Clinical Preventive Services Guidelines for Adolescents up to age 18: Recommended Screening and Interventions

UCSF Division of Adolescent and Young Adult Medicine

Updated August 2023

The United States Preventive Services Task Force develops clinical preventive services recommendations for primary care clinicians, based on rigorous evidence reviews. This document provides a broad overview of key recommendations pertaining to adolescents up to age 18. For information on screening, please visit the USPSTF website. For information on vaccines, please visit the CDC website.

Area: Nutrition, Exercise, Obesity

Topic	Recommended Population	Recommended Screening Test / Intervention
Obesity Screening **Update in Progress** Source: (2017, June). *Obesity in Children and Adolescents: Screening.* Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/obesity-in-children-and-adolescents-screening	This recommendation applies to all children and adolescents aged 6 to 18 years.	Screening: Body mass index measurement is the recommended screening test for obesity. Body mass index percentile is plotted on growth charts, such as those developed by the CDC, which are based on US-specific, population-based norms for children 2 years and older. Obesity is defined as an age-and sex-specific BMI in the 95th percentile or greater. Treatment: The USPSTF found that comprehensive, intensive behavioral interventions with a total of 26 contact hours or more over a period of 2 to 12 months resulted in weight loss. See Table 1 of this recommendation for more information on interventions studied. Although components varied across interventions, the interventions frequently: • included sessions targeting both the parent and child (separately, together, or both); • offered individual sessions (both family and group); • provided information about healthy eating, safe exercising, and reading food labels; • encouraged the use of stimulus control (e.g., limiting access to tempting foods and limiting screen time); goal setting, self-monitoring, contingent rewards, and problem solving; • included supervised physical activity sessions. Interventions with >=52 contact hours demonstrated greater weight loss and some improvements in cardiovascular and metabolic risk factors. These higher intensity interventions rarely took place in primary care settings and were were often delivered by multidisciplinary teams. The USPSTF reviewed pharmacological interventions for weight loss, including Metformin and Orlistat, considering factors such as potential harms, efficacy, and data on long-term outcomes. Based on this review, the USPSTF encourages clinicians to promote behavioral interventions as the primary effective intervention for weight loss in children and adolescents.

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Area: Substance Use

Topic	Recommended Population	Recommended Screening Test / Intervention
Tobacco: **Screening and Counseling** Source: (2020, April). *Prevention and Cessation of Tobacco Use in Children and Adolescents: Primary Care Interventions.* Retrieved from https://uspreventiveservicestaskforce.org/uspstf/recommendation/tobacco-and-nicotine-use-prevention-in-children-and-adolescents-primary-care-interventions	This recommendation applies to school-aged children and adolescents younger than 18 years.	The USPSTF identified a broad range of effective behavioral counseling interventions to prevent tobacco initiation in children and adolescents, with many engaging the child and a parent. No specific component of behavioral counseling interventions appeared to make an intervention more or less effective. Interventions vary in features such as: • modality: Interventions included face-to-face counseling, telephone counseling, and computer-based and print-based interventions. For telephone-based interventions, telephone counseling was usually provided in conjunction with another modality such as print materials or face-to-face counseling; • intensity: number of contacts made with intervention recipients ranged from 1 to 8 contacts. Several studies used the 5A Model: Clinicians Asked about smoking; Advised continued Abstinence, and referred to peer counselor who continues model (Assess, Assist and Arrange follow-up), in face-to-face or telephone communication, using motivational interviewing and behavior change counseling. For additional information about behavioral counseling interventions in this area, see Table 2 of this recommendation. This recommendation's Box offers additional information. Most of the evidence on behavioral counseling interventions to prevent tobacco use focused on cigarette smoking. The USPSTF concludes that the evidence on interventions to prevent cigarette smoking could be applied to • prevention of e-cigarette use; • prevention of cigar use, which includes cigarillos and little cigars.

Area: Mental Health

Topic	Recommended Population	Recommended Screening Test / Intervention
Anxiety Screening Source: (2022, October). Anxiety in Children and Adolescents*: Screening*. Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/screening-anxiety-children-adolescents	The USPSTF recommends screening for anxiety in children and adolescents aged 8 to 18 years.	Anxiety screening instruments are heterogeneous. Some are designed to assess for a specific anxiety disorder (e.g., the Social Phobia and Anxiety Inventory for Children, which screens for social phobia and anxiety disorder), while others are designed to assess several anxiety disorders. Broader screening instruments used to identify children with several different anxiety disorders include: the Screen for Child Anxiety Related Disorders (SCARED) (global anxiety and any anxiety disorder) and the Patient Health Questionnaire–Adolescent (GAD and panic disorder). Anxiety screening tools alone are not sufficient to diagnose anxiety. If the screening test is positive for anxiety, a confirmatory diagnostic assessment and follow-up is required. Treatment for anxiety disorders can include psychotherapy, pharmacotherapy, a combination of both, or collaborative care. Several psychotherapy approaches have been used to treat anxiety; however, cognitive behavioral therapy is the most commonly used approach. Duloxetine, a serotonin–norepinephrine reuptake inhibitor, is the only medication approved by the FDA for treatment of GAD in children 7 years or older. Other medications have also been reported as being prescribed off-label for treatment of anxiety in youth. More tools and information are available from this USPSTF recommendation, under “Practice Considerations.”

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Area: Mental Health

Topic	Recommended Population	Recommended Screening Test / Intervention
Depression Screening Source: (2022, October). *Depression and Suicide Risk in Children and Adolescents: Screening*. Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/screening-depression-suicide-risk-children-adolescents	The USPSTF recommends screening for major depressive disorder (**MDD**) in adolescents aged 12 to 18 years.	The most commonly used screening instrument in clinical practice is the 9-item Patient Health Questionnaire (PHQ-9). Other screening instruments that may be longer but have been studied include the full PHQ modified for adolescents (PHQ-A) and the Center for Epidemiologic Studies Depression Scale. Treatment options for MDD in children and adolescents include pharmacotherapy, psychotherapy, collaborative care, psychosocial support interventions, and complementary and alternative medicine approaches. Among the types of psychotherapy used in treating children and adolescents with depression, cognitive behavioral therapy and interpersonal therapy have the most evidence supporting their effectiveness. The FDA has approved • fluoxetine for use in treating MDD in children 8 years or older; • escitalopram to treat MDD in adolescents aged 12 to 17 years. The FDA has issued a boxed warning for antidepressants, recommending that patients of all ages who start antidepressant therapy be monitored appropriately and observed closely for clinical worsening, suicidality, or unusual changes in behavior. More tools and information are available from this USPSTF recommendation, under “Practice Considerations.”

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Area: Safety / Violence

Topic	Recommended Population	Recommended Screening Test / Intervention
Family / Partner Violence **Update in Progress** Source: (2018, October). *Intimate Partner Violence, Elder Abuse, and Abuse of Vulnerable Adults: Screening.* Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/intimate-partner-violence-and-abuse-of-elderly-and-vulnerable-adults-screening	The USPSTF recommends that clinicians screen for intimate partner violence (IPV) in women of reproductive age and provide or refer women who screen positive to ongoing support services.	Screening Tests The following instruments accurately detect IPV in the past year among adult women: • Humiliation, Afraid, Rape, Kick (HARK; 4 questions that assess emotional and physical IPV in the past year); • Hurt, Insult, Threaten, Scream (HITS; 4 items that assess the frequency of IPV); • Extended–Hurt, Insult, Threaten, Scream (E-HITS; includes an additional question to assess the frequency of sexual violence); • Partner Violence Screen (PVS; 3 items that assess physical abuse and safety); • Woman Abuse Screening Tool (WAST; 8 items that assess physical and emotional IPV). Most studies only included women who could be separated from their partners during screening, during the intervention, or both, so screening and the intervention could be delivered in private. Clinicians should be aware of state and local reporting requirements, which vary considerably across jurisdiction. Some states require clinicians to report abuse to legal authorities, and most require reporting of injuries resulting from guns, knives, or other weapons. Intervention – needs clarifying term – behavioral interventions? No studies definitively identified which intervention components resulted in positive outcomes. Based on the evidence from 3 studies, effective interventions generally: • included ongoing support services that focused on counseling and home visits; • addressed multiple risk factors (not just IPV), or • included parenting support for new mothers. This recommendation includes a Box with more information about the components of effective ongoing support services. Studies that only included brief interventions and provided information about referral options were generally ineffective.

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Area: Sexual / Reproductive Health

Topic	Recommended Population	Recommended Screening Test / Intervention

HIV Screening
 	
Source:
(2019, June). *Human Immunodeficiency Virus (HIV): Screening.*
 	
Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/human-immunodeficiency-virus-hiv-infection-screening
	The USPSTF recommends HIV screening all persons ages 15-64, including pregnant persons.
	
	For adolescents under age 15 (*and adults over age 65*), USPSTF recommends HIV screening for those at increased risk.
	
	Increased risk includes the following factors:
	• men who have sex with men;
	• active injection drug use;
	• having vaginal or anal intercourse:
	  ○ without a condom, or
	  ○ with more than 1 partner whose HIV status is unknown;
	• exchanging sex for drugs or money;
	• having other sexually transmitted infections (STI) or a partner with an STI;
	• having a sexual partner who is living with HIV or is in a high-risk category.
		Current CDC guidelines recommend testing for HIV infection with an antigen/antibody immunoassay approved by the US Food and Drug Administration that detects HIV-1 and HIV-2 antibodies and the HIV-1 p24 antigen, with supplemental testing after a reactive assay to differentiate between HIV-1 and HIV-2 antibodies. If supplemental testing for HIV-1/HIV-2 antibodies is nonreactive or indeterminate (or if acute HIV infection or recent exposure is suspected or reported), an HIV-1 nucleic acid test is recommended to differentiate acute HIV-1 infection from a false-positive test result. CDC Guidelines are updated here.
		
		When using a rapid HIV test for screening, positive results should be confirmed. Pregnant women presenting in labor with unknown HIV status should be screened with a rapid HIV test to get results as soon as possible.
		
		Treatment
		• No cure or vaccine for HIV infection currently exists.
		• Early initiation of ART and other interventions effectively reduce the risk of clinical progression to AIDS, AIDS-defining clinical events, and mortality. Also, studies to date have shown that when ART leads to viral suppression, no cases of virologically linked HIV transmission have been observed.
		• Interventions other than ART include prophylaxis for opportunistic infections when clinically indicated, immunizations, and cancer screening.
		• ART treatment in pregnant women living with HIV and use of other precautions substantially decrease the risk of transmission to the fetus, newborn, or infant.
		• The clinical treatment of HIV infection is a dynamic scientific field. The Panel on Antiretroviral Guidelines for Adults and Adolescents of the US Department of Health and Human Services regularly updates guidelines for HIV treatment regimens.

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Preexposure Prophylaxis for HIV Infection (PrEP) Source: (2019, June). *Prevention of Human Immunodeficiency Virus (HIV) Infection: Preexposure Prophylaxis.* Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/prevention-of-human-immunodeficiency-virus-hiv-infection-pre-exposure-prophylaxis	The USPSTF recommends that the following persons be considered for PrEP: Men who have sex with men, are sexually active, and have 1 of the following characteristics: • a serodiscordant sex partner (i.e., in a sexual relationship with a partner living with HIV); • inconsistent use of condoms during receptive or insertive anal sex • a sexually transmitted infection (STI) with syphilis, gonorrhea, or chlamydia within the past 6 months. Heterosexually active women and men who have 1 of the following characteristics: • a serodiscordant sex partner (i.e., in a sexual relationship with a partner living with HIV); • inconsistent use of condoms during sex with a partner whose HIV status is unknown and who is at high risk (e.g., a person who injects drugs or a man who has sex with men and women); • an STI with syphilis or gonorrhea within the past 6 months. Persons who inject drugs and have 1 of the following characteristics: • shared use of drug injection equipment; • risk of sexual acquisition of HIV (see above). This recommendation's "Practice Considerations" provides additional information about identification of populations for whom PrEP may be indicated.	The CDC maintains an HIV prevention website, this includes: • guidelines for PrEP; as of August 2023, the most recent update is dated 2021. A new update is in progress; • additional guidance and tools for clinicians. More tools and information are available from this USPSTF recommendation, under "Practice Considerations."

Area: Sexual / Reproductive Health

Topic	Recommended Population	Recommended Screening Test / Intervention
Sexually Transmitted Infections (STIs) Source: (2020, August). *Sexually Transmitted Infections: Behavioral Counseling.* Retrieved from https://uspreventiveservicestaskforce.org/uspstf/recommendation/sexually-transmitted-infections-behavioral-counseling	All sexually active adolescents are at increased risk for STIs and should be counseled.	To determine which adolescents are sexually active, clinicians should routinely ask their patients for pertinent information about their sexual history. Intervention approaches include in-person counseling, videos, websites, written materials, telephone support, and text messages. Most successful approaches: • provide information on common STIs and STI transmission; • assess the person's risk for acquiring STIs; • aim to increase motivation or commitment to safer sex practices; • provide training in condom use, communication about safer sex, problem solving, and other pertinent skills. Interventions that include group counseling and involve high total contact times (defined in the evidence review as more than 120 minutes), often delivered over multiple sessions, are associated with larger STI prevention effects. However, some less intensive interventions have been shown to reduce STI acquisition, increase condom use, or decrease number of sex partners. Interventions shorter than 30 minutes tended to be delivered in a single session. More tools and information are available from this USPSTF recommendation, under "Practice Considerations."

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Area: Sexual / Reproductive Health

Topic	Recommended Population	Recommended Screening Test / Intervention
Syphilis / Non-pregnant adolescents Source: (2022, September). *Syphilis Infection in Nonpregnant Adults and Adolescents: Screening.* Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/syphilis-infection-nonpregnant-adults-adolescents-screening	The USPSTF recommends screening for syphilis in persons who are at increased risk for infection. To assess who is at increased risk, the USPFTF recommends considering • the prevalence of infection in the communities they serve; • sociodemographic and behavioral factors that may be associated with increased risk of syphilis infection. Factors association with higher prevalence of syphilis include: • men who have sex with men; • persons with HIV infections, of history of incarceration, sex work or military services; • among heterosexuals, use of illicit drugs, particularly methamphetine; • diagnoses of another sexually transmitted infection, which may signal sex without a condom.	Current syphilis screening tests rely on detection of antibodies rather than direct detection of the organism that causes syphilis, *Treponema pallidum*. • A *traditional screening algorithm* is a 2-step process involving an initial nontreponemal test (e.g., Venereal Disease Research Laboratory [VDRL] or rapid plasma reagin [RPR] test) followed by a confirmatory treponemal antibody detection test (e.g., *T pallidum* particle agglutination [TP-PA] test). • A more recently developed *reverse sequence algorithm* uses an automated treponemal test (e.g., enzyme-linked or chemiluminescence immunoassay) for the initial screening, followed by a nontreponemal test for reactive samples. Discordant results in the reverse sequence are resolved with a second confirmatory treponemal test, preferably testing for different antigens than the initial test. The effectiveness of parenteral penicillin G for the treatment of primary, secondary, and latent syphilis is well established. Dosage and the length of treatment depend on the stage and symptoms of the infection. Clinicians are encouraged to refer to the CDC's STI Treatment Guidelines for the most up-to-date treatment guidance.

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Syphilis / Pregnant Adolescents **Update in Progress** Source: (2018, September). *Syphilis Infection in Pregnant Women: Screening.* Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/syphilis-infection-in-pregnancy-screening	The USPSTF recommends screening for syphilis in all pregnant women.	This 2018 recommendation outlines two testing procedures: • Traditionally, screening involved an initial "nontreponemal" antibody test (i.e., Venereal Disease Research Laboratory test or rapid plasma reagin [RPR] test) to detect biomarkers released from damage caused by syphilis infection, followed by a confirmatory "treponemal" antibody detection test (i.e.,, fluorescent treponemal antibody absorption or *T pallidum* particle agglutination test). • Because nontreponemal tests are complex, a reverse sequence screening algorithm has been developed in which an automated treponemal test (such as an enzyme-linked, chemiluminescence, or multiplex flow immunoassay) is performed first, followed by a nontreponemal test. If the test results of the reverse sequence algorithm are discordant, a second treponemal test (preferably using a different treponemal antibody) is performed. Clinicians are encouraged to refer to the CDC's STD Treatment and Screening website for the most up-to-date information on screening. As of August 2023, the most recent STI Treatment Guidelines were published in 2021.
Gonorrhea and Chlamydial Infection Source: (2021, September). *Chlamydia and Gonorrhea: Screening.* Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/chlamydia-and-gonorrhea-screening	The USPSTF recommends screening for chlamydia and gonorrhea in all sexually active women 24 years or younger and in women 25 years or older who are at increased risk for infection. This recommendation includes all pregnant persons.	Nucleic acid amplification tests (NAATs) for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* infections are usually used for screening because their sensitivity and specificity are high for detecting these infections. The FDA approves NAATs for use on urogenital and extragenital sites, including urine, endocervical, vaginal, male urethral, rectal, and pharyngeal specimens. Urine testing with NAATs is at least as sensitive as testing with endocervical specimens, clinician- or self-collected vaginal specimens, or urethral specimens in clinical settings. The same specimen can be used to test for chlamydia and gonorrhea. Clinicians are encouraged to refer to the CDC's STD Treatment and Screening website for the most up-to-date information on screening. As of August 2023, the most recent STI Treatment Guidelines were published in 2021.

Area: Cancer Screening

Topic	Recommended Population	Recommended Screening Test / Intervention
Skin Cancer Counseling Source: (2018, March). *Skin Cancer Prevention: Behavioral Counseling*. Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/skin-cancer-counseling	The USPSTF recommends counseling young adults, adolescents, children, and parents of young children about minimizing exposure to ultraviolet (UV) radiation for persons aged 6 months to 24 years **with fair skin types** to reduce their risk of skin cancer. The USPSTF defined fair skin type as follows: • pale skin; • light hair and eye color; • freckles; or • those who sunburn easily.	Behavioral Counseling Interventions: • All studies conducted in children and adolescents focused on sun protection behaviors. • Most were directed at parents, and some provided child-specific materials or messages. • Half of the interventions included face-to-face counseling, and all included print materials. • Three studies provided the intervention in conjunction with well-child visits.

Area: Infectious Disease

Topic	Recommended Population	Recommended Screening Test / Intervention
Hepatitis B Source: (2020, December). *Hepatitis B Virus Infections in Adolesents and Adults: Screening*. Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/hepatitis-b-virus-infection-screening	Important risk groups for HBV infection with a prevalence that should be screened include: • persons born in countries and regions with a high prevalence of HBV infection (≥2%), such as Asia, Africa, the Pacific Islands, and parts of South America; • US-born persons not vaccinated as infants whose parents were born in regions with a very high prevalence of HBV infection (≥8%); • HIV-positive persons; • persons with injection drug use and needle sharing-contacts; • men who have sex with men; • household contacts or sexual partners of persons with HBV infection.	Screening for those in risk groups Screening for hepatitis B should be performed with HBsAg tests approved by the FDA, followed by a confirmatory test for initially reactive results. A positive HBsAg result indicates chronic or acute infection. Serologic panels performed concurrently with or after HBsAg screening allow for diagnosis and to determine further management. Interventions: Persons with testing results indicative of acute or chronic HBV infection generally receive education about reducing the risk of transmission to others (e.g., during childbirth or with sex and needle-sharing partners and household contacts). Between 20% and 40% of patients with chronic HBV infection will require treatment. Several antiviral medications are approved by the FDA for treatment of chronic HBV infection.

Area: Infectious Diseases, including CDC Recommended Immunizations:

Below is a list of infectious disease relevant to young adults for which there are vaccines and other preventive interventions. The CDC regularly updates its vaccine recommendations.

Hepatitis B screening	https://www.cdc.gov/vaccines/hcp/vis/vis-statements/hep-b.pdf
Human Papilloma Virus	https://www.cdc.gov/vaccines/hcp/vis/vis-statements/hpv.pdf
Influenza	https://www.cdc.gov/vaccines/hcp/vis/vis-statements/flulive.html https://www.cdc.gov/vaccines/hcp/vis/vis-statements/flu.html
Meningococcal Quadrivalent	https://www.cdc.gov/vaccines/hcp/vis/vis-statements/mening.pdf
Serogroup B Meningococcal	https://www.cdc.gov/vaccines/hcp/vis/vis-statements/mening-serogroup.pdf
Td / Tdap	http://www.cdc.gov/vaccines/hcp/vis/vis-statements/tdap.pdf
COVID-19	https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#not-immunocompromised

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