

Putting Prevention into Practice

An Evidence-Based Approach

Primary Care–Based Interventions to Prevent Illicit Drug Use in Children, Adolescents, and Young Adults

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Case Study

M.P. is a 14-year-old patient who comes to your office for a well-child visit. After taking a history and conducting a physical examination, you conclude that the patient is doing well. M.P. eats a healthy diet at home and is part of a local soccer league. M.P. is an overall good student and just started high school in the fall. When asked, M.P. denies ever trying any illicit substances; however, he does report trying to “get high” off of cough syrup with several of his new high school friends. This occurred once, and M.P. says that he never wants to try it again.

Case Study Questions

1. Based on the U.S. Preventive Services Task Force (USPSTF) recommendation on primary care–based interventions to prevent illicit drug use in children, adolescents, and young adults, which of the following statements should be your next step?

- ☐ A. M.P. should be referred to or enrolled in behavioral counseling to prevent illicit drug use because the USPSTF found convincing evidence of the net benefit of primary care–based interventions in children, adolescents, and young adults.
- ☐ B. M.P. does not meet the criteria for prevention because he has already admitted to using cough syrup recreationally; this should be addressed with intensive follow-up.
- ☐ C. M.P. does not meet the criteria for prevention because the USPSTF recommendations do not apply to teenagers.

- ☐ D. It is uncertain whether providing behavioral counseling interventions will prevent illicit drug use in the future; the USPSTF found insufficient evidence to assess the balance of benefits and harms of primary care interventions for preventing illicit drug use.
- ☐ E. M.P. should not be offered behavioral counseling because the USPSTF has found that the harms outweigh the benefits.

2. Based on the USPSTF recommendation on primary care–based interventions to prevent illicit drug use in children, adolescents, and young adults, which of the following substances are considered illicit drugs?

- ☐ A. Alcoholic beverages.
- ☐ B. Tobacco products, including electronic cigarettes.
- ☐ C. Household products such as glues, solvents, and gasoline.
- ☐ D. Over-the-counter medications used inappropriately.

See related U.S. Preventive Services Task Force Recommendation Statement at <https://www.aafp.org/afp/2020/1015/od1.html>.

This PPIIP 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/drug-use-illicit-primary-care-interventions-for-children-and-adolescents#fullrecommendationstart>.

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CME This clinical content conforms to AAFP criteria for CME. See CME Quiz on page 461.

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3. Based on the USPSTF recommendation on primary care–based interventions to prevent illicit drug use in children, adolescents, and young adults, which one of the following statements about the effects of illicit drug use is correct?

- ☐ A. Persistent illicit drug use has minimal effect on psychosocial and neurocognitive functions.
- ☐ B. Illicit drug use does not have an effect on academic performance and education attainment.
- ☐ C. No difference in health outcomes occurs when drug use is initiated at a younger age.
- ☐ D. Frequent or heavy illicit drug use is associated with increased risk-taking behaviors, including driving under the influence, violence, and unsafe sexual activity.
- ☐ E. There is a low prevalence of illicit drug use among children, adolescents, and young adults.

Answers

1. **The correct answer is D.** Because of limited and inadequate evidence, the USPSTF concluded that the benefits and harms of primary care–based interventions to prevent illicit drug use in children, adolescents, and young adults are uncertain and that the evidence is insufficient to assess the balance of benefits and harms.¹ This recommendation applies to children 11 years and younger, adolescents 12 to 17 years of age, and young adults 18 to 25 years of age, including pregnant people. Children, adolescents, and young adults who are regular users of illicit drugs (at least once per week) or who have been diagnosed with a substance use disorder are outside the scope of this recommendation.¹

2. **The correct answers are C and D.** “Illicit drug use” is defined in the recommendation statement as the use of substances that are illegally obtained or involve nonmedical use of prescription medications, that is, drug use for reasons, for duration, in amounts, or with frequency other than prescribed or use by others than the prescribed individual. Nonmedical drug use also includes the use of over-the-counter medications, such as cough suppressants. Other illicit drugs include household products such as glues, solvents, and gasoline. These substances are ingested, inhaled, injected, or administered using other methods to affect cognition, affect, or other mental processes; to “get high”; or for other

nonmedical reasons.¹ Although it is illegal for minors to obtain alcohol or tobacco products, these products are not generally considered illicit drugs. The USPSTF has separate recommendations on screening and interventions to reduce unhealthy alcohol use and tobacco use.^{2,3}

3. **The correct answer is D.** Frequent and heavy illicit drug use is associated with increased risk-taking behaviors while intoxicated, such as driving under the influence, unsafe sexual activity, and violence. In 2016, nearly three-fourths of all deaths in young people 10 to 24 years of age in the United States resulted from three causes: unintentional injuries, including motor vehicle crashes; suicide; and homicide. Among the leading health risk behaviors, the use of alcohol and illicit drugs is the primary health risk behavior that contributes to these causes of death.^{1,4} Illicit drug use can also have harmful long-term consequences. Children and adolescents who initiate marijuana use before 17 years of age are more likely to progress to other drug use and drug abuse/dependence as adults compared with those who initiate use after 18 years of age. Studies have linked use of cannabis to poorer academic performance and lower education attainment (i.e., dropping out of high school or not obtaining a college degree). Persistent illicit drug use starting in adolescence has been associated with negative psychosocial and neurocognitive effects, including increased anxiety and impaired abstract thinking, attention, learning, and psychomotor functioning.^{1,4}

The views expressed in this work are those of the authors and do not reflect the official policy or position of Loma Linda University or the U.S. government.

References

1. Krist AH, Davidson KW, Mangione CM, et al. Primary care–based interventions to prevent illicit drug use in children, adolescents, and young adults: US Preventive Services Task Force recommendation statement. *JAMA*. 2020;323(20):2060-2066.
2. Curry SJ, Krist AH, Owens DK, et al. Screening and behavioral counseling interventions to reduce unhealthy alcohol use in adolescents and adults: US Preventive Services Task Force recommendation statement. *JAMA*. 2018;320(18):1899-1909.
3. Davidson KW, Krist AH, Barry MJ, et al. 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.
4. O'Connor E, Thomas R, Senger CA, et al. Interventions to prevent illicit and nonmedical drug use in children, adolescents, and young adults: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2020;323(20):2067-2079. ■