“Risky Business: Kids, E-cigs, Vaping, and New Tobacco Products”

Special guest speaker: Terry Pechacek, PhD
Deputy Director for Research Translation in CDC’s Office on Smoking and Health
Today’s Moderator

Steve Kelder, PhD, MPH
Co-Director and Professor
Michael & Susan Dell Center for Healthy Living
The University of Texas School of Public Health
Austin Regional Campus

Today’s webinar will be recorded and available online next week at TexasTCORS.org
The Texas TCORS

• Funded in September 2013 – one of 14 Centers in the U.S.
• Funded by N.I.H. to provide scientific evidence and a new generation of scientists to focus on tobacco regulatory science to guide the FDA.
• The Food and Drug Administration (FDA) has the authority (2009) to regulate the manufacturing, distribution, and marketing of tobacco products.
The Texas TCORS

Our Center’s research focuses on:

– Texas as a demographic bellwether state
– Youth and young adults as vulnerable populations
– New and emerging tobacco products
– Marketing to youth and young adults
– Communication methods to inform young adults of the risks and harms of tobacco use
The Texas TCORS

- Three large RO1 research projects
- Four “cores” to support research (Training, Development, Data, Administrative)
- Speaker Series with Annual Invited Speaker
- Partners include: UT School of Public Health, UT Austin, UT MD Anderson Cancer Center, and Rutgers SPH
Today’s Guest

Terry Pechacek, PhD
Deputy Director for Research Translation
Office on Smoking and Health
Center for Disease Control and Prevention
"Risky Business: Kids, E-cigs, Vaping, and New Tobacco Products"

Electronic Nicotine Delivery Systems (ENDS)

Terry F. Pechacek, Ph.D
Deputy Director for Research Translation
Office on Smoking and Health

The findings and conclusions in this presentation are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention. The responsibility for all of the presented material rests exclusively with the author.
Tobacco Smoke is Deadly

“The burden of death and disease from tobacco use in the United States is overwhelmingly caused by cigarettes and other combusted tobacco products; rapid elimination of their use will dramatically reduce this burden.”

The health consequences of smoking – 50 years of progress: a report of the Surgeon General. – Atlanta, GA. : U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.
Overview

1. What are Electronic Nicotine Delivery Devices (ENDS)?
2. Who is using ENDS?
3. Where do ENDS fit in tobacco control?
4. Which policy approaches are appropriate for ENDS?
Electronic Cigarettes and Vaping Devices

- Disposable
- Rechargeable
- Tank
- Novelty
ENDS Aerosol is Not Harmless Water Vapor

- A tobacco product
- ENDS aerosol contains nicotine and other potentially harmful constituents
- Some ENDS can be altered to deliver other psychoactive substances
The ENDS Market is Growing

- Unregulated
- Over 466 brands
- 7764 unique flavors
- Range of players
- $1.5 - 2 billion in annual sales
ENDS Advertising Expenditures across media markets

- 2011: $6.4 million
- 2012: $18.3 million
- 2013: >$80 million
They have celebrity spokespeople

Stephen Dorff's Rise From the Ashes - Brought to you by blu Cigs

https://www.youtube.com/watch?v=5BbVXQk9nNk

Their magazine ads feature rugged men ...
... and glamorous women
Sex Appeals

2012 Only Comes Once

MAKE THE SWITCH TO Blu ELECTRONIC CIGARETTES

This year, resolve to make the most of your opportunities by making the switch to Blu. With only five ingredients, Blu produces no ash, no smell, only vapor, which means it’s perfect for restaurants, bars and your trip around the bases. You control the nicotine. You control when and where you want to smoke. The rest is up to her.

FLAVORS: Classic Tobacco, Magnificent Mocha, Cherry Krak, Yidd Vanilla & Jane Jet

blucigs.com

Available Now at These and Other Fine Retailers:

SHEETZ DUNKIN DONUTS 7-Eleven H-E-B meijer

18+ only. CALIFORNIA PROPOSITION 65 Warnings: This product contains nicotine, a chemical known to the state of California to cause birth defects or other reproductive harm.

SURGEON GENERAL’S WARNING: Smoking By Pregnant Women May Result in Fatal Injury, Premature Birth And Low Birth Weight.
What factors lead to youth smoking?

- Exposure to ads
- Themes in advertising that resonate with youth
- Low prices and price-reducing promotions
- Ease of access to a product
- Candy and fruit-flavored products
- Health claims
- Products that are easier to use
E-cigarette ever use more than doubled* between 2011 and 2012 among students

**Youth E-cigarette Ever Use, National Youth Tobacco Survey, United States**

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>All Students</td>
<td>3.3%</td>
<td>6.8%</td>
</tr>
<tr>
<td>High School</td>
<td>4.7%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Middle School</td>
<td>1.4%</td>
<td>2.7%</td>
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*Statistically different (p<0.05)

Current e-cigarette use among students more than doubled between 2011 and 2012

Current E-Cigarette Use*, National Youth Tobacco Survey, United States

<table>
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<tr>
<th></th>
<th>2011</th>
<th>2012</th>
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</thead>
<tbody>
<tr>
<td>All Students</td>
<td>1.1%</td>
<td>2.1%</td>
</tr>
<tr>
<td>High School</td>
<td>1.5%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Middle School</td>
<td>0.6%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

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

E-cigarettes and Nonsmoking Youth

- From 2011-2013 the number of non-smoking youth who used an e-cigarette increased three-fold
- In 2013, over \( \frac{1}{4} \) of a million non-smoking youth used e-cigarettes
- Intention to smoke cigarettes was higher among e-cigarette users

Awareness of electronic cigarettes among U.S. adults – HealthStyles, 2010-2013


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<tr>
<th></th>
<th>2010/2011</th>
<th>2012/2013</th>
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<tbody>
<tr>
<td>Current Smoker</td>
<td>4.9</td>
<td>9.4</td>
</tr>
<tr>
<td>Former Smoker</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Never Smoker</td>
<td>0.2</td>
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Potential Health Impacts of ENDS

- Could have negative and positive individual and population health impact

“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”

ENDS Potential for Harm

- **Direct harm**
  - Expose children and adolescents, pregnant women, and non-smokers to 2nd hand aerosol or psychoactive substances
  - Result in poisonings among users or non-users
  - Uncertain health effects of long term exposure
    - Pulmonary delivery of propylene glycol, nicotine, (State guidance)
      - Lower toxin burden than cigs, but not water vapor
Number of calls to poison centers for cigarette or e-cigarette exposures, by month — United States, September 2010–February 2014
Potential harmful interaction with cigarettes

- Lead to regular use of nicotine and/or use of cigarettes in youth or adult non-smokers
- Delay quitting and/or diminish the chances a smoker will quit by leading to long-term dual use
- Discourage smokers from using proven quit methods
- Increase former smoker relapse
- Glamorize and renormalize tobacco use
Not Approved as a Cessation Device

In 8 years companies have not approached FDA for approval

**ENDS and Cessation**

**Might be helpful?**

<table>
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<tr>
<th>Used Like NRT</th>
<th>Decrease Consumption</th>
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<tbody>
<tr>
<td>Do Not Result in Quitting</td>
<td>High Levels of Dual Use</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
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Interaction with End Game scenarios

- End Game scenarios that rise to the top for the U.S.
  - FDA regulation to
    - reduce nicotine content to make cigarettes non-addictive
    - establish strict standards for levels of toxicants in tobacco products
    - standards to make some or all tobacco products less appealing
  - Sales restrictions such as local and state product bans

The health consequences of smoking – 50 years of progress: a report of the Surgeon General. – Atlanta, GA.: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.
ENDS Potential for Benefit

- Only under three circumstances:

  - Complete long-term substitution by established smokers
  - Assist in rapid transition to a society with little or no use of burned products
  - Short-term use if shown to produce successful and permanent cessation of burned products
ENDS Policy Approaches

- **Not tolerated**: Marketing or sales that result in youth use
- **Prohibited**: In all places where smoking is
- **Eliminate**: Use of combusted tobacco

- FDA regulation is *fundamental* to minimizing harms
- States and communities can also take action
FDA Proposed Rule

- Extend authority to regulate additional tobacco products, including ENDS
- If finalized required approaches include:
  - Requirements to register and submit product and ingredient listings;
  - Prohibition on new tobacco product marketing without FDA review;
  - Prohibition of direct and implied claims of reduced risk without FDA review and authorization based on scientific evidence;
  - Prohibition of free samples;
States and Communities—Rationale for prohibiting ENDS use in all places where smoking is not allowed

- Compare to clean air, not cigarette smoke
- Aerosol contains nicotine and may contain other psychoactive substances and toxins
- Wild west--no manufacturing standards
- Potential to expose youth, pregnant women, and non-smokers to aerosolized nicotine and other toxins
- No evidence public use is necessary for smokers to “switch” – could enable dual use
State Action on ENDS

- No sales to minors (34 states)
- No use where smoking is not allowed (3 states)
- Additional promising strategies may include retailer licensing, marketing restrictions, taxation

- CDC will soon track ENDS legislation on http://www.cdc.gov/tobacco/state_system/
2014 SGR Recommendations

- Fully fund comprehensive statewide tobacco control programs at CDC-recommended levels
- Sustain high-impact media campaigns such as Tips for 12 mo/year for 10+ years
- Raise excise taxes -- at least $10 per pack most effective
- Fulfill opportunity of the ACA to provide access to barrier-free proven tobacco use cessation treatment
- Expand cessation in primary and specialty care settings
As endgame strategies are developed:

- Effectively implement FDA’s authority for tobacco product regulation to reduce product addictiveness and harmfulness

- Expand tobacco control and prevention research to increase understanding of the ever changing landscape

- Extend comprehensive smokefree indoor protections to 100% of the U.S. population
**Summary**

- ENDS are not “safe”
- Unregulated sale and distribution is driving demand
- Cessation claims are unproven…CDER is avenue
- Potential for harm and benefit depends on the context of combusted tobacco products

**Policy Approaches**

- No marketing or sales to kids
- Clean air is the standard
- Comprehensive approach is warranted
- Pedal to the metal on combusted tobacco
Thank You!

Questions?

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Questions?