The Appeal of E-cigarettes to Youth
Learning Objectives

At the end of this session, participants will be able to:

• Understand the epidemiology of youth e-cigarette use
• Describe the reasons that youth use e-cigarettes
• Understand the link between flavored tobacco products and youth nicotine addiction
• Describe the tobacco industry’s targeted marketing of tobacco products to youth
• Discuss youth’s exposure to e-cigarette marketing
How Many Teens use E-Cigarettes?
E-Cigarette use among Youth

• E-cigarettes are the most commonly-used tobacco product among youth, and use has increased significantly in recent years.

• The US Surgeon General has declared that youth use of any tobacco products, including e-cigarettes, is unsafe.

• High school and college students use e-cigarettes at higher rates than middle school students or adults.

• E-cigarette use is strongly associated with use of other tobacco products.
CURRENT TOBACCO USE AMONG U.S. MIDDLE SCHOOL STUDENTS$^{2,4,5,6}$

Note: Dashed lines represent change in survey administration.

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®
CURRENT TOBACCO USE AMONG U.S. HIGH SCHOOL STUDENTS \(^2,4,5,6\)

Note: Dashed lines represent change in survey administration

Slide adapted with permission from Centers for Disease Control and Prevention
## 2020 E-Cigarette Use Trends

**CDC 2020 National Youth Tobacco Survey:**

<table>
<thead>
<tr>
<th></th>
<th>High School Students n=10,097</th>
<th>Middle School Students n=8,837</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current e-cigarette users</td>
<td>19.6%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Among the current e-cigarette users:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequent e-cigarette users</td>
<td>38.9%</td>
<td>20%</td>
</tr>
<tr>
<td>Used pod-based e-cigarettes</td>
<td>48.5%</td>
<td>41.9%</td>
</tr>
<tr>
<td>Used disposables</td>
<td>26.5%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Used flavored e-cigarettes*</td>
<td>84.7%</td>
<td>73.9%</td>
</tr>
</tbody>
</table>

*most common flavors were fruit, mint/menthol, and candy/dessert/sweet*
Why Do Youth Use E-Cigarettes?
Youth Beliefs about E-Cigarette Use

• Many youth believe that e-cigarettes are less harmful than traditional cigarettes\(^1\)

• Youth who believe that e-cigarettes cause no harm are more likely to use e-cigarettes than their peers who believe e-cigarettes are harmful\(^7\)
Youth Beliefs about E-Cigarette Use

- Youth are not always aware of what ingredients are in their e-cigarette

REASONS THAT YOUTH USE E-CIGARETTES

• **Targeted marketing** that depict e-cigarettes as appealing and less harmful than cigarettes

• **Flavors** like menthol/mint, fruit, or candy

• **High nicotine content** and nicotine salts, that are designed to deliver more nicotine and with less throat irritation to a population that is already susceptible to addiction

• **Self-medication** for an underlying concern, like anxiety

• **Head rush**

• **Curiosity**

• **Ability to do tricks**
Marketing of E-Cigarettes to Youth
E-Cigarettes are sold everywhere

- Vape shops
- Convenience stores
- Gas stations
- Retail outlets
- Mall kiosks
- Grocery stores
- Internet vendors

Image source: S. Walley (personal photo). Used with permission.
**E-Cigarettes are Marketed Directly to Youth**

- E-cigarette companies market directly to youth by:
  - Focusing on flavors
  - Using social media
  - Offering scholarships

- E-cigarette advertisements use the same strategies that Big Tobacco used to sell cigarettes to youth:
  - Celebrity spokespeople
  - Sponsorship of sporting events and music festivals
  - Targeted television ads
Youth are Exposed to E-Cigarette Marketing

- Most youth in the United States are exposed to e-cigarette marketing\(^4\)
- Exposure to e-cigarette ads is associated with youth use of e-cigarettes\(^8\)

Image source: Centers for Disease Control and Prevention, *Youth Exposure to Advertising and E-cigarette Use*, CDC Vital Signs, January 2016
Flavors and Youth Use of E-Cigarettes
E-Cigarettes Come in Many Flavors

Flavor categories

- Fruit, Dessert/Sweet
- Tobacco
- Menthol/mint
- Alcohol
- Nuts/spices
- Coffee/tea
- Beverage
- Unflavored

Image source: S. Tanski (personal photo). Used with permission.
### Flavors and E-Cigarette Use

- The 2009 *Family Smoking Prevention and Tobacco Control Act* banned flavors (excluding menthol) in cigarettes\(^{18}\)
- Flavors are still allowed in other tobacco products, including e-cigarettes\(^{18}\)
- The Tobacco Industry has a history of using flavors to purposely attract teens to using tobacco products\(^{13,19,20}\)
FLAVORS AND E-CIGARETTE USE

- 31% of teens report that flavors are the primary reason that they use e-cigarettes\textsuperscript{21}
- Most youth initiate tobacco/e-cigarette use with a flavored product\textsuperscript{22}
- Most youth who use e-cigarettes report using a flavored product\textsuperscript{6}
- The most common flavors of e-cigarettes among middle school and high school students are fruit, mint/menthol, and candy/dessert flavors\textsuperscript{6}
**How do Flavors Attract Youth?**

- Flavors improve the taste of tobacco products\(^{13}\)
- Flavors reduce the “harshness” or irritation that people feel when they begin using tobacco products\(^{13}\)
- E-cigarettes are marketed in flavors that are designed to appeal to youth, including strawberry shortcake, cool cucumber, and unicorn milk
- E-cigarette flavors are marketed directly to teens, with colorful packaging and marketing displays\(^{1,13}\)
FLAVORS AND AAP POLICY

• Current proposed legislation bans all flavors except menthol/mint
  – Disposable or one-time use e-cigarette products, like Puff Bars, are exempted from this flavor ban

• Because of the strong appeal of flavored e-cigarettes to youth, AAP Policy Recommends that the FDA should ban all characterizing flavors, including menthol, in all e-cigarettes and other tobacco products\textsuperscript{23}
Nicotine Content
HIGHLY ADDICTIVE

• E-cigarettes contain high concentrations of nicotine
  – JUUL and other 4th generation “pod” products utilizing nicotine salts contain nicotine concentrations that are more than double the concentration found in other e-cigarettes
• This high concentration is a serious concern for youth, who are already uniquely susceptible to nicotine addiction
• The addictive potential is so high that the US Surgeon General has declared that youth use of nicotine in any form is unsafe
NICOTINE SALTS

• Designed to deliver more nicotine and with less throat irritation, compared to closed system devices\(^9\)
• Contribute to more frequent use, increasing potential for addiction
• All salt-based e-juice and liquid contains nicotine (ie, JUUL and Puff Bars)

Image source: “Nicotine 3D Model” by Unknown Author is licensed under CC BY 2.0.
**KEY POINTS**

- E-cigarettes are the most common tobacco product among youth.
- Youth use e-cigarettes for many reasons, including family/friend use, appeal of flavors, and beliefs about safety.
- Flavored e-cigarettes are designed to appeal to youth.
- Most youth who use e-cigarettes prefer flavored products, such as fruit, mint/menthol, and sweet/dessert flavors.
- E-cigarettes are marketed directly to youth.
- Most US youth are exposed to e-cigarette marketing.
REFERENCES


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20. R.J. Reynolds Inter-office Memorandum, May 9, 1974, Bates No. 511244297-4298

