

# U.S. Preventive Services Task Force

## Screening for Unhealthy Drug Use: Recommendation Statement

### Summary of Recommendations

The USPSTF recommends screening by asking questions about unhealthy drug use in adults age 18 years or older. Screening should be implemented when services for accurate diagnosis, effective treatment, and appropriate care can be offered or referred (*Table 1*). (Screening refers to asking questions about unhealthy drug use, not testing biological specimens.)

#### **B recommendation.**

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for unhealthy drug use in adolescents. **I statement.**

See the “Practice Considerations” section for suggestions for practice regarding the I statement.

### Importance

Many people in the United States experience problems related to unhealthy drug use, defined in this recommendation statement as the use of illegal drugs and the nonmedical use of prescription psychoactive medications (i.e., use of medications for reasons, for duration, in amounts, or with frequency other than prescribed or use by persons other than the prescribed individual). In 2018, an estimated 12% of U.S. residents 18 years or older reported current unhealthy drug use in a national survey.<sup>1</sup> Unhealthy drug use is more commonly reported by young adults aged 18 to 25 years (24%) than by older adults (10%) or adolescents aged 12 to 17 years (8%). In 2018,

an estimated 5.4% of pregnant persons aged 15 to 44 years reported unhealthy drug use in the last month. Adults 18 years or older (10.5%) and adolescents aged 12 to 17 years (8.0%) more commonly reported cannabis use in the last month than nonmedical use of psychotherapeutic medications, including pain relievers (2.1% and 1.3%, respectively)<sup>1</sup> and opioids (1.2% and 0.7%, respectively).<sup>1</sup> In both age groups, less than 1% reported use of heroin, cocaine, hallucinogens, inhalants, or methamphetamines in the last month.

An estimated 8 million persons 12 years or older met diagnostic criteria for drug dependence or abuse of drugs in the past year.<sup>1</sup> Drug use is one of the most common causes of preventable death, injuries, and disability.<sup>2,3</sup> In 2017, unhealthy drug use caused more than 70,000 fatal overdoses.<sup>4</sup> Drug use can cause many serious health effects that vary by drug type, administration mode, amount, and frequency of use, as well as pregnancy status.<sup>5</sup> Opioid use can cause drowsiness, slowed breathing, constipation, coma, and fatal overdose. Stimulants such as cocaine can cause arrhythmias, myocardial infarction, seizures, and other complications. Marijuana use is associated with slowed reaction time; problems with balance, coordination, learning, and memory; and chronic cough and frequent respiratory infections.<sup>5</sup> Injection drug use may result in blood-borne viral and bacterial infections.<sup>2,5</sup> Drug use during pregnancy can increase risk of obstetric complications such as placental

**See related** editorial on page 72.

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**This summary** is one in a series excerpted from the Recommendation Statements released by the USPSTF. These statements address preventive health services for use in primary care clinical settings, including screening tests, counseling, and preventive medications.

**The complete** version of this statement, including supporting scientific evidence, evidence tables, grading system, members of the USPSTF at the time this recommendation was finalized, and references, is available on the USPSTF website at <https://www.uspreventiveservicestaskforce.org/>.

**This series** is coordinated by Kenny Lin, MD, MPH, deputy editor.

**A collection** of USPSTF recommendation statements published in *AFP* is available at <https://www.aafp.org/afp/uspstf>.

TABLE 1

**Screening for Unhealthy Drug Use: Clinical Summary of the USPSTF Recommendation**

<p><b>What does the USPSTF recommend?</b></p>	<p>For adults 18 years or older: <b>Grade B</b></p> <p>Screen by asking questions about unhealthy drug use in adults 18 years or older.</p> <p>Screen when services for accurate diagnosis, effective treatment, and appropriate care can be offered or referred. Screening refers to asking questions about unhealthy drug use, not testing biological specimens.</p> <p>Unhealthy drug use includes using illegal drugs, such as heroin, or using a prescription drug in ways that are not recommended by a doctor, such as to “get high” or affect someone’s mood or way of thinking.</p> <p>For adolescents: <b>I statement</b></p> <p>The evidence is insufficient to assess the balance of benefits and harms of screening for unhealthy drug use.</p>
<p><b>To whom does this recommendation apply?</b></p>	<p>Adults 18 years or older and adolescents, including those who are pregnant and postpartum.</p> <p>Settings and people for which services for accurate diagnosis, effective treatment, and appropriate care can be offered or referred.</p> <p>Does not apply to:</p> <ul style="list-style-type: none"> <li>Adolescents or adults who have a currently diagnosed drug use disorder or are currently undergoing or have been referred to drug use treatment.</li> <li>Settings and people for which treatment cannot be provided or the result of screening is punitive.</li> </ul>
<p><b>What’s new?</b></p>	<p>This recommendation to screen adults for unhealthy drug use is new and is based on new evidence. Previously in 2008, there was insufficient evidence to make a recommendation for adults.</p> <p>Evidence continues to be insufficient to assess the balance of benefits and harms of screening for drug use in adolescents.</p>
<p><b>How to implement this recommendation?</b></p>	<p><b>For adults:</b> Ask adults about unhealthy drug use. Clinicians can ask the questions or ask their patient to share their answers on a form, computer, or tablet. There are a variety of screening tools available, such as:</p> <ul style="list-style-type: none"> <li>Brief tools (e.g., NIDA [National Institute on Drug Abuse] Quick Screen, which asks 4 questions about use of alcohol, tobacco, nonmedical use of prescription drugs, and illegal drugs in the past year), which may be more feasible in busy primary care settings.</li> <li>Longer tools (e.g., the 8-item ASSIST [Alcohol, Smoking and Substance Involvement Screening Test]) that assess risks associated with unhealthy drug use or comorbid conditions.</li> <li>The PRO (Prenatal Risk Overview) for pregnant people.</li> </ul> <p>Providers should be aware of state requirements and best practices on informed consent for screening, documenting screening results in medical records, and confidentiality protections.</p> <p><b>For adolescents:</b> Evidence is insufficient, so clinicians should use their judgment about screening by asking questions about drug use.</p>
<p><b>What are other relevant USPSTF recommendations?</b></p>	<p>The USPSTF has also issued other related recommendations on interventions to prevent drug use in children, adolescents, and young adults; screening and behavioral counseling interventions for reducing unhealthy alcohol use in adolescents and adults; interventions for tobacco smoking cessation in adults, including pregnant people; and primary care interventions to prevent tobacco use in children and adolescents. These recommendations are available at <a href="https://www.uspreventiveservicestaskforce.org">https://www.uspreventiveservicestaskforce.org</a>.</p>
<p><b>Where to read the full recommendation statement?</b></p>	<p>Visit the USPSTF website (<a href="https://www.uspreventiveservicestaskforce.org">https://www.uspreventiveservicestaskforce.org</a>) to read the full recommendation statement. This includes more details on the rationale of the recommendation, including benefits and harms; supporting evidence; and recommendations of others.</p>

**Note:** The USPSTF recognizes that clinical decisions involve more considerations than evidence alone. Clinicians should understand the evidence but individualize decision making to the specific patient or situation.

USPSTF = U.S. Preventive Services Task Force.

abruption, preeclampsia, and third trimester bleeding, as well as adverse fetal and infant outcomes such as spontaneous abortion, abnormal brain growth, preterm delivery, low birth weight, and neonatal abstinence syndrome.<sup>6</sup> Drug use is also associated with violence, criminal activity, incarceration, impaired school and work performance, interpersonal dysfunction, and other social and legal problems.<sup>7</sup>

**USPSTF ASSESSMENT OF MAGNITUDE OF NET BENEFIT**

**Adults 18 Years or Older.** The USPSTF concludes with moderate certainty that screening by asking questions about unhealthy drug use in adults has **moderate net benefit** when services for accurate diagnosis of unhealthy drug use or drug use disorders, effective treatment, and appropriate care can be offered or referred.

**Adolescents Aged 12 to 17 Years.** Because of the lack of evidence, the USPSTF concludes that the benefits and harms of screening for any type of unhealthy drug use in adolescents

are uncertain and that the **balance of benefits and harms cannot be determined.**

See *Table 2* for more information on the USPSTF recommendation rationale and assessment. For more details on the methods the USPSTF uses to determine the net benefit, see the USPSTF Procedure Manual.<sup>8</sup>

**Practice Considerations**

**PATIENT POPULATION UNDER CONSIDERATION**

This recommendation statement applies to adults 18 years or older, including pregnant and postpartum persons, and adolescents aged 12 to 17 years in primary care settings. This statement does not apply to adolescents or adults who have a currently diagnosed drug use disorder or are currently undergoing or have been referred for drug use treatment. This statement applies to settings and populations for which services for accurate diagnosis, effective treatment, and appropriate care can be offered or referred.

TABLE 2

**Summary of USPSTF Rationale**

Rationale	Adults 18 years and older	Adolescents aged 12 to 17 years
Detection	Adequate evidence that available screening tools can detect a spectrum of drug use and types of drug use	Inadequate evidence that available screening tools can detect most types of unhealthy drug use
Benefits of early detection and intervention and treatment	Adequate evidence that 3 FDA-approved pharmacotherapy agents have moderate benefits for reducing relapse and increasing retention in treatment in adults with opioid use disorders Adequate evidence that psychosocial interventions have moderate benefits for increasing abstinence from or reducing unhealthy drug use; effects may be greater for intensive psychosocial interventions and for cannabis use Magnitude of benefits is moderate for screening for and treatment of unhealthy drug use based on moderate benefits of pharmacotherapy in adults with opioid use disorders and some intensive psychosocial interventions in adults using some types of drugs	Inadequate evidence that pharmacotherapy is effective for reducing relapses or increasing retention in treatment in adolescents with opioid use disorders Inadequate evidence that psychosocial interventions are effective for increasing abstinence from or reducing the use of drugs
Harms of early detection and intervention and treatment	Adequate evidence to bound the magnitude of harms as no greater than small for Screening (asking questions about unhealthy drug use, not testing biological specimens) Pharmacotherapy for opioid use disorders Intensive psychosocial interventions Based on lack of evidence that these interventions cause serious adverse events and evidence that buprenorphine is associated with minor adverse effects (such as constipation)	Inadequate evidence to estimate the magnitude of harms of Screening Pharmacotherapy for opioid use disorders Psychosocial interventions for any type of drug use
USPSTF assessment	Moderate certainty that screening for unhealthy drug use has a moderate net benefit when services for accurate diagnosis of unhealthy drug use or drug use disorders, effective treatment, and appropriate care can be offered or referred	Benefits and harms of screening for any type of drug use are uncertain and the balance of benefits and harms cannot be determined

FDA = U.S. Food and Drug Administration; USPSTF = U.S. Preventive Services Task Force.

The net benefit assessment does not apply to settings and populations for which treatment cannot be provided or the result of screening is punitive.

## DEFINITIONS

For the purposes of this recommendation, unhealthy drug use is defined as the use of substances (not including alcohol or tobacco products) that are illegally obtained or the non-medical use of prescription psychoactive medications, that is, use of medications for reasons, for duration, in amounts, or with frequency other than prescribed or by persons other than the prescribed individual. 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. Unhealthy drug use is abbreviated as “drug use” in this recommendation statement.

Screening refers to asking 1 or more questions about drug use or drug-related risks in face-to-face, print, or audiovisual format. It does not refer to testing urine, saliva, blood, or other biological specimens for the presence of drugs.

## ASSESSMENT OF RISK

The USPSTF recommends screening by asking questions in all adults 18 years or older regardless of risk factors for unhealthy drug use. However, some factors are associated with a higher prevalence of unhealthy drug use. These include being aged 18 to 25 years; male sex; having a mental health condition, personality or mood disorder, or nicotine or alcohol dependence; a history of physical or sexual abuse, parental neglect, or other adversity in childhood; or drug or alcohol addiction in a first-degree relative.<sup>1,9</sup> Factors associated with misuse of prescription drugs include history of other drug use, mental illness, pain, and greater access to prescription drugs.<sup>10</sup> Factors associated with prenatal use of drugs include a mental health disorder, interpersonal violence, and family history of substance use.<sup>11</sup>

## SCREENING TOOLS

Several screening tools that ask questions about drug use are available for identifying 1 or more classes of unhealthy drug use, the frequency or severity of use, or drug-related health, social, or legal consequences that characterize unhealthy use or drug use disorders. Interviewer-administered tools and self-administered tools appear to have similar accuracy.<sup>12</sup>

Primary care practices may consider several factors when selecting screening tools. Brief tools (e.g., NIDA [National Institute on Drug Abuse] Quick Screen, which asks 4 questions about use of alcohol, tobacco, nonmedical use of prescription drugs, and illegal drugs in the past year) may be more feasible in busy primary care settings, but longer tools (e.g., the 8-item ASSIST [Alcohol, Smoking and Substance Involvement Screening Test]) that assess risks

associated with unhealthy drug use or comorbid conditions may reveal information signaling the need for prompt diagnostic assessment. Tools with questions about nonmedical use of prescription drugs (e.g., TAPS [Tobacco, Alcohol, Prescription Medication, and Other Substance Use]) may be useful when clinicians are concerned about prescription misuse. One study reported that drug use questions in the PRO (Prenatal Risk Overview) risk assessment tool were reasonably accurate for identifying drug abuse or dependence in pregnant women.

Screening tools are not meant to diagnose drug dependence, abuse, addiction, or drug use disorders. Patients with positive screening results may, therefore, need to be offered or referred for diagnostic assessment.

## SCREENING INTERVALS

There is little evidence about the optimal time to start asking about unhealthy drug use or the optimal interval for screening in adults older than 18 years.

## TREATMENT

Treatment of drug use disorders is based on the type of drug used, the severity of drug use, and the type of use disorder. Many drug use disorders are chronic, relapsing conditions, and many persons who start treatment do not complete treatment.<sup>13</sup> Therefore, treatment must often be repeated to stabilize current drug use, reduce relapse, and achieve abstinence or other treatment goals. Some patients, such as those who are pregnant, nursing, or caring for ill or healthy neonates, may require specialized treatment settings.

Pharmacotherapy, which is often provided with individual or group counseling, is the standard for treatment of opioid use disorders involving heroin or prescription opioid use in adults and pregnant and postpartum persons.<sup>14-16</sup> Drug use disorders involving nonopioid drugs, such as cannabis, stimulants, and some prescription drugs, are generally treated with various psychosocial interventions that usually involve multiple sessions of cognitive behavioral therapy, motivational interventions, contingency management, relapse prevention, community reinforcement, family behavioral therapy, 12-step facilitation therapy, or other behavioral approaches. Intensive interventions usually involve several in-person sessions over several weeks or months.

The management of patients who screen positive is usually accompanied by other interventions, including testing for blood-borne pathogens; assessment of misuse of, abuse of, or dependence on alcohol or tobacco; assessment of potentially coexisting mental health disorders; and pain management for patients with pain who are abusing opioids.

## IMPLEMENTATION

In practice, the benefits and harms of screening may vary because of several health, social, and legal issues. In many

communities, affordable, accessible, and timely services for diagnostic assessment and treatment of patients with positive screening results are in limited supply or unaffordable.

To minimize the potential adverse effects such as stigma, labeling, or medicolegal consequences of asking questions about drug use and documenting and reporting answers, clinicians should be aware of state requirements and best practices on informed consent for screening, mandatory screening, documenting screening results in medical records, reporting of screening results to medicolegal authorities, and confidentiality protections (see the “Additional Tools and Resources” section).<sup>17-24</sup> This recommendation statement applies to settings and populations for which services for accurate diagnosis, effective treatment, and appropriate care can be offered or referred. The net benefit assessment does not apply to settings and populations for which treatment is not provided or the result of screening is punitive.

### ADDITIONAL TOOLS AND RESOURCES

Several tools may help clinicians implement this screening recommendation (*Table 1*).

### SUGGESTIONS FOR PRACTICE REGARDING THE I STATEMENT FOR ADOLESCENTS AGED 12 TO 17 YEARS

**Potential Preventable Burden.** Based on a national survey in 2018, 8% of adolescents aged 12 to 17 years reported drug use in the last month. Among youth reporting such drug use, the most commonly used substances were marijuana, inhalants, prescription psychotherapeutic drugs, opioids, and hallucinogens.<sup>1</sup> An estimated 2.7% met diagnostic criteria for drug dependence or abuse,<sup>1</sup> and the vast majority presented with concurrent mental health diagnoses.<sup>25</sup> Risk factors for drug use in youth include aggressive childhood behavior, lack of parental supervision, poor social skills, access to drugs at school, and community poverty.<sup>26</sup>

Adolescent substance use, including use of heroin and misuse of prescription opioids, is associated with the leading causes of death—suicide, overdose, unintentional injury, and violence in adolescents and young adulthood.<sup>25</sup> Substance use during this period of rapid brain development can also harm neurocognitive development and endocrine function that, in turn, can impair academic, occupational, and social functioning.<sup>26-28</sup> Adolescents with drug use disorders are also at increased risk of sexually transmitted infections, other physical health problems, unintended pregnancies, criminal involvement, and school truancy.<sup>25</sup>

**Potential Harms of Screening and Treatment.** Although there is limited evidence on harms, adolescents may experience potential harms from screening for drug use such as labeling and stigmatization. Because of concerns about long-term use of opioid agonists, the U.S. Food and Drug Administration restricts approval for buprenorphine to

youth 16 years or older, and the U.S. Department of Health and Human Services restricts admission to methadone programs to youth younger than 18 years who continue to use opioids after at least 2 rounds of detoxification and psychosocial interventions.<sup>28</sup>

**Current Practice.** About 50% to 86% of pediatricians report routinely screening for substance use, and most screen using their clinical impressions rather than a validated screening tool.<sup>22</sup>

### OTHER RELATED USPSTF RECOMMENDATIONS

The USPSTF has issued recommendation statements on these related topics:

- Interventions to prevent drug use in children, adolescents, and young adults<sup>29</sup>
- Screening and behavioral counseling interventions for reducing unhealthy alcohol use in adolescents and adults<sup>30</sup>
- Interventions for tobacco smoking cessation in adults, including pregnant women<sup>31</sup>
- Primary care interventions to prevent tobacco use in children and adolescents<sup>32</sup>
- Screening for depression in adults<sup>33</sup>
- Screening for depression in children and adolescents<sup>34</sup>
- Screening for suicide risk in adolescents and adults<sup>35</sup>

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The “Update of Previous USPSTF Recommendation,” “Supporting Evidence,” “Research Needs and Gaps,” and “Recommendations of Others” sections of this recommendation statement are available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/drug-use-illicit-screening>.

The USPSTF recommendations are independent of the U.S. government. They do not represent the views of the Agency for Healthcare Research and Quality, the U.S. Department of Health and Human Services, or the U.S. Public Health Service.

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