“E-Cigarettes: Panacea or Peril?”

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Today’s webinar will be recorded and available online next week at

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Today’s Guest

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E-Cigarettes: Panacea or Peril?

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Webinar Objectives

• Recognize that tobacco use is the world’s leading preventable cause of death.

• Understand that most of the harm caused by tobacco is due to combustion (smoke)

• Realize that e-cigarettes could play an important role by increasing cessation among individual smokers.

• Differentiate between the possible benefit that e-cigarettes may have to individual smokers compared to the potential harm to population health.

• Acknowledge the need for effective regulatory action to optimize individual benefit and minimize population harm.

• Guide health professionals on how to discuss e-cigarettes with smokers.
Globally, tobacco use is the largest preventable cause of death (6.3 million deaths annually)

Source: tobaccoatlas.org
The majority of harm from tobacco occurs as a result of smoke – a product of combustion.

Source: tobaccoatlas.org
Current tobacco control strategies won’t result in single-digit smoking prevalence. We need to disrupt the status quo.

Unpublished Data: Mendez and Warner, University of Michigan School of Public Health
Can novel nicotine products serve as a disruptive technology and advance public health?

Sources: MarkTen® Markten.com; VUSE® from Vusewapor.com; Blu® from blucigs.com; Orbs from the evolvement.org; Hookah from hookashisha.org; all other images from Wikimedia Commons
E-cigs and tank systems (ENDS) heat liquid nicotine and create a vapor rather than burn tobacco and create smoke…Thus, fewer toxins
Will ENDS be a panacea or peril?

*From an individual perspective...*

- Smoking combusted cigarettes is the single greatest cause of death in the world.
- Current tobacco control methods will not achieve public health objectives.
- Properly regulated, e-cigs have the potential of providing nicotine at a much lower level of harm.

*From a population perspective...*

E-cigarettes could -

- Increase youth initiation
- Promote dual use
- Delay cessation
- Provide different health risks
- Entice former smokers back to nicotine
- Re-normalize smoking
- Continue addiction
- Set back progress from establishing health promoting social norms
Teens and E-cigarettes
Current e-cigarette use among high school students tripled between 2011 and 2013

*Current use is defined as use on one or more days in the last 30 days*

E-cigarette use among never smoking youth

• From 2011-2013, the number of never smoking youth who used an e-cigs increased three-fold

• In 2013, over 250,000 never smoking youth used e-cigarettes

• Intention to smoke cigarettes was higher among e-cigarette users

Smoking and Vaping Among High School Students

- Past-Month E-Cigarette Use
- Past-Month Cigarette Smoking

- 2011: E-Cigarette Use = 1.5, Cigarette Smoking = 15.8
- 2012: E-Cigarette Use = 2.8, Cigarette Smoking = 14
- 2013: E-Cigarette Use = 4.5, Cigarette Smoking = 12.7
- 2014: E-Cigarette Use = 9.2, Cigarette Smoking = 13.4
Nearly half of U.S. students using tobacco use multiple products, especially e-cigarettes.

More than 4.6 million students reported being current tobacco users.

1 in 4 high school students
1 in 13 middle school students

Of the current tobacco users, 2.2 million students reported being current users of two or more types of tobacco products.

Of the current tobacco users, 2.4 million students reported using e-cigarettes.

For the first time in NYTS, e-cigarettes were the most commonly used tobacco product among students, followed by hookah (1.6 million), cigarettes (1.6 million), and cigars (1.4 million).

2014 National Youth Tobacco Survey, FDA.gov
The e-cigarette *quandary*: helping smokers quit while enticing new addicts. The e-cigarette *dilemma*

“E-cigarettes pose a public policy *conundrum*. They are a gateway drug — but it’s not, or hasn’t been, entirely clear in which direction most traffic through that gateway flows.”

Ruth Marcus, September 5, 2014
U.S. Preventive Services Task Force Recommendation on ENDS for Smoking Cessation

• Thus far, the U.S. Preventive Services Task Force (USPSTF) has made the strongest stance about ENDS
• In September 2015, the USPSTF “found the evidence on ENDS use as a smoking cessation tool in adults or adolescents to be insufficient.”
• The USPSTF was only able to identify two randomized, controlled trials that evaluated the effect of e-cigarettes on smoking abstinence in adults. These two studies found mixed results.
ENDS climate in UK: A strong stance has been taken

• Public Health England published a report in August 2015 stating that “The current best estimate is that e-cigarette use is around 95% less harmful to health than smoking.”

• E-cigarette companies quickly capitalized on this finding, using the statistic in the front window of e-cigarette shops.

• Some criticize that the report is based on expert opinion (multi-criteria decision analysis) rather than empirical evidence.

Perception of relative harm of e-cigarettes among US adults, 2012-2014

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage of Respondents</th>
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<tbody>
<tr>
<td>Less Harmful 2012</td>
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<tr>
<td>Less Harmful 2014</td>
<td>33.8</td>
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<td>About the Same 2012</td>
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<tr>
<td>About the Same 2014</td>
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<td>I Don't Know 2012</td>
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<tr>
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</tbody>
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1. Unpublished results of data from the 2012 HealthStyle survey
2. Unpublished results of data from the 2014 Tobacco Products and Risk Perceptions Survey conducted by the Georgia State University Tobacco Center of Regulatory Science (TCORS)
Cigarette
E-Cigarette
Unintended consequences of ENDS: Vaping used for recreation, not cessation

- E-cigarettes are the source of a new sport, called Cloud Chasing, where vapors try and blow the most vapor.
Public health concerns about ENDS marketing

• E-cigarette advertising grew twelve-fold in two years (from $6.4 million in 2011 to over $80 million in 2013).
• E-cigarette advertising is completely unregulated and “anything goes.”
• Much e-cigarette marketing resembles tobacco advertisements of the past, and this is a concern to public health. Like traditional cigarette marketing, e-cigarette marketing uses:
  • Rugged men and beautiful women
  • Sex appeal
  • Unsubstantiated health claims
  • Famous spokespersons
  • Cartoons
• Current e-cig marketing is appealing to young people and has the potential to re-normalize smoking.
No one under 42 years of age in the U.S. has ever seen an ad for a tobacco product on television… until now

blu E-Cigarettes Video with Jenny McCarthy (click for video)
"Responsible e-cigarette manufacturers, including blu ecigs, do not market to youth."

Lorillard to FDA (10/23/13)
Let’s see what “responsible” marketing really looks like to e-cig companies…

Jenny McCarthy as spokesperson for blu eCigs.

“freedom to have a cigarette without the guilt.” — Jenny McCarthy

blucigs.com
Examples of “responsible” marketing...

*Sports Illustrated* swim suit edition (February, 2014)
Some companies use e-cigs as “nutritional” supplements: Lose weight, have more energy and better sleep!
Unintended consequences of ENDS: Entice former smokers to return to nicotine

There are 53 million former smokers in the U.S. and they are being enticed to try e-cigs, as exemplified by FIN’s “Welcome Back” campaign.

“Though the primary message is that people can smoke e-cigarettes indoors, FIN’s choice of a diner from the 1950s—a time when smoking was perfectly acceptable—is the ad’s booster engine, a subtle but powerful underlying sell that runs on pure nostalgia.”

-Adweek, May 2012
Circumvent smokefree laws
Regulation can occur at each stage of the tobacco life-cycle and this regulation should include ENDS.
Federal ENDS Regulation: Waiting for the FDA to act

• In 2009, President Obama signed the Tobacco Control Act.
• In 2011, the FDA announced its intention to regulate all tobacco products, including e-cigarettes.
• In 2014, the FDA issued a proposed rule for extending their regulatory authority over all tobacco products (deeming).
• In April 2015, Health and Human Services Secretary set a goal of June 2015 for issuing a final ruling.
• On October 19, 2015, FDA submitted the final rule to OMB for approval

E-cigarettes are unregulated in the U.S. and are a source of confusion among health professionals, health educators, public health, researchers, government officials, and consumers alike.

Campaign for Tobacco-Free Kids, September 22, 2015 Press Release
Role of state and local laws in regulating e-cigarettes

• Since the FDA has not acted on e-cigarettes, states and local governments have imposed their own regulations, in some instances.

• As of July 2015, at least 170 municipalities and three states stated that e-cigarettes cannot be used in smokefree environments.

• Health professionals have the potential to play a strong role in advocating that e-cigarette use to be banned in smokefree areas. This can be done at the local level and will likely be more effective than focusing exclusively on federal policy change.
Action Steps: What needs to happen?

• Create a regulatory scheme that favors exclusive use of non-combusted nicotine products over traditional cigarettes.
• Gradually reduce nicotine levels in cigarettes to non-addictive levels.
• Avoid unintended consequences
  • Youth initiation
  • Dual use (unless limited dual use helps with cessation)
  • Former smokers returning to nicotine
  • Re-normalization of smoking
  • Use of e-cigs for delivery of illicit drugs
• Work to eliminate any type of addiction, including addiction to nicotine.
• Include as part of broader health promotion strategy.
Establish strategic nicotine regulatory framework focused on complete transition from combustion

Use all policy levers to achieve transition from combustion, including:

- Provide evidence-based and affordable cessation services
- Allow responsible ENDS marketing consistent with evidence (as with NRT)
- Establish differential tax policy to discourage combusted products (NEJM)
- Allow non-harmful flavors as necessary
- Limit nicotine content and other product standards that would make combustible cigarettes less addicting and attractive
- Establish progressively more restrictive time, place, and manner of sales of combustible cigarettes, particularly at the state and local level
- Assure policy levers do not erode successful tobacco control strategies, particularly clean indoor air laws.
Potential Health Impact of ENDS

“The promotion of electronic cigarettes and other innovative tobacco products is much more likely to be beneficial in an environment where the appeal, accessibility, promotion, and use of cigarettes are being rapidly reduced”

Health education efforts directed toward smokers

As the popularity of ENDS increases, more smokers are thinking about quitting:

- Capitalize on this unprecedented interest in quitting and communicate the best information available to guide informed decision making.

- Communicate that there are proven and effective methods to stop smoking (e.g., NRT, counseling, Chantix). If these methods haven’t worked for a particular smoker, he/she may want to consider ENDS.

- Emphasize that there is little evidence about the efficacy or unintended consequences of ENDS. And, while there may be unknown harms from ENDS, it is certainly less harmful than continued smoking.

- Advise smokers to avoid dual use and that ENDS should only be used for a finite period of time, rather than as a permanent replacement product for smoking.

- Strike the proper balance between possible individual benefit (smokers quitting), against possible population harm (kids starting & dual use).

- Use the public discourse on ENDS to further discourage smoking and advance other tobacco control policies.
Thank You! Questions?

www.publichealth.gsu.edu