of employment that are not public places and in retail outlets that exclusively sell or promote electronic smoking devices; and (2) bans free sampling or at nominal cost unless at an e-cigarette retail outlet; and (3) bans e-cigarette sales to minors.

<http://www.tpchd.org/news.php?nid=647> <http://tpchd.org/files/library/22094f84d3b140cb.pdf>

- **West Virginia: Effective June 23, 2011, Clark County** bans the sale of e-cigarettes to anyone under 18 years of age. [http://www.oregonlive.com/clark-county/index.ssf/2011/06/clark\\_county\\_bans\\_sale\\_of\\_e-cigarettes\\_to\\_minors.html](http://www.oregonlive.com/clark-county/index.ssf/2011/06/clark_county_bans_sale_of_e-cigarettes_to_minors.html)
- **Wisconsin: Effective April 20, 2012** prohibits the sale of e-cigarettes to people under age 18. <http://docs.legis.wisconsin.gov/statutes/statutes/134/66>
- **Wyoming: Effective March 13, 2013** bans the sale of e-cigarettes to people under age 18. <http://legisweb.state.wy.us/2013/Summaries/SF0103.htm>

Review a list of other U.S. municipalities and counties that restrict the use of electronic smoking devices, and some states that ban its use in State or educational facilities, at <http://www.no-smoke.org/pdf/ecigslaws.pdf>.

#### **Other restrictive policies in the U.S. (listed by most recently enacted):**

- **July 1, 2013, Minnesota** taxes e-cigarettes at a rate of 95% of the wholesale cost. <http://www.cspnet.com/category-management-news-data/tobacco-news-data/articles/year-end-review-tobacco-legislation>
- **March 15, 2013, U.S. Air Force** changes its policy "Tobacco Use in the Military" (Air Force Instruction 40-102) to include e-cigarettes and smokeless tobacco products which was adopted in 2010. <http://www.aerotechnews.com/nellisafb/2013/03/15/air-force-aims-to-curtail-electronic-cigarette-use/>

In August 2010, the Air Force surgeon general, Lt. Gen. (Dr.) Charles B. Green, issued a memo alerting all Airmen about safety concerns regarding electronic cigarettes. The memo states that due to the nature, appearance and safety concerns of electronic cigarettes, they are considered to be in the same category as tobacco products, the use of which is governed by Air Force Instruction 40-102, Tobacco Use in the Air Force. This new product will be included in the upcoming revision of AFI 40-102 due out this fall. [http://www.af.mil/news/story\\_print.asp?id=123218666](http://www.af.mil/news/story_print.asp?id=123218666)

- **December 2011, the New York Liquor Authority** made a Declaratory Ruling that beer wholesalers who have a C license cannot sell e-cigarettes. <https://www.sla.ny.gov/system/files/2011-03/687-Saleofelectroniccigarettes.pdf>
- **February 2011: The U.S. Department of Transportation (DOT) communicated in writing to New Jersey Senator Frank Lautenberg that the use of smokeless e-cigarettes on airplanes is prohibited.** The DOT plans to issue an official ban in the spring of 2011. According to the Associated Press, Transportation Secretary Ray LaHood said the DOT has been informing airlines and the public that it interprets smoking regulations to include e-cigarettes. [http://www.njgasp.org/DOT\\_Policy\\_on\\_ecigs\\_feb\\_2011\\_ltr\\_to\\_lautenberg.pdf](http://www.njgasp.org/DOT_Policy_on_ecigs_feb_2011_ltr_to_lautenberg.pdf)

Examples of enforcing the no e-cigarette use policy in-flight:

- In July 2011, a passenger refused to extinguish his e-cigarette in-flight from Los Angeles to Salt Lake City on Southwest Airlines, and upon disembarking, the FBI



charged him with interference with the flight crew.  
[http://connect2utah.com/search-fulltext?nxd\\_id=156217](http://connect2utah.com/search-fulltext?nxd_id=156217)

- o January 24, 2011 an Allegiant Airlines flight was diverted when a passenger refused to stop using their e-cigarette in-flight. The passenger argued with the flight attendant, and the pilots diverted the plane.  
<http://www.wvec.com/home/Electronic-cigarette-leads-to-unexpected-landing-in-Norfolk-114504289.html>

Senator Lautenberg wrote the 1987 law that banned smoking on airplanes; he asked the DOT to clarify the rule. In 2010, GASP requested Senator Lautenberg's office to look into clarifying the 1987 law banning smoking on airlines, to have it apply to electronic smoking devices as well. <http://www.sfgate.com/cgi-bin/article.cgi?f=/n/a/2011/02/11/financial/f055143S14.DTL#ixzz1DtI4gqZJ> On January 24, 2011 an Allegiant Airlines flight was diverted when a passenger refused to stop using their e-cigarette in-flight. The passenger argued with the flight attendant, and the pilots diverted the plane. <http://www.wvec.com/home/Electronic-cigarette-leads-to-unexpected-landing-in-Norfolk-114504289.html>

- **September 30, 2010, San Francisco Airport Commission** bans the use of e-cigarettes at the airport where smoking is banned.  
[http://www.njgasp.org/SanFrancisco\\_AirportCommPolicy9.30.10.pdf](http://www.njgasp.org/SanFrancisco_AirportCommPolicy9.30.10.pdf)
- **August 2010, U.S. Navy** announces that smoking will no longer be permitted below decks on its submarines, effective December 31, 2010. The policy includes e-cigs where are not approved by the FDA. The policy was initiated to protect the health of nonsmoking sailors. The Navy offers smoking cessation programs and nicotine replacement therapy will be widely available on the submarines.  
[http://www.njgasp.org/kitsapsun\\_navy\\_news\\_4-8-2010.pdf](http://www.njgasp.org/kitsapsun_navy_news_4-8-2010.pdf)
- **August 2010: Central Michigan University** banned the use of e-cigarettes in all buildings and residence halls , and within a 25 feet perimeter of all buildings.  
<http://www.cm-life.com/2010/08/19/electronic-cigarettes-banned-in-campus-buildings-residence-halls/>
- **October 14, 2009 Amazon.com** prohibits sale of electronic tobacco products on their website, and Paypal cancels e-cigarette accounts. Onlineprnews.com reported on October 14, 2009, that internet retailer Amazon.com noticed its resellers that e-cigarettes and other e-tobacco products are "inappropriate for Amazon.com" and that Amazon.com is prohibiting the sale of such products. Onlineprnews.com also reported that Paypal cancelled its electronic cigarette accounts.  
[http://www.njgasp.org/OLPRMedia\\_amazon\\_ecigs\\_removed\\_10-19-09.pdf](http://www.njgasp.org/OLPRMedia_amazon_ecigs_removed_10-19-09.pdf)

#### **Restrictive international policies (by most recently enacted):**

- **December, 2013, Switzerland** bans the use of e-cigarettes in public transport. The country also bans the sale of e-cigarettes but allows them to be imported.  
[http://www.njgasp.org/Google\\_Switzerland\\_e-cig\\_ban\\_11-12-13.pdf](http://www.njgasp.org/Google_Switzerland_e-cig_ban_11-12-13.pdf)
- **August 2013, UK Rail** announces a complete ban on passengers using e-cigarettes anywhere inside stations. **May 2013, First Capital Connect**, a commuter train in the London metro area banned the use of e-cigarettes on its trains.  
[http://www.njgasp.org/IndependentCoUK\\_train\\_ecig\\_ban\\_8-12-13.pdf](http://www.njgasp.org/IndependentCoUK_train_ecig_ban_8-12-13.pdf)  
[http://www.njgasp.org/UK\\_Hunts\\_Post\\_E-cig\\_ban\\_fcc\\_5-30-13.pdf](http://www.njgasp.org/UK_Hunts_Post_E-cig_ban_fcc_5-30-13.pdf)

- **July 10, 2013, European Parliament's Environment and Health Committee** voted to back the European Commission's proposed tobacco restrictions. One was to regulate e-cigarettes as medicinal products if they contain 4 mg or more of nicotine. [http://www.njgasp.org/EU\\_E-cigs\\_as\\_medicine\\_7-17-13.pdf](http://www.njgasp.org/EU_E-cigs_as_medicine_7-17-13.pdf)
- **June 21, 2013, the European Union** agreed on a directive to make tobacco products less appealing and limit all nicotine-containing products (including vapor products) with a nicotine level equal to or exceeding 1 mg per unit, or products with a nicotine concentration equal to or exceeding 2 mg per ml. <http://register.consilium.europa.eu/pdf/en/13/st11/st11483.en13.pdf>
- **June 2013, United Kingdom** decides electronic cigarettes will be regulated as medicine by the Medicines and Healthcare products Regulatory Agency. Beginning 2016, e-cigarette manufacturers will have to prove the quality of their products and demonstrate they deliver the correct amount of nicotine to obtain a license to sell their products in the UK. [http://www.njgasp.org/Reuters\\_UK\\_ecigs\\_regulated\\_6-12-13.pdf](http://www.njgasp.org/Reuters_UK_ecigs_regulated_6-12-13.pdf)
- **May 2011, Argentina** passes resolution 3226/2011 to ban the importation, distribution, commercialization and advertising of e-cigarettes and paraphernalia related to them. [http://www.njgasp.org/Argentina\\_bans\\_e-cigs\\_YahooNews\\_5-9-2011.pdf](http://www.njgasp.org/Argentina_bans_e-cigs_YahooNews_5-9-2011.pdf)
- **July 2010, Singapore** bans e-cigarette importation, distribution and sales under Section 16 (1) of the Tobacco (Control of Advertisements and Sale) Act, enforced by the Health Sciences Authority (HSA). Prohibits the importation, distribution, sale or offer for sale of any confectionery or other food product or any toy or other article designed to resemble a tobacco product or packaging which is designed to resemble the packaging commonly associated with tobacco products. Fine is of up to \$5, 000 upon conviction. [www.njgasp.org/Singapore\\_ban\\_7-19-10.pdf](http://www.njgasp.org/Singapore_ban_7-19-10.pdf)
- **January 2010, Malta** bans e-cigarette use in public places where smoking is banned and bans sale to minors. <http://archive.maltatoday.com.mt/2010/01/10/t14.html>
- **August 2009, Brazil** bans the sale, importation and advertisement of electronic cigarettes. The Brazil's health and sanitation federal agency, Anvisa, found the current health safety assessments about e-cigarettes not to be yet satisfactory to make the product eligible to be approved for commercialization. <http://www.estadao.com.br/noticias/vidae,anvisa-proibe-comercializacao-do-cigarro-eletronico,427373,0.htm>
- **July 2009: Israeli Health Ministry** bans e-cigarette sales and importation. <http://www.israelnationalnews.com/SendMail.aspx?print=print&type=0&item=132629>
- **June 2009: Panama** bans the importation, distribution and sale of e-cigarettes. Ministry of Health cites FDA findings as reason for their ban. <http://mensual.prensa.com/mensual/contenido/2009/10/22/hoy/panorama/1969677.asp>
- **March 27, 2009, Canada** bans sale of e-cigarettes that contain nicotine. Health Canada called for the immediate cessation of imports, sales, and advertising of electronic smoking products containing nicotine, and advised Canadians not to purchase or use any electronic smoking products. Under the Canadian Food and Drugs Act, Food and Drugs, electronic smoking products containing nicotine require market authorization before they can be imported, marketed, or sold. As of March 27, 2009, no electronic smoking product has been authorized for sale by Health Canada. <http://www.hc->

- **March 2009, Hong Kong** bans the use and sale of electronic cigarettes, unless registered as a pharmaceutical product with the government.  
[http://www.tco.gov.hk/textonly/english/infostation/infostation\\_04032009.html](http://www.tco.gov.hk/textonly/english/infostation/infostation_04032009.html) and  
[http://www.thestandard.com.hk/news\\_detail.asp?pp\\_cat=30&art\\_id=79120&sid=22983216&con\\_type=3](http://www.thestandard.com.hk/news_detail.asp?pp_cat=30&art_id=79120&sid=22983216&con_type=3)
- **January 2009, Jordan's Ministry of Health** banned the import of the electronic cigarettes, citing World Health Organization's health concerns.  
<http://www.jordantimes.com/?news=13857>
- **January 2009, Victoria (Australia)** bans e-cigarette use, sales and advertising. Australian law classifies nicotine as a poison (only exemption is for cigarettes and for cessation products). E-cigarettes have not been evaluated for safety and efficacy:

According to a spokesperson for the Federal Department of Health and Ageing, every form of nicotine except for replacement therapies and cigarettes are classified as a form of poison. Last October, the National Drugs and Poisons Schedule Committee (NDPSC) decided that this classification should remain for e-cigarettes, which effectively makes it illegal to sell nicotine e-cigarettes in all states and territories.

"The e-cigarette has not been evaluated for safety or efficacy," said a spokesperson for the Federal Department of Health and Ageing. "Nicotine has well recognized physiological and pathological effects and, as with conventional cigarettes, the e-cigarette would be expected to lead to, and sustain, nicotine addiction." <http://www.news.com.au/technology/electronic-cigarettes-sold-online-illegally/story-e6f1fro0-1111118601200>

- **March 2008, Turkey's Health Ministry** bans the sale and importation of e-cigarettes, classifying e-cigarettes as a pesticide. Ads of e-cigarettes are also banned.  
<http://arama.hurriyet.com.tr/arsivnews.aspx?id=-621407> and  
<http://arama.hurriyet.com.tr/arsivnews.aspx?id=-622303>

#### **U.S. jurisdictions considering bans on the use and/or sale of e-cigarettes (alphabetical list by state).**

- On February 26, 2014 a **San Diego** Committee will consider a proposal to regulate electronic cigarettes as traditional cigarettes, including a ban in public places and workplaces and preventing the sale to minors.  
[http://www.njgasp.org/ABC10NewsSanDiego\\_ecigs\\_2-13-14.pdf](http://www.njgasp.org/ABC10NewsSanDiego_ecigs_2-13-14.pdf)
- On February 14, 2014 the **West Virginia** House passed a bill to ban the sale of electronic cigarettes and other alternative tobacco products to minors. It has been passed to the Senate for consideration.  
<http://www.wvgazette.com/News/201402130118>
- On February 22, 2013, **California** introduced a bill (SB 648) that would ban electronic cigarettes in public places and workplaces, amending existing smokefree air laws to include electronic cigarettes as tobacco products.  
[http://www.leginfo.ca.gov/pub/13-14/bill/sen/sb\\_0601-0650/sb\\_648\\_bill\\_20130805\\_amended\\_asm\\_v96.pdf](http://www.leginfo.ca.gov/pub/13-14/bill/sen/sb_0601-0650/sb_648_bill_20130805_amended_asm_v96.pdf)
- Since 2011, the **San Francisco, California Department of Public Health** has proposed holding e-cigarettes under the same public smoking laws as traditional tobacco

products. The Health Commission passed a resolution on June 21, 2011 endorsing the San Francisco Department of Public Health's proposal to prohibit e-cigarettes where smoking is prohibited and would require a tobacco permit for the sale of e-cigarettes and other non-FDA approved smoking cessation nicotine delivery devices.

<http://www.sfbg.com/2013/06/12/scorning-smokers>

<http://www.sfdph.org/dph/files/hc/HCRes/Resolutions/2011Res/ecig%20reso.pdf>

- In January 2014 **Delaware** proposed legislation banning the sale of e-cigarette products to minors.  
[http://www.njgasp.org/WDEL\\_1150am\\_Minor\\_Ban\\_ecigs\\_DE\\_1-29-14.pdf](http://www.njgasp.org/WDEL_1150am_Minor_Ban_ecigs_DE_1-29-14.pdf)
- In January 2014, **Kentucky** introduced HB220 to include electronic cigarettes in in the state's tobacco tax scheme, and HB267 to establish the age of sale as 18 for the sale of electronic cigarette devices. <http://www.lrc.ky.gov/record/14RS/HB220.htm>,  
<http://www.lrc.ky.gov/record/14RS/HB267.htm>
- As of September 2011, **Macon, Georgia** is considering the expansion of the state's smoking ban, which would also include banning the use of e-cigarettes in places where smoking is banned. <http://www.breatheeasy.com/files/Ordinance.pdf>  
<http://www.macon.com/2011/09/23/1714992/macon-at-odds-over-smoking.html>
- In August 2013, **Massachusetts** proposed Bill 3639 to amend their existing smokefree air law to include e-cigarettes and all nicotine delivery products and to restrict their sale of to people under 18 years of age, prohibit their use on public school grounds, prohibit free samples, ban their use in public places and workplaces, and restrict the distribution of samples.  
[http://www.njgasp.org/myfoxboston\\_MA\\_bill\\_restricts\\_ecigs\\_8-13-13.pdf](http://www.njgasp.org/myfoxboston_MA_bill_restricts_ecigs_8-13-13.pdf)
- In **New Mexico**, both the Santa Fe City Council and state legislators are considering legislation to ban the sale of e-cigarettes to minors as of November 2013.  
[http://www.njgasp.org/abqjournal.com\\_ecigsale\\_ban\\_minors\\_11-20-13.pdf](http://www.njgasp.org/abqjournal.com_ecigsale_ban_minors_11-20-13.pdf)
- In San Diego California, San Diego's Councilman Mark Kersey drafted a proposal to be considered by the city of San Diego Committee asking that e-cigarettes be regulated the same way as traditional cigarettes and restrict the use of e-cigarettes in all public facilities. The proposal will be considered at the February 26 meeting.  
<http://www.10news.com/news/san-diego-councilman-mark-kersey-proposals-to-regulate-e-cigarettes-021314>
- As of November 2013, **Suffolk County, New York**, is considering following New York City's lead by introducing a bill to raise the age of selling tobacco products to age 21.  
[http://www.njgasp.org/CBS\\_Suffolk\\_County\\_raise\\_to\\_21\\_11-21-13.pdf](http://www.njgasp.org/CBS_Suffolk_County_raise_to_21_11-21-13.pdf)
- On February 3, 2014, **Oregon** introduced HB 4115 to define "vapor product" and "vape", and amends laws related to consumption of tobacco products by minors to include references to consumption of vapor products by minors. It also bans the use of the devices indoors and in cars with children.  
<https://olis.leg.state.or.us/liz/2014R1/Downloads/MeasureDocument/HB4115>
- On July 19, 2013 **Pennsylvania** introduced SB1055 to amend the definition of tobacco products to include electronic cigarettes.  
<http://legiscan.com/PA/text/SB1055/id/873434/Pennsylvania-2013-SB1055-Introduced.pdf>

- On January 16, 2014, **Rhode Island** introduced H7133 to include electronic cigarettes in the current tobacco product tax scheme. Also, H7021, introduced on January 8, 2014, would amend the definition of tobacco products to include e-cigarettes.  
[http://legiscan.com/RI/text/H7133/id/922758/Rhode\\_Island-2014-H7133-Introduced.pdf](http://legiscan.com/RI/text/H7133/id/922758/Rhode_Island-2014-H7133-Introduced.pdf)  
[http://legiscan.com/RI/text/H7021/id/907286/Rhode\\_Island-2014-H7021-Introduced.pdf](http://legiscan.com/RI/text/H7021/id/907286/Rhode_Island-2014-H7021-Introduced.pdf)
- On January 27, 2014, **Utah** introduced SB 0012 to increase the age of sale to 21 for e-cigarettes and tobacco products.  
<http://e.utah.gov/~2014/bills/sbillint/SB0012.pdf>

### **International Jurisdictions considering bans on the use and/or sale of e-cigarettes (alphabetical list by country).**

- As of December 2013, the **Philippines** is considering regulating the use and promotion of e-cigarettes, and regulating the sale to persons under 18 years old by introducing SB2011 or the E-Cigarette Regulation Act of 2013.  
[http://www.njgasp.org/BusinessMirror\\_Phillipines\\_Senator\\_seeks\\_ecig\\_regs\\_1-3-14.pdf](http://www.njgasp.org/BusinessMirror_Phillipines_Senator_seeks_ecig_regs_1-3-14.pdf)
- As of May 31, 2013, **France** is considering banning e-cigarette smoking in public places.  
[http://www.njgasp.org/CBSNews\\_France\\_ban\\_ecigs\\_public\\_places\\_5-31-13.pdf](http://www.njgasp.org/CBSNews_France_ban_ecigs_public_places_5-31-13.pdf)
- As of December 2011, **Greece** is considering a ban on the sale and use of e-cigarettes.  
[http://www.njgasp.org/Greece\\_E-cig-ban-possible-12-13-2011.pdf](http://www.njgasp.org/Greece_E-cig-ban-possible-12-13-2011.pdf)
- As of June 2013, **Italy** is considering banning e-cigarette smoking in public places.  
[http://www.njgasp.org/DNALifestyle-Injurious\\_to\\_health\\_Italy\\_ecigs\\_public\\_6-6-13.pdf](http://www.njgasp.org/DNALifestyle-Injurious_to_health_Italy_ecigs_public_6-6-13.pdf)
- On June 26, 2013, the **Philippines' Food & Drug Association** issued an Advisory that secondary exposure to e-cigarette emission might be harmful to health, and advised the public not to smoke or use e-cigarettes, and that local governing units shall be guided by this advisory in strengthening their ordinances against smoking in public places and on second-hand exposure to harmful substances." Read the Advisory for more details on the chemical and metals that pollute the air from e-cigarette vapor.  
<http://www.fda.gov.ph/attachments/article/80233/FA2013-015.pdf>

### **The Tobacco Industry and E-Cigarettes**

Tobacco industry lobbyists are supporting bills that prevent sales to minors but are worded in such a way to ensure e-cigarettes remain taxed at a lower rate than traditional cigarettes and remain outside states' existing indoor smoking bans.

- In mid July 2013, Rhode Island Governor Chaffee vetoed a bill that banned the sale of e-cigarettes to minors, calling it "counterproductive to prohibit sales to children while simultaneously exempting electronic cigarettes from laws concerning regulation, enforcement, licensing or taxation. As a matter of public policy, electronic cigarette laws should mirror tobacco product laws, not circumvent them."  
[http://www.njgasp.org/ColumbusDispatch\\_E-cig\\_Bill\\_Trojan\\_Horse\\_7-22-13.pdf](http://www.njgasp.org/ColumbusDispatch_E-cig_Bill_Trojan_Horse_7-22-13.pdf)  
[http://www.tobaccofreekids.org/press\\_releases/post/2013\\_07\\_18\\_ri](http://www.tobaccofreekids.org/press_releases/post/2013_07_18_ri)

In November 2013, *The Wall Street Journal* published an article "10 Things E-Cigarettes Won't Tell You" which looks at the e-cigarette industry as a threat to the decades of progress of antismoking efforts. The list of ten items with a brief description:

1. We're Big Tobacco in disguise. All three big tobacco companies (Altria Group, Reynolds American, and Lorillard) have entered the e-cigarette market.

2. We can't promise this won't kill you. The industry is careful only to claim their products are "less harmful" than traditional smokes.
3. This probably isn't the best way to quit smoking. They are not FDA approved as a smoking-cessation product.
4. We're advertising like it's 1960 - while we still can. As of November 2013 the FDA has not yet issued regulations which could treat e-cigarettes under the same law as traditional cigarettes.
5. We defy categorization. The FDA regulations should sort this out if, as expected, e-cigarettes are classified as a tobacco product.
6. We're cheaper than cigarettes because we aren't taxed like cigarettes.
7. Kids love us. The proportion of middle- and high school kids who have used e-cigarettes doubled between 2011 and 2012, raising concerns that they can be a gateway to traditional smokes.
8. We're bringing smoking back indoors...
9. ...and back into aircraft. Some airlines have created policies banning smoking but the federal Department of Transportation currently doesn't ban e-cigarettes.
10. E-joints and e-crackpipes are the new e-cig. Liquid forms of some drugs are being created and used in the devices.

[http://www.njgasp.org/WallStJournal\\_10\\_Things\\_ecigs\\_11-20-13.pdf](http://www.njgasp.org/WallStJournal_10_Things_ecigs_11-20-13.pdf)

As of November 2013, E-cigarettes do not fall under the same advertising restrictions as other tobacco products, and the companies have recreated the old product marketing strategies of using celebrity endorsements, cartoon characters, and flavors that appeal to kids such as chocolate and gummy bears. FDA regulations that are yet to be written may address this issue. [http://www.njgasp.org/USAToday\\_ecigs\\_ads\\_11-11-13.pdf](http://www.njgasp.org/USAToday_ecigs_ads_11-11-13.pdf)

On December 18, 2013 six Senators sent a letter to Federal Trade Commission Chairwoman Edith Ramirez requesting the FTC to investigate the marketing practices of e-cigarette manufacturers and urging enforcement action against companies that make misleading health claims in their advertising. [http://www.njgasp.org/BarbaraBoxerPressRelease\\_Ecig\\_letter\\_12-18-13.pdf](http://www.njgasp.org/BarbaraBoxerPressRelease_Ecig_letter_12-18-13.pdf)

### **Why restrict sale and use of e-cigarettes?**

A **September 3, 2013** article "9 Terribly Disturbing Things About Electronic Cigarettes," in the *Huffington Post* lists them as:

1. E-cigarettes contain toxic chemicals.
2. Kids and teens can buy them.
3. While cigarette companies say they don't market to kids, e-cigarettes come in flavors like cherry, strawberry, vanilla and cookies and cream milkshake.
4. Laws regulating cigarette ads don't yet apply to e-cigarettes.
5. E-cigarette companies are spending a TON on advertising.
6. E-cigarettes can be used in many places where smoking is banned.
7. People think e-cigarettes can help them quit smoking.
8. E-cigarettes aren't taxed like traditional tobacco products.
9. Despite unknown health consequences, e-cigarettes are poised to make inroads with the new generation of young people.

[http://www.huffingtonpost.com/2013/09/03/electronic-cigarettes\\_n\\_3818941.html?view=print&comm\\_ref=false](http://www.huffingtonpost.com/2013/09/03/electronic-cigarettes_n_3818941.html?view=print&comm_ref=false)

A University of Michigan poll released **September 13, 2010** shows that adults support restrictions on e-cigarettes, based on potential risks and not just immediate health effect, as well as the possibility that e-cigarettes may lead youth to smoke cigarettes, according to Matthew M. Davis, M.D., director of the poll. The poll found:

- 91 percent of adults in the U.S. think manufacturers should be required to test e-cigarettes for safety.
- 85 percent favor prohibiting the sale of e-cigarettes to minors.
- 82 percent think the FDA should regulate e-cigarettes like other nicotine-containing products.
- 68 percent of adults think e-cigarettes should have health warnings like tobacco cigarettes and other nicotine products.

Read study at <http://www.med.umich.edu/mott/npch/pdf/091310report.pdf>.

Read news clip at <http://www.njgasp.org/e-Cigs-newswire-UMich-study-9-2010.pdf>.

## II. Health Concerns

The following sections provide detailed, documented support and information regarding public health concerns with e-cigarette use and exposure.

### 1. Product is 'smoked', therefore not permissible under the 2006 New Jersey Smoke-Free Air Act (NJSFAA).

The NJSFAA definitions section, NJSA 26:3D-57, defines smoking as "... or any other matter can be smoked":

"Smoking" means the burning of, inhaling from, exhaling the smoke from, or the possession of a lighted cigar, cigarette, pipe or any other matter or substance which contains tobacco or any other matter that can be smoked."

The heating element in the e-cigarette heats and vaporizes the nicotine/propylene glycol solution, creating the 'smoke' which is inhaled and exhaled. Since the product is 'smoked' and creates a 'smoke', e-cigarette use is **not** permissible for use in public places and workplaces that are covered under the NJSFAA.

In addition, some e-cigarette companies admit in their marketing materials that their products are 'smoked'. GASP surveyed some e-cigarette websites, and, for example, Smokeless Revolution's website admits many times, that the product creates a 'smoke':

"The EVO is an electronic, smokeless alternative that delivers true tobacco flavor through a **vapor mist smoke**, with your preferred level of nicotine."

<http://www.smokelessrevolution.com/home.html>

Their website's "Frequently Asked Questions" section also states that a battery is used to create the smoke vapor:

...a small rechargeable battery and a unique, safe replaceable cartridge containing water, propylene glycol, nicotine, a scent that emulates a tobacco flavor and a membrane to suspend the ingredients. When using EVO, the act of inhaling or smoking it

produces the tactile and craving satisfactions traditional smokers seek, and triggers a vaporizing process that releases a simulated smoke that is actually a vapor mist that harmlessly evaporates into the air within a few seconds.  
<http://www.smokelessrevolution.com/faq.html>

Other e-cigarette websites have similar language.

## **2. Public health nuisance created when product used as intended.**

The New Jersey general public nuisance code, NJS 26:3-46 et seq. may also apply, separate and apart from the NJSFAA. It is unclear what byproducts are in the smoke that is emitted from the e-cigarette, and therefore, the safety of the smoke is called into question. NJS 26:3-46 specifically refers to "gases or vapors... that are injurious to the health of the inhabitants."

Persons with breathing disabilities may especially have their lung functioning compromised, due to exposure to e-cigarette byproducts like propylene glycol (helps to create the smoke effect), and other additives to the nicotine solution when heated, then dispersed into the air. A public place or workplace that permits the usage of e-cigarettes may be subject to a violation of the NJ Law Against Discrimination, or the Americans with Disabilities Act Amendment Act of 2009.

Pertinent sections of the NJ public health nuisance code are in section 14 of this paper.

On January 24, 2011 an Allegiant Airlines flight was diverted when a passenger refused to stop using their e-cigarette in-flight. The passenger argued with the flight attendant, and the pilots diverted the plane. <http://www.wvec.com/home/Electronic-cigarette-leads-to-unexpected-landing-in-Norfolk-114504289.html>

## **3. July 2009 FDA study finds carcinogens in e-cigarettes, and other health concerns regarding the use of e-cigarettes.**

The FDA's Center for Drug Evaluation, Division of Pharmaceutical Analysis (DPA) conducted a laboratory analysis of e-cigarette cartridges from two leading brands. The analysis indicated that e-cigarettes expose users to harmful chemical ingredients:

- Diethylene glycol, an antifreeze ingredient toxic to humans was found.
- Tobacco specific nitrosamines that are human carcinogens were detected in ½ of the samples.
- Tobacco-specific impurities suspected of being harmful to humans – anabasine, myosmine, and B-nicotyrine – were detected in a majority of the samples.
- The e-cigarette cartridges labeled as containing no nicotine had low levels of nicotine present in all cartridges sampled, except one.
- 3 different e-cigarette cartridges with the same label emitted markedly different amounts of nicotine with each puff, ranging from 26.8 to 43.2 mcg nicotine/100 ml puff.
- One high-nicotine cartridge delivered twice as much nicotine to users when inhaled, than was delivered by a sample of an FDA approved smoking cessation nicotine inhalation product.

FDA Summary <http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm173146.htm>

FDA study <http://www.fda.gov/downloads/Drugs/ScienceResearch/UCM173250.pdf>

The FDA concluded in its July 2009 findings:

- Clinical studies about the safety and efficacy of these products for their intended use have NOT been submitted to the FDA. Consumers have now way of knowing:
  - Whether e-cigarettes are safe for their intended use.



- About what types or concentrations of potentially harmful chemicals, or what dose of nicotine they are inhaling when they use these products.  
<http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm173401.htm>
- Read highlights from the FDA July 2009 media call in section 13 of this paper.

U.S. Senator Frank Lautenberg issued a July 22, 2009 press release in response to the FDA report:

**This report proves what we feared – that e-cigarettes may be unsafe and need to be taken off the market immediately.** Not only can these products fuel a life-long addiction to nicotine, but now the FDA has found that they contain cancer-causing chemicals.  
[http://www.njgasp.org/Ecigs\\_sen\\_lautenberg\\_press\\_release\\_03-23-09.pdf](http://www.njgasp.org/Ecigs_sen_lautenberg_press_release_03-23-09.pdf)

National Public Radio quoted Walt Linscott, an attorney for Smoking Everywhere, a major e-cigarette importer, in their August 5, 2009 story about e-cigarette:

"It is a cigarette, and cigarettes inherent by their design and nature are not safe."  
[http://www.njgasp.org/NPR\\_ecigs\\_08-05-09.pdf](http://www.njgasp.org/NPR_ecigs_08-05-09.pdf)

#### 4. World Health Organization (WHO) issues warnings about e-cigarettes.

At an annual awards ceremony held July 2, 2013, the WHO urged the government of the Philippines to regulate the sale of e-cigarettes, citing a trend in other countries where people who started using e-cigarettes ended up smoking the real thing. Dr. Susan Mercado, director for Building Healthy Communities and Populations of the WHO-Western Pacific office said,

"In 2010, the WHO organized a global panel of experts to review the evidence and there is no evidence to show that it can help you quit smoking,"  
[http://www.njgasp.org/Phillippines\\_WHO\\_ecigs\\_warning\\_7-4-13.pdf](http://www.njgasp.org/Phillippines_WHO_ecigs_warning_7-4-13.pdf)

In September 2008, the WHO issued a written warning that there is no research/testing that e-cigarettes are safe products for human consumption, and no evidence that e-cigarettes are a safe substitute for smoking, or help smokers to quit. See WHO statement at  
<http://www.who.int/mediacentre/news/releases/2008/pr34/en/index.html>.

#### 5. Researchers, health organizations voice concerns about e-cigarettes.

On **March 4, 2014**, the New York Times story "E-Cigarettes, by Other Names, Lure Young and Worry Expert" discussed the growing trend of non-traditional electronic cigarettes. "Hookah pens," "e-hookahs," and "vape pipes", subdivisions of electronic cigarettes, are growing in popularity among minors and causing trouble for health officials who are facing struggles trying to regulate and measure the spread of e-cigarettes. The worry is that many users of these products don't realize that they are off-sets of electronic cigarettes which is leading to under reported use in national and local studies of electronic smoking devices.  
[http://www.njgasp.org/NYTimes\\_ecigs\\_other\\_names\\_3-4-14.pdf](http://www.njgasp.org/NYTimes_ecigs_other_names_3-4-14.pdf)

In a **February 5, 2014** letter to the British Medical Journal from Mari Roberts and Mark Davies from the Department of Anesthesia, Royal Liverpool and Broadgreen University Hospitals, the dangers of electronic cigarette use before surgery are discussed. Traditionally, anesthesiologists have strongly advised patients to stop smoking before anesthesia and surgery, and now some doctors are also recommended avoiding electronic cigarette use prior to surgery. Electronic cigarettes, like traditional cigarettes, provide users which nicotine, which can affect the cardiovascular and nervous systems, making the process of anesthesia less predictable and less safe.  
[http://www.njgasp.org/bmj\\_ecigs\\_anesthesia\\_dangers\\_2-5-14.pdf](http://www.njgasp.org/bmj_ecigs_anesthesia_dangers_2-5-14.pdf)

The **January 7, 2014** issue of the American Journal of Preventive Medicine published the study, "Beliefs and Experimentation with Electronic Cigarettes." The researchers concluded: "Given

that young adults are still developing their tobacco use behaviors, informing them about the lack of evidence to support e-cigarettes as quit aids and the unknown health risk of e-cigarettes may deter young adults from trying these products.

[http://www.ajpmonline.org/webfiles/images/journals/amepre/AMEPRE\\_3935-stamped-010714.pdf](http://www.ajpmonline.org/webfiles/images/journals/amepre/AMEPRE_3935-stamped-010714.pdf)

In a National Center for Biotechnology Information study, published **December 22, 2011**, the acute pulmonary effects of using an e-cigarette were examined. The study found that there are immediate adverse physiologic effects after short-term use of electronic cigarettes that are similar to some of the effects seen with tobacco smoking.

<http://www.ncbi.nlm.nih.gov/pubmed/22194587>

In the **December 11, 2013** issue of the journal *Nicotine & Tobacco Research*, Roswell Park Cancer Institute released their study on secondhand vapor smoke entitled, "Secondhand Exposure to Vapors from Electronic Cigarettes". The "results showed that e-cigarettes emitted significant amounts of nicotine." The researchers share that this raises health concerns about a nonuser's exposure to secondhand vapor smoke. The researchers conclude that their study can "guide policymakers as decisions are made about the regulation of nicotine delivery devices. 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.
- "Our data suggest 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."
- "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."

Roswell Park's research partners include the Medical University of Silesia in Sosnowiec, Poland; and the Department of Chemical Hazards / Institute of Occupational and Environmental Health in Sosnowiec, Poland.

[http://www.njgasp.org/NTR\\_Czogala-Goniewicz-Travers\\_SHS\\_e-cig\\_vapors\\_12-2013](http://www.njgasp.org/NTR_Czogala-Goniewicz-Travers_SHS_e-cig_vapors_12-2013)

On **December 3, 2013**, the Dutch Health Ministry's National Institute for Public Health issued an "E-Cigarette Factsheet" about concerns with safety, quality, sales and endorsement of e-cigarettes. The Factsheet details e-cigarette ingredients that may irritate the respiratory system, and some ingredients that contain carcinogenic substances like formaldehyde and tobacco-specific nitrosamines. Fox News reported that, "Citing the institute's findings, Dutch deputy health minister Martin Van Rijn argued that e-cigarettes are as addictive as tobacco cigarettes because they contain nicotine, and he said there was no proof of claims by manufacturers that they help smokers quit."

- Read the Factsheet  
[http://www.rivm.nl/dsresource?objectid=rivmp:230704&type=org&disposition=inline&ns\\_nc=1](http://www.rivm.nl/dsresource?objectid=rivmp:230704&type=org&disposition=inline&ns_nc=1)
- Read the Dutch Ministry of Health's summary webpage  
[http://www.rivm.nl/en/Documents\\_and\\_publications/Common\\_and\\_Present/Further\\_research\\_into](http://www.rivm.nl/en/Documents_and_publications/Common_and_Present/Further_research_into)

[\\_hazards\\_posed\\_by\\_e\\_cigarettes http://www.rivm.nl/en/Documents\\_and\\_publications/Common\\_and\\_Present/Further\\_research\\_into\\_hazards\\_posed\\_by\\_e\\_cigarettes?](http://www.rivm.nl/en/Documents_and_publications/Common_and_Present/Further_research_into_hazards_posed_by_e_cigarettes?)

- Read the Fox News 11/29/13 story <http://www.foxnews.com/health/2013/11/29/dutch-sound-alarm-about-possible-risks-e-cigarettes/>

On **November 28, 2013**, the European Commission announced that it seeks to overturn a vote by Members of the European Parliament that rejected outlawing electronic smoking devices in their present form. Brussels officials fear that there is a “risk that electronic cigarettes can develop into a gateway to normal cigarettes”, according to the paper, and wants to include the smoke-free alternative under a new EU “tobacco products directive” — despite the fact that they contain no tobacco. The commission proposals would ban, by 2017, e-cigarettes that produce levels of nicotine above 20 mg per ml, those with refillable cartridges or those designed to taste like tobacco. According industry estimates, if current growth rates continue, by 2017, when the EU ban would come into force, there could be nearly five million former people using electronic cigarettes rather than smoking tobacco. In Britain, the pub chain JD Wetherspoon and some train operators have already banned the devices. The Dutch public health institute on Wednesday published a policy paper claiming that electronic cigarettes are as harmful as ordinary cigarettes, warning they are addictive and contain poisonous substances:

- The European Commission document says the devices “normalise the action of smoking”.
- They simulate smoking behaviour and are increasingly used and marketed to young people and non-smokers.”. <http://www.telegraph.co.uk/news/worldnews/europe/eu/10481328/EU-seeks-ban-on-all-currently-available-e-cigarettes.html>

An **April 2013** study by the German Cancer Research Center (DKFZ) evaluated the current state of e-cigarettes. The Key Message of the research center publication is:

“Electronic cigarettes are novel products emerging on the market just a couple of years ago. Consequently, there are only few scientific studies on the health implications of using electronic cigarettes. Based on current data, the following statements can be made:

#### **Product characteristics**

- E-cigarettes cannot be rated as safe at the present time.
- Consumers do not have reliable information on product quality.
- Electronic cigarettes have various technical flaws (leaking cartridges, accidental intake of nicotine when replacing cartridges, possibility of unintended overdose).
- Some manufacturers provide insufficient and partly wrong information about their liquids.

#### **Health effects**

- The liquids contain ingredients that on short-term use irritate air- ways and may lead to allergic reactions and which may be harmful to health when inhaled repeatedly over a prolonged period of time.
- The aerosol of some liquids contains harmful substances (form- aldehyde, acetaldehyde, acrolein, diethylene glycol, nickel, chromium, lead).
- The functionality of electronic cigarettes can vary considerably (aero- sol production, nicotine delivery into aerosols).
- Adverse health effects for third parties exposed cannot be excluded because the use of electronic cigarettes leads to emission of fine and ultrafine inhalable liquid particles, nicotine and cancer-causing sub- stances into indoor air.

#### **Users of electronic cigarettes**

- Smokers and smokers considering cessation, as well as former smokers use electronic cigarettes predominantly.

- Even though only few non-smokers use electronic cigarettes, the products may bring them closer to smoking conventional cigarettes.
- Electronic cigarettes are used as an alternative to cigarette smoking and as smoking cessation aids primarily because they are believed to be less harmful than regular cigarettes.

#### **Efficacy as cessation device**

- Electronic cigarettes – regardless of their nicotine content – can reduce the desire to smoke (craving) and withdrawal symptoms.
- Some smokers cut down smoking or quit smoking as a result of using e-cigarettes.
- The efficacy of e-cigarettes as an aid for sustained smoking cessation has not yet been proven.

#### **Product regulation**

- We desperately need to know more on product quality, ingredients, possible health effects of e-cigarette use, and efficacy of e-cigarettes as cessation aid. Carefully planned studies by qualified and objective scientists are necessary.
- Electronic cigarettes should be regulated as medicinal products, regardless of their nicotine content.
- E-cigarettes should not be dispensed to children and youth.
- Non-smoker protection legislation should apply to e-cigarettes."

<http://www.dkfz.de/en/presse/download/RS-Vol19-E-Cigarettes-EN.pdf>

In the **March 20, 2013** issue of the journal PLOS ONE, researchers from the University of California - Riverside published their study entitled, "Metal and Silicate Particles Including Nanoparticles Are Present in Electronic Cigarette Cartomizer Fluid and Aerosol." The researchers found that 22 elements were identified in the electronic cigarette aerosol, and three of these elements (lead, nickel, and chromium) appear on the FDA's "harmful and potentially harmful chemicals" list [38]. The researchers concluded that EC consumers should be aware of the metal and silicate particles in EC aerosol and the potential health risks associated with their inhalation: Lead and chromium concentrations in EC aerosols were within the range of conventional cigarettes, while nickel was about 2–100 times higher in concentration in EC aerosol than in Marlboro brand cigarettes (Table 1).

- Adverse health effects in the respiratory and nervous systems can be produced by many of the elements in Table 1, and many of the respiratory and ocular symptoms caused by these elements have been reported by EC users in the Health and Safety Forum on the Electronic Cigarette Forum website <http://www.e-cigarette-forum.com/forum/health-safety-e-smoking/>.
- Although Table 1 was constructed to emphasize the effects of the elements found in aerosol on the respiratory system, other systems, such as the cardiovascular and reproductive systems, can be affected by most of the elements in EC aerosol.
- Nanoparticles tend to penetrate deep into the respiratory system and reach the alveolar sacs. The electronic cigarette brand used in our study required a high air flow rate to produce aerosol, which would further enhance deep penetration of nanoparticles into the respiratory system. Metal particles/nanoparticles can produce adverse effects in vitro and in vivo, and nanoparticles can be transported in vivo to other organs, including the liver, kidney, heart, and brain. Chromium, nickel and tin nanoparticles were found in EC aerosol. Cobalt chromium and chromium oxide nanoparticles damaged cultured cells, and long-term inhalation of nickel hydroxide nanoparticles by mice caused oxidative stress and inflammation in lung and cardiac tissues. While tin nanoparticles, per se, have not been studied in human lungs, tin dust from a Chinese mine was cytotoxic, induced release of reactive oxygen species from alveolar macrophages in vitro, and induced malignant transformation of cultured bronchial epithelial cells. Inhalation of tin dust has also been reported to cause stannosis in humans.
- The study was based on one brand of electronic cigarettes purchased on multiple occasions over a two year period.

It will be important in future studies to determine if other brands of EC produce aerosol with similar levels of metals and silicates and if the metals, silicates and nanoparticles in EC aerosol present long-term health risks to users and exposed bystanders.

<http://www.plosone.org/article/info:doi/10.1371/journal.pone.0057987> Study citation: Williams M, Villarreal A, Bozhilov K, Lin S, Talbot P (2013) Metal and Silicate Particles Including Nanoparticles Are Present in Electronic Cigarette Cartomizer Fluid and Aerosol. PLoS ONE 8(3): e57987. doi:10.1371/journal.pone.0057987

In the **March 6, 2013** issue of the journal *Tobacco Control*, Roswell Park Cancer Institute released their study on carcinogens and toxicants in secondhand vapor smoke entitled, "Levels of selected carcinogens and toxicants in vapour from electronic cigarettes." The study found that as a harm reduction strategy, a nicotine inhaler would be a safer approach to delivering nicotine than an e-cigarette product. The study results comparing the two products show:

Toxic Compounds	E-cig	Inhaler
Formaldehyde	28.2	2.0
Acetaldehyde	7.4	1.1
Acrolein	11.5	ND
o-methylbenzoyne	3.9	0.7
Toluene	0.8	ND
p,m-xylene	0.1	ND
NNN	1.5	ND
NNK	6.6	ND
Cadmium	0.09	0.03
Nickel	0.19	0.19
Lead	0.09	0.04
	ND=not detected	

Accordingly, an e-cigarette delivers 14 times as much formaldehyde, 7 times as much acetaldehyde, 6 times as much o-methylbenzene, 3 times as much cadmium and twice as much lead as a nicotine inhaler, as well as acrolein, toluene, p,m-xylene, NNN and NNK, which were not detected in the inhaler. Roswell Park's research partners include the Medical University of Silesia in Sosnowiec, Poland; and the Department of Chemical Hazards / Institute of Occupational and Environmental Health in Sosnowiec, Poland. Read more on the [Center for Tobacco Control Research & Education's website](http://tobaccocontrol.bmj.com/content/early/2013/03/05/tobaccocontrol-2012-050859.abstract).

<http://tobaccocontrol.bmj.com/content/early/2013/03/05/tobaccocontrol-2012-050859.abstract>

A March 13, 2013 *New York Daily News* article identifies e-cigarettes as being tried by about 21% of adult smokers in 2011, up from 10% in 2010. According to Dr. Andrew Strasser, associate professor in the department of psychiatry at the University of Pennsylvania School of Medicine, and resident tobacco products expert at Penn's Center for Interdisciplinary Research on Nicotine Addiction:

- "Just replacing some of your daily cigarettes [with e-cigarettes] is not really a harm reduction strategy."
- "There has not been a rigorous evaluation of quality control."
- "There could be a significant variation in nicotine dosing in individual cartridges."
- "We don't know enough about the e-cigarette to be able to recommend it as a smoking cessation tool"

Read the full article at [http://www.nigasp.org/NYDailyNews\\_More\\_people\\_are\\_smoking\\_e-cigarettes\\_but\\_as\\_a\\_quitting\\_tool\\_they\\_may\\_be\\_all\\_smoke\\_and\\_mirrors\\_3-13-13.pdf](http://www.nigasp.org/NYDailyNews_More_people_are_smoking_e-cigarettes_but_as_a_quitting_tool_they_may_be_all_smoke_and_mirrors_3-13-13.pdf)

The May 2013 issue of the journal *Nicotine & Tobacco Research* published a study entitled, "[Use of Electronic Cigarettes Among State Tobacco Cessation Quitline Callers](#)", which found that smokers trying to quit who used e-cigarettes were significantly less likely to be tobacco abstinent at the 7-month survey, compared with participants who had never tried e-cigarettes. Read a list of implications from the study published by Dr. Stan Glantz of the University of California, San Francisco Center for Tobacco Control Research & Education.

<http://tobacco.ucsf.edu/important-new-evidence-using-e-cigarettes-reduces-successful-quitting-cigarettes>

The Italian Health Ministry published a report on December 28, 2012 that concludes e-cigarettes do not help smokers quit, nor do they provide a safer alternative to traditional smoking. Roberta Pacifici, director of Italy Observatory on Smoking, Alcohol and Drug Use at the National Health Institute, who worked on the report, said that the scientific reports studied "do not reassure us about the effectiveness or the innocuousness of its use."

[http://www.njgasp.org/ABC\\_no\\_proof\\_e-cigs\\_combat\\_addiction\\_1-2-13.pdf](http://www.njgasp.org/ABC_no_proof_e-cigs_combat_addiction_1-2-13.pdf)

A University of Athens study was presented at the European Respiratory Society's Annual Congress in Vienna, Austria on September 2, 2012.

- The study showed that using an e-cigarette caused an immediate increase in airway resistance, lasting for 10 minutes, making it harder for participants to breathe.
- "We found an immediate rise in airway resistance in our group of participants, which suggests e-cigarettes can cause immediate harm after smoking the device. More research is needed to understand whether this harm also has lasting effects in the long-term.

<http://www.erscongress2012.org/mediacenter/news-release/item/428-experts-warn-that-e-cigarettes-can-damage-the-lungs.html>

- "ERS does not classify e-cigarettes as a safe alternative to smoking, nor does it consider them an approved tobacco cessation tool," spokesman Klaus Rabe recently told reporters, reiterating from the society's statement in February. "ERS recommends following effective smoking cessation treatment guidelines based on clinical evidence which do not advocate the use of such products."

<http://www.dailycommercial.com/091112electroniccigarettes>

<http://www.medicalnewstoday.com/articles/249784.php>

The **August 1, 2012** edition of the Oxford University Press on behalf of the Society for Research on Nicotine or Tobacco 2012 published FDA's letter entitled, [FDA Summary of Adverse Events on Electronic Cigarettes](#). The letter was submitted by li-Lun Chen, MD, Office of Science, Center for Tobacco Products, FDA. The types of adverse effects from e-cigarettes reported to the FDA are:

- "2008 and earlier (1 of 18 total tobacco product reports), 2009 (10 of 16), 2010 (16 of 27), 2011 (11 of 30), and first-quarter 2012 (9 of 11). Of the 47 reports on e-cigarettes, 8 reported serious adverse events. A summary of serious e-cigarette complaints include hospitalization for illnesses such as pneumonia, congestive heart failure, disorientation, seizure, hypotension, possible aspiration pneumonia, second-degree burns to the face (product exploded in consumer's mouth while driving and during routine use), chest pain and rapid heartbeat, possible infant death secondary to choking on e-cig cartridge, and loss of vision requiring surgery."
- "In addition to these serious adverse events, other e-cigarette complaints include concerns about false advertising, headache/ migraine, chest pain, cough/sputum, nausea/vomiting, dizziness, feeling sick, confusion/stupor, sore throat, shortness of breath, abdominal pain, pleurisy, blurry vision, and sleepy/tired. Of note, there is not necessarily a causal relationship between AEs reported and e-cigarette use, as some AEs could be related to pre-existing conditions or due to other causes not reported."
- "Research by CTP reviewers found e-cigarette companies marketing flavored cartridges containing nicotine levels ranging from 0 mg to upwards of 24 mg..." .

A **July 2012** study published in the journal *Indoor Air* found that e-cigarettes are putting detectable levels of significant carcinogens and toxins into the air: acetic acid, acetone, isoprene, formaldehyde and acetaldehyde. The authors concluded "[t]he consumption of e-

cigarettes marks a new source for chemical and aerosol exposure in the indoor environment. To evaluate the impact of e-cigarettes on indoor air quality and to estimate the possible effect of passive vaping, information about the chemical characteristics of the released vapor is needed." The study was conducted at the Fraunhofer Wilhelm-Klauditz-Institut in Germany. [http://www.njgasp.org/Indoor\\_Air\\_journal\\_ecig\\_vaping\\_5-2012.pdf](http://www.njgasp.org/Indoor_Air_journal_ecig_vaping_5-2012.pdf)

In **July 2011**, The *New England Journal of Medicine* published a perspective from the Schroeder National Institute for Tobacco Research and Policy Studies which discusses safety concerns with e-cigarettes. According to the Legacy Foundation's press release:

- "Smokers attempting to use e-cigarettes as quitting aids will most likely find them ineffective due to the fluctuating nicotine content and unpredictable delivery."
- "The safety of inhaling propylene glycol over an extended period of time has not been studied in humans."
- "E-cigarettes may serve as a 'bridge product' that smokers use in places where traditional tobacco smoking is prohibited, thus perpetuating their addiction and use of real cigarettes."
- E-cigarettes "may be used as a 'starter' product for young people considering smoking, especially since the cartridges can be purchased over the Internet with tempting flavoring like grape and chocolate."

<http://www.legacyforhealth.org/4550.aspx>

In **December 2010**, a study funded by a grant from the University of California Tobacco-Related Disease Research Center studied 5 brands of e-cigarettes and observed many safety issues:

- "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."

These researchers expressed their concern about the safety of the e-cigarette vapors. The University of California press release states: "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 manufacturers are dubious at best."

[http://www.njgasp.org/e-cig\\_study\\_UC\\_Riverside\\_12-3-2010.pdf](http://www.njgasp.org/e-cig_study_UC_Riverside_12-3-2010.pdf)

The e-cigarette device can be dangerous. An electronic cigarette plugged into a laptop for charging exploded and started a fire in an Idaho residence.

[http://www.njgasp.org/WPTV\\_ecig\\_fire\\_idaho\\_11-5-13.pdf](http://www.njgasp.org/WPTV_ecig_fire_idaho_11-5-13.pdf)

A Florida user lost teeth and part of his tongue when an e-cigarette battery malfunctioned, blowing up in his mouth and causing a fire in his home.

[http://www.njgasp.org/ABCNews\\_ECig\\_Explodes\\_2-17-2012.pdf](http://www.njgasp.org/ABCNews_ECig_Explodes_2-17-2012.pdf)

The **December 2010** issue of the American Public Health Association Journal published an editorial expressing health concerns about e-cigarettes.

[http://www.njgasp.org/APJA\\_ecig\\_editorial\\_12-2010.pdf](http://www.njgasp.org/APJA_ecig_editorial_12-2010.pdf)

Harvard School of Public Health's industry watch entitled, "Electronic Cigarettes: A new 'tobacco' industry?" published **October 7, 2010** concludes: "Research on product design, toxicant exposure, abuse liability including dual use with tobacco products, youth initiation, and influence on cessation efforts is needed to counteract e-cigarette industry marketing and inform regulatory strategies." [http://www.njgasp.org/TC\\_ecig\\_industry\\_10-25-2010.pdf](http://www.njgasp.org/TC_ecig_industry_10-25-2010.pdf)

On **August 27, 2010**, The American Cancer Society Cancer Action Network presented to the New Mexico Tobacco Settlement Revenue Oversight Committee asking for a ban of all sales of e-cigarettes until approved by the FDA. <http://www.njgasp.org/ACSCAN-Aug-27-2010-ecig-ppt.pdf>

On **June 14, 2010**, The American Medical Association (AMA) House of Delegates adopted a new policy that recommends electronic cigarettes (e-cigarettes) be classified as drug delivery devices, subject to the same FDA regulations as all other drug delivery devices. Additional policy adopted supports prohibiting the sale of e-cigarettes that are not FDA approved. AMA Board Member Edward L. Langston, MD, stated:

- "Very little data exists on the safety of e-cigarettes, and the FDA has warned that they are potentially addicting and contain harmful toxins."
- "Because e-cigarettes have not been thoroughly tested, one cannot conclude that they are less harmful or less dangerous than conventional cigarettes."
- "The fact that they come in fruit and candy flavors gives them the potential to entice new nicotine users, especially teens."  
[http://www.njgasp.org/AMA\\_ecigs\\_drug\\_delivery\\_06-14-10.pdf](http://www.njgasp.org/AMA_ecigs_drug_delivery_06-14-10.pdf)

In **May 2010**, support of an Illinois bill that would ban the sale of electronic cigarettes (SB 3174), national public health organizations issued a public statement with 3 key messages about this product that is not regulated by the FDA: "There is no scientific evidence that e-cigarettes are safer for consumers than regular tobacco products"; "Many e-cigarettes are being enhanced with bubble gum and fruit flavors, which are attractive to teens."; "There is no scientific evidence that e-cigarettes can help smokers quit." <http://www.iafp.com/legislative/SB3174e-cigarettes.pdf>

In **May 2009**, the American Lung Association, American Cancer Society Cancer Action Network, the American Heart Association, and the Campaign for Tobacco-Free Kids have called for e-cigarettes to be removed from the market. See FDA website. <http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm173175.htm>

## **6. E-cigarettes appeal to youth.**

The Utah State Department of Health published in December 2013 the results of their state survey on tobacco product use, which shows a much higher level of use among kids than adults. Here are their conclusions:

- The percentage of Utah students in grades 8, 10, and 12 who reported that they had tried electronic cigarettes more than doubled from 2011 to 2013
- Despite having no legal access to e-cigarettes, Utah youth are three times more likely to report current use than adults
- Nearly one third of Utah youth who used e-cigarettes in the past 30 days report that they never tried conventional cigarettes
- Due to candy-like flavors, aggressive marketing, and lack of data regarding safety, monitoring the increasing use of e-cigarettes among youth is a public health priority

[http://health.utah.gov/opha/publications/hsu/1312\\_ECig.pdf](http://health.utah.gov/opha/publications/hsu/1312_ECig.pdf)

On September 6, 2013 the Centers for Disease Control and Prevention reported that during 2011-12, e-cigarette use and experimentation more than doubled among U.S. middle and high school students. Results from the National Youth Tobacco Survey show that the percentage of



high school students who reported ever using e-cigarettes increased from 4.7 percent in 2011 to 10 percent in 2012. According to the report, approximately 1.78 million U.S. youth used e-cigarettes in 2012. To summarize,

- 10 percent of high school students have tried e-cigarettes
- Middle and high school e-cigarette use doubled from 2011 to 2012
- In 2012, an estimated 160,000 middle and high school students who tried e-cigarettes have never smoked a cigarette.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a6.htm>

Youth are attracted to electronic gadgets. Coupled with e-cigarette flavorings that are enticing to teens and children, there is concern that e-cigarettes smoking may appeal to teens, and also lead teens to smoking cigarettes, little cigars that look like cigarettes, or other tobacco products, which are less expensive than e-cigarettes. See health organizations concerns at

<http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm173175.htm>

New electronic smoking devices, such as "hookah pens", can appeal to minors. They are colorful, come in fruit and candy flavors, and allow the smoker to be discreet in their usage around parents or other adults in school situations. For an example:

<http://www.texashookah.com/images/disposablehookah.htm>

A study published July 2012 in the *American Journal of Public Health* entitled "Young Adults' Favorable Perceptions of Snus, Dissolvable Tobacco Products, and Electronic Cigarettes: Findings From a Focus Group Study" concludes: "Young adults perceive the new tobacco products positively and are willing to experiment with them. Eliminating flavors in these products may reduce young adults' intentions to try these products."

[http://njgasp.org/AmJPublicHealth\\_abstract\\_ecigs\\_young\\_adults\\_7-19-12.pdf](http://njgasp.org/AmJPublicHealth_abstract_ecigs_young_adults_7-19-12.pdf)

The FDA and health advocates are concerned about the appeal of e-cigarettes to young people. The FDA July 2009 report stated:

- 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.

<http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm173401.htm>

The liquid nicotine solution, packaged in a separate bottle, can be consumed by a child, and lead to nicotine poisoning, as in this case where it was reported that a child died after swallowing her grandfather's liquid e-cigarette nicotine cartridge.

[http://www.njgasp.org/TimesofIsrael\\_toddler\\_ecig\\_nicotine\\_death\\_5-29-13.pdf](http://www.njgasp.org/TimesofIsrael_toddler_ecig_nicotine_death_5-29-13.pdf)

## **7. Unsubstantiated claims about e-cigarettes' reduced health risk.**

In 2011, about 21 percent of adults who smoke traditional cigarettes had used electronic cigarettes up from about 10 percent in 2010.

[http://www.cdc.gov/media/releases/2013/p0228\\_electronic\\_cigarettes.html](http://www.cdc.gov/media/releases/2013/p0228_electronic_cigarettes.html)

Employers are beginning to assess a health insurance plan surcharge for employees using e-cigarettes. According to the National Business Group on Health, using e-cigarettes is tobacco use and should be treated as such by employers. In 2014, UPS will charge employees \$150 per month more for their health plan, if they use tobacco, including e-cigarettes. Wal-Mart also places employees who use e-cigarettes in their health plan's "tobacco user" classification; their health plan has two classifications: non-tobacco user and tobacco user. In 2013, 42% of employers added a monthly surcharge for tobacco-using employees.

[http://www.njgasp.org/ModernHealthcare\\_employers\\_ins\\_charge\\_ecigs\\_smoking\\_8-29-13.pdf](http://www.njgasp.org/ModernHealthcare_employers_ins_charge_ecigs_smoking_8-29-13.pdf)

[http://www.njgasp.org/CincinnatiBusinessCourier\\_ecig\\_health\\_insur\\_9-13-13.pdf](http://www.njgasp.org/CincinnatiBusinessCourier_ecig_health_insur_9-13-13.pdf)

Federal, state, county and local policymakers are concerned about claims of reduced health risk when using e-cigarettes. The e-cigarette companies have NOT provided any scientific clinical studies and toxicity analyses to the FDA that demonstrate reduced health risk, or that the product is safe to use. See public health advocacy organizations concerns at <http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm173175.htm>

For example, an October 24, 2009 press release from Denver-based E-CigaretteDirect.com states:

“E-CigaretteDirect.com recommends that smokers switch to electronic cigarettes to protect themselves and their loved ones from secondhand smoke and heart disease... The electronic cigarette takes all the smell, and detrimental health risks out of the picture. The e-cigarette is considered a harm reduction alternative to regular cigarettes.”  
[http://www.njgasp.org/Ecigdirect\\_press\\_release\\_10-24-09.pdf](http://www.njgasp.org/Ecigdirect_press_release_10-24-09.pdf)

The e-cigarette industry opposes smokefree air laws that are proposed in states without comprehensive smokefree air laws, and encourages e-cigarette usage on airplanes, which are confined spaces with recirculated air. An e-cigarette buyer's guide blog details how an airplane passenger should convince a flight attendant to let them smoke e-cigarettes on a plane. See <http://www.electroniccigaretterevue.com/best-electronic-cigarette>

U.S. Senator Frank Lautenberg (New Jersey), who spearheaded requiring 100% smokefree airlines, voices his concerns with e-cigarettes. Read the Senator's letter to the FDA at [http://www.njgasp.org/ECigs\\_sen\\_lautenberg\\_press\\_release\\_03-23-09.pdf](http://www.njgasp.org/ECigs_sen_lautenberg_press_release_03-23-09.pdf)

## **8. Products themselves can be unreliable and dangerous.**

Batteries or other components of e-cigarettes can be dangerous, exploding and causing fires.

In December 2013 a fire was started in a Phoenix, Arizona home. Fire officials say the electronic smoking device cartridge overheated while plugged into the charger.  
[http://www.njgasp.org/ABC15\\_ArizonaFireECig\\_1-1-14.pdf](http://www.njgasp.org/ABC15_ArizonaFireECig_1-1-14.pdf)

In November 2013, an Idaho house fire was started when an overcharged electronic cigarette exploded. [http://www.njgasp.org/News5\\_Idaho\\_ecig\\_housefire\\_11-5-13](http://www.njgasp.org/News5_Idaho_ecig_housefire_11-5-13)

In February 2012, a Florida man was seriously injured when his e-cigarette exploded in his mouth, taking out some of his front teeth and part of his tongue, and starting a fire in his home.  
[http://www.njgasp.org/ABCNews\\_ECig\\_Explodes\\_2-17-2012.pdf](http://www.njgasp.org/ABCNews_ECig_Explodes_2-17-2012.pdf)

The U.S. Department of Health and Human Services has a webpage to report safety issues with products. Go to:  
<https://www.safetyreporting.hhs.gov/fpsr/WorkflowLoginIO.aspx?metinstance=0FD3FD8B7F7C1C0C1BD207BCB3C4769AC46F1300>

## **9. Health risks of nicotine**

Powerful side effects of nicotine on the cardiovascular system:

- Releases epinephrine (adrenaline), which raises blood pressure, heart rate and respiration and glucose levels.
- Vasoconstrictor – harder for the heart to pump through constricted arteries.

- May cause body to release stored fat and cholesterol into bloodstream.  
<http://en.wikipedia.org/wiki/Nicotine>
- Nicotine itself promotes blood vessel damage by promoting cellular damage in vascular smooth muscle cells, promoting plaque formation thereby causing blood vessel damage. [http://www.njgasp.org/Biophysics\\_presents\\_nicotine\\_findings\\_2-26-2012.pdf](http://www.njgasp.org/Biophysics_presents_nicotine_findings_2-26-2012.pdf)
- Nicotine plays multiple roles in carcinogenesis through inhibition of apoptosis and cell proliferation ([Catassi et al. 2008](#); [Wright et al. 1993](#); [Zhou et al. 2010](#)). It is known to affect oxidative stress and to have adverse effects on brain and lung development in children ([Zhou et al. 2010](#)). Nicotine may have adverse effects on vascular function and might promote inflammation ([Wittebole et al. 2007](#)). Because nicotine and other THS constituents may be transformed into new toxicants ([Sleiman et al. 2010a, 2010b](#)), concerns about potential health risks of THS must include compounds created through secondary reactions. Thirdhand Tobacco Smoke: Emerging Evidence and Arguments for a Multidisciplinary Research Agenda, *Environmental Health Perspectives* (journal), published May 31, 2011.  
<http://ehp03.niehs.nih.gov/article/fetchArticle.action?articleURI=info%3Adoi%2F10.1289%2Fehp.1103500>
- Nicotine and the increased cholinergic activity it causes have been shown to impede apoptosis, which is one of the methods by which the body destroys unwanted cells (programmed cell death). Since apoptosis helps to remove mutated or damaged cells that may eventually become cancerous, the inhibitory actions of nicotine may create a more favorable environment for cancer to develop. <http://en.wikipedia.org/wiki/Nicotine>
- Nicotine raises blood sugar levels and the more nicotine that was present, the higher the blood sugar levels were. Higher blood sugar levels are linked to an increased risk of complications from diabetes, such as eye and kidney disease. Researchers from California State Polytechnic University in Pomona presented the study's findings at the American Chemical Society meeting in Anaheim, California, March 27, 2010. Author Xiao-Chuan Liu concluded, "This study should encourage diabetics to quit smoking completely, and to realize that it's the nicotine that's raising [blood sugar levels]."  
<http://njgasp.org/Yahoo-News-Nicotine-Raises-Blood-Sugar-Levels-3-27-11.pdf> See also 1989 study, which similarly concluded that Nicotine increases glucose levels, making blood sugar levels even harder to manage in diabetics.  
[http://findarticles.com/p/articles/mi\\_m0689/is\\_n5\\_v28/ai\\_7923099/](http://findarticles.com/p/articles/mi_m0689/is_n5_v28/ai_7923099/)
- Women who use nicotine gum and patches during the early stages of pregnancy face an increased risk of having babies with birth defects, says a study that looked at about 77,000 pregnant women in Denmark. The study found that women who use nicotine-replacement therapy in the first 12 weeks of pregnancy have a 60 percent greater risk of having babies with birth defects, compared to women who are non-smokers, the Daily Mail reported. The findings were published in the Journal Obstetrics and Gynecology.  
<http://en.wikipedia.org/wiki/Nicotine>
- A study from South Africa at the University of Stellenbosch found that exposure to nicotine decreased the overall viability of sperm by between 5 and 15 percent.  
[http://www.njgasp.org/IOL\\_Male\\_fertility\\_study\\_9-12-12.pdf](http://www.njgasp.org/IOL_Male_fertility_study_9-12-12.pdf)
- There are documented cases of tobacco workers suffering from nicotine overdose as a result of handling raw tobacco leaves, a condition known as Green Tobacco Sickness.  
<http://www.enotes.com/how-products-encyclopedia/nicotine-patch>  
[http://en.wikipedia.org/wiki/Green\\_Tobacco\\_Sickness](http://en.wikipedia.org/wiki/Green_Tobacco_Sickness)

- Spilling an extremely high concentration of nicotine onto the skin can result in intoxication or even death since nicotine readily passes into the bloodstream from dermal contact. Lockhart LP (1933). "Nicotine poisoning". *Br Med J* **1**: 246–7
- In some cases children have become poisoned by topical medicinal creams which contain nicotine. [http://en.wikipedia.org/wiki/Nicotine\\_poisoning](http://en.wikipedia.org/wiki/Nicotine_poisoning)

**Nicotine is FDA-regulated in NRTs, but not for e-cigarettes.** Nicotine replacement therapy treatments (NRTs), such as the patch, gum, nasal spray, lozenges, are made with pharmaceutical grade nicotine. Manufacturers of FDA-approved nicotine replacement products are required to submit a detailed Manufacturing and Controls Section as part of the New Drug Application (NDA). This documentation assures that the product is manufactured in compliance with Good Manufacturing Practices regulations.

The NDA includes sourcing, processing and meticulous documentation at each step of production and use of a pharmaceutical grade active drug. These rigorous conditions are required to assure that the product contains the type and quantity of the drug as labeled. Failure of a manufacturer of an NDA product to comply with these regulations can result in prosecution / enforcement action by the FDA for marketing an adulterated, mislabeled and/or illegal drug product under U. S. law.

The FDA does not regulate nicotine products used with e-cigarettes for quality or quantity. The FDA's preliminary analysis showed that levels of nicotine can vary per tested cartridge, regardless of labeling, and that nicotine was found in nicotine-free labeled product.

#### **10. E-cigarettes are drug delivery devices; therapeutic claims may require FDA approval.**

The FDA classifies nicotine as a drug. E-cigarettes deliver nicotine to the user, like other nicotine delivery devices that are FDA approved as smoking cessation products (e.g. nicotine patch, lozenge, nasal inhaler, etc.) On September 8, 2010, the FDA issued letters stating that electronic cigarettes and similar products meet the definition of drug delivery devices and need to be regulated as such. See Section 11 on page 7 of this white paper, for more details on the FDA's September 8, 2010 letters.

The July 2009 FDA study found different e-cigarettes yielded different levels of nicotine dosages, with one delivering approximately twice the amount allowable from an FDA approved nicotine nasal inhaler that is used for smoking cessation purposes. Nicotine poisoning is a concern.

The FDA is required to approve and regulate tobacco cessation products under Federal Food, Drug, and Cosmetic Act (FFDCA) section 505(a) or 21 U.S.C. 355. Tobacco cessation products are considered drugs that have to undergo the new drug application/FDA approval process. <http://www.fda.gov/TobaccoProducts/ResourcesforYou/ucm168231.htm>

Websites that sell e-cigarettes, and share testimonials from users about how the e-cigarettes helped them reduce smoking cigarettes, may be promoting the product for smoking cessation purposes. Only FDA approved smoking cessation products are allowed to market and sell their product for a smoking cessation purpose. If a product is marketed and sold as a smoking cessation product, without FDA approval, that product should not be sold.

### **III. FDA Regulation and Litigation**

#### **1. FDA decides not to appeal court decision allowing e-cigarette imports to USA.**

**April 25, 2011:** the FDA announced that it will not appeal the recent decision by the U.S. Court of Appeals for the D.C. Circuit in *Sottera, Inc. v. Food & Drug Administration*, 627 F.3d 891 (D.C. Cir.

2010), stating that e-cigarettes and other products are not drugs/devices unless they are marketed for therapeutic purposes, but that products "made or derived from tobacco" can be regulated as "tobacco products" under the FD&C Act. The FDA webpage stated that the FDA is aware that certain products made or derived from tobacco, such as electronic cigarettes, are not currently subject to pre-market review requirements of the Family Smoking Prevention and Tobacco Control Act. FDA is developing a strategy to regulate this emerging class of products as tobacco products under the Family Smoking Prevention and Tobacco Control Act. Products that are marketed for therapeutic purposes will continue to be regulated as drugs and/or devices. The FDA "is considering whether to issue guidance and/or a regulation on 'therapeutic' claims." Sourced directly from FDA website at

<http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm172906.htm>

Stakeholder letter: <http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm252360.htm>

**December 20, 2010:** The FDA filed a new appeal, asking the full U.S. Court of Appeals to reinstate a stay of the preliminary injunction, pending the FDA's request for a rehearing of the case. The FDA argues that the three-judge panel's December 7, 2010 decision "rests on a clear error of law and will undermine" objectives that were laid out by Congress when it passed legislation in 2009 that empowered the FDA to regulate tobacco products for the first time. In early December, the Court of Appeals three-judge panel ruled that e-cigarettes and other products made or derived from tobacco can be regulated as "tobacco products" by the FDA, unless marketers make specific claims that the devices help smokers quit or provide other therapeutic remedies. *Wall Street Journal* at

<http://online.wsj.com/article/SB10001424052748703581204576033640017829896.html>

The three-judge panel decision on December 7, 2010 affirmed the District Court's preliminary injunction that allows NJOY to import their e-cigarettes while the lawsuit is pending. The Court of Appeals noted that the factual record on NJOY is "meager", and intimated that the FDA should consider trying to establish that NJOY does in fact make therapeutic claims regarding its electronic cigarettes. [www.njgasp.org/SotteravFDADCCourtOfAppealsDecision.pdf](http://www.njgasp.org/SotteravFDADCCourtOfAppealsDecision.pdf), pg. 13 If the FDA is successful in its claim that NJOY makes therapeutic claims, then the FDA may have jurisdiction over NJOY's e-cigarette products under the FDCA's drug/device provisions. Some e-cigarette companies market their products as smoking cessation devices, as evidenced on their website testimonials, at live demos, etc.

**September 8, 2010:** The FDA issued warning letters to five electronic cigarette distributors for various violations of the Federal Food, Drug, and Cosmetic Act (FDCA) including unsubstantiated claims and poor manufacturing practices. In letters to the Electronic Cigarette Association and the five distributors, the FDA said the agency intends to regulate electronic cigarette and related products in a manner consistent with its mission of protecting the public health. The FDA determined that the electronic cigarette products addressed in the warning letters, and similar products, meet the definitions of both a drug and device under the Federal Food, Drug and Cosmetic Act, and the definition of a combination product in 21 C.F.R. Part 3, with a drug primary mode of action. Firms that introduce these electronic cigarette products into the marketplace will have to comply with the FDCA, including the drug approval process.

<http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm225224.htm>

<http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/UCM225263.pdf>

The 5 e-cigarette companies have 15 days from Sept 8, 2010 (date of FDA notices of violations) to describe steps each will take to rectify the violations. If the FDA does not receive sufficient responses from each company, the FDA may seek seizure of the e-cigarette products, and injunctive relief.

**May 24, 2010:** The FDA filed its appellate brief for the pending lawsuit being heard by the District of Columbia Court of Appeals, in its e-cigarettes lawsuit, and national tobacco control organizations filed an amicus brief on behalf of the FDA's case which can be read at [http://www.casaa.org/files/FDA Appeals Brief.pdf](http://www.casaa.org/files/FDA%20Appeals%20Brief.pdf). Court papers on this appeal due by July 22, 2010.

**April 2, 2010:** The U.S. Court of Appeals (District of Columbia) ruled that the FDA can ban the importation of e-cigarettes into the USA, during the pending of a lawsuit filed by the e-cigarette company plaintiffs. The U.S. Court of Appeals reversed a lower court decision that disallowed the FDA from banning the importation of e-cigarettes while the litigation proceeded. This April 2, 2010 ruling is a win for the FDA. Read the April 2, 2010 U.S. Court of Appeals decision at <http://www.ash.org/ecigstay>. Read the April 21, 2010 newsclip on our website <http://www.njgasp.org/e-cigs-fda-ban-04-2010-article.pdf>.

**March 1, 2009, U.S. FDA:** FDA opened an investigation, refusing to allow e-cigarettes, e-cigars and e-pipes to cross the border on a case-by-case basis. The FDA concludes that e-cigarettes meet the definition of a combination drug device product under the Federal Food, Drug and Cosmetic Act, considers e-cigarettes new drugs that require FDA approval:

The U.S. Food and Drug Administration has reviewed several electronic cigarettes, cigars, and pipes, and refused these products at the United States border. The agency has acted because these products offered for import appear to require FDA approval to be legally marketed in the U.S and have not been reviewed by the agency.

These products consist of devices that turn nicotine and other chemicals into a vapor to be inhaled by the user. They are typically designed to look like conventional cigarettes, cigars, and pipes, and to be used the same way.

**The FDA is concerned about the potential for addiction to and abuse of these products. They may also be perceived as safer alternatives to conventional tobacco use and possibly initiate nicotine use among those who have never smoked, or among former smokers. The agency is also concerned that this could lead to an increase in the use of conventional tobacco products by young people, with well-known adverse health consequences.**

As of March 1, 2009, the FDA had refused 17 shipments of various brands of these "electronic" cigarettes, cigars, and pipes, and their components. At that time, the FDA stated it would continue to evaluate these products on a case-by-case basis. See FDA statement for full details. <http://cfc.wjla.com/external.cfm?p=fdaecigs033109>

## **2. Transcript highlights from FDA's July 2009 media call re: preliminary analysis**

Several leading experts provided information on the FDA's media call in July 2009, to discuss the FDA's findings in their preliminary analysis of a sampling of e-cigarettes:

**Dr. Jonathan Samet**, Director of the Institute for Global Health at the University of Southern California, is a leading authority on the health effects of smoking and air pollution and he serves as Consulting Editor and Senior Scientific Editor for the Surgeon General Reports on smoking and health including the 1985, 1986, 1990, 2004 and 2006 reports. Dr. Samet commented on the study, stating that:

- "... one group of compounds were the **tobacco specific nitrosoamines** which are quite closely linked in smokers to lung cancer and they were found in detectable - they **were detected.**" (page 19)

**Mr. Westenberger** is the Deputy Director at the Center for Drug Evaluation and Research at FDA in the Division of Pharmaceutical Analysis. He has served with FDA for 39 years. The CDER is where the FDA's preliminary testing was conducted on electronic cigarettes. Testing was performed by a team of analytical chemists under his supervision and he wrote the final report. On the media call, Mr. Westenberger stated the following:

- "... the majority of the **samples tested positive for the presence of tobacco specific impurities suspected of being harmful to humans such as anabasine, myosmine, and beta-nicotyrine.**" (page 4)
- "... **Half the samples also tested positive for the presence of certain tobacco specific nitrosoamines that are known human carcinogens such as N-(nitrosonornicotine), and 4-(methylnitrosoamino)-1-(3-pyridyl)-1-butanone.** In addition to these carcinogenic impurities one cartridge was found to have approximately 1% diethylene glycol present a toxic compound to humans. As far as the manufacturing quality **some of the cartridges listed as containing no nicotine were actually found to have nicotine present.**" (page 4)
- "... **Variability in the amount of nicotine delivered is also an issue. Three different cartridges with the same label contained significantly different amounts of nicotine per puff** ranging anywhere from 27 to 43 micrograms. All of these results indicate a lack of general overall quality control. **In summary these results suggest e-cigarettes could have safety and quality concerns.**"(page 4)

**Dr. Jonathan Winickoff** is a practicing Pediatrician and Assistant Professor of Pediatrics at Harvard Medical School and the Chair of the American Academy of Pediatrics Tobacco Consortium.

- "... electronic cigarettes are available on the market in a **variety of flavors** such as bubblegum, chocolate and mint. **Past experience suggests that these products may be particularly appealing to young people.**" (page 7)
- Flavored regular cigarettes promote youth initiation and help young occasional smokers to become daily smokers. Similarly e-cigarettes might encourage children, teens and young adults to take their first step toward smoking cigarettes. **Young people may be attracted to these products due to their novelty, safety claims and the availability of the products in a variety of fruit, candy, cola and chocolate flavors.** In addition these products are **easily accessed online, in stores and at mall kiosks where young people often hang out.** (page 7)
- **One cigarette company is claimed to be putting vitamins in the cartridges. This is either a direct or an implied health claim that may confuse some potential users into thinking that the product promotes health** when it actually might lead to nicotine dependence. The advertising warning that "this product is for adults only" appears tailor made to appeal to kids. (page 7)
- Nicotine addiction is one of the hardest addictions to break. **An expanding pool of unregulated nicotine products that appeal to youth might increase the overall number of individuals who become nicotine dependent for life** and later use regular cigarettes. (page 8)
- Once you've smoked the e-cigarette and are nicotine dependent the leap to a regular cigarette may not seem as great. **Between 1/3 and 1/2 of all youth who try a regular cigarette will become daily smokers because of the highly addictive nature of nicotine.** It is therefore **vital to decrease exposure to products that would lead to experimentation with nicotine. It is not a safe drug to try.** (page 8)
- **My last point is that nicotine can be toxic in higher amounts for adults but it takes much less to have toxic effects in children.** It is unclear what safety mechanisms are in place for these devices. For example, **a young child modeling a parent might be able to inhale the entire nicotine load of an e-cigarette cartridge simply by puffing until it was empty.** (page 8)

## **IV. New Jersey Nuisance Code**

### **NJSA 26:3-46. Abatement of nuisances**

The local board, within its jurisdiction, shall examine into and prohibit any nuisance, offensive matter, foul or noxious odors, gases or vapors, water in which mosquito larvae breed, and all causes of disease which may be known to the board or brought to its attention, which, in its opinion, are injurious to the health of the inhabitants therein, and shall cause the same to be removed and abated at the expense of the owner.

### **NJSA 26:3-47. Abatement without ordinance**

The power given to the local board to remove and abate nuisances, sources of foulness, or causes of sickness hazardous to the public health, shall not depend upon whether the board has exercised its power to pass, alter, or amend ordinances in relation to the public health.

### **NJSA 26:3-48. Nuisance on public property; notice**

Whenever a nuisance, noxious odors, gases or vapors, water in which mosquito larvae breed, or cause of ill health or disease is found on public property or on a highway, notice shall be given by the local board to the person officially in charge thereof to remove and abate the same within such time as the board may specify. If he fails to comply with the notice, the mode of procedure shall be the same as is hereinafter provided in case of a like condition existing on private property.

### **NJSA 26:3-49. Nuisance on private property; notice**

Whenever any nuisance, noxious gases or vapors, water in which mosquito larvae breed, or cause of ill health or disease is found on private property, the local board shall notify the owner to remove and abate the same, at his own expense, within such time as the board may specify. A duplicate of the notice shall be left with one or more of the tenants or occupants. If the owner resides out of the state or cannot be so notified speedily, a notice left at the house or premises with the tenant or occupant, or posted on the premises, shall suffice.

### **NJSA 26:3-50. Failure to comply with notice; abatement**

If the owner when notified, as provided in section 26:3-49 of this title, shall not comply with the notice or order of the local board within the time specified, the board shall proceed to abate the nuisance and remove the cause of such foul or noxious odors, gases or vapors, water in which mosquito larvae breed, or other thing detrimental to the public health.