The Importance of Addressing E-cigarettes in Clinical Practice
LEARNING OBJECTIVES

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

• Summarize the health effects of e-cigarettes for youth
• Describe why pediatric health providers should address e-cigarettes in clinical practice
• Describe USPSTF and AAP recommendations for addressing e-cigarettes in pediatric practice
Patient Education: Health Effects
Known and potential risks

**Risks**

1. Initiation of combustible tobacco products
2. Nicotine addiction
3. Safety risks
4. ? Long term health risks
Conclusion 16-1: There is substantial evidence that e-cigarette use increases risk of ever using combustible tobacco cigarettes among youth and young adults.¹
Nicotine Addiction

The adolescent brain is uniquely vulnerable to the rewarding effects of nicotine.²

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E-cigarettes can deliver higher levels of nicotine than traditional cigarettes.³

Pod system e-liquids (including JUUL):

59 mg/ml

63% of JUUL users do not know that the product always contains nicotine.⁴
Nicotine dependence, indicated by craving, starts before daily or regular use. Interventions may be delivered at any stage.
SAFETY RISKS

• Burns
  – 2,035 explosion and burn injuries seen in US Emergency Departments from 2015-2017\(^6\)

• Poisonings
  – 8,269 liquid nicotine exposures reported among children <6 from 2012-2017\(^7\)
  – Child-resistant packaging laws associated with decreasing exposure rates
**Conclusion 5-1:** There is *conclusive evidence* that in addition to nicotine, most e-cigarette products *contain and emit* numerous potentially toxic substances.¹

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Why Should Pediatricians Address E-Cigarettes in Practice?
WHY SHOULD PEDIATRICIANS ADDRESS E-CIGARETTES WITH YOUTH?

• E-cigarette use has direct, negative health effects\(^1\)
• Young e-cigarette users are at increased risk of transitioning to combustible tobacco products\(^1\)
• Majority of adult tobacco users initiate tobacco use by age 18\(^2\)
• E-cigarettes are the most common tobacco product used by youth\(^3\)
Adolescent brain is uniquely vulnerable to nicotine addiction. Executive function and neurocognitive processes in the adolescent brain are not fully developed. Physiologically more vulnerable to addiction. The earlier youth start, the stronger the addiction and the more difficult it is to quit.

**Why Should Pediatricians Address E-cigarettes with Youth?**

- Executive function and neurocognitive processes in the adolescent brain are not fully developed
- The earlier youth start, the stronger the addiction and the more difficult it is to quit
Interventions to prevent the initiation of tobacco use should be provided to all youth who have not started using tobacco products yet, regardless of the presence or absence of other risk factors.

Various behavioral counseling intervention types are effective in preventing tobacco initiation in children, including face-to-face counseling, telephone counseling, and computer-based and print-based interventions.
Why Address Cessation in Practice?

• Tobacco dependence is a chronic, relapsing condition\textsuperscript{12}
  – Nicotine is addictive
  – Every person who uses tobacco should be offered treatment
• Adolescent tobacco users want to quit, but don’t always know they can receive help\textsuperscript{13}
• Youth are less likely than adult tobacco users to use effective cessation supports\textsuperscript{14}
RECOMMENDATIONS FOR THE PEDIATRIC SETTING

• AAP Policy recommends that pediatricians:
  – Screen for e-cigarette use and exposure\textsuperscript{15,16}
  – Provide prevention counseling\textsuperscript{15,16}
  – Provide counseling that all places where children spend time should be free of tobacco and e-cigarette use\textsuperscript{15,26}
  – Not recommend e-cigarettes as a tobacco cessation product\textsuperscript{15}
  – Support adolescent tobacco users in their quit attempts\textsuperscript{16}

• The US Preventive Services Task Force recommends that pediatricians provide education and brief counseling to youth to prevent initiation of tobacco use, including e-cigarettes.\textsuperscript{11}
RECOMMENDATIONS FOR THE PEDIATRIC SETTING

• For adolescent patients who use e-cigarettes, especially those who do not disclose their use, it is important to have resources readily available and accessible
• Allow for access without having to disclose
• Resources for the waiting and clinic rooms include:
  – Posters
  – Brochures
  – Videos
KEY POINTS

• E-Cigarettes increase risk of youth progressing to traditional tobacco use
• E-cigarettes are addictive
• E-Cigarettes have short- and long-term health risks.
• Pediatric health providers should address e-cigarettes in clinical practice


