Clinical Preventive Services Guidelines for Young Adults Ages 18-25: Risk Factors and Recommended Screening Tests (CPSG-YA)

UCSF Division of Adolescent and Young Adult Medicine

Guidelines as of April 7th, 2020, 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 18-25 age group 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 Source: *(2015, October). *High Blood Pressure in Adults: Screening.* Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/high-blood-pressure-in-adults-screening *USPSTF update in progress	Persons at increased risk include • Those who have high-normal blood pressure (130 to 139/85 to 89 mm Hg) • Those who are overweight or obese • African Americans	Office measurement of blood pressure is most commonly done with a **sphygmomanometer**. The USPSTF recommends confirmation outside of the clinical setting before a diagnosis of hypertension is made and treatment is started. Confirmation may be done by using HBPM or ABPM. Because blood pressure is a continuous value with natural variations throughout the day, repeated measurements over time are generally more accurate in establishing a diagnosis of hypertension. Those who are at increased risk should be screened annually, while those not at increased risk should be re-screened every 3 to 5 years. The USPSTF did not find evidence for a single gold standard protocol for HBPM or ABPM.
Nutrition, Exercise, Obesity	Obesity/BMI Source: (2018, September). *Weight Loss to Prevent Obesity-Related Morbidity and Mortality in Adults: Behavioral Interventions.* Retrieved from		Behavior-based weight loss interventions in adults with obesity are supported by adequate evidence to lead to clinically significant improvements in weight status, reduced incidence of type 2 diabetes, and elevated plasma glucose levels. Persons with a BMI between 25 and 29.9 are overweight and those with a BMI of 30 and above are obese. **BMI is calculated either as weight in pounds divided by height in inches squared**

	https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/obesity-in-adults-interventions1		**multiplied by 703, or as weight in kilograms divided by height in meters squared.**
Area	**Recommendation**	**Risk Factors**	**USPSTF Recommended Screening Tests**
Nutrition, Exercise, Obesity	Healthy Diet and Physical Activity Source: *(2014, August). *Healthful Diet and Physical Activity for Cardiovascular Disease Prevention in Adults With Cardiovascular Risk Factors: Behavioral Counseling*. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/healthy-diet-and-physical-activity-counseling-adults-with-high-risk-of-cvd *USPSTF update in progress	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. These risk factors are: • Hyperlipidemia • Dyslipidemia • Impaired fasting glucose • Metabolic syndrome	Intensive behavioral counseling interventions to promote a healthful diet and physical activity 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. In the studies reviewed by the USPSTF, the vast majority of participants had a BMI greater than 25 kg/m2.

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Substance Use	Alcohol: Screening and Counseling (2018, November). *Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary Care.* Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/unhealthy-alcohol-use-in-adolescents-and-adults-screening-and-behavioral-counseling-interventions	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.**
Substance Use	Tobacco: Screening and Counseling for Non-Pregnant Adults Source: *(2015, September). *Tobacco Smoking Cessation in Adults, Including Pregnant Women: Behavioral and Pharmacotherapy Interventions.* Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/tobacco-use-in-adults-and-pregnant-women-counseling-and-interventions1 *USPSTF update in progress	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 Source: *(2015, September). *Tobacco Smoking Cessation in Adults, Including Pregnant Women: Behavioral and Pharmacotherapy Interventions*. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/tobacco-use-in-adults-and-pregnant-women-counseling-and-interventions1 *USPSTF update in progress	Smoking prevalence is higher in the following groups (as applicable to female young adults): • 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 • persons with mental health conditions	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
	
	Source: (2016, January). *Depression in Adults: Screening*. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/depression-in-adults-screening1
		• 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 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
			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), 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

		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.	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 Source: (2019, June). *Human Immunodeficiency Virus (HIV): Screening*. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/human-immunodeficiency-virus-hiv-infection-screening1	• 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, and with more than 1 partner whose HIV status is unknown • 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.	Screening is recommended for individuals 15-65 years old, younger adolescents at increased risk and all pregnant women. 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. **Rapid HIV antigen/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.

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Reproductive Health	STI: Behavioral Counseling Source: *(2014, September). *Sexually Transmitted Infections: Behavioral Counseling*. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/sexually-transmitted-infections-behavioral-counseling1 *USPSTF update in progress	• 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.

Area	Recommendation	Risk Factors	USPSTF Recommended Screening Tests
Reproductive Health	Syphilis: Screening for Non-Pregnant Adults Source: (2016, June). *Syphilis Infection in Nonpregnant Adults and Adolescents: Screening*. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/syphilis-infection-in-nonpregnant-adults-and-adolescents	• 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**).
Reproductive Health	Syphilis: Screening for Pregnant Women Source: (2018, September). *Syphilis Infection in Pregnant Women: Screening*. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/syphilis-infection-in-pregnancy-screening1	• Women living in geographic areas with higher prevalence of syphilis • Women with HIV • Incarceration • Sex work	Early screening for syphilis is recommended for all pregnant women. Clinicians may also consider re-screening early in the third trimester for women at high risk of syphilis per CDC, AAP, and ACOG guidelines. 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 Source: *(2014, September). *Chlamydia and Gonorrhea: Screening*. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/chlamydia-and-gonorrhea-screening *USPSTF update in progress	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 partner • 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.
Reproductive Health	Folic Acid Source: (2017, January). *Folic Acid for Prevention of Neural Tube Defects: Preventive* Medication. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/folic-acid-for-the-prevention-of-neural-tube-defects-preventive-medication	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	Skin Cancer Source: (2018, March). *Skin Cancer Prevention: Behavioral Counseling*. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/skin-cancer-counseling2	Individuals with the following characteristics face substantially increased risk of skin cancer: • Fair skin type (pale skin, light hair and eye color, freckles, or those who sunburn easily) • Use of tanning beds • History of sunburns or previous skin cancer Additional risk factors include: • Increased number of nevi (moles) and atypical nevi • HIV infection • History of receiving an organ transplant • Family history of skin cancer	Counseling on minimizing exposure to ultraviolet (UV) radiation is recommended for persons aged 6 months to 24 years with fair skin types in order to reduce their risk of skin cancer. Evidence suggests that the net benefit of counseling all adults older than 24 years is small.
Cancer Screening	Testicular Cancer Source: (2011, April). *Testicular Cancer: Screening*. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/testicular-cancer-screening		The United States Preventive Services Task Force recommends **against** screening for testicular cancer in adult males.

Area	Recommendation	Risk Factors	USPSTF Recommended Screening Tests
Cancer Screening	BRCA-related Cancer Source: (2019, August). *BRCA-Related Cancer: Risk Assessment, Genetic Counseling, and Genetic Testing.* Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/brca-related-cancer-risk-assessment-genetic-counseling-and-genetic-testing1	This recommendation applies to women who are asymptomatic for BRCA-related cancer and have unknown BRCA mutation status, *including* those have been previously diagnosed with BRCA-related cancer but have completed treatment and are considered cancer free. Women who have the following risk factors should be screened: • Personal history of breast, ovarian, tubal, or peritoneal cancer • Family history of breast, ovarian, tubal, or peritoneal cancer Ancestry associated with a known potentially harmful mutation in the *BRCA1* or *BRCA2* genes	For women with a family history of BRCA-related cancers, USPSTF has found the following brief risk assessment tools to be validated and accurate: • the Ontario Family History Assessment Tool (Table 1) • Manchester Scoring System (Table 2) • Referral Screening Tool (Table 3) • Pedigree Assessment Tool (Table 4) • 7-Question Family History Screening Tool (Table 5) • International Breast Cancer Intervention Study instrument (Tyrer-Cuzick) (Table 6) • brief versions of BRCAPRO Genetic counseling should be offered to women with a positive result from screening. Genetic testing should be performed only when an individual with personal or family history is willing to talk with a health professional who is suitably trained to provide genetic counseling and interpret test results, and when test results will aid in decision-making. Routine risk assessment is **not recommended** for women without personal or family history associated with *BRCA1/2* gene mutations.

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Safety/ Violence	Family/Partner Violence Source: (2018, October). *Intimate Partner Violence, Elder Abuse, and Abuse of Vulnerable Adults: Screening.* Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/intimate-partner-violence-and-abuse-of-elderly-and-vulnerable-adults-screening1	Women of child-bearing age are most at risk, however all women are at potential risk for abuse. Factors that elevate risk include: • Exposure to violence as a child • Young age • Unemployment • 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	Recommendation	Risk Factors	USPSTF Recommended Screening Tests
Infectious Diseases	Hepatitis C Source: *(2020, March). *Hepatitis C Virus Infection in Adolescents and Adults: Screening*. Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/hepatitis-c-screening	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).	Screening is recommended for all adults aged 18 to 79 years without known liver disease. 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.

Area		
CDC Recommended Immunizations and other Infectious Diseases	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
	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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