Electronic Nicotine Delivery Systems and Vaping Marijuana

Heidi Driscoll, Coordinator, South Kingstown Partnership for Prevention

David Neill, Investigator, United States Attorney’s Office
Electronic Cigarette use among young people has officially surpassed traditional cigarette use!

CDC 2011-2014 National Youth Tobacco Surveys
1 in 7 high school students have tried "VAPING"  
Yale University Study
High School
30 Day Use
of E-Cigarettes

2011 - 1.5%

2013 - 4.5%

2014 - 13.4%

CDC Office of Smoking and Health, July 2015
Middle Schoolers- 30 Day Use
0.6% in 2011
1.1% in 2013
3.9 % in 2014
• Nearly 2.5 Million U.S. middle and high school students were past 30 day e-cigarette users in 2014

(CDC Office on Smoking and Health, July 2015: )

• More than 263,000 middle and high school students who had never smoked cigarettes had tried e-cigs
Teens and E-cigarettes

Teens are more likely to use e-cigarettes than cigarettes.¹

8th grade: 3.6% Cigarettes, 9.5% E-cigarettes
10th grade: 6.3% Cigarettes, 14.0% E-cigarettes
12th grade: 11.4% Cigarettes, 16.2% E-cigarettes

2x as many boys use e-cigs as girls

NIDA
March 2016
PREVENTION WORKS!!

Tobacco Use is at its lowest rate (among 12-17) In 2 DECADES

2015 Monitoring the Future Survey (funded by NIDA)
High School Tobacco Use (%) by Type

- Cigarette
- Cigar
- Smokeless
- E-Cig

E-Cigs have arrived in the life of the American Teen
Rhode Island Law

THE SALE OF CIGARETTES, TOBACCO AND ELECTRONIC NICOTINE-DELIVERY SYSTEM PRODUCTS TO PERSONS UNDER THE AGE OF 18 IS AGAINST RHODE ISLAND LAW (§ 11-9-13.8(1), Rhode Island Statutes) PHOTO ID FOR PROOF OF AGE IS REQUIRED FOR PURCHASE.
E-Cig History

- Developed in 2003 in Beijing, China by a pharmacist named Hon Lik
- 2006-2007 Introduced in US
- 2009 The Electronic Cigarette Association (ECA) is formed
- 2010 AMA urges FDA to regulate as a drug delivery device
WHAT ARE THEY-

A nicotine delivery device that produces Inhalable Flavored SMOKE-LIKE vapor
Nicotine

- Highly addictive
- Toxic to developing fetuses and impairs brain and lung development
- Because the adolescent brain is still developing, nicotine use during adolescence can disrupt the formation of brain circuits that control attention, learning, and susceptibility to addiction
- Poisonings have resulted from users and non-users due to ingestion of nicotine liquid, absorption through skin and inhalation
- Poison control calls from e-cigarette exposure increased from 1 per month in Sept 2010 to 215 per month in Feb 2014 and over half of those calls were regarding children under 5
Categories

1. Electronic Cigarettes
2. Vaporizers
3. Heat-Not-Burn
E-cigs

(Battery-powered devices made to mimic the size and weight of combustible cigarettes)

- Disposable (200-1800 puffs)
- Rechargeable (wall, car and USB)
- Flavored Cartridges
- E-cigar/E-Hookah/E-Shisha
Disposable e-cigar

Up to 1800 puffs
Vaporizers
(Larger devices with higher-powered batteries that vaporize nicotine through an open or closed tank system)

- E-liquids- Used in Vaporizers, solution that contains varying levels of nicotine
- Mods- Large scale cylindrical or box shaped vaporizers housing extremely large batteries
TEEN E-CIG USERS ARE MORE LIKELY TO START SMOKING.\(^2\)

<table>
<thead>
<tr>
<th></th>
<th>Start Smoking Within 6 Months</th>
<th>Start Smoking Within 12 Months</th>
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<tbody>
<tr>
<td>E-CIG USER</td>
<td>30.7%</td>
<td>25.2%</td>
</tr>
<tr>
<td>NON USER</td>
<td>8.1%</td>
<td>9.3%</td>
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*Includes combustible tobacco products (cigarettes, cigars, and hookah)

WHAT DO TEENS SAY IS IN THEIR E-CIG?\(^3\)

- 66.0% Just Flavoring
- 13.2% Nicotine
- 13.7% Don’t Know
- 5.8% Marijuana
- 1.3% Other

Manufacturers don’t have to report e-cig ingredients, so users don’t know what’s actually in them.
Heat-Not-Burn
(Products that heat actual tobacco vs liquid nicotine)

- Dry Vaporizers- Devices that let consumers vaporize their own tobacco or other plant product
- Pods- Similar to e-cigs but with actual tobacco instead of liquid nicotine
Popularity

- Cheap
- Highly available
- Youth-appealing flavors, colors and designs
- Products made to conceal use
Choose the Albuterol Inhaler
iolite
The Next Generation in Vaporisers
FIVE Signs your Child is Vaping

1. The scent
2. “Pens” that aren’t pens
3. Copious sipping of Liquids
4. Nose Bleeds
5. Passing on Caffeine
HIGH TEEN EXPOSURE TO E-CIG ADVERTISING

7 in 10 exposed to ads

- RETAIL ADS: 52.8% MIDDLE SCHOOL STUDENTS, 56.3% HIGH SCHOOL STUDENTS
- INTERNET ADS: 35.8% MIDDLE SCHOOL STUDENTS, 42.9% HIGH SCHOOL STUDENTS
- TV/MOVIE ADS: 34.1% MIDDLE SCHOOL STUDENTS, 38.4% HIGH SCHOOL STUDENTS
- NEWSPAPER & MAGAZINE ADS: 25.0% MIDDLE SCHOOL STUDENTS, 34.6% HIGH SCHOOL STUDENTS

Electronic Cigarettes Market Growth

- From $500 Million in 2012, to $1.7 Billion in 2013.
- Wells Fargo - sales will surpass conventional cigarettes in ten years.
South Kingstown Partnership for Prevention
215 Columbia Street
Wakefield, RI 02879
401-360-1880
skprevention.org