Recommended Guidelines for Clinical Preventive Services for Adolescents up to age 18: Risk Factors and Recommended Screening Tests

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Guidelines as of 11/2017, subject to change.

The United States Preventive Services Task Force (USPSTF) conducts scientific evidence reviews of a broad range of clinical preventive health care services and develops recommendations for primary care clinicians and health systems. These reviews are conducted periodically and published in the form of Recommendation Statements. This document serves as a broad overview of the relevant recommendations for the adolescents up to age 18 and is not meant to be all encompassing. There may be special considerations for certain subpopulations within the young adult age group, such as pregnant women. For information on screening, please visit the USPSTF website. For information on immunizations, please visit the CDC website.

Area	Recommendation	Risk Factors (defined by USPSTF unless otherwise noted)	USPSTF Recommended Screening Tests
Nutrition, Exercise, Obesity	Hypertension/ High Blood Pressure Website: https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/blood-pressure-in-children-and-adolescents-hypertension-screening Updated 10/2013		The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for primary hypertension in asymptomatic children and adolescents to prevent subsequent cardiovascular disease in childhood or adulthood.
Nutrition, Exercise, Obesity	Obesity Screening Website: https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/obesity-in-children-and-adolescents-screening1 Updated 06/2017	Although all children and adolescents are at risk for obesity and should be screened, there are several specific risk factors, including: • Parental obesity • Poor nutrition • Low levels of physical activity • Inadequate sleep • Sedentary behaviors • Low family income	The USPSTF recommends that clinicians screen children aged 6 years and older for obesity and offer them or refer them to comprehensive, intensive behavioral intervention to promote improvement in weight status. This recommendation applies to children and adolescents aged 6 to 18 years. The USPSTF is using the following terms to define categories of increased BMI: overweight is defined as an age- and gender- specific BMI between the 85th and 95th percentiles, and obesity is

			defined as an age- and gender-specific BMI at ≥95th percentile. The USPSTF did not find sufficient evidence for screening children younger than 6 years. In 2005, the USPSTF found adequate evidence that BMI was an acceptable measure for identifying children and adolescents with excess weight. BMI is calculated from the measured weight and height of an individual.
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Nutrition, Exercise, Obesity	Healthy diet Website: https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/healthy-diet-and-physical-activity-counseling-adults-with-high-risk-of-cvd Updated 08/2014	• Hyperlipidemia • Other known risk factors for cardiovascular and diet-related chronic disease	Intensive behavioral counseling interventions have moderate benefits for CVD risk in overweight or obese adults who are at increased risk for CVD, including decreases in blood pressure, lipid and fasting glucose levels, and body mass index (BMI) and increases in levels of physical activity. The reduction in glucose levels was large enough to decrease the incidence of a diabetes diagnosis. This recommendation applies to adults aged 18 years or older in primary care settings who are overweight or obese and have known CVD risk factors (hypertension, dyslipidemia, impaired fasting glucose, or the metabolic syndrome). In the studies reviewed by the USPSTF, the vast majority of participants had a BMI greater than 25 kg/m2

Substance Use	Alcohol: Screening and Counseling Website: https://www.uspreventiveservices taskforce.org/Page/Document/ UpdateSummaryFinal/alcohol- misuse-screening-and-behavioral-counseling-interventions-in- primary-care Updated 05/2013	Risky use of alcohol is defined by the NIAAA and USDA as: • More than 7 drinks per week or more than 3 drinks per day for women. • More than 14 drinks per week or 4 drinks per day for men.	Numerous screening instruments can detect alcohol misuse in adults with acceptable sensitivity and specificity. The USPSTF prefers the following tools for alcohol misuse screening in the primary care setting: **NIAAA single-question screening**, such as asking, "How many times in the past year have you had 5 (for men) or 4 (for women) or more drinks in a day?" The **Alcohol Use Disorders Identification Test (AUDIT)** is the most studied screening tool for detecting the full spectrum of alcohol-related problems in primary care settings. Also available is the abbreviated AUDIT- Consumption test, or **AUDIT-C.**
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Substance Use	Tobacco: Screening and Counseling for non-pregnant adults Website: https://www.uspreventiveservices taskforce.org/Page/Document/ UpdateSummaryFinal/tobacco-use-in-adults-and-pregnant-women-counseling-and-interventions1 Updated 09/2015	According to the 2012–2013 National Adult Tobacco Survey, smoking prevalence is higher in the following groups: • Men • Adults aged 25 to 44 years • Persons with a race or ethnicity category of "other, non-Hispanic" • Persons with a GED (vs. graduate-level education • Persons with an annual household income of less than $20,000 • Persons who are lesbian, gay, bisexual, or transgender. • Higher rates of smoking have been found in persons with mental health condition	The **"5-A" framework** provides a useful counseling strategy: 1. Ask about tobacco use. 2. Advise to quit through clear personalized messages. 3. Assess willingness to quit. 4. Assist to quit. 5. Arrange follow-up and support. Both intervention types (pharmacotherapy and behavioral interventions) are effective and recommended; combinations of interventions are most effective, and all should be offered. The best and most effective combinations are those that are acceptable to and feasible for an individual patient; clinicians should consider the patient's specific medical history and preferences and offer and

			provide the combination that works best for the patient.
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Substance Use	Tobacco: Screening and Counseling for Pregnant Women Website: https://www.uspreventiveservices taskforce.org/Page/Document/ UpdateSummaryFinal/tobacco- use-in-adults-and-pregnant-women- counseling-and-interventions1 Updated 09/2015		Because many pregnant women who smoke do not report it, using multiple-choice screening questions to assess smoking status in this group may improve disclosure. The USPSTF recommends that clinicians ask all pregnant women about tobacco use, advise them to stop using tobacco, and provide behavioral interventions for cessation to pregnant women who use tobacco. The USPSTF found convincing evidence that behavioral interventions substantially improve achievement of tobacco smoking abstinence in pregnant women, increase infant birthweight, and reduce risk for preterm birth. The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of pharmacotherapy interventions for tobacco cessation in pregnant women.
Mental Health	Depression Website: https://www.uspreventiveservices taskforce.org/Page/Document/ UpdateSummaryFinal/depression-in-adults-screening1 Updated 01/2016	• The USPSTF recommends screening for depression in the general adult population, including pregnant and postpartum women. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up. • A number of factors are associated with an increased risk of depression ○ Women, young and middle-aged adults, and nonwhite persons have higher rates of	Commonly used depression screening instruments include the Patient Health Questionnaire (PHQ) in various forms and the Hospital Anxiety and Depression Scales in adults, the Geriatric Depression Scale in older adults, and the Edinburgh Postnatal Depression Scale (EPDS) in postpartum and pregnant women. All positive screening results should lead to additional assessment that considers severity of depression and comorbid psychological problems (eg, anxiety, panic attacks, or substance abuse),

		depression than their counterparts, as do persons who are undereducated, previously married, or unemployed. ○ Other groups who are at increased risk of developing depression include persons with chronic illnesses (eg, cancer or cardiovascular disease), other mental health disorders (including substance misuse), or a family history of psychiatric disorders. • Among older adults, risk factors for depression include disability and poor health status related to medical illness, complicated grief, chronic sleep disturbance, loneliness, and a history of depression • Risk factors for depression during pregnancy and postpartum include poor self-esteem, child-care stress, prenatal anxiety, life stress, decreased social support, single/unpartnered relationship status, history of depression, difficult infant temperament, previous postpartum depression, lower socioeconomic status, and unintended pregnancy.	alternate diagnoses, and medical conditions. Effective treatment of depression in adults generally includes antidepressants or specific psychotherapy approaches (eg, CBT or brief psychosocial counseling), alone or in combination. Given the potential harms to the fetus and newborn child from certain pharmacologic agents, clinicians are encouraged to consider CBT or other evidence-based counseling interventions when managing depression in pregnant or breastfeeding women.

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Reproductive Health	HIV Website: https://www.uspreventiveservices taskforce.org/Page/Document/Update SummaryFinal/human-immunodeficiency-virus-hiv- infection-screening Updated 04/2013	• Men who have sex with men and active injection drug users are at high risk for new HIV infection. • Those who have acquired or request testing for other sexually transmitted infections. Behavioral risk factors for HIV infection include: • Having unprotected vaginal or anal intercourse • Having sexual partners who are HIV-infected, bisexual, or injection drug users • Exchanging sex for drugs or money The USPSTF recognizes that the above categories are not mutually exclusive, the degree of sexual risk is on a continuum, and individuals may not be aware of their sexual partners' risk factors for HIV infection.	The standard test for diagnosing HIV infection is the **repeatedly reactive enzyme immunoassay**, followed by **confirmatory western blot or immunofluorescent assay**. Conventional HIV test results are available within 1 to 2 days from most commercial laboratories. **Rapid HIV antibody testing** is also highly accurate, may use either blood or oral fluid specimens, and can be performed in 5 to 40 minutes, and when offered at the point of care, is useful for screening high-risk patients who do not receive regular medical care (e.g., those seen in emergency departments), as well as women with unknown HIV status who present in active labor. Initial positive results require confirmation with conventional methods. Other U.S. Food and Drug Administration–approved tests for detection and confirmation of HIV infection include combination tests (for p24 antigen and HIV antibodies) and qualitative HIV-1 RNA.

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Reproductive Health	STI: Behavioral Counseling Website: https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/sexually-transmitted-infections-behavioral-counseling1 Updated 09/2014	• All sexually active adolescents are at increased risk for STIs and should be counseled. • Other risk groups that have been included in counseling studies include adults with current STIs or other infections within the past year, adults who have multiple sex partners, and adults who do not consistently use condoms. Clinicians should be aware of populations with a particularly high prevalence of STIs such as: • All African Americans have the highest STI prevalence of any racial/ethnic group, and STI prevalence is higher in American Indians, Alaska Natives, and Latinos than in white persons. Increased STI prevalence rates are also found in: • Men who have sex with men (MSM) • Persons with low incomes living in urban settings • Current or former inmates • Military recruits • Persons who exchange sex for money or drugs • Persons with mental illness or a disability • Current or former intravenous drug users • Persons with a history of sexual abuse • Patients at public STI clinics	Interventions ranging in intensity from 30 minutes to 2 or more hours of contact time are beneficial. Evidence of benefit increases with intervention intensity. High- intensity counseling interventions (defined in the review as contact time of ≥2 hours) were the most effective. Interventions can be delivered by primary care clinicians or through referral to trained behavioral counselors. Most successful approaches provided basic information about STIs and STI transmission; assessed the person's risk for transmission; and provided training in pertinent skills, such as condom use, communication about safe sex, problem solving, and goal setting. Many successful interventions used a targeted approach to the age, sex, and ethnicity of the participants and also aimed to increase motivation or commitment to safe sex practices. Intervention methods included face-to-face counseling, videos, written materials, and telephone support.

Reproductive Health	Syphilis Website: https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/syphilis-infection-in-nonpregnant-adults-and-adolescents Updated 06/2016	• Men who have sex with men • Sex work • Exchange of sex for drugs • Incarceration • Men and women with HIV • Men younger than 29	Screening for syphilis infection is a two-step process that involves an initial nontreponemal test (**Venereal Disease Research Laboratory or Rapid Plasma Reagin**), followed by a confirmatory treponemal test **FTA-ABS (fluorescent treponemal antibody absorbed) or TP-PA (T. pallidum particle agglutination**).
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Reproductive Health	Gonorrhea and Chlamydial Infection Website: https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/chlamydia-and-gonorrhea-screening Updated 09/2014	Those with the highest chlamydial and gonococcal infection rates occur in women aged 20 to 24 years, followed by females aged 15 to 19 years. Chlamydial infections are 10 times more prevalent than gonococcal infections in young adult women. Among men, infection rates are highest in those aged 20 to 24 years. Other risk factors for infection include having: • a new sex partner • more than 1 sex intimate • a sex partner with concurrent partners • a sex partner who has an STI • inconsistent condom use among persons who are not in mutually monogamous relationships • previous or coexisting STI exchanging sex for money or drugs	*Chlamydia trachomatis* and *Neisseria gonorrhoeae* infections should be diagnosed by using nucleic acid amplification tests (NAATs) because their sensitivity and specificity are high and they are approved by the U.S. Food and Drug Administration for use on urogenital sites, including male and female urine, as well as clinician-collected endocervical, vaginal, and male urethral specimens. Most NAATs that are approved for use on vaginal swabs are also approved for use on self-collected vaginal specimens in clinical settings. Rectal and pharyngeal swabs can be collected from persons who engage in receptive anal intercourse and oral sex, although these collection sites have not been approved by the U.S. Food and Drug Administration.

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Reproductive Health	Hepatitis C Website: https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/hepatitis-c-screening Updated 06/2013	The most important risk factor for HCV infection is past or current injection drug use. Another established risk factor for HCV infection is receipt of a blood transfusion before 1992. Additional risk factors include: • long-term hemodialysis • being born to an HCV-infected mother • incarceration • intranasal drug use • getting an unregulated tattoo • other percutaneous exposures (such as in health care workers or from having surgery before the implementation of universal precautions).	Anti–HCV antibody testing followed by polymerase chain reaction testing for viremia is accurate for identifying patients with chronic HCV infection. Various noninvasive tests with good diagnostic accuracy are possible alternatives to liver biopsy for diagnosing fibrosis or cirrhosis.
Reproductive Health	Folic Acid Website: https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/folic-acid-for-the-prevention-of-neural-tube-defects-preventive-medication Updated 01/2017	Although all women of childbearing age are at risk of having a pregnancy affected by neural tube defects and should take folic acid supplementation, some factors increase their risk. Additional risk factors include: • Personal or family history of neural tube defects • Use of antiseizure medication • Maternal diabetes • Obesity • Mutations in folate-related enzymes	The current statement recommends that all women who are planning or capable of pregnancy take a daily supplement containing 0.4 to 0.8 mg (400 to 800 µg) of folic acid.

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Cancer Screening	Cervical Cancer Website: https://www.uspreventiveservices taskforce.org/Page/Document/ UpdateSummaryFinal/cervical-cancer-screening Updated 03/2012	• All women who have a cervix, regardless of sexual history • Women with HPV infection • HIV infection • Compromised immune system • In-utero exposure to diethylstilbestrol • Previous treatment of a high-grade precancerous lesion or cervical cancer	Current evidence indicates that there are no clinically important differences between liquid-based cytology and conventional cytology. Women who have had a hysterectomy with removal of the cervix and who do not have a history of a high- grade precancerous lesion or cervical cancer are not at risk for cervical cancer and **should not be screened.** Women who had their cervix removed during surgery for ovarian or endometrial cancer are not at high risk for cervical cancer and **would not benefit from screening.**
Cancer Screening	Testicular Cancer Website: https://www.uspreventiveservices taskforce.org/Page/Document/ UpdateSummaryFinal/testicular-cancer-screening Updated 04/2011		The United States Preventive Services Task Force recommends **against** screening for testicular cancer in adult males.
Cancer Screening	Skin cancer (counseling) Website: https://www.uspreventiveservices taskforce.org/Page/Document/ UpdateSummaryFinal/skin-cancer-counseling Updated 05/2012	The U.S. Preventive Services Task Force (USPSTF) recommends counseling children, adolescents, and young adults aged 10 to 24 years who have fair skin about minimizing their exposure to ultraviolet radiation to reduce risk for skin cancer.	This recommendation applies to all asymptomatic persons with no history of skin cancer. Because most trials of skin cancer counseling only include people with a fair skin type, the recommendation for counseling of children, adolescents, and young adults aged 10 to 24 years is limited to this population. Few trials were available to determine the effectiveness of counseling parents or guardians to prevent UV exposure in children younger

			than 10 years; therefore, the recommendation does not address this population.
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Cancer Screening	BCRA-related Cancer Website: https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/brca-related-cancer-risk-assessment-genetic-counseling-and-genetic-testing Updated 12/2013	This recommendation applies to asymptomatic women who have not been diagnosed with BRCA-related cancer. Women who have 1 or more family members with a known potentially harmful mutation in the *BRCA1* or *BRCA2* genes should be offered genetic counseling and testing.	Although several risk tools are available, the tools evaluated by the USPSTF include the Ontario Family History Assessment Tool (Table 1), Manchester Scoring System (Table 2), Referral Screening Tool (Table 3), Pedigree Assessment Tool (Table 4), and FHS-7 (Table 5). The Referral Screening Tool (an updated version, the B-RST, is available at www.breastcancergenescreen.orgThis link goes offsite. Click to read the external link disclaimer and FHS-7 are the simplest and quickest to administer. All of these tools seem to be clinically useful predictors of which women should be referred for genetic counseling due to increased risk for potentially harmful BRCA mutations (most sensitivity estimates were >85%), although some models have been evaluated in only 1 study. To determine which patients would benefit from BRCA risk assessment, primary care providers should not use general breast cancer risk assessment models (for example, the National Cancer Institute Breast Cancer Risk Assessment Tool, which is based on the Gail model) because they are not designed to determine which women should receive genetic counseling or BRCA testing.

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Safety/Violence	Family/Partner Violence Website: https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/intimate-partner-violence-and-abuse-of-elderly-and-vulnerable-adults-screening Updated 01/2013	Women of child-bearing age are most at risk, however all women are at potential risk for abuse Factors that elevate risk include: • young age • substance abuse • marital difficulties • economic hardships	Several screening instruments can be used to screen women for IPV. Those with the highest levels of sensitivity and specificity for identifying IPV are Hurt, Insult, Threaten, Scream (HITS) (English and Spanish versions); Ongoing Abuse Screen/Ongoing Violence Assessment Tool (OAS/OVAT); Slapped, Threatened, and Throw (STaT); Humiliation, Afraid, Rape, Kick (HARK); Modified Childhood Trauma Questionnaire– Short Form (CTQ-SF); and Woman Abuse Screen Tool (WAST). The HITS instrument includes 4 questions, can be used in a primary care setting, and is available in both English and Spanish. It can be self- or clinician-administered. HARK is a self-administered 4-item instrument. STaT is a 3-item self-report instrument that was tested in an emergency department setting.

Area		
Infectious Diseases, including CDC Recommended Immunizations	Below is a list of vaccinations relevant to the young adult age group, which the CDC regularly updates. The most current CDC immunizations page can be viewed here.	
	Td/Tdap	http://www.cdc.gov/vaccines/hcp/vis/vis-statements/tdap.pdf
	Human Papillomavirus	http://www.cdc.gov/vaccines/hcp/vis/vis-statements/hpv-gardasil-9.pdf
	Varicella	http://www.cdc.gov/vaccines/hcp/vis/vis-statements/varicella.pdf
	Measles, mumps, rubella	MMR Website: http://www.cdc.gov/vaccines/hcp/vis/vis-statements/mmr.pdf MMRV Website: http://www.cdc.gov/vaccines/hcp/vis/vis-statements/mmrv.pdf
	Influenza	http://www.cdc.gov/vaccines/hcp/vis/vis-statements/flu.pdf
	Pneumococcal (polysaccharide)	http://www.cdc.gov/vaccines/hcp/vis/vis-statements/ppv.pdf
	Hepatitis A	http://www.cdc.gov/vaccines/hcp/vis/vis-statements/hep-a.pdf
	Hepatitis B	http://www.cdc.gov/vaccines/hcp/vis/vis-statements/hep-b.pdf
	Hepatitis C	http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/hepatitis-c-screening
	Serogroup B Meningococcal (MenB):	http://www.cdc.gov/vaccines/hcp/vis/vis-statements/mening-serogroup.pdf
	Quadrivalent Meningococcal	http://www.cdc.gov/vaccines/hcp/vis/vis-statements/mening.pdf

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