

Putting Prevention into Practice

An Evidence-Based Approach

Primary Care Interventions for Prevention and Cessation of Tobacco Use in Children and Adolescents

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Case Study

J.P., a 13-year-old girl, presents to your clinic for a routine well-child visit. She has no acute concerns, is doing well in school, plays sports, and is generally healthy. J.P. reports that she has never used tobacco products, including electronic cigarettes (e-cigarettes) or vaping.

Case Study Questions

1. Based on U.S. Preventive Services Task Force (USPSTF) recommendations, which tobacco prevention interventions should you provide to J.P.?

- ☐ A. No interventions are indicated at this time because J.P. does not smoke.
- ☐ B. You should provide education or brief counseling interventions to prevent J.P. from starting to vape.
- ☐ C. You should provide print materials, face-to-face counseling, computer-based interventions, or telephone counseling to prevent J.P. from starting to smoke.
- ☐ D. You should offer pharmacotherapy interventions to prevent J.P. from starting to use tobacco products.

2. According to the USPSTF recommendations, interventions to prevent tobacco use should be provided to which one of the following populations?

- ☐ A. Children and adolescents at increased risk of tobacco use because they live in a rural area.
- ☐ B. Adolescent White males because they have the highest smoking rates.
- ☐ C. School-aged children at increased risk of tobacco use because they have parents who smoke.
- ☐ D. Adolescents at increased risk because they have friends who vape.
- ☐ E. All youth, whether they have risk factors for tobacco use or not.

Answers appear on the following page.

See related U.S. Preventive Services Task Force Recommendation Statement\ on page 234.

This PPIP quiz is based on the recommendations of the USPSTF. More information is available in the USPSTF Recommendation Statement and supporting documents on the USPSTF website (<https://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/tobacco-and-nicotine-use-prevention-in-children-and-adolescents-primary-care-interventions>.

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CME This clinical content conforms to AAFP criteria for CME. See CME Quiz on page 207.

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3. Which one of the following cessation interventions does the USPSTF recommend for children and adolescents who use tobacco?

- ☐ A. The USPSTF recommends providing behavioral counseling interventions because there is convincing evidence that they are effective in helping school-aged children and adolescents quit tobacco use.
- ☐ B. The USPSTF recommends offering tobacco cessation medications because there is adequate evidence that they are effective in helping school-aged children and adolescents quit tobacco use.
- ☐ C. The USPSTF recommends referring patients to self-guided and group-based tobacco cessation resources because there is adequate evidence that they are effective in helping school-aged children and adolescents quit tobacco use.
- ☐ D. The USPSTF recommends against providing behavioral counseling interventions because they paradoxically increase tobacco use among adolescents.
- ☐ E. The USPSTF does not make a recommendation for or against tobacco cessation interventions in youth who use tobacco because the evidence is insufficient to determine the balance of benefits and harms.

Answers

1. The correct answers are B and C. In addition to addressing smoking, the current update to the USPSTF recommendation on interventions for tobacco prevention and cessation in children and adolescents now includes prevention of the use of products such as e-cigarettes, vapes, and hookah pens. From 2011 to 2018, current e-cigarette use increased from 1.5% to 20.8% among high school students in the United States.¹ Use of e-cigarettes now outranks cigarettes as the most prevalent form of tobacco use among youth. Recommended behavioral counseling interventions for the prevention of tobacco use in children and adolescents include print, face-to-face, telephone, and computer-based methods. There is no evidence available on pharmacotherapy for the prevention of tobacco use.

2. The correct answer is E. All youth, regardless of the presence or absence of risk factors for tobacco use, should

be asked about tobacco use and provided information to prevent initiation of tobacco use, including cigarettes, cigars, smokeless tobacco, and e-cigarettes. Several risk factors have been identified that place some youth at higher risk of tobacco use. These risk factors include being male, being White, being not college-bound, being from a rural area, having parents with lower levels of education, parental smoking, having childhood friends who smoke, being an older adolescent, experiencing highly stressful events, and perceiving tobacco use as low risk.

3. The correct answer is E. The USPSTF found that there is insufficient evidence to determine the balance of benefits and harms of primary care interventions for tobacco cessation among school-aged children and adolescents who already smoke. The pooled effect of the trials that evaluated behavioral counseling interventions for tobacco cessation in primary care settings did not find a significant reduction in smokers after the intervention.² However, the studies were small and used various intervention methods, making it unclear whether the interventions were unsuccessful or whether the studies were simply underpowered to detect a difference in tobacco cessation. No medications are currently approved by the U.S. Food and Drug Administration for tobacco cessation in children and adolescents, and few trials have evaluated pharmacotherapy for tobacco cessation in youth. Overall, the USPSTF found the evidence on both behavioral counseling and pharmacotherapy interventions for tobacco cessation in youth to be insufficient. The USPSTF is calling for more research in this area.

The views expressed in this work are those of the authors and do not reflect the official policy or position of the Uniformed Services University of the Health Sciences, the Department of Defense, or the U.S. government.

References

1. US Preventive Services Task Force. Primary care interventions for prevention and cessation of tobacco use in children and adolescents: US Preventive Services Task Force recommendation statement. *JAMA*. 2020;323(16):1590-1598.
2. Selph S, Patnode C, Bailey SR, et al. Primary care-relevant interventions for tobacco and nicotine use prevention and cessation in children and adolescents: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2020;323(16):1599-1608. ■