Vaping Among Arizona Kids: 
A Public Health Policy Perspective

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Disclosures:
None

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VAPING: A BACK STORY

E-cigarettes Continue to Evolve
E-cigarettes Make Aerosol, Not Vapor

The aerosol users breathe from the device and exhale can contain harmful and potentially harmful substances.

Major Concerns with Youth Vaping

- Often, vaping hooks teens on nicotine who have never smoked.
- The developing adolescent brain is particularly vulnerable to addiction and nicotine.
- Most vape products contain nicotine (often in large concentrations) and other hazardous chemicals.
- Marketed in colors and flavors and images that attract youth.
Food & Drug Administration (FDA)

• Addressing the unprecedented increase in vaping among youth, FDA focused on regulating vape manufacturers and retailers.

• In Fall 2018, FDA gave manufacturers & retailers 60 days to prove they can keep them away from minors.

Centers of Disease Control & Prevention (CDC)

• Identified vaping among youth as a *Major Public Health Concern*
  – Direct health hazard to youth through use and exposure
  – Most vape products contain and emit numerous toxic substances, including actual metals and metal concentrations.
  – Vape products have not been approved as tobacco cessation products
Ever used an electronic vapor product among high school youth, YRBS 2015-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>AZ (%)</th>
<th>U.S. (%)</th>
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<tbody>
<tr>
<td>2015</td>
<td>51.6</td>
<td>44.9</td>
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<td>2017</td>
<td>51.0</td>
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Frequent use of electronic vapor products among high school youth, YRBS 2015-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>AZ (%)</th>
<th>U.S. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3.1</td>
<td>3.0</td>
</tr>
<tr>
<td>2017</td>
<td>5.3</td>
<td>3.3</td>
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Trends from the Arizona Youth Survey

While tobacco use among youth is at an all-time low (4%):

- 50% of youth report vaping at least once.
- 30% of youth have vaped in the past 30 days.
- 20% currently use on a nearly daily basis.

(90,000+......ages 12-17)
Arizona Trends (continued)

We also know that:

• Males vape at higher rates than females.
• Older teens vape more than younger teens.
• White youth vape more than Latinos and African Americans.
• 97% of vape products tested at the State Lab contain high levels of nicotine.

FACTS OVER FLAVOR CAMPAIGN
Campaign Overview

- ADHS ran the *Facts Over Flavor* youth prevention campaign from December 31, 2018 – December 31, 2019.
- Focused on Arizona youth ages 9 – 13 years.
- Based on formative research, including a review of national practices and focus groups comprised of Arizona youth who vape.

Formative Research Findings, 2018-2019

- Many youth and parents believed that vaping is harmless.

- Youths report that:
  - “Everyone is vaping/Juuling’ in my school......
  - Even right in the classroom.....and the bathrooms are known as the “vape rooms.”
Facts Over Flavor

• Goals:
  – Educate youth and provide guidance to parents on the dangers (immediate and long-term) of vape product use.
  – Prevent the initiation of vape consumption among middle school children

A New Approach to Media

• The Facts Over Flavor campaign was developed based on CDC best practice
• Designed within the context of today’s youth communications and media consumption habits
Campaign Results  
(12/31/2018 – 12/31/2019)

- Over 90 million impressions on digital, social, and cable media platforms
  - Snapchat (60%)
  - YouTube (18%)
  - Instagram (14%)

- 75% are performed on a mobile device

- Average time on factsoverflavor.com is nearly 6 minutes!

THE OUTBREAK
CDC Investigating Illness Linked to E-Cigs and Vaping Across the Country, August 17, 2019

EVALI – U.S. Data

• Syndromic data on emergency department (ED) visits suggest that the outbreak began in June 2019. Cases have been declining since a peak in September.
• As of February 4, 2020, 2758 hospitalized cases of EVALI were reported from all 50 states, the District of Columbia, and 2 U.S. territories.
• There have been 64 deaths reported nationwide.
Arizona Data

• As of February 11th, Arizona has 21 reported cases of EVALI, which are part of the national outbreak.
• There have been no deaths in Arizona.
• Ages of case subjects ranges from 16-57. The median age is 20.

Symptoms of EVALI

• Patients in this investigation reported symptoms such as:
  – Respiratory symptoms, including cough, shortness of breath, or chest pain
  – Gastrointestinal symptoms, including nausea, vomiting, stomach pain, or diarrhea
  – Nonspecific symptoms, like fever, chills, or weight loss
National and state data from patient reports and product sample testing show tetrahydrocannabinol (THC)-containing e-cigarette, or vaping, products, particularly from informal sources like friends, family, or in-person or online dealers, are linked to most cases and play a major role in the outbreak.

What was the Cause?

- Laboratory data show that Vitamin E acetate, an additive in some THC-containing e-cigarette, or vaping, products, is strongly linked to the EVALI outbreak.
- Vitamin E acetate has been found in product samples tested by FDA and state laboratories and in patient lung fluid samples tested by CDC from geographically diverse states.
What is Vitamin E Acetate?

- Vitamin E acetate is used as an additive, most notably in THC-containing e-cigarette, or vaping, products.
- Vitamin E is a vitamin found in many foods, as a dietary supplement, and in many cosmetic products, like skin creams.

Recommendations

- CDC and FDA recommend that people not use THC-containing e-cigarette, or vaping, products, particularly from informal sources like friends, family, or in-person or online dealers.
- Vitamin E acetate should not be added to any e-cigarette, or vaping, products.
- Adults using nicotine-containing e-cigarette, or vaping, products as an alternative to cigarettes should not go back to smoking.
Recommendations, continued

• E-cigarette, or vaping, products (nicotine- or THC-containing) should never be used by youths, young adults, or women who are pregnant.

• Adults who do not currently use tobacco products should not start using e-cigarette, or vaping, products.

WHAT NOW?
Why Youth Initiate Vaping

- Vape is a social lubricant (conversation starter).
- It helps ease social anxiety.
- Flavors and devices are appealing…look “cool.”
- It is easier to show-off “smoke tricks,” and often leads to competition.
- Social contagion.

Countering the Prevailing Beliefs About Vape

- Meet them where they’re at!
  - Reach youth and parents via social media and local events throughout Arizona.
- Communicate thru trusted messengers!
  - Work with Students Taking a New Direction (STAND), an ADHS initiative involving 36 youth coalitions across Arizona.
- Enforce legality, without criminalizing!
  - Coordinate with the Attorney General’s Office in conducting surveillance of illegal sales of vape products to youth.
Talking to Youth About Quitting

- Most youth use the term JUUL-ing, and many do not consider JUUL-ing as vaping.
- They do not buy the “health consequences” argument as a reason to quit.
- They are not responsive to the “nicotine addiction” argument.
- They want clear reasons why they should not vape (e.g. immediate health hazards).

Next Steps & Challenges

- Statewide youth vape campaign will need to be refreshed with new messaging
- Partnerships and collaboration with public and private organizations will need to be strengthened
  - Health care providers play a significant role
- Emerging products are entering the market constantly
- Legislation (T21 enforcement of the new FDA rules, bans on flavors)
FactsOverFlavor.com
AZDHS.gov/vape
AZDHS.gov/vapeillness

Thank You!

Will Humble