

MEMORANDUM

November 21, 2014

TO: County Council

FROM: Amanda Mihill, Legislative Attorney *AMihill*

SUBJECT: **Introduction:** Bill 56-14, Health and Sanitation – Smoking – Electronic Cigarettes

Bill 56-14, Health and Sanitation – Smoking – Electronic Cigarettes, sponsored by Councilmember Floreen, Council Vice President Leventhal, and Councilmembers Branson and Navarro, is scheduled to be introduced on November 25, 2014. A public hearing is tentatively scheduled for January 22, 2015 at 7:30 p.m.

Bill 56-14 would:

- prohibit the use of electronic cigarettes in public places where traditional tobacco smoking is prohibited;
- restrict the sale of certain liquid nicotine or liquid nicotine containers in retail outlets unless the nicotine is in a container considered child resistant packaging;
- prohibit the sale of electronic cigarettes in any place that is accessible to buyers of the product without the intervention of the seller (similar to tobacco products); and
- generally amend County law regarding smoking, electronic cigarettes, and health and sanitation.

Background

Before the introduction of Bill 56-14, the Health and Human Services Committee met twice on the issue of electronic cigarettes. All the materials from those worksessions are not reproduced in this packet, but can be found at the following links:

- July 21: http://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2014/140721/20140721_HHS1.pdf
- September 18: http://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2014/140918/20140918_HHS1.pdf

At the July 21 worksession, the Committee received briefings from the National Institutes of Health and the Legal Resource Center for Public Health Policy on electronic cigarettes. These briefings included a discussion of the current medical understanding of the health risks and

public policy concerns with electronic cigarette usage. The presentation from Dr. Walton and Dr. Boone from the National Institute on Drug Abuse is on ©10. After the briefings, Committee members expressed specific concerns about the use of electronic cigarettes by minors and directed staff to provide options to restricting youth access to electronic smoking devices. Committee members discussed these options, including a prior draft of Councilmember Floreen's bill, at its September 18 worksession. Also at its September 18 worksession, Committee members received a briefing from the Department of Liquor Control's Licensing and Regulatory Enforcement staff on its program to identify entities that are selling tobacco to minors.

This packet contains:	<u>Circle #</u>
Bill 56-14	1
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F:\LAW\BILLS\1456 Electronic Cigarettes\Intro Memo.Doc

Bill No. 56-14
Concerning: Health and Sanitation –
Smoking – Electronic Cigarettes
Revised: 9/9/2014 Draft No. 4
Introduced: November 25, 2014
Expires: May 25, 2016
Enacted: _____
Executive: _____
Effective: _____
Sunset Date: None
Ch. _____, Laws of Mont. Co. _____

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

By: Councilmember Floreen, Council Vice President Leventhal, and
Councilmembers Branson and Navarro

AN ACT to:

- (1) prohibit the use of electronic cigarettes in certain public places;
- (2) restrict the sale of certain liquid nicotine or liquid nicotine containers in retail outlets unless the nicotine is in a container considered child resistant packaging;
- (3) restrict the accessibility of certain tobacco products in retail settings, and require retail sellers of those products to take certain actions;
- (4) prohibit the use of electronic cigarettes by minors; and
- (5) generally amend County law regarding smoking, electronic cigarettes, and health and sanitation.

By amending

Montgomery County Code
Chapter 24, Health and Sanitation
Section 24-9

By adding

Chapter 24, Health and Sanitation
Sections 24-13 and 24-14

By renumbering

Chapter 24, Health and Sanitation
Sections 24-2, 24-3, 24-4, 24-5, 24-6, 24-7, 24-8, 24-9B, 24-9C, 24-9D, 24-10, 24-11,
24-11A

By repealing

Chapter 24, Health and Sanitation
Section 24-9A

By renaming

Chapter 24, Health and Sanitation
Article II

Boldface	<i>Heading or defined term.</i>
<u>Underlining</u>	<i>Added to existing law by original bill.</i>
[Single boldface brackets]	<i>Deleted from existing law by original bill.</i>
<u>Double underlining</u>	<i>Added by amendment.</i>
[[Double boldface brackets]]	<i>Deleted from existing law or the bill by amendment.</i>
* * *	<i>Existing law unaffected by bill.</i>

The County Council for Montgomery County, Maryland approves the following Act:

1 **Sec. 1. Sections 24-2, 24-3, 24-4, 24-5, 24-6, 24-7, 24-8, 24-10, 24-11, and**
2 **24-11A are renumbered as follows:**

3 **24-2, 24-3. [Reserved.]**

4 **24-[4]2. Communicable diseases generally — Warning signs.**

5 * * *

6 **24-[5]3. [Same] Communicable diseases — Unauthorized removal of**
7 **warning signs.**

8 * * *

9 **24-[6]4. [Same] Communicable diseases — Control in food establishments.**

10 * * *

11 **24-[7]5. Use of certain shoe-fitting devices or machines prohibited.**

12 * * *

13 **24-[8]6. Commitment of chronic alcoholics.**

14 * * *

15 **24-[10]7. Catastrophic health insurance plan.**

16 * * *

17 **24-[11]8. Massage.**

18 * * *

19 **24-[11A]8A. Fitness centers — defibrillators.**

20 * * *

21 **Sec. 2. Article II is renamed; Section 24-9 is amended; Section 24-9A is**
22 **repealed; Sections 24-9B, 24-9C, and 24-9D are renumbered; and Section**
23 **24-13 is added as follows:**

24 **Article II. [Reserved] Smoking, Tobacco, and Nicotine.**

25 **24-9. Smoking and using electronic cigarettes in public places.**

26 (a) **Definitions.** In this [Section] Article, the following words and phrases
27 have the meanings indicated:

28 * * *

29 Electronic cigarette means an electronic device that delivers vapor for
30 inhalation, including any refill, cartridge, or any other component of
31 an electronic cigarette. Electronic cigarette does not include any
32 product approved by the Food and Drug Administration for sale as a
33 drug or medical device.

34 * * *

35 Smoking or smoke means the act of lighting, smoking, or carrying a
36 lighted or smoldering cigar, cigarette, or pipe, of any kind.

37 * * *

38 Vape shop means any store that primarily sells electronic cigarettes.
39 Vape shop does not include an area of a larger store in which
40 electronic cigarettes are sold.

41 (b) Smoking and using an electronic cigarette are prohibited in certain
42 public places. A person must not smoke or use any electronic
43 cigarette in or on any:

44 * * *

45 (c) Exceptions. Smoking or using an electronic cigarette is not prohibited
46 by this Section:

47 (1) In a tobacco shop or a vape shop;

48 * * *

49 (3) When smoking or using an electronic cigarette is necessary to
50 the conduct of scientific research into the health effects of
51 tobacco smoke and is conducted at an analytical or educational
52 laboratory;

53 * * *

54 (d) Notwithstanding paragraph (b)(11), the Director of the Department of
55 Health and Human Services may designate an outside area on

56 property that is owned or leased by the County where smoking or
57 using an electronic cigarette is allowed if the Director finds that a
58 complete prohibition on that property would impede a program's
59 mission or effective delivery of services.

60 (e) *Posting signs.*

61 (1) Except as provided in paragraph (e)(4), signs prohibiting or
62 permitting smoking or using an electronic cigarette, as the case
63 may be, must be posted conspicuously at each entrance to a
64 public place covered by this Section.

65 (2) Where smoking or using an electronic cigarette is prohibited by
66 this Section, the sign either must read "No smoking or using an
67 electronic cigarette by order of Montgomery County Code § 24-
68 9. Enforced by (department designated by the County
69 Executive)" or be a performance-oriented sign such as "No
70 Smoking or Using an Electronic Cigarette" or "This is a Smoke
71 Free Establishment." The international no-smoking symbol
72 may replace the words "No smoking."

73 * * *

74 (f) *Duty to prevent smoking in certain areas.* The owner or person in
75 control of a building or area covered by this Section must refuse to
76 serve or seat any person who smokes where smoking or using an
77 electronic cigarette is prohibited, and must ask the person to leave the
78 building or area if the person continues to smoke after proper warning.

79 * * *

80 (k) *Enforcement and penalties.*

81 (1) Any violation of this [Section] Article is a class C civil
82 violation. Each day a violation exists is a separate offense.

83 (2) The County Attorney or any affected party may file an action in
84 a court with jurisdiction to enjoin repeated violations of the
85 Section.

86 (3) The County Executive must designate by Executive order one
87 or more County departments or agencies to enforce this Article.

88 (4) The Director of the Department of Health and Human Services
89 may suspend a license issued under Chapter 15 for up to 3 days
90 if the Director finds, under the procedures of Section 15-16,
91 that the operator of an eating and drinking establishment has
92 knowingly and repeatedly violated any provision of this
93 Section.

94 [24-9A. Reserved.]

95 24-[9B]10. Availability of tobacco products to minors.

96 * * *

97 24-[9C]11. Distribution of tobacco products to minors.

98 * * *

99 24-[9D]12. Tobacco and electronic cigarette [Products – Placement] products
100 = placement.

101 (a) Placement. A retail seller of any tobacco or electronic cigarette
102 product must not display or store the product in any place that is
103 accessible to buyers of the product without the intervention of the
104 seller or an employee of the seller.

105 (b) Definitions. *Tobacco product* means any substance containing
106 tobacco, including cigarette, cigars, smoking tobacco, snuff, or
107 smokeless tobacco.

108 (c) Applicability. This Section does not apply to:

109 (1) the sale of any tobacco or electronic cigarette product from a
 110 vending machine that complies with all requirements of state
 111 law; and

112 (2) any store where only or primarily tobacco or electronic
 113 cigarette products are sold.

114 [(d) Enforcement. The County Executive must designate by Executive
 115 order one or more County departments or agencies to enforce this
 116 Section.]

117 **[24-12. Reserved.]**

118 **24-13. [Reserved] Use of electronic cigarettes by minors prohibited.**

119 A person under 18 years old must not use an electronic cigarette.

120 **24-14. Child Resistant Packaging of Liquid Nicotine Container Required.**

121 (a) Definitions. In this Section, the following words have the meanings
 122 indicated:

123 Child resistant packaging means packaging that is:

124 (1) designed or constructed to be significantly difficult for children
 125 under 5 years of age to open or obtain a toxic or harmful
 126 amount of the substance contained therein within a reasonable
 127 time; and

128 (2) not difficult for normal adults to use properly.

129 Child resistant packaging does not mean packaging which all such
 130 children cannot open or obtain a toxic or harmful amount within a
 131 reasonable time.

132 Liquid nicotine container means a container that is used to hold liquid
 133 containing nicotine in any concentration.

134 (b) Child resistant packaging required. A retail seller of any liquid
135 nicotine or liquid nicotine container must not sell, resell, distribute,
136 dispense, or give away:

137 (1) any liquid or gel substance containing nicotine unless the
138 substance is in child resistant packaging; or

139 (2) any nicotine liquid container unless the container constitutes
140 child resistant packaging.

141 (c) Exceptions. This Section does not apply to a liquid nicotine container
142 that is sold, marketed, or intended for use in an electronic cigarette if
143 the container is prefilled and sealed by the manufacturer and not
144 intended to be opened by the consumer.

145 **24-[12]15-24-21. Reserved.**

146 *Approved:*

147

148

149 _____
Craig L. Rice, President, County Council Date

150 *Approved:*

151

152

153 _____
Isiah Leggett, County Executive Date

154 *This is a correct copy of Council action.*

155

156

157 _____
Linda M. Lauer, Clerk of the Council Date

LEGISLATIVE REQUEST REPORT

Bill 56-14

Health and Sanitation – Smoking – Electronic Cigarettes

DESCRIPTION:	Bill 56-14 would prohibit the use of electronic cigarettes in public places where traditional tobacco smoking is prohibited; restrict the sale of certain liquid nicotine or liquid nicotine containers in retail outlets unless the nicotine is in a container considered child resistant packaging; prohibit the sale of electronic cigarettes in any place that is accessible to buyers of the product without the intervention of the seller (similar to tobacco products); and prohibit the use of electronic cigarettes by minors.
PROBLEM:	Electronic cigarettes are not currently regulated by the FDA or the state. Many youth could perceive electronic cigarettes as less harmful than traditional tobacco smoking. Current statistics show that e-Cigarette use by high school students increased from less than 5% to almost 10% from 2011 to 2012 and that reasons students gave for using e-Cigarettes include: curiosity, attraction of flavors, use by friends and family, desire to quit smoking, availability, and it is a sign of independence.
GOALS AND OBJECTIVES:	In part, to protect the health of minors by restricting the use and availability of electronic cigarettes to minors.
COORDINATION:	Health and Human Services
FISCAL IMPACT:	To be requested.
ECONOMIC IMPACT:	To be requested.
EVALUATION:	To be requested.
EXPERIENCE ELSEWHERE:	To be researched.
SOURCE OF INFORMATION:	Amanda Mihill, Legislative Attorney, 240-777-7815
APPLICATION WITHIN MUNICIPALITIES:	To be researched.
PENALTIES:	Class C violation.

Electronic Cigarettes: An Overview

**Presentation to
Montgomery County Council**

July 21, 2014

Kevin Walton, PhD

Division of Pharmacotherapies and Medical Consequences of Drug Abuse

Ericka Boone, PhD

Office of Science Policy and Communications

National Institute on Drug Abuse, NIH



National Institute
on Drug Abuse

Conventional Tobacco Use in the U.S.

- Associated morbidity and mortality
 - 480,000 Americans die each year from smoking (\approx 1 in 5 deaths)
 - 16 million suffer from tobacco-related illnesses
- Economic cost: nearly **\$300B** annually
 - \$133B in direct medical care
 - \$156B in lost productivity
- 18.1% of all U.S. adults smoke (42% in 1965)

However, in the past year

- 68.9% of adult smokers wanted to stop smoking
- 42.7% of adult smokers made a quit attempt



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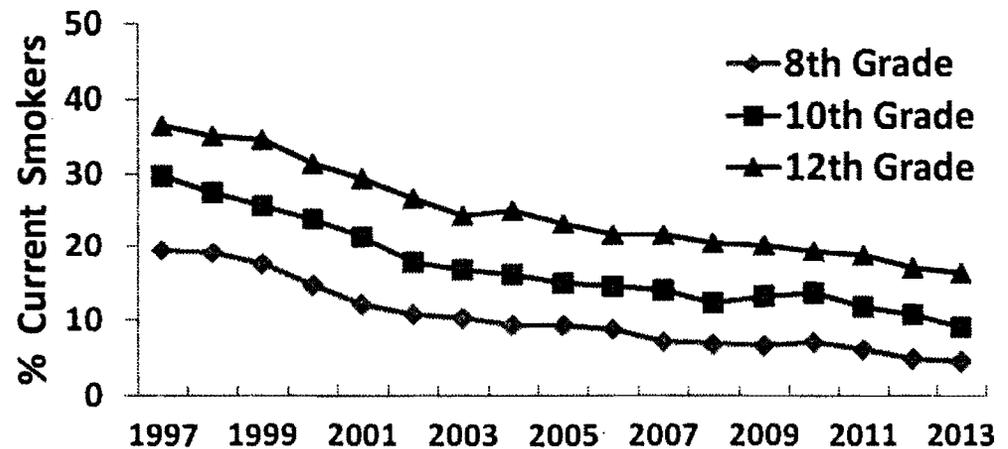
Source: HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General.

Youth Smoking Continues as a Concern

- 90% of smokers begin while in their teens or earlier
- 14% of high school students (grades 9–12) smoke
- Use of multiple tobacco products is common
- With current trends, 6 million teens alive today will die from smoking-related diseases

However...

- The percent of teens who are current smokers* has been declining for more than a decade



Source: HHS, Preventing Tobacco Use Among Youth and Young Adults, A Report of the Surgeon General, 2012
CDC, MMWR 62(No. 45), November 15, 2013; Johnston, MTF National Results on Drug Use:1975-2013



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on Drug Abuse

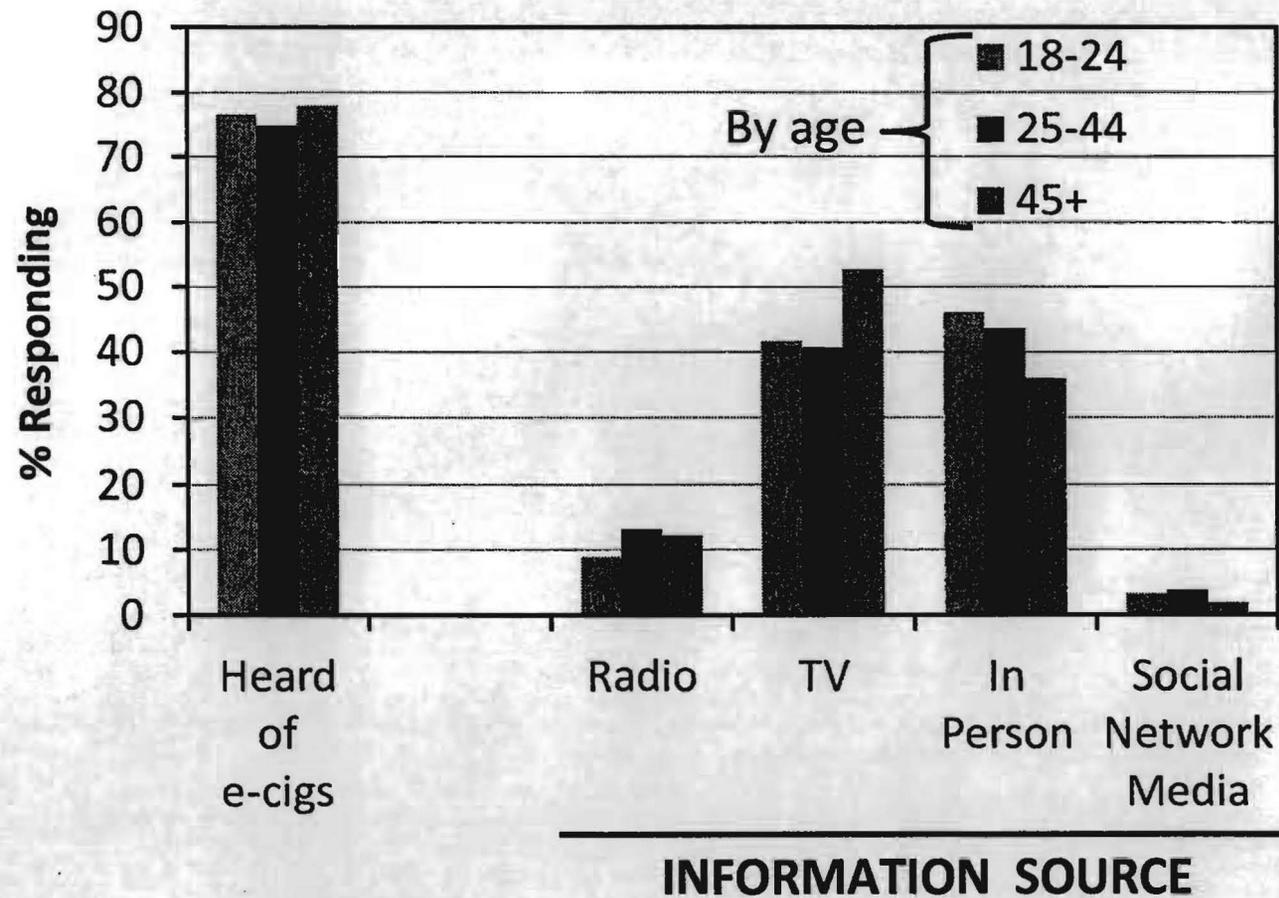
Electronic Cigarette (E-cigarette) History

- An e-cigarette is a smokeless nicotine delivery device
 - E-cigarettes can also contain no nicotine, just producing a flavored aerosol (vapor)
- First introduced in China in 2003
- Available in the U.S. since 2007
- Made by U.S. tobacco companies and independent non-conventional-tobacco companies
 - Lorillard (blu), Reynolds American (Vuse), Altria (MarkTen)
 - Independent large players include NJOY and Logic
- Over 250 e-cigarette brands in the U.S.
- E-cigarette use has doubled every year since 2010
- Estimated to be **greater than \$1.5B industry**



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Most People Are Aware of Electronic Cigarettes

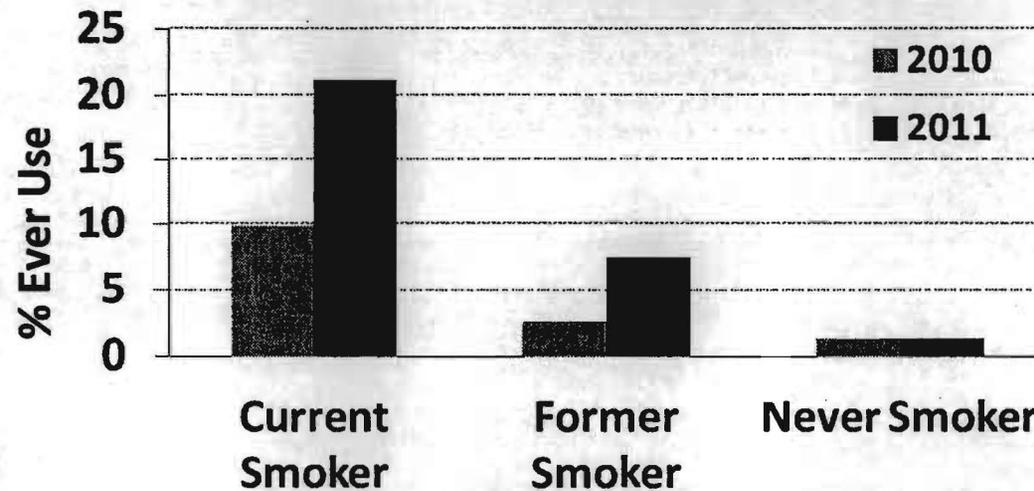


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Source: Zhu et al, 2013

71

Adult Use of Electronic Cigarettes Primarily by Current Smokers



≈80% of current users
report dual use with
conventional
cigarettes

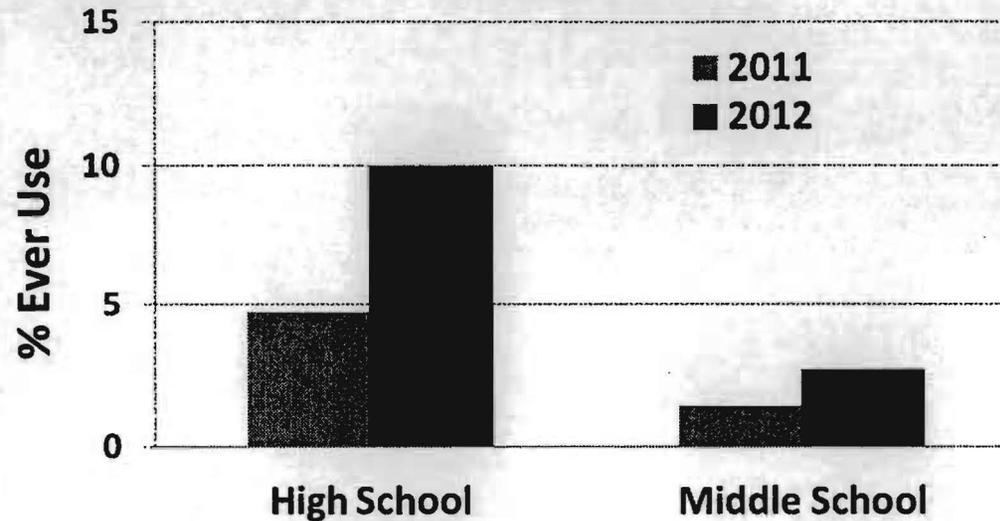
- **Health reasons primary motivator for e-cigarette use**
 - Believe less harmful than conventional cigarettes
 - Desire to cut down and/or quit conventional cigarettes
 - Help with reducing cravings and withdrawal symptoms
 - Want to prevent relapse to conventional cigarettes
 - Don't want to disturb others with smoke or for use in smoke-free places

Source: King et al, 2013; Pearson et al, 2012; Lee et al, 2014; Brown et al, 2014; Etter, 2010; Kralikova et al, 2013; Pearson et al, 2012; Vickerman et al, 2013



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Electronic Cigarette Use by Youth Increasing



76.3% of students who used in the past month also smoked conventional cigarettes

- 1 in 5 middle school students that reported ever using e-cigarettes have never tried conventional cigarettes
- Reasons given for using e-cigarettes
 - Curiosity
 - Attraction of flavors
 - Use by friends and family
 - Desire to quit smoking
 - Availability
 - Sign of independence



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Source: CDC, MMWR 62:893-97, 2013; Camenga, et al, 2014; Kong et al, 2014

Current E-Cigarette Regulation is Limited

- E-cigarettes mostly unregulated under federal law
 - FDA currently seeking to regulate the sale, manufacture, and distribution of e-cigarettes
 - Unknown when regulations will be finalized
- There are no official standards of design or contents
- There is no requirement to provide public information on the contents of e-cigarettes
- Many states, including Maryland, regulate the sale of e-cigarettes to minors



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Source: http://tobacconomics.org/wp-content/uploads/2014/06/EcigStateLaws_SCTCENDS.pdf

What are the Concerns About Electronic Cigarettes??

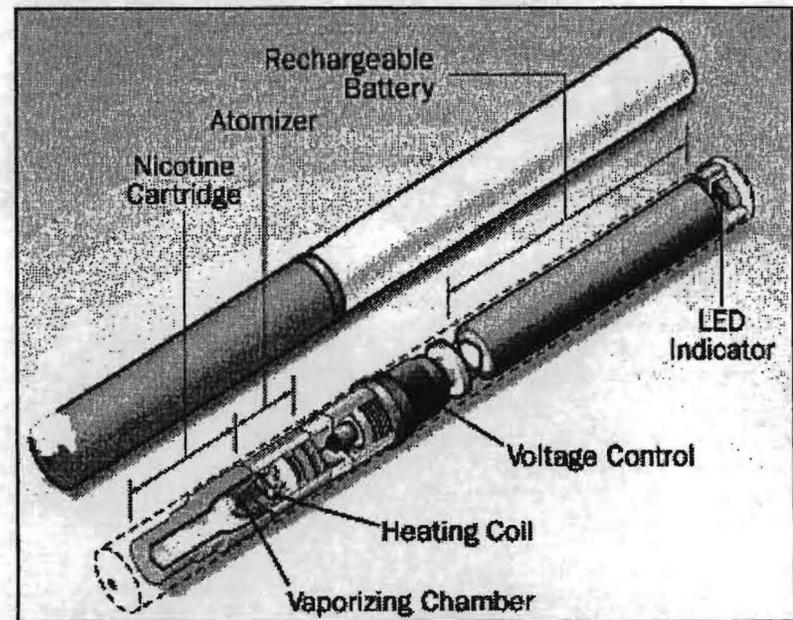
- In general use but risks and benefits not fully evaluated
- Lack of standards over design and contents
- Potential relapse for former smokers or use by never smokers
- May renormalize smoking or encourage poly-use
- Potential for use with controlled substances
- Marketing that may attract kids
 - Kid-friendly flavors (e.g., chocolate, fruit, gummi bear, cotton candy, etc) and characters or famous actors; ads in media



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Anatomy of an Electronic Cigarette

- Consists of a power source, heating device (aerosolizer/vaporizer), and liquid-containing cartridge
- Puffing activates the battery-powered heating device, which heats the nicotine solution into an aerosol (vapor), which is then inhaled
- Early devices designed to resemble conventional tobacco cigarettes



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Source: <http://science.howstuffworks.com/innovation/everyday-innovations/electronic-cigarette1.htm>

Types of Electronic Cigarettes

Disposable e-cigarette



NJOY, White Cloud,
Greensmoke

Rechargeable e-cigarette



Markten, Mystic,
blu, VUSE

**Pen-style, medium-sized
rechargeable e-cigarette**



eGo, Vaporking,
Totally Wicked

**Tank-style, large-sized
rechargeable e-cigarette**



Volcano Lavatube

Sealed device
or cartridge

User adds liquid
to device



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Source: Grana, et al, 2014

Tank Systems and Liquid Refills

- Tank systems give users access to an extensive assortment of flavors and nicotine concentrations

	Strength					
Red Label	0.0%	0.6%	1.0%	1.4%	1.8%	3.0%
Herbal e-liquid	0.0%					
Titan Fluid	11mg/ml		18mg/ml		36mg/ml	
Patriot Range	6mg/ml	10mg/ml	14mg/ml	18mg/ml	30mg/ml	
Original e-liquid	8mg/ml	11mg/ml	18mg/ml	24mg/ml	36mg/ml	



100+ FLAVORS

- These devices are gaining in popularity
- Can have larger, more powerful batteries
- Concerns about accidental liquid nicotine poisoning
 - CDC reports increase in poison control center calls regarding e-cigarettes: 1 call/month in 2010, 214 calls/month in 2014
 - Regulatory efforts discussed to require child-safe packaging



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Electronic Cigarette Liquid Contents

1. Nicotine (0% to 3.6%)
 2. Propylene Glycol (PG)
 3. Vegetable Glycerin (VG)
(Glycerol)
 4. Water
 5. Flavorings
- Experience with PG and VG
 - The Food and Drug Administration classifies PG and VG as “Generally Recognized As Safe” (GRAS)
 - PG/VG used in medicines, cosmetics, and food products
 - PG for inhalation (e.g., asthma inhalers) at concentrations much lower than in e-cigarettes
 - VG does not have a history of use for inhalation
 - PG and VG used to create artificial theatrical fog



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Electronic Cigarette Aerosol Contents

- Long-term safety of aerosol inhalation is unknown
 - It is not just water vapor; little experience with some constituents
 - Some compounds same as in tobacco smoke: acrolein, acetaldehyde
 - Generally lower levels of toxins (9-450x) than in tobacco smoke
- Variable voltage devices can alter the aerosol
 - Higher voltage produces higher temps, more nicotine in aerosol
 - This can increase levels of toxic compounds: e.g., formaldehyde
 - Levels can approach those measured in conventional cigarettes
- E-cigarette aerosol is less complex than tobacco smoke
 - There are an estimated 5000 compounds in tobacco smoke
 - Tobacco smoke includes 70 known carcinogens
 - Many fewer compounds in e-cigarette aerosol

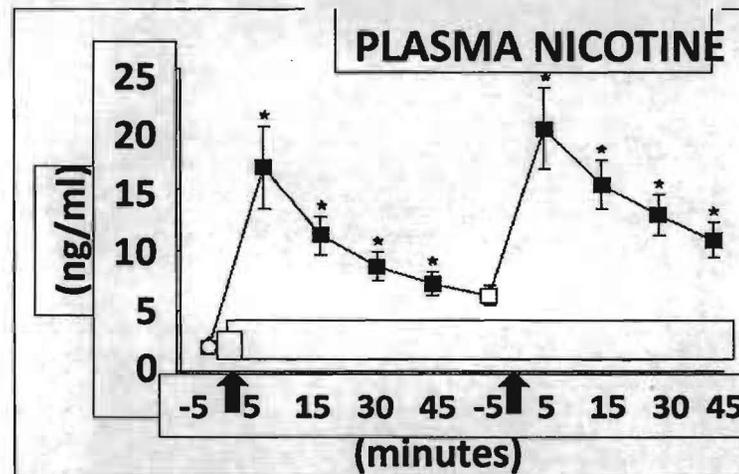


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Goniewicz et al, 2014; Kosmider et al, 2014

Addiction Potential: Conventional vs. Electronic Cigarette

- Conventional cigarette delivers nicotine rapidly



Arrow indicates
smoking initiation:
10 puffs/30 seconds

- Other compounds in smoke may enhance addiction
- Association of smoking with specific behaviors
 - Social interactions, drinking, stress
- Children and teenagers may be highly susceptible to nicotine addiction



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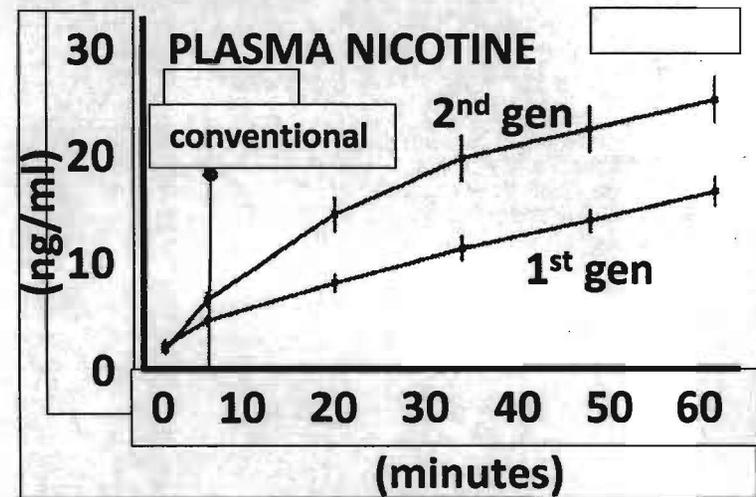
Source: Vansickel, et al, 2010

Addiction Potential: Conventional vs. Electronic Cigarette

- E-cigarettes have been less effective at nicotine delivery

However

- Newer devices can deliver more nicotine
- Nicotine delivery can be by puffing behavior



- Unknown effects of flavors and additives
- Situational use is similar – social, drinking, stress
- Use by children and teenagers is a significant concern



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Source: Farsalinos et al, 2014

Secondhand and Thirdhand Exposure

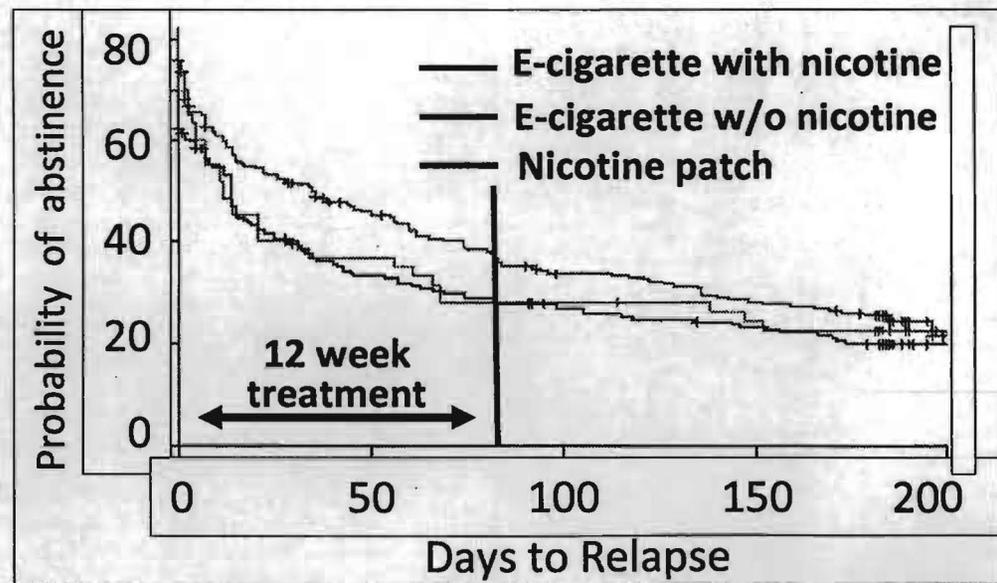
- E-cigarettes have no sidestream emissions like a conventional cigarette (generates smoke while holding)
- Exhaled aerosol may be inhaled by nearby individuals (secondhand exposure)
- Surfaces can be coated with the nicotine-containing aerosol as it settles (thirdhand exposure)
- Health effects of indirect aerosol exposure are unclear
- Extensive experience with conventional cigarettes is being used as a guide to investigate these questions



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Electronic Cigarettes: Nicotine Cessation

- Nicotine replacement therapy (NRT) is an approved cessation treatment
- E-cigarettes may be a uniquely effective NRT due to their potential to mimic conventional cigarettes
 - More rapid nicotine delivery than approved NRT
 - Behavioral aspects: mouth feel, exhaling aerosol, touch
- Only a few peer-reviewed clinical studies
 - Limited effect
 - Little nicotine delivered



Source: Bullen et al, 2013



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Electronic Cigarettes: Harm Reduction

- “People smoke for the nicotine but they die from the tar” Prof Michael Russell, 1976
- In a harm reduction model, smokers would replace conventional cigarettes with e-cigarettes
- There is active debate on the proper approach
 - Some advocates support the immediate routine use of e-cigarettes to replace conventional cigarettes
 - A more cautious view seeks a better understanding on safety and their impact on conventional cigarette use
- No peer-reviewed harm reduction studies



NIH Supported Research into Electronic Cigarettes

- Device design and function
- Health effects of aerosol constituents
- Biomarkers (physiological measures of exposure)
- How does marketing influence use
- What are the effect of flavorings on preferences
- Longitudinal surveys of use by youth and adults
- Potential for cessation and harm reduction



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There are More Questions than Answers for Electronic Cigarettes

- How safe are e-cigarettes for long term use?
- Will conventional cigarette smokers who use e-cigarettes completely switch or become dual users?
- Will e-cigarettes alter a smoker's intentions to quit?
- Can e-cigarettes be an effective tool in cessation?
- Will non-smoking youth routinely use e-cigarettes?
- How will e-cigarettes affect youth smoking of conventional cigarettes?



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Additional slides



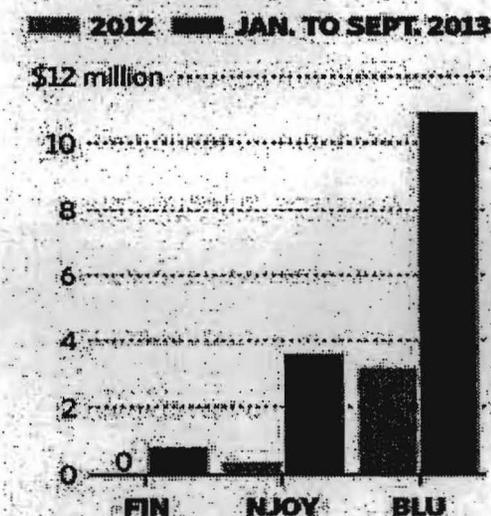
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Electronic Cigarette Advertising

- Advertising of traditional cigarettes TV ads banned since 1971
- Increased youth exposure to e-cig ads
 - Between 2011-2013, e-cig TV ads that reach children increased by 256% and young adults by 321%
- Ads during 2013 Super Bowl reached more than 10 million viewers
- In 2013, \$30 million spent on ads in for 'blu' e-Cig brand (increase planned for 2014)
- In 2014, \$30 million budgeted to promote NJOY e-Cigs in the US (spending triple that of 2013)

Ramping Up

TV ad spending for e-cigarettes



Source: Kantar Media
The Wall Street Journal



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Source: Wall Street Journal (online) - Dec 2013; Duke, et al (2013) - http://pediatricsde.aap.org/pediatrics/july_2014?pg=59#pg59

Regulatory Options Enacted by States

- Taxing e-cigs similar to tobacco products
- Restrict or prohibit redemption of coupons for tobacco products, including e-cig products
- Prohibit distribution of free samples
- Regulate sale and distribution of flavored non-cigarette tobacco products with characterizing flavors (similar to New York)
- Comprehensive youth access laws prohibiting sale to minors, requirement to be kept behind counters, sold only in places where adults permitted to enter and raise minimum age to purchase
- Include e-cigs in smoke and tobacco-free restrictions
- Regulate the sale and marketing of e-cigs, health warnings at point-of-sale



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Source: <http://publichealthlawcenter.org/sites/default/files/pdf/tclc-fs-regulatory-options-e-cigarettes-2013.pdf>

Current State Regulations

United States 100% Smokefree Air Laws

American Nonsmokers' Rights Foundation

As of July 3, 2014

Note: American Indian and Alaska Native sovereign tribal laws are not reflected on this map.

Territories and Commonwealths

Commonwealth of Northern Mariana Islands

Guam

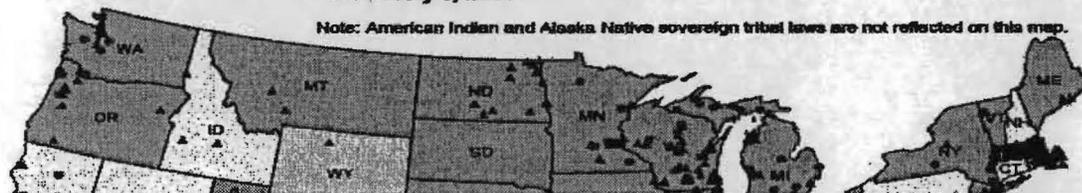
American Samoa

Puerto Rico

U.S. Virgin Islands

Locality Type with a 100% Smokefree Law

- ▲ City
- County



U.S. State and Local Laws Regulating Use of Electronic Cigarettes

American Nonsmokers' Rights Foundation

As of July 3, 2014

Note: American Indian and Alaska Native sovereign tribal laws are not reflected on this map.

Territories and Commonwealths

Commonwealth of Northern Mariana Islands

Guam

American Samoa

Puerto Rico

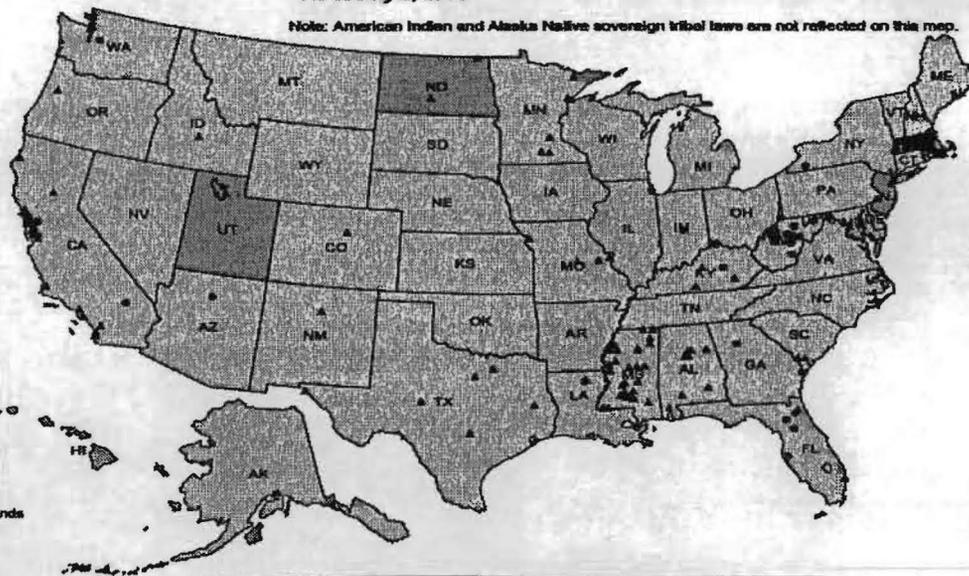
U.S. Virgin Islands

Locality Type

- ▲ City
- County

State and Commonwealth/Territory Law Type

- Law Restricts E-cigarette Use in 100% Smokefree Venues
- No E-cigarette Restriction in 100% Smokefree Venues



National Institute on Drug Abuse

Physiological Effects of Nicotine

- Nicotine is rapidly delivered to the bloodstream via conventional cigarettes.
- Nicotine stimulates the adrenal glands to release the hormone epinephrine (adrenaline), increasing blood pressure, respiration, and heart rate.
- Nicotine increases release of the neurotransmitter dopamine, affecting brain pathways controlling reward and pleasure.
- Long-term brain changes induced by continued nicotine exposure result in addiction—a condition of compulsive drug seeking and use, even in the face of negative consequences.

