



**2024**

**ADULT PREVENTIVE CARE  
GUIDELINES**

# Contents

- About the MHQP Adult Preventive Care Guidelines. . . . . 1**
- Social Determinants of Health (SDoH) . . . . . 1**
- Racism, Discrimination, and Health . . . . . 2**
- Periodic Health Evaluation . . . . . 4**
  - Breast Cancer | 5
  - Cervical Cancer | 6
  - Colorectal Cancer | 8
  - Lung Cancer | 9
  - Prostate Cancer | 10
  - Skin Cancer | 11
- General Screening, Counseling, and Guidance . . . . . 12**
  - Cardiovascular Health (incl. screening for hypertension, lipid disorder/high cholesterol, and abdominal aortic aneurysm) | 12
  - Diabetes (Type-2) and Pre-Diabetes | 14
  - Obesity and Overweight | 15
  - Physical Activity | 16
  - Diet and Nutrition | 17
  - Oral Health | 18
  - Sexual Health, Sexual Orientation, and Gender Identity | 18
  - Sleep | 19
  - Tobacco, Smoking, and Vaping | 20
  - Depression | 21
  - Anxiety | 22
  - Unhealthy Alcohol and Substance Use | 23
  - Safety/Injury Prevention | 24
  - Violence/Abuse in the Home | 25
  - Sensory Screening | 26
- Infectious Disease Screening . . . . . 27**
  - COVID-19 | 27
  - Mpox | 28
  - Sexually Transmitted Infections (Chlamydia, Gonorrhea, Syphilis, HPV) | 28
  - Hepatitis B | 30
  - Hepatitis C | 31
  - HIV | 32
  - Tuberculosis (TB) | 33
  - Mosquito- and Tick-Borne Illnesses | 33
- Screening and Guidance for Age Specific Conditions . . . . . 34**
  - Menstruation | 34
  - Preconception Counseling | 34
  - Menopause Management | 35
  - Osteoporosis | 35
  - Cognitive Impairment | 36
  - End of Life Planning | 36

## About the MHQP Adult Preventive Care Guidelines

MHQP’s 2024 guidelines were developed by a collaborative group of Massachusetts healthcare organizations. These are recommendations for providing preventive care to adult patients from the general population. These guidelines should not supplant clinical judgment or the needs of individual patients. These guidelines are intended as quality practice recommendations and are not intended as a description of benefits, conditions of payment, or any other legal requirements of any particular health plan or payor. Each health plan or payor makes its own determination of coverage and benefits. In the event that these practice recommendations are inconsistent with any applicable laws or regulations, such laws or regulations take precedence.

## Social Determinants of Health (SDoH)

- Review a completed SDoH screening tool, such as [PRAPARE](#) or [the Social Needs Screening Tool](#), and incorporate into the plan of care
- Develop an action plan at each visit with information available.
  - ♦ Make sure that social determinants that are being targeted for recommendations are modifiable, like food insecurity, homelessness, lack of transportation, or inaccessibility to quality education.
  - ♦ Individuals who are at high-risk of certain conditions due to unmodifiable social determinants, like race or age, should be subject to increased screenings as indicated.
- Refer patients to additional team members for education, resources, and referrals as needed.
- Discuss access to healthcare by asking: “Do you have any concerns that prevent you from keeping your health care appointments?” and “Do you need any accommodations during your visit?”
- Assess health literacy by asking: “How confident are you filling out medical forms by yourself?”

### Screening Tools and Action Plans

[Protocol for Responding and Assessing Patient’s Assets, Risks and Experiences \(PRAPARE\)](#): The PRAPARE screening tool screens for four main health-related social needs, including patient demographics; housing, food, transportation, and utilities; finance; and social and emotional health.

[Social Needs Screening Tool](#): The Social Needs Screening tool screens for five core health-related social needs, which include housing, food, transportation, utilities, and personal safety, using validated screening questions, as well as the additional needs of employment, education, childcare, and financial strain.

[Develop an Action Plan](#): A quick form to guide a discussion with patients about their social determinants of health and document a plan to address them. The form is available in seven languages.

### Community Resources:

[2-1-1](#): This resource helps individuals obtain information about receiving assistance in the event of a crisis, emergency, or natural disaster.

[Find Help](#): This interactive tool helps individuals find free or reduced cost services related to food, housing, or transportation.

[HelpSteps](#): This interactive tool provides information on how to access social services related to food, housing, and medical care.

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## DEFINITION OF THE SOCIAL DETERMINANTS OF HEALTH FOR MHQP’S GUIDELINES PROGRAM

Social Determinants of Health (SDoH) are the conditions under which people are born, grow, live, work, and age. SDoH can either help a patient’s health (like living in a low crime neighborhood), or adversely affect it (such as living in a neighborhood with poor air quality and pollutants). Conditions can be modifiable, like food insecurity or homelessness, or unmodifiable, like race or age. ([AAFP](#), [WHO](#))

## Social Determinants of Health (SDoH) (continued)

### General Resources:

[The EveryONE Project Toolkit](#): This toolkit offers strategies for use among clinicians to promote diversity and advance health equity in all communities.

[THRIVE](#): THRIVE is also a tool for engaging community members and practitioners in assessing the status of community determinants, prioritizing them, and taking action to change them in order to improve health, safety, and health equity.

[A Practitioner's Guide for Advancing Health Equity](#): The purpose of the Health Equity Guide is to assist practitioners with addressing the well-documented disparities in chronic disease health outcomes.

[Cancer Disparities](#): This webpage provides examples of disparities in cancer, and the contributing factors behind these disparities.

[Short Assessment of Health Literacy—Spanish and English \(SAHL-S&E\)](#): The Short Assessment of Health Literacy—Spanish and English (SAHL-S&E) is a new instrument, consisting of comparable tests in English and Spanish, with good reliability and validity in both languages.

[Vaccine Resource Hub](#): Access hundreds of free and accurate educational materials to support COVID-19 and flu vaccination in your community.

## Racism, Discrimination, and Health

A growing body of research shows that centuries of racism in this country has had a profound and negative impact on Black, Indigenous, and People of Color (BIPOC) communities. The impact is pervasive and deeply embedded in our society—affecting where one lives, learns, works, worships, and plays and creating inequities in access to a range of social and economic benefits—such as housing, education, wealth, and employment. These social determinants of health are key drivers of health inequities within BIPOC communities, placing those within these populations at greater risk for negative health outcomes (adapted from CDC).

[Jones](#) and the [CDC style guide](#) have defined 3 levels of racism.

- *Systemic, institutionalized, and structural racism*: “Structures, policies, practices, and norms resulting in differential access to the goods, services, and opportunities of society by ‘race’ (e.g., how major systems—the economy, politics, education, criminal justice, health, etc. — perpetuate unfair advantage).”
- *Interpersonal and personally mediated racism*: “Prejudice and discrimination, where prejudice is differential assumptions about the abilities, motives, and intents of others by ‘race,’ and discrimination is differential actions towards others by ‘race.’ These can be either intentional or unintentional.”
- *Internalized racism*: “Acceptance by members of the stigmatized ‘races’ of negative messages about their own abilities and intrinsic worth.”

It is important for providers to examine the potential effects of racism in causing race-associated differences in health outcomes. Moreover, providers should acknowledge the influence of racism and discrimination in perpetuating disparities related to access to preventive services, the utilization of screening services, and delays in care. Providers should also examine whether their own implicit biases may lead to making inequitable care decisions.

The downstream effects of systemic racism, including race-based unfair interpersonal treatment and unequal access to resources and opportunities, can result in chronic stress, which has been shown to cause adverse health consequences within BIPOC communities ([Health Affairs, 2022](#)).

Other historically marginalized communities are also disproportionately subjected to discrimination. Discrimination is also attributed to gender identity, sexual orientation, and can also be directed toward individuals or communities with a variety of physical and social attributes such as age, body size, ability, social class, or religion—as well as the multiple intersections of these identities and characteristics ([Health Affairs, 2020](#)).

These guidelines stratify risk by modifiable and unmodifiable patient factors. Note that missing health equity data elements (such as granular race, ethnicity, gender identity, sexual orientation, and disability data) and the lack of diversity in health research studies make it difficult to assess disparities in risk for many diseases and conditions. Subpopulations are referenced throughout the document as they are described in the cited literature.

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## Racism, Discrimination, and Health (continued)

Centuries of discrimination have also led to substantial medical mistrust, particularly within the Black community ([Bazargan et al. 2022](#); [Jack, 2021](#)). The social stigmatization of an individual's intersecting identities, including gender identity, sexual orientation, body type, and ability, can also perpetuate medical mistrust. Medical mistrust leads to lower quality of care and the potential for adverse outcomes in multiple ways, including reduced usage of preventive services, loss of continuity of care, lack of follow up care, and dissatisfaction in patient-provider interactions ([Allen et al. 2022](#)); [Bazargan et al., 2021](#); [Duthely et al., 2021](#); [Graham et al., 2015](#); [Musa et al., 2009](#); [Parnitzke Smith, 2017](#); [Rokoske, 2022](#)), highlighting the need for healthcare providers to address the role of racism and discrimination in perpetuating mistrust. Healthcare mistrust can be at the interpersonal and institutional levels ([Ward, 2017](#)).

This guidance acknowledges that race is a social construct and not based in biology. Race was included in our risk-based analysis because race is a proxy for systemic racism, which perpetuates racial health inequities. Other social risk factors that intersect with racism (e.g., housing, education, and access to healthy foods) are also included to emphasize the multiple pathways to negative health outcomes.

### Resources

[Confronting Institutionalized Racism](#): This article by Camara Phyllis Jones explores the pervasive and systemic nature of racism within institutions and offers a framework for addressing and dismantling this deeply rooted issue in society.

[CDC Resources & Style Guides for Framing Health Equity & Avoiding Stigmatizing Language](#): This resource provides links to references, other resources, and style guides to frame health equity and avoid stigmatizing language.

[Systemic And Structural Racism: Definitions, Examples, Health Damages, And Approaches to Dismantling](#):

This article underscores that racism isn't always overt but can manifest as systemic and structural racism deeply ingrained in policies, practices, and beliefs, perpetuating unfair treatment and adverse health consequences for people of color, with examples such as residential segregation, biased policing, and suggests the need for concerted, cross-sector efforts to dismantle these pervasive forms of racism.

[Discrimination: A Social Determinant of Health Inequities](#): This article highlights the significant and wide-reaching impact of discrimination as a social determinant of health, discussing its role as a pervasive stressor with direct and indirect effects on the well-being of historically underserved communities, shedding light on its contribution to various health disparities.

[Building Trust in Health Care—Why, Where, and How](#): This editorial discusses the significant decline in trust in the US healthcare system over the past half-century, citing statistics and high-profile events that have contributed to this erosion of confidence in medical leaders and institutions.

[Re-Building Trust](#): This article discusses a collaborative effort involving over 120 healthcare stakeholders, exploring trust in various healthcare aspects and providing recommendations for improvement.

## Periodic Health Evaluation

### At every age

- Obtain initial/interval medical and family history.
- Screen for social determinants of health (see SDoH section above for screening tools and resources)
- Perform age-appropriate physical exam.
- Provide preventive screenings and counseling as outlined below.
- Update immunizations. For current immunization schedules, refer to the [U.S. Centers for Disease Control and Prevention 2024 Adult Immunization Guidelines](#)
  - Assess vaccination status with attention to social risk factors, medical mistrust, personal beliefs, and other concerns associated with delaying or missing vaccinations.
  - ACIP recommends use of COVID-19 vaccines for all adults. COVID-19 vaccine and other vaccines may be administered on the same day. See the [COVID-19 Vaccine Product Information page](#) for additional information about COVID-19 vaccines authorized for use in the United States
  - Note that, Black and Hispanic/Latino people remain less likely than their White counterparts to have received a COVID-19 vaccine ([KFF, 2022](#)), leaving them at increased risk. These differences are likely due to a complex interaction of social determinants of health, including socioeconomic status, access to quality and equitable medical care, and medical mistrust.
- Notable changes and highlights include:
  - Recommend Hepatitis B vaccine for all adults 18-59
  - Refer to [CDC Influenza ACIP Vaccine Recommendations](#) for current influenza vaccine recommendations.
  - Recommend [MenABCWY](#) in previously unvaccinated young adults, also use shared decision making for [MenB in young adults](#)
  - Recommend Mpox vaccine for those at risk
  - Recommend RSV vaccine for adults over 60. See perinatal guidelines for RSV vaccination in pregnancy
  - Recommend Tdap vaccine to any person who has not been previously vaccinated and who will have close contact with a baby  $\leq$  12 months. For Tdap vaccine refer to the [Tdap Vaccine Recommendations](#)

18–29 Years	30–49 Years	50+ Years
<ul style="list-style-type: none"> <li>• Annually for ages 18–21</li> <li>• Every 1–3 years, depending on risk factors, for ages 22–29</li> </ul>	<ul style="list-style-type: none"> <li>• Every 1-3 years, depending on risk factors</li> </ul>	<ul style="list-style-type: none"> <li>• Annually</li> </ul>

### DEFINITION OF PERIODIC HEALTH EVALUATION FOR MHQP'S GUIDELINES PROGRAM:

The periodic health evaluation (PHE) consists of one or more visits with a health care provider to assess patients' overall health and risk factors for preventable disease, and it is distinguished from the annual physical exam by its incorporation of tailored clinical preventive services and laboratory testing as part of health risk assessment. Source: [AHRQ](#)

**Breast Cancer**

18–39 Years	40–74 Years	75+ Years
<ul style="list-style-type: none"> <li>• Consider performing clinical breast exam at all periodic health evaluations</li> <li>• Screen for patients with an increased risk for genetic mutations, including BRCA gene mutations, using appropriate screening tools. Offer genetic counseling for those with positive screening results. The tools evaluated by the USPSTF include the <a href="#">Ontario Family History Assessment Tool</a>, <a href="#">Manchester Scoring System</a>, <a href="#">Referral Screening Tool</a>, <a href="#">Pedigree Assessment Tool</a>, and <a href="#">FHS-7</a>.</li> <li>• Consider prescribing risk-reducing medications, such as tamoxifen, raloxifene, or aromatase inhibitors, to those who are 35 or older and are at increased (&gt;1.7%) risk for breast cancer and at low risk for adverse medication effects using shared decision making                         <ul style="list-style-type: none"> <li>♦ Note that the USPSTF does not endorse any particular risk prediction tool. However, the NCI Breast Cancer Risk Assessment Tool and the Breast Cancer Surveillance Consortium Risk Calculator are based on models tested in US populations and are publicly available for clinicians and patients to use as part of the process of shared, informed decision-making about taking risk-reducing medications for breast cancer.</li> </ul> </li> </ul>		
<ul style="list-style-type: none"> <li>• Only with patients at risk, use shared decision making to discuss the risks and benefits of initiating mammography or other screening exams</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct mammography every two years, or more frequently based on risk factors and shared decision making</li> </ul>	<ul style="list-style-type: none"> <li>• Determine need of further mammography based on shared decision making</li> </ul>

**RISK FACTORS**

Breast cancer prevalence varies among racial and ethnic groups, with the highest rates among White patients and patients of Ashkenazi Jewish descent ([CDC, 2019](#); [Yedjou et al., 2019](#)). Note that those of Ashkenazi Jewish descent have a higher risk of developing breast cancer at a young age, due to higher rates of BRCA gene mutation ([Yedjou et al., 2019](#)). Also, note that in women under age 50, breast cancer is more common in Black women ([Rebner & Pai, 2020](#)). Black women are also more likely to die from breast cancer at any age ([American Cancer Society, 2022](#)). Patients may be more likely to get more aggressive forms of breast cancer and be diagnosed at a younger age if they are Black ([American Cancer Society, 2022](#); [Rebner & Pai, 2020](#)). Differences in breast cancer prevalence by race are likely due to complex interactions of social determinants of health, including access to affordable and equitable medical care.

Risk factors for breast cancer include:

- Age, the risk for breast cancer increases with age; most breast cancers are diagnosed after age 50
- Having a first degree relative (parent, sibling, or child) with breast, ovarian, tubal, or peritoneal cancer or multiple relatives with breast cancer
- Having a genetic predisposition, such as BRCA gene mutation
- Having a personal history of ovarian cancer or high-risk breast biopsy result
- Having a history of chest radiation therapy at a young age
- Early menarche or late menopause
- Having dense breasts
- In utero diethylstilbestrol (DES) exposure
- Using hormone replacement therapy (HRT) or oral contraceptives
  - ♦ Note that combined estrogen and progesterone HRT and certain oral contraceptives increase the risk of breast cancer.
- Never having a full-term pregnancy, having a first pregnancy after age 30, or not breastfeeding
- Not being physically active
- Being overweight or obese after menopause
- Drinking alcohol
- Having barriers to getting screened or to follow-up care for an abnormal mammogram, including living in medically underserved area

Note that other factors such as smoking, being exposed to chemicals that can cause cancer, and changes in other hormones due to night shift working also may increase breast cancer risk.

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## Breast Cancer (continued)

### Resources:

[B-RST](#): (available in English and Spanish): This tool is a USPSTF recommended online screening tool that asks questions about family history to assess for Hereditary Cancer risk and possible benefit of additional information

### [Bring your Brave](#):

[Screening Mammography – Clinician Instructions](#): This tool is best used by clinicians and patients together to help clarify the personal risk of breast cancer, and then illustrate the possible benefits and harms of screening mammograms.

[Breast Cancer Screening Decision](#): (For women 40-49): This is a screening tool designed to give women unbiased information that can help make an informed decision about when you should start and how often you should have screening mammograms.

[Should I Continue with Mammogram Screening?](#) (For women 75-84): This tool will help women over the age of 75 think about whether or not they may want to stop or continue having mammograms.

[What Can I Do to Decrease My Risk](#): This resource provides information to help lower breast cancer risk.

[Bring Your Brave – Breast Cancer Resources](#): The *Bring Your Brave* [campaign](#) provides information about breast cancer to women younger than age 45 by sharing real stories about young women whose lives have been affected by breast cancer.

[Breast Cancer Risk and Prevention](#): This American Cancer Society resource outlines things patients can do that might lower their risk of breast cancer.

## Cervical Cancer

18–20 Years	21–24 Years	25–65 Years	66+ Years
<ul style="list-style-type: none"> <li>• Omit cervical cancer screening test if a person has had a hysterectomy for benign disease with removal of cervix and does not have a history of high-grade precancerous lesion or cervical cancer.</li> <li>• Note that the USPSTF states these recommendations do not apply to those with high grade precancerous lesions or cervical cancer or in utero DES exposure or a compromised immune system, including those with HIV.</li> </ul>			
<ul style="list-style-type: none"> <li>• No cervical cancer screening is indicated</li> <li>• Recommend HPV vaccination, if not previously vaccinated</li> </ul>	<ul style="list-style-type: none"> <li>• Consider screening with cervical cytology alone every three years (pap or liquid cytology)</li> <li>• Recommend HPV vaccination, if not previously vaccinated</li> </ul>	<ul style="list-style-type: none"> <li>• Screen every five years with hrHPV testing or if not available, screen every five years with co-testing (hrHPV and cytology) or screen every three years with cytology alone</li> <li>• Discuss HPV vaccination with adults ages 27 through 45, if they did not get adequately vaccinated previously</li> </ul>	<ul style="list-style-type: none"> <li>• Discontinue cervical cancer screening after 65 years of age in women at low risk due to previous negative screening</li> </ul>

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## Cervical Cancer (continued)

### RISK FACTORS

Cervical cancer prevalence varies among racial and ethnic groups, with the highest rates among Black, American Indian, Alaska Native, and Hispanic/Latino patients ([CDC, 2019](#)). Hispanic/Latino women have the highest rates of developing cervical cancer, and Black women have the highest rates of dying from cervical cancer. ([CDC, 2022](#)). Differences in rates of cervical cancer by race and ethnicity are likely due to complex interactions of social determinants of health, including access to affordable and equitable medical care.

Risk factors for cervical cancer include:

- Having a family history of cervical cancer
- Having a personal history of cervical dysplasia
- Having an infection with high-risk HPV (human papillomavirus)
- Having a history of sexually transmitted diseases (including HIV/AIDS and chlamydia)
- Engaging in condomless sex or having multiple sexual partners
- Having a compromised immune system
- In utero diethylstilbestrol (DES) exposure
- Prolonged use of oral contraceptives (5 years or more)
- Smoking
- Having multiple full-term pregnancies, individuals who have had 3 or more full-term pregnancies have an increased risk of developing cervical cancer.
- Young age at first full-term pregnancy, women who were younger than 20 years when they had their first full-term pregnancy are more likely to get cervical cancer later in life than women who waited to get pregnant until they were 25 years or older.
- Having barriers to getting screened or to follow-up care for an abnormal pap smear, including living in medically underserved area
- Low socioeconomic status

Resource:

[Cervical Cancer Screening](#): This is a resource to aid women to learn about cervical cancer screening.

## Colorectal Cancer

18–44 Years	45–75 Years	76–85 Years
<p>Options for colorectal cancer screening:</p> <ul style="list-style-type: none"> <li>Note that while colonoscopy is often considered to be the best test, annual FIT testing may be more accessible and acceptable to patients and is included in the top tier of tests per <a href="#">the US Multi-Society Task Force on Colorectal Cancer in 2017</a> <ul style="list-style-type: none"> <li>Colonoscopy every 10 years <b>or</b></li> <li>Annual FIT</li> <li>If patient is unable to follow either of these screening regimens, then select one of the following methods/ screening intervals:           <ul style="list-style-type: none"> <li>Computed tomographic colonography every 5 years <b>or</b></li> <li>sDNA-FIT every 1-3 years <b>or</b></li> <li>Flexible sigmoidoscopy every 5–10 years <b>or</b></li> <li>gFOBT every year</li> </ul> </li> </ul> </li> <li>If patient cannot follow any of these recommendations: capsule colonoscopy every 5 years.</li> </ul>		
<ul style="list-style-type: none"> <li>Screenings are not routine except for patients at high risk – See screening schedules in Risk Factor section below.</li> </ul>	<ul style="list-style-type: none"> <li>Screen for colorectal cancer and use shared decision making to select one of the methods/screening intervals listed above.</li> </ul>	<ul style="list-style-type: none"> <li>Selectively offer screening for adults aged 76 to 85 years. Evidence indicates that the net benefit of screening all persons in this age group is small. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the patient’s overall health, prior screening history, and preferences.</li> <li>After age 86, screening is not recommended.</li> </ul>
<p><b>RISK FACTORS</b></p> <p>Colorectal cancer prevalence varies among racial and ethnic groups, with Black, American Indian, and Alaska Native patients having higher rates of colorectal cancer than White patients (<a href="#">CDC, 2019</a>). Black patients have shorter stage-specific survival and overall mortality rates of colorectal cancer compared with White patients (<a href="#">Rutter et al. 2021</a>). These differences are likely due to complex interactions of social determinants of health, including access to affordable and equitable medical care. Note that patients of Ashkenazi Jewish descent also have a higher incidence of colorectal cancer than other populations and that this observed incidence likely has a genetic component (<a href="#">Locker &amp; Lynch, 2004</a>).</p> <p>Risk factors for colorectal cancer include:</p> <ul style="list-style-type: none"> <li>Age, your risk of getting colorectal cancer increases as you get older. Nearly 94% of new cases of colorectal cancer occur in adults 45 years or older.</li> <li>Sex, males are more likely to get colorectal cancer than females.</li> <li>Having one first degree relative with colorectal cancer or advanced adenoma diagnosed before age 60 <b>or</b> having two first degree relatives with colorectal cancer or advanced adenoma at any age. <i>If patients have these risk factors, they should begin screening with colonoscopy ten years less than age at diagnosis of 1st degree relative or at age 40, whichever is earlier repeating every 5 years.</i></li> <li>Having one first degree relative with colorectal cancer, advanced adenoma or advanced serrated lesion over age 60. <i>If patients have these risk factors, they should begin screening with colonoscopy at age 40, with intervals same as average risk patients.</i></li> <li>Having a history of inflammatory bowel disease or a genetic syndrome such as familial adenomatous polyposis (FAP) or hereditary non-polyposis colorectal cancer (Lynch syndrome). Review screening guidelines specific to these conditions.</li> <li>Low socioeconomic status</li> <li>Having a diet low in fruits and vegetables, a diet low in fiber, or a diet high in fat or processed meats.</li> </ul>		

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## Colorectal Cancer (continued)

### RISK FACTORS (continued)

- Not being physically active
- Being overweight or obese
- Alcohol consumption
- Tobacco use

#### Resources:

[Colorectal Cancer: Catching it Early](#): This guide helps patients understand who may be at higher risk for colorectal cancer, and determine the types of screening that may be the best for them.

[Guide to Colorectal Cancer Screening](#): This guide is designed to inform patients of the types of screening tests that are available for colorectal cancer.

[ePrognosis Colorectal Cancer Screening Survey](#): This screening calculator is intended for clinicians to use as a rough guide to determine possible mortality outcomes.

[CDC: Colorectal Cancer Screening Tests](#): This resource reviews colorectal cancer screening strategies.

## Lung Cancer

18-50 Years	50-80 Years
<ul style="list-style-type: none"> <li>• Counsel current smokers to quit smoking (see <i>Tobacco, Smoking, and Vaping</i> section for resources to help quit smoking)</li> </ul>	<ul style="list-style-type: none"> <li>• Counsel current smokers to stop smoking and counsel that lung cancer screening does not replace the need to quit smoking (see <i>Tobacco, Smoking, and Vaping</i> section for resources to help quit smoking)</li> <li>• Use shared decision making to discuss the risks and benefits of low dose computed tomography (LDCT) screenings for patients meeting the following criteria:               <ul style="list-style-type: none"> <li>◆ <a href="#">20 pack-year smoking history</a> and</li> <li>◆ either currently smoke or have quit within the past 15 years</li> </ul> </li> <li>• If the decision is made to pursue screening, screen annually at a facility equipped to perform screening and evaluate results</li> <li>• Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery</li> </ul>

### RISK FACTORS

Black, Hispanic/Latino, Asian, American Indian, and Alaska Native patients are less likely to be diagnosed early with lung cancer compared with White patients ([American Lung Association, 2022](#)). These differences are likely due to complex interactions of social determinants of health, including access to affordable and equitable medical care.

Risk factors for lung cancer include:

- Having a family history of lung cancer
- Having a personal history of specific other cancers: small cell lung cancer, lymphoma including Hodgkin's, tobacco associated cancers like bladder and head and neck, cancers that required radiation treatment to the chest
- Having a history of COPD or pulmonary fibrosis
- Smoking (current smokers or smoking within the past 15 years)
- Exposure to secondhand smoke and other chemicals including radon, asbestos, and diesel fumes

#### Resources:

[Is Lung Cancer Screening Right for Me? \(Spanish\)](#): This article answers many frequently asked questions about lung cancer screenings, and helps patients determine if screening is right for them.

## Prostate Cancer

18-39 Years	40-49 Years	50-69 Years	70+ Years
<ul style="list-style-type: none"> <li>For high-risk patients only, use shared decision making to discuss prostate specific antigen (PSA) screening.</li> </ul>	<ul style="list-style-type: none"> <li>For high-risk patients only, use shared decision making to discuss prostate specific antigen (PSA) screening.</li> <li>High-risk patients should be provided with the same screening education and options as patients aged 50-69.</li> </ul>	<ul style="list-style-type: none"> <li>Screening for prostate cancer with PSA test should not be performed or offered routinely without shared decision making, including a clear explanation and understanding of the benefits and harms.</li> <li>Only offer PSA screening for patients who express a clear preference for screening after shared decision making and who have a life expectancy of &gt;10 years.</li> <li>For patients who have chosen PSA screening, screen every 1-4 years. Consider annual screening in patients with higher PSA levels that are still below a cut-off for biopsy, and less frequent screening in patients with lower initial PSA levels. PSA screening is not recommended for patients with a life expectancy of &lt; 10 years.</li> </ul>	<ul style="list-style-type: none"> <li>PSA screening and routine discussion of screening are not recommended.</li> </ul>

### RISK FACTORS

Prostate cancer prevalence varies among racial and ethnic groups, with Black patients at a disproportionately higher risk than other racial/ethnic groups ([CDC, 2019](#)). Black men are twice as likely to die from prostate cancer than other men and tend to develop prostate cancer at a younger age ([CDC, 2023](#)). These differences are likely due to complex interactions of social determinants of health, including access to affordable and equitable medical care, as well as genetics. Studies have shown that Black men with prostate cancer carry different genetic variants and often have more aggressive disease than men of other racial/ethnic groups ([Chowdhury-Paulin, 2021](#); [National Cancer Institute 2023](#)).

Risk factors for prostate cancer include:

- Age, while prostate cancer is rare in men younger than 40, the chance of having prostate cancer rises rapidly after age 50. About 6 in 10 cases of prostate cancer are found in men older than 65.
- Having a family history of prostate cancer, including a first degree relative (parent, sibling) diagnosed with prostate cancer before the age of 65, three first degree relatives with prostate cancer, three generations with prostate cancer on either the maternal or paternal line, or family history of breast, ovarian, or pancreatic cancer
- Having mutations of the BRCA1 or BRCA2 genes
- Having Lynch syndrome (hereditary non-polyposis colorectal cancer)
- Low socioeconomic status

Resources:

[Testing for Prostate Cancer](#): This booklet includes information to help men understand testing for prostate cancer so they can decide with their doctor if testing is right for them.

[CDC Prostate Cancer](#): This resource provides helpful information to patients about prostate cancer and testing. Note that it reflects the 2018 USPSTF recommendation age cut-offs.

[3 Things Black Men Should Know About Prostate Cancer](#): Black men are at increased risk for prostate cancer and may benefit from more vigilant screening. This article outlines 3 things Black men should know about prostate cancer.

## Skin Cancer

### 18+ Years

- Educate at-risk patients about skin cancer, including using the [ABCDE guidelines](#) to check moles
- Counsel to limit exposure to the sun (especially between 10 A.M. and 4 P.M.), to fully cover skin with clothing and hats, and to use sun block (SPF 15 or greater), especially those over 24 with fair skin types
- Discourage use of indoor tanning
- Consider inspecting skin for abnormalities when performing physical exam

#### RISK FACTORS

White patients are at higher risk of developing skin cancer than other racial groups ([CDC, 2019](#)) due to less melanin in the skin; however, when skin cancers occur in other racial/ethnic groups, they tend to be diagnosed at a later stage and, as a result, have a worse prognosis ([Skin Cancer Foundation, 2020](#)). These differences are likely due to complex interactions of social determinants of health, including access to affordable and equitable medical care, as well as genetics. In addition, there's a lower public awareness overall of the risk of skin cancer among individuals of color. Patients and providers may be less familiar with the typical appearance of skin cancers on skin color ([Skin Cancer Foundation, 2020](#)).

Risk factors for skin cancer include:

- Age, individuals who are 65 years of age or older are more likely to be get skin cancer
- Having a family or personal history of skin cancer
- Having a personal history of repeated sunburns early in life or chronic exposure to the sun
- Having certain characteristics to their skin, such as a large number of moles, fair skin, or sun sensitivity

Resources:

[Skin Cancer in People of Color](#): This guide helps patients of color understand their skin cancer risk, and how to conduct self-exams.

[Skin Cancer in People of Color Image Gallery – American Society for Dermatologic Surgery](#): This image gallery gives clinicians examples of what skin cancer looks like on people of color.

## General Screening, Counseling, and Guidance

**Cardiovascular Health** (incl. screening for hypertension, lipid disorder/high cholesterol, and abdominal aortic aneurysm)

### 18+ Years

#### General

- Review and assess known cardiovascular risks, and counsel on mitigating any risks. See sections on diet and nutrition, obesity and overweight, and physical activity for additional counseling and guidance.
- Ask about access to safe, affordable, and accessible physical activity options
- Ask about access to healthy, affordable, and culturally appropriate food options
- Refer to SNAP or other food assistance services as indicated
- Offer or refer adults with cardiovascular disease risk factors to behavioral counseling interventions to promote a healthy diet and physical activity

#### Tobacco

- Counsel current smokers to quit smoking (see *Tobacco, Smoking, and Vaping* section for resources to help quit smoking)

#### Lipids

- Screen for lipid disorder (high cholesterol) with either a non-fasting total cholesterol and HDL or a fasting lipid profile. Using a non-fasting lipid profile may result in needing a follow-up fasting lipid profile. Recommend follow-up fasting lipoprotein profile if total cholesterol is >200 mg/dl or HDL is <40 mg/dl.
- Recommend [statin use](#) in patients without CV disease aged 40-75 who have at least one risk factor for CVD and a 10 year risk of developing CVD of 10% or higher based on ASCVD Risk Factor Estimator Plus (USPSTF B recommendation). Note that the ASCVD Risk Estimator Plus generally assigns higher risk for Black persons than White persons when other factors are identical. Concerns about calibration of the Pooled Equations exist, as race is incorporated into the calculation and race is a social construct, not based in biology.
- Consider [statin use](#) in similar patients whose risk is 7.5% or higher based on ACC/AHA Pooled Cohort Equation (USPTF C Recommendation)
- Consider using [ASCVD Risk Estimator Plus](#) to evaluate 30 year or lifetime risk in patients with low risk aged 18-39.
- Note that there is a new ACC/AHA calculator called [PREVENT](#). This calculator removes race, extends the age range to 30-79, and has a 10- and 30-year risk calculation. Current recommendations for the use of statins and other interventions have not incorporated this new calculator as of the publication of these guidelines.
- Recommend using a 10 year risk assessment tool for patients aged 30-79, and assess results in the context of other risk factors and known limitations of the tool. Note that no risk estimator perfectly predicts ASCVD risk. Tools available include: [PREVENT](#), [ASCVD Risk Estimator Plus](#), [Framingham CVD risk score](#), [Reynolds risk score](#), and [QRISK/JBS3](#) tools.
- Consider CAC scoring in patients with borderline to intermediate risk

#### Blood Pressure

- Check blood pressure at every medical encounter
- Perform blood pressure screening for hypertension
  - ♦ Screen for hypertension every year in adults 40 years or older and in adults at increased risk for hypertension (such as persons with high-normal blood pressure, or persons who are overweight or obese)
  - ♦ Screen less frequently (ie, every 3-5 years) as appropriate for adults aged 18 to 39 years not at increased risk for hypertension and with a prior normal blood pressure reading
  - ♦ Offer ambulatory blood pressure measurements for those who have high blood pressure readings in the office
- Recommend less than 2,300 mg of sodium per day as part of a healthy eating pattern

(continued on next page)

## Cardiovascular Health (continued)

### Abdominal Aortic Aneurysm

- Screen for abdominal aortic aneurysm once in males aged 65–75 who have ever smoked, and consider using shared decision making for others at risk

### Aspirin

- Using shared decision making, consider low dose aspirin for adults aged 40–59 who have a 10% or greater 10 year risk of CVD, are not at risk for bleeding, have a life expectancy of 10 years or more and are willing to continue taking it for 10 years
- Offer or refer adults with cardiovascular disease risk factors to behavioral counseling interventions to promote a healthy diet and physical activity

### RISK FACTORS

Cardiac death rates and disease prevalence among racial and ethnic groups vary by source. However, Black individuals are more likely to die of heart disease than their White counterparts ([CDC, 2019](#)). In addition, Native American/Alaska Indian individuals are more likely to be diagnosed with coronary heart disease than their White counterparts ([OMH, 2018](#)). Conditions which are themselves risk factors for developing heart disease, like diabetes and hypertension, also vary. These differences are likely due to complex interactions of social determinants of health, including access to healthy options for diet and exercise, and access to affordable and equitable medical care. Note that research has shown a significantly high association between experiences with stigma and discrimination and cardiovascular disease ([Panza et al. 2019](#)).

Risk factors for cardiovascular disease include:

- Age, incidence for CVD is 40% from ages 40–59, 75% from ages 60–79, and over 80% for those 80 years and older
- Sex, males are more likely to develop cardiovascular disease than females
- Having a family history of premature heart disease
- Having a personal history of smoking, alcohol consumption, diabetes, hypertension, hyperlipidemia, low HDL, obesity (BMI over 30), or preeclampsia
- Low socioeconomic status
- Not being physically active
- Living in areas with low accessibility to healthy, affordable, and culturally appropriate food

Risk factors for abdominal aortic aneurysm include:

- Age, individuals are more likely to develop abdominal aortic aneurysm if they are age 65 years and older
- Sex, males are more likely to develop abdominal aortic aneurysm than females
- Having a family history of abdominal aortic aneurysm, coronary artery disease, peripheral vascular disease, and/or hypertension
- Regular use of tobacco

Resources:

[ACC/AHA Pooled Cohort Equations](#): This calculator is intended for clinician use to help understand the 10-year risk of ASCVD in patients. Note that the ASCVD Risk Estimator Plus generally assigns higher risk for Black persons than White persons when other factors are identical. Concerns about calibration of the Pooled Equations exist, as the [USPSTF](#) recognizes that race is a social construct.

[Aspirin Guide](#): The Aspirin-Guide app from researchers at Brigham and Women’s Hospital, Harvard Medical School, helps clinicians decide which patients are candidates for the use of low-dose aspirin (75 to 81 mg/d) in the primary prevention of atherosclerotic cardiovascular disease (ASCVD) by balancing the ASCVD benefits against the risk of harm due to gastrointestinal (GI) or other bleeding.

[2019 ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease](#): This guide is for clinicians to understand how to assess and estimate the risk of CVD in patients.

[Statin Choice Decision Aid](#): This calculator is for patients, with aid from their clinicians, to understand how to use statins to reduce likelihood of heart attacks.

Note: If you use an application for risk calculation, make sure it is based on the ACC/AHA Pooled Cohort Equation.

## Diabetes (Type-2) and Pre-Diabetes

### 18+ Years

- Counsel on the benefits of physical activity and a healthy diet. See sections on diet and nutrition and physical activity for further guidance.
- Ask about access to safe, affordable, and accessible physical activity options
- Ask about access to healthy, affordable, and culturally appropriate food options
- Refer to [SNAP](#) or other food assistance services as indicated
- Screen for prediabetes and type 2 diabetes with fasting blood sugar, 2-hour oral glucose tolerance, or HbA1C test every three years in adults aged 35 to 70 years who have overweight or obesity. Offer or refer patients with pre-diabetes to effective preventive interventions.
- Consider screening Asian patients with overweight or obesity starting at a BMI of 23
- Consider screening in adults younger than 35 who have overweight and obesity and belong to a higher risk group
- Consider screening the general population every 3 years beginning at age 35. If test results in diagnosis of pre-diabetes, recommend screening again in 6 months to 1 year, and counsel or refer for counseling on diet and lifestyle changes to prevent the onset of Type-2 diabetes.
- Consider the [CDC training program](#) recommendation for diabetic and pre-diabetic patients
- Emphasize that lifestyle changes that result in lower weight and increased physical activity are critical in managing Type-2 diabetes and pre-diabetes, including the potential for remission
- Refer for consideration of [metabolic surgery](#) if BMI is  $\geq 40$  ( $\geq 37.5$  in Asian Americans)
- Refer for consideration of [metabolic surgery](#) if BMI is 35-39.9 (32.5-37.4 in Asian Americans) who do not achieve durable weight loss and improvement in comorbidities (including hyperglycemia) with reasonable nonsurgical methods

### RISK FACTORS

Diabetes and pre-diabetes prevalence varies among racial and ethnic groups, with the highest rates among American Indian and Alaska Native patients, then Black patients, then Hispanic/Latino patients, then Asian patients, and with the lowest rates among White patients ([CDC, 2022](#)). These differences are likely due to complex interactions of social determinants of health, including access to healthy and affordable foods, access to safe, affordable, and accessible physical activity options, education about diet and exercise as prevention tools, socioeconomic status, and access to affordable and equitable medical care.

Risk factors for diabetes include:

- Age, individuals who are ages 45 years and older are more likely to develop diabetes
- Sex, males are more likely to develop diabetes than females
- Having a first degree relative with diabetes
- Having a personal history of being overweight/obese, high blood pressure (above 135/80mmHg), vascular disease, elevated cholesterol/lipid levels, gestational diabetes or birth of a baby >9 lbs, impaired glucose tolerance, and/or polycystic ovary syndrome
- Not being physically active (being physically active fewer than three times a week)
- Living in areas with low accessibility to healthy, affordable, and culturally appropriate food

Resources:

[CDC: Diabetes Prevention Recognition Program](#): The DPRP provides information to people at high risk for type 2 diabetes, their health care providers, and payers about the location and performance of organizations offering the National DPP lifestyle change program (National DPP LCP) through various delivery modes (in-person, online, distance learning, and combination).



## Obesity and Overweight

### 18–65 Years

- Counsel on the benefits of physical activity and a healthy diet to maintain an appropriate weight for height. See sections on diet and nutrition and physical activity for further guidance.
- Ask about access to safe, affordable, accessible, and culturally appropriate physical activity options
- Ask about access to healthy, affordable, and culturally appropriate food options
- Refer to [SNAP](#) or other food assistance services as indicated
- Screen for obesity at every periodic health evaluation visit using the CDC's BMI charts as a guide
- Note that the BMI should be used in conjunction with other clinical assessments before making a diagnosis of obesity and overweight. The correlation between BMI and percentage body fat is fairly strong; however, two people with the same BMI may have different percentages of body fat based on differences in skeletal and muscle mass.
- Offer more focused evaluation and intensive counseling for obese adults (BMI  $\geq 30$ ), or overweight adults (BMI  $\geq 25$ ) with co-morbidities, to promote sustained weight loss. The USPSTF recommends that clinicians offer or refer patients with a BMI  $\geq 30$  to intensive, multicomponent behavioral interventions.
- Consider the [CDC training program](#) recommendation for diabetic and pre-diabetic patients. See diabetes section for diabetes-specific recommendations.

#### RISK FACTORS

Obesity and overweight prevalence varies among racial and ethnic groups, with higher rates among Black, American Indian, Alaska Native, and Hispanic/Latino patients ([CDC, 2019](#); [OMH, 2018](#)). In addition, women are more likely than men to be diagnosed with obesity ([Cooper et al. 2021](#)). These differences are likely due to complex interactions of social determinants of health, including access to healthy and affordable foods, access to safe, affordable, accessible, and culturally appropriate physical activity options, access to health care, education about diet and exercise as prevention tools, socioeconomic status, and access to affordable and equitable medical care.

Risk factors for obesity/overweight include:

- Living in areas with low accessibility to healthy, affordable, and culturally appropriate food
- Low socioeconomic status
- Not being physically active

## Physical Activity

18-65 Years	65+ Years
<ul style="list-style-type: none"> <li>• Ask about access to safe, affordable, accessible, and culturally appropriate physical activity options</li> <li>• Counsel on the importance of regular physical activity including aerobic, strength, and flexibility training</li> <li>• Advise that the CDC recommends 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity aerobic activity/week, and muscle-strengthening activities 2 days/week</li> <li>• Advise that any increase in physical activity can be beneficial in chronic disease prevention, even if not to the level of the CDC recommendation</li> </ul>	<ul style="list-style-type: none"> <li>• Emphasize the importance of balance training for older adults at risk for falling</li> </ul>
<p><b>RISK FACTORS</b></p> <p>Physical inactivity prevalence varies among racial and ethnic groups, with higher rates of inactivity outside of work among Hispanic patients, followed by Black, then American Indian and Alaska Native patients (<a href="#">CDC, 2022</a>). These differences are likely due to complex interactions of social determinants of health, including access to safe, affordable, and accessible physical activity options, access to health care, education about exercise as a prevention tool, and socioeconomic status. In addition, note that individuals with mobility disabilities report barriers to engaging in aerobic exercise (<a href="#">CDC, 2022</a>).</p> <p>There are also gender disparities in physical activity, with women reporting less physical activity than men (<a href="#">McCarthy &amp; Warne, 2022</a>). These differences are likely due to complex interactions of socioecological factors.</p> <p>Risk factors for physical inactivity include:</p> <ul style="list-style-type: none"> <li>• Living in areas that lack safe and walkable neighborhoods, or low access to physical activity options or equipment</li> <li>• Having a sedentary occupation or time limitations</li> <li>• Low socioeconomic status</li> </ul>	
<p>Resources:</p> <p><a href="#">WalkBoston</a>: This webpage is for the organization WalkBoston, which advocates to make walking safer and easier in Massachusetts to encourage better health, a cleaner environment, and more vibrant communities.</p> <p><a href="#">Physical Activity for Adults</a>: This guide helps patients understand the benefits of physical activity, and how to become more physically active.</p> <p><a href="#">Physical Activity for Older Adults</a>: This guide helps seniors understand the benefits of physical activity, and how to become more physically active.</p> <p><a href="#">A Matter of Balance</a>: A Matter of Balance: Managing Concerns About Falls is a program designed to reduce the fear of falling and increase activity levels among older adults.</p> <p><a href="#">Exercising on a Budget</a>: This resource provides ways to exercise for little or no money, including many activities that can be done in the home.</p>	

## Diet and Nutrition

### 18+ Years

- Ask about access to healthy, affordable, and culturally appropriate food options
- Refer to [SNAP](#) or other food assistance services as indicated
- Counsel on the importance of a healthy diet in the prevention of disease. A healthy diet:
  - ♦ Emphasizes nutrient dense foods including fruits, vegetables, whole grains, and low-fat dairy
  - ♦ Includes a variety of protein foods, such as seafood, lean meats and poultry, eggs, legumes (beans and peas), soy products, nuts, and seeds
  - ♦ Limits red and processed meat, refined carbohydrates, and food and beverages with added sugar, salt, and saturated, trans fats, and cholesterol
  - ♦ Stays within your daily calorie needs
- Screen for eating disorders by asking about body image and dieting patterns

#### RISK FACTORS

Often, race, ethnicity, and the social determinants of health are associated with dietary intake and related health disparities. Food insecurity and limited access to healthy foods is more common in Black, Hispanic/Latino, Native American, and Alaska Native households ([Brown et al., 2022](#); [Molitor and Kehl, 2023](#)). In addition, members of the LGBTQ Community ([Ferrero et al., 2023](#)) and people with disabilities ([Carlson et al., 2017](#)) are more likely to experience food insecurity. Note that in the United States, the most economical food choices are often highly processed with high amounts of added sugars, sodium, and saturated/trans fats.

Risk factors for poor nutrition include:

- Low socioeconomic status
- Living in areas with low accessibility to healthy, affordable, and culturally appropriate food

Resources:

[Choose My Plate](#): This webpage encourages use of the MyPlate app for patients to make better, healthier food choices.

[CDC: Healthy Weight](#): This webpage helps patients understand how to use physical activity and nutritious meals to maintain a healthy weight.

[SNAP](#): This webpage helps determine who is eligible for SNAP and how to apply for the food assistance program.

[SNAP Benefits Healthy Incentives Program \(HIP\) for Clients](#): This webpage gives you information about the Healthy Incentives Program (HIP), which helps those who receive SNAP benefits to gain access to healthy food by finding HIP authorized farmers and vendors.

[Farmers Market Nutrition Program](#): This webpage provides information about the Farmers Market Nutrition program, which gives eligible seniors and WIC families coupons to buy fresh produce at farmers markets across the state.

[1Degree](#): One Degree is an interactive tool that helps you find free, life-improving resources related to food, health, housing, employment, and more near you.

[Commodity Supplemental Food Program: Find your local program](#): This webpage provides contact information for the commodity supplemental food programs in every state.

[Find Meals when Schools are Closed](#): This webpage provides information on where to find free meals for children when school is not in session.

[Heart Healthy Recipes](#): This website provides hundreds of heart healthy recipes for breakfast, lunch, dinner, and dessert that are also tailored to different cultural groups.

## Oral Health

### 18+ Years

#### 18+ Years

- Ask about access to preventive dentistry and encourage visiting a dentist at least yearly
- Encourage use of fluoridated water and toothpaste
- Advise twice daily tooth brushing and daily flossing
- Counsel to avoid foods and drinks with added sugars
- Counsel to avoid tobacco use
- Counsel to limit alcohol use

#### RISK FACTORS

Often, race, ethnicity, and the social determinants of health are associated with lack of access to dental care. Non-Hispanic Black adults have the highest percentage of tooth decay ([CDC, 2021](#)). Note that dental coverage for adult Medicaid recipients is not required by federal law and can vary by state, which limits access to dental care for individuals on public health insurance ([CDC, 2021](#)).

Risk factors for dental caries, gum disease and undiagnosed oral cancers include:

- Living in places with lack of access to dental care
- Living in places without fluoridated water
- Low socioeconomic status
- Consumption of foods and drinks with added sugars
- Regular use of alcohol
- Regular use of tobacco

#### Resources:

[America's Tooth Fairy](#): This webpage provides resources for families to gain access to dental care, and education to help foster healthy habits to last a lifetime.

[Massachusetts Dental Society](#): The resources on this webpage can help families find the best dentists for them, and learn about low-cost dental care options.

[CDC Oral Health Tips](#): This source from the CDC lists recommendations on how to maintain good oral health

[My Water's Fluoride](#): This resource from the CDC allows people to check whether their water source is fluoridated.

## Sexual Health, Sexual Orientation, and Gender Identity

### 18+ Years

General counseling regarding safe and healthy sexual behaviors:

- Obtain sexual history and ask about involvement in sexual behaviors with sensitivity to sexual orientation and gender identity
- Counsel about responsible sexual behaviors, including definition of consent
- Discuss contraception with patients whose sexual practice might lead to pregnancy
- Ask about use/motivation/access to use contraceptive methods to prevent STIs and unintended pregnancy
- Consider preconception counseling (see *Preconception Counseling* section for more details)
- Offer PrEP (pre-exposure prophylaxis) if appropriate
- Offer PEP (post-exposure prophylaxis) if appropriate

#### Resources:

[Medical Eligibility Criteria for Contraceptive Use](#): This guide includes recommendations for using specific contraceptive methods by women and men who have certain characteristics or medical conditions.

[Sexual Consent](#): This guide provides information on what consent is and how to provide it to a sexual partner.

[CDC: Sexual Violence is Preventable](#): This guide provides information on what sexual violence is and ways and resources for those in need.

[Pre-Exposure Prophylaxis \(PrEP\)](#): This resource provides guidelines for clinicians for prescribing PrEP, and educates patients about the benefits of PrEP.

## Sleep

18+ Years	61-64 Years	65+ Years
<ul style="list-style-type: none"> <li>• Recommend consistent sleep and wake times throughout the week</li> <li>• Discourage exposure to blue light (including LED bulbs and electronic screens) for at least one hour before sleep onset</li> <li>• Recommend regular exercise to help promote sleep</li> <li>• Discourage alcohol, caffeine, and large meals before sleep</li> <li>• Discourage excess alcohol consumption throughout the day</li> </ul>		
<ul style="list-style-type: none"> <li>• Recommend 7 or more hours of sleep per night</li> </ul>	<ul style="list-style-type: none"> <li>• Recommend 7 to 9 hours of sleep per night</li> </ul>	<ul style="list-style-type: none"> <li>• Recommend 7 to 8 hours of sleep per night</li> </ul>
<p><b>RISK FACTORS</b></p> <p>There are racial and ethnic disparities in sleep duration. Black and Hispanic/Latino patients are more likely to report short sleep duration (<a href="#">Reitman, 2022</a>; <a href="#">Whinnery et al., 2014</a>). These differences are likely due to complex interactions of social determinants of health, including socioeconomic status, psychosocial and/or emotional stressors, and occupational factors.</p> <p>Risk factors for short sleep duration include:</p> <ul style="list-style-type: none"> <li>• Living below the poverty line, having low educational attainment, working more than one job, being shift workers and/or unemployed</li> <li>• Living in a crowded home and/or in a low-income neighborhood</li> </ul>		
<p>Resources:</p> <p><a href="#">Healthy Sleep Habits</a>: This guide gives information on how to establish healthy sleep habits to get a better night's sleep.</p> <p><a href="#">Sleep Wellness</a>: This guide helps on how to establish better sleep hygiene.</p> <p><a href="#">Harvard Health Letter: Blue light has a dark side</a>: This article talks about the effects of blue light on sleep, and how you can protect yourself from blue light at night.</p>		

## Tobacco, Smoking, and Vaping

### 18+ Years

- Ask about tobacco, smoking, and vaping use at every visit
- Advise all tobacco and nicotine users to quit, especially people who are pregnant
- Assess readiness to quit
- Assist tobacco and nicotine users in quitting by providing behavioral interventions and US Food and Drug Administration (FDA)–approved pharmacotherapy for cessation to nonpregnant adults who use tobacco.
- Arrange follow-up
- Discuss lung illnesses associated with use of vaping products and urge people who vape to stop

#### RISK FACTORS

American Indian and Alaska Native individuals have the highest smoking rate of any racial or ethnic group ([American Lung Association, 2022](#)). For about three in four Black people who smoke, the usual cigarette is menthol ([American Lung Association, 2022](#)). The menthol in cigarettes has been found to make it both easier to start smoking and harder to quit. Men are also more likely to smoke than women ([NIH, 2022](#)). LGBTQA+ communities also continue to be a disproportionately affected by tobacco use ([Truth Initiative, 2016](#)). In addition, according to the CDC, adults with disabilities are more likely to smoke than adults without disabilities ([CDC, 2023](#)). These differences are likely due to complex interactions of social determinants of health, including socioeconomic status, socioecological factors, and psychosocial and/or emotional stressors, as well as tobacco companies targeting marketing in low-income communities.

Risk factors for tobacco use, smoking, or vaping include:

- Age, individuals who are younger than 65 years are more likely to use tobacco products, smoke, or vape

Resources:

[Massachusetts Tobacco Cessation Program \(MTCP\)](#): The MTCP is a statewide public health program focused on comprehensive approaches to reduce tobacco and nicotine use.

[5-A's Framework](#): The 5-A's framework helps clinicians guide conversations with patients who use tobacco products to quit.

[How to Quit Smoking: CDC](#): This website gives resources to patients on how to quit using tobacco products.

[Smokefree.gov](#): This website provides tools and tips for how to begin thinking about quitting using tobacco products, and how to continue a patient's quit journey.

[HHS Million Hearts](#): HHS Million Hearts which provides tools for clinicians, including a tobacco cessation change package and resources for patients on how they can quit smoking.

## Depression

### 18+ Years

- Screen for depression annually
  - ♦ Commonly used depression screening instruments include the Patient Health Questionnaires in various forms ([PHQ-2](#) and [PHQ-9](#)) in adults, the Center for Epidemiologic Studies Depression Scale ([CES-D](#)), the Geriatric Depression Scale ([GDS](#)) in older adults, and the Edinburgh Postnatal Depression Scale ([EPDS](#)) in postpartum and pregnant persons.
- Recommend that the patient reach out to health plans for recommendations for resources to help manage depression

#### RISK FACTORS

Depression prevalence varies among racial and ethnic groups, gender identities, and sexual orientations. Black, Hispanic/Latino, American Indian, Alaska Native, and multi-racial individuals have equal or higher rates of depression than White individuals ([Blue Cross Blue Shield: The Health of America, 2022](#); [USPSTF, 2023](#)). Women ([Mayo Clinic, 2023](#)) and members of the LGBTQIA+ community ([American Psychiatric Association, 2019](#)) are also more likely to experience depression. In addition, prevalence of depression is higher among adults with disabilities than adults without disabilities ([Czeisler et al., 2021](#)). These differences are likely due to complex interactions of social determinants of health, including access to health care and experiences of discrimination, and socioecological factors, including mental health stigma. Major depression goes undiagnosed and untreated at disproportionately greater rates in majority Black, Hispanic/Latino, and American Indian, and Alaska Native communities, leading to unnecessary suffering ([Blue Cross Blue Shield: The Health of America, 2022](#); [SAMHSA, 2017](#)).

Risk factors for depression include:

- Age, young and middle-aged adults are more likely to be diagnosed with depression
- Having a family history of depression or other mental health disorders
- Being widowed or divorced
- Having a personal history of depression or other mental health disorders, or engaging in unhealthy alcohol or substance use
- Living with chronic illnesses (e.g., cancer or cardiovascular disease)
- Being in the perinatal period
- Having gone through recent stressful life events or traumatic experiences
- Having experienced adverse childhood experiences ([ACEs](#))
- Having low educational attainment
- Being unemployed
- Low socioeconomic status

Resources:

[PHQ-9](#): This tool asks about the frequency of depressed mood and anhedonia over the past two weeks.

[PHQ-2](#): This tool asks about the frequency of depressed mood and anhedonia over the past two weeks. The PHQ-2 includes the first two items of the PHQ-9.

[CES-D](#): This tool screens for depression in older adults.

[GDS](#): This tool screens for depression in older adults.

[EPDS](#): This tool screens for depression in postpartum and pregnant persons.

## Anxiety

### 18+ Years

- Screen for anxiety using the GAD-7 or other validated screening tool
- Consider screening for other types of anxiety by asking these four questions:
  1. Have you had a spell or attack when you suddenly felt frightened, anxious or uneasy? (Panic Disorder)
  2. Have you been bothered by feeling nervous, anxious or on edge over the last 6 months? (Generalized Anxiety Disorder)
  3. Have you had a problem being anxious or uncomfortable around people? (Social Anxiety Disorder)
  4. Have you had recurrent dreams or nightmares of trauma or avoidance of trauma reminders? (Post Traumatic Stress Disorder)
- Recommend that the patient reach out to health plans for recommendations for resources to help manage anxiety

### RISK FACTORS

Anxiety prevalence varies among racial and ethnic groups, gender identities, and sexual orientations. Black individuals are more likely to meet the criteria for post-traumatic stress disorder than other racial groups, while White individuals are more likely to be diagnosed with social anxiety disorder, generalized anxiety disorder, and panic disorder than other racial groups ([Asnaani et al., 2010](#)). Women ([McLean et al., 2011](#)) and members of the LGBTQIA+ community ([American Psychiatric Association, 2019](#)) are also more likely to experience anxiety. In addition, the prevalence of anxiety is higher among adults with disabilities than adults without disabilities ([Czeisler et al., 2021](#)). These differences are likely due to complex interactions of social determinants of health, including access to health care, experiences of discrimination, and socioecological factors, including mental health stigma. Anxiety disorder is underdiagnosed and undertreated at disproportionately greater rates in majority Black and Hispanic/Latino communities, leading to unnecessary suffering ([Mental Health American, 2020](#); [Williams et al., 2013](#)).

Risk factors for anxiety include:

- Having a family history of anxiety, depression, or other psychiatric disorders
- Having a personal history of anxiety, depression, or other psychiatric disorders, and/or having other chronic illnesses or medical issues
- Being in the perinatal period
- Using alcohol or nicotine products
- Being widowed or divorced
- Having gone through recent stressful life events or traumatic experiences
- Having experienced adverse childhood experiences ([ACEs](#))
- Low socioeconomic status

Resources:

[GAD-7](#): This screening tool is used to determine whether or not a patient may have an anxiety disorder that needs treatment.

[Brief Intervention for Anxiety in Primary Care Patients](#): This paper provides a simple, easy to learn, unified approach to the diagnosis, care management and pharmacotherapy of the four most common anxiety disorders (panic, generalized, and social anxiety disorders, and PTSD) in primary care.



## Unhealthy Alcohol and Substance Use

### 18+ Years

- Assess history of unhealthy substance use, including marijuana/THC, prescription drugs, or over-the-counter drugs
- Consider brief questionnaires (e.g. [AUDIT](#), [NIDA Quick Screen](#)) to help assess likelihood of unhealthy alcohol use
- Consider more in depth screening for people who admit to unhealthy use of alcohol or other substances: [NIDA](#), [ASSIST](#)
- Counsel about the effects of unhealthy alcohol and/or substance use
- Provide brief behavioral counseling to people engaged in or at risk of developing unhealthy alcohol/substance use
- Treat or refer for treatment if there is evidence of addiction
- Advise family and friends of persons with unhealthy opioid use to obtain NARCAN for emergency use.
- Discuss lung illnesses associated with use of vaping products
- Recommend that prescription medications are stored in a secure place and that any unused prescription medication is properly disposed of
- Counsel not to drive when under the influence of alcohol/substances, and not to ride with someone who is under the influence
- Advise people who are pregnant to stop drinking alcohol and using harmful substances during pregnancy, and advise them of the harmful effects of substance use on fetal development
- Recommend that the patient reach out to health plans for recommendations for resources to help manage unhealthy alcohol/substance use

### RISK FACTORS

Substance use disorder prevalence varies among racial and ethnic groups, gender identities, and sexual orientations. Estimates of unhealthy alcohol and substance use are higher for American Indian and Alaska Native people than for all other racial and ethnic groups ([SAMSHA, 2019](#)). Members of the LGBTQIA+ community ([NIH, 2020](#)) and people with disabilities ([Czeisler et al., 2021](#)) are also more likely to report unhealthy alcohol and substance use patterns. In addition, men are more likely than women to use all forms of illicit drugs ([National Institute on Drug Use, 2020](#)). These differences are likely due to complex interactions of social determinants of health, including access to health care, socioeconomic status, and experiences of discrimination.

Risk factors for unhealthy alcohol and substance use patterns include:

- Age, individuals who are ages 18-25 are more likely to engage in unhealthy substance use
- Having a family history of unhealthy alcohol or substance
- Having a personal history of mental health issues, and/or tobacco or alcohol dependence or binge drinking
- Having started using substances early on in life, and/or having used addictive substances like stimulants or opioids in the past
- Having a history of trauma, physical or sexual abuse, and/or childhood neglect

Resources:

[Massachusetts Substance Abuse Information and Education Helpline](#): The Helpline is a statewide, public resource for finding substance use treatment, recovery, and problem gambling services.

[MA Prescription Dropbox Locations](#): This webpage provides a list of prescription medication drop boxes around Massachusetts.

[SBIRT](#): This toolkit was developed to assist Massachusetts healthcare providers and organizations in implementing regular Screening, Brief Intervention and Referral to Treatment (SBIRT) for unhealthy alcohol and drug use in clinics and practices.

[Massachusetts Drug and Alcohol Addiction Treatment Centers](#): This webpage lists drug and alcohol addiction treatment centers in Massachusetts.

## Safety/Injury Prevention

### 18+ Years

- Counsel about ways to prevent household and recreational injuries. For example:
  - ◆ Safe-keeping of prescription drugs or household chemicals
  - ◆ Motor-vehicle safety/seatbelt use
  - ◆ Helmet and other protective gear for cycling, skateboarding, scootering, and motorcycles
  - ◆ Water safety
  - ◆ Concussion and traumatic brain injury
  - ◆ Alcohol and substance use
  - ◆ Carbon monoxide risks and detectors
  - ◆ Fall prevention measures in the elderly. For more information on fracture prevention refer to section on Osteoporosis.
- Advise about the dangers of firearms possession, particularly handguns, in the home. Recommend the removal of guns from the home or secure home storage with safety locks on.
- Advise to keep guns away from children, and discuss other ways to reduce accidental injury or death from guns

#### Resources:

[Fall Prevention Checklist](#): This resource helps you identify and implement safety measures in your home to prevent falls.

[A Matter of Balance](#): This resource discusses how seniors can get involved with a program to reduce the fear of falling and increase activity level among older adults.

[CDC: Injury Prevention & Control](#): The CDC's Injury Center provides resources on how to prevent violence and injury among at-risk communities.

[Stopping Elderly Accidents, Deaths, & Injuries \(STEADI\): Fall Prevention](#): This resource provides tips and resources for clinicians to help integrate fall prevention into routine clinical practice.

## Violence/Abuse in the Home

### 18+ Years

- Assess and screen for physical and behavioral signs of abuse and neglect
- Screen for intimate partner violence using the [WAST-SF](#) or [HARK](#) tools, with particular attention to those of child-bearing age
- Consider asking the following questions:
  - ◆ Have you ever been hurt or threatened by your partner, or anyone else (e.g. ex-partner, other family member)?
  - ◆ Do you ever feel afraid, controlled, or isolated by your partner or anyone else?

#### RISK FACTORS

Certain racial and ethnic groups, gender identities, and sexual orientations are more at-risk for violence/abuse in the home. Approximately 1 in 4 women have been subjected to severe intimate partner physical violence, and/or intimate partner stalking ([National Coalition Against Domestic Violence, 2012](#); [National Intimate Partner and Sexual Violence Survey, 2012](#)). Black, American Indian, Alaska Native, and Hispanic/Latino women are more likely to be a victim of physical violence, rape, and/or stalking by a partner in their lifetime ([National Intimate Partner and Sexual Violence Survey, 2012](#)). Lesbian and bisexual women are also more likely to experience physical violence, rape, and/or stalking by an intimate partner in their lifetime compared with their straight counterparts ([National Intimate Partner and Sexual Violence Survey, 2012](#)). Transgender individuals are 1.7 times more likely to experience IPV compared to cisgender individuals ([Peitzmeier et al. 2020](#)). In addition, people with disabilities are more likely to experience all forms of abuse (physical, sexual, and emotional abuse) than people without disabilities ([National Coalition Against Domestic Violence, 2018](#)). These differences are likely due to complex interactions of social determinants of health, including socioeconomic status, access to healthcare and social services, and experiences of discrimination.

Note that this section includes other categories of violence/abuse in the home, including elder and caregiver abuse. However, disparities research into elder and caregiver abuse prevalence was not available at the time of these guidelines.

Risk factors for violence or abuse in the home include:

- Age, elderly individuals are more likely to face violence or abuse in the home
- Being mentally or physically incapacitated or disabled, having a history of mental illness, or being caregivers of individuals who are mentally or physically incapacitated, disabled, or have a history of mental illness
- Being pregnant
- Being socially isolated

Resources:

[Understanding Intimate Partner Violence](#): This resource provides information about the signs of intimate partner violence, and resources to prevent it.

[National Domestic Violence Hotline](#) — 1-800-799-SAFE: This webpage provides resources and support for those who may be facing domestic violence.

[HITS](#): This document is a compilation of existing tools for assessing intimate partner violence (IPV) and sexual violence (SV) victimization (defined below) in clinical/healthcare settings.

[HARK](#): The four HARK questions accurately identify women experiencing IPV in the past year and may help women disclose abuse in general practice.

[Forge Forward](#): This lengthy, trans-specific safety planning tool covers: basic facts about intimate partner violence; safety planning; groundwork; staying safe at home; emergency safety bag; financial planning; safe havens; safety in your new place; safety on the job and in public; orders of protection; protecting children and pets; and emotional support.

## Sensory Screening

### 18+ Years

- Ask about hearing and vision impairment, and counsel or refer for further diagnosis around any issues
- Recommend eye exam at the following intervals:
  - ◆ 40-54: 2-4 years
  - ◆ 55-64: 1-3 years
  - ◆ 65+: 1-2 years
- Consider Glaucoma screening with a dilated eye exam every two years for:
  - ◆ High risk individuals ages 40 and over
  - ◆ All individuals ages 60 and over

#### RISK FACTORS

There are racial/ethnic disparities in vision loss. Black Hispanic/Latino individuals have higher rates of diabetic retinopathy and have higher rates of vision impairment compared with their White counterparts ([Baregian et al., 2017](#); [Zambelli-Weiner et al., 2012](#)). These differences are likely due to complex interactions of social determinants of health, including socioeconomic status and access to quality and affordable healthcare.

Black individuals have double the rate of glaucoma compared with their White and Hispanic/Latino counterparts ([Zambelli-Weiner et al., 2012](#)). Research into genetic components of this increased risk warrant additional exploration.

Risk factors for vision loss include:

- Having a family history of vision loss

Resource:

[Massachusetts Commission for the Deaf & Hard of Hearing](#): MCDHH provides accessible communication, education, and advocacy to consumers and private and public entities so that programs, services, and opportunities throughout Massachusetts are fully accessible to persons who are deaf and hard of hearing.

# Infectious Disease Screening

[Traveler's Health](#) (Vaccines, Medicines, Advice)

## COVID-19

### 18+ Years

- Recommend vaccination to all eligible adults, with attention to underlying causes of vaccine hesitancy
- Advise patients on prevention measures including vaccination, wearing masks, social distancing, and avoiding places with poor ventilation and air circulation
- Counsel patients at higher risk of developing severe disease from COVID-19 on disease prevention, emphasizing the risk of developing more severe disease and the need for strict and consistent measures to avoid contact with potentially infected people

### RISK FACTORS

The highest rates of COVID-related infection, hospitalization, and death are observed among Black, Hispanic/Latino, and Asian individuals, and where data exist, American Indian, Alaska Native, and Pacific Islander populations ([Lopez et al., 2021](#); [Tanne, 2023](#)). People with intellectual and developmental disabilities are also more likely to develop severe complications from COVID-19 ([CDC, 2021](#)). These differences are likely due to complex interactions of social determinants of health, including socioeconomic status and access to quality and equitable healthcare services.

Risk factors for severe complications from COVID-19 infection include:

- Age, individuals who are age 65 and older are more likely to develop severe complications from COVID-19 infection
- Having multiple underlying medical conditions or living with disabilities
- Living in a congregate setting
- Not being physically active
- Being immunocompromised
- Having a personal history of the following medical conditions: cancer; cerebrovascular disease; chronic kidney disease; chronic liver disease (cirrhosis, non-alcoholic fatty liver disease, alcoholic liver disease, autoimmune hepatitis); chronic lung diseases, including COPD (chronic obstructive pulmonary disease), interstitial lung disease, bronchopulmonary dysplasia, bronchiectasis, pulmonary embolus, and pulmonary hypertension; cystic fibrosis; dementia; diabetes (type 1 or type 2); disabilities including ADHD, cerebral palsy, birth defects, intellectual and developmental disabilities, down syndrome, spinal cord injuries; heart conditions, such as heart failure, coronary artery disease, cardiomyopathies or hypertension; HIV; mental health disorders (mood disorders and schizophrenia spectrum disorders; overweight/obesity; pregnancy and recent pregnancy; sickle cell disease or thalassemia; smoking (current and former); substance use disorder; tuberculosis

## Mpox

### 18+ Years

- Vaccinate individuals at risk of contracting mpox

#### RISK FACTORS

Men who have sex with men and individuals who identify as transgender and gender diverse are at increased risk for contracting mpox ([CDC, 2024](#)). These differences are likely due to complex interactions of social determinants of health, including access to affordable and equitable sexual health services, socioecological factors, and experiences of discrimination.

Risk factors for mpox include:

- Having had sexual or intimate contact with someone who may have mpox
- In the last 6 months, having had or expect to have:
  - ◆ One or more sexually transmitted infections
  - ◆ A weakened immune system because of another illness like HIV
  - ◆ Sexual or intimate contact with a person who is at risk of mpox
  - ◆ Anonymous sexual or intimate contact, or more than one sexual partner

Resources:

[CDC: Mpox](#): This resource outlines Mpox prevention steps.

[Mpox Vaccination Basics](#): This resource reviews Mpox vaccination basics.

## Sexually Transmitted Infections (Chlamydia, Gonorrhea, Syphilis, HPV)

### 18+ Years

- Obtain sexual history
- Recommend condom use for anal, vaginal, and oral intercourse
- Counsel on effective ways to reduce the risk of infection based on patient's sexual history, current practices, and risk factors
- Assess risk to identify people who need more frequent screening

#### Chlamydia and gonorrhea

- Screen all sexually active female patients age 24 and younger annually
- Starting at age 25, screen if at risk

#### RISK FACTORS

Black, Hispanic/Latino, Asian, American Indian, Alaska Native, Native Hawaiian and other Pacific Islander individuals have higher rates of chlamydia and gonorrhea compared with their White counterparts ([CDC, 2023](#)). These differences are likely due to complex interactions of social determinants of health, including socioeconomic status and access to affordable and equitable sexual health services.

Risk factors for chlamydia or gonorrhea infection include:

- Engaging in condomless anal, vagina, or oral intercourse
- Having sex with individuals who have chlamydia or gonorrhea
- Being sexually active under 25 years of age
- Having a personal history of or currently have sexually transmitted infections
- Having new or multiple sex partners, or their current partner(s) have other sexual partner(s)
- Using injection drugs
- Exchanging sex for money or drugs
- Having recently entered correctional facilities

## Syphilis

- Screen if at risk

### RISK FACTORS

Black, Hispanic/Latino, Asian, American Indian, Alaska Native, Native Hawaiian and other Pacific Islander individuals have higher rates of syphilis compared with their White counterparts. These differences are likely due to complex interactions of social determinants of health, including socioeconomic status and access to affordable and equitable sexual health services.

Note that most cases of syphilis in the United States are among men who have sex with men and individuals who identify as transgender and gender diverse ([CDC, 2021](#)). These differences are likely due to complex interactions of social determinants of health, including access to affordable and equitable sexual health services, socioecological factors, and experiences of discrimination.

Risk factors for syphilis include:

- Engaging in condomless anal, vagina, or oral intercourse
- Having sex with individuals who have syphilis
- Having a personal history of or currently have sexually transmitted infections
- Having new or multiple sex partners, or their current partner(s) have other sexual partner(s)
- Using injection drugs
- Exchanging sex for money or drugs
- Having recently entered correctional facilities
- Living in areas with increased syphilis morbidity

Resources:

[NCHHSTP Atlas Plus: HIV, Viral Hepatitis, STD, and TB](#): This resource provides the case rates of HIV across the country.

[NCHHSTP Atlas Plus: Syphilis](#): This resource provides the county-level rates of syphilis among women across the country.

[CDC Rates of Syphilis by State](#): This resource provides a ranking of syphilis rates by state.

## HPV

- See cervical cancer screening section for screening recommendations.
- Counsel regarding schedule for HPV vaccine
- Recommend HPV vaccination for people age 26 and under, if not previously vaccinated
- Use shared decision making for adults ages 27-45 who are inadequately or not vaccinated

### RISK FACTORS

Men who have sex with men and individuals who identify as transgender and gender diverse are at increased risk for contracting HPV ([Meites et al., 2022](#)). These differences are likely due to complex interactions of social determinants of health, including access to affordable and equitable sexual health services, socioecological factors, and experiences of discrimination.

Risk factors for HPV include:

- Engaging in condomless anal, vagina, or oral intercourse
- Having sex with individuals who have HPV.
- Having HIV or another disease or condition that weakens the immune system.
- Having new or multiple sex partners, or their current partner(s) have other sexual partner(s)
- Using injection drugs
- Exchanging sex for money or drugs
- Having recently entered correctional facilities.
- Not being vaccinated for HPV

(continued on next page)

## Sexually Transmitted Infections (continued)

Resources:

[HPV Vaccine Resources for Clinicians](#): Use the information and materials on this site to help you and your staff communicate effectively with parents about the importance of HPV vaccination.

[HPV Vaccination for Adults Aged 27-45 Years](#): This resource is a shared decision-making tool to help providers discuss HPV vaccination with adult patients.

[Sexually Transmitted Infections \(STI\) Fact Sheets](#): This webpage provides fact sheets for patients that answers basic questions about sexually transmitted infections.

[NCHHSTP Atlas Plus: HIV, Viral Hepatitis, STD and TB](#): This resource provides the case rates of HIV across the country.

## Hepatitis B

18-59 Years	60+ Years
<ul style="list-style-type: none"> <li>• Counsel on risk factor reduction</li> <li>• Screen those at risk for hepatitis B who have not been vaccinated</li> <li>• Advise vaccination for all adults 18-59</li> </ul>	<ul style="list-style-type: none"> <li>• Counsel on vaccination for patients not vaccinated and at high risk</li> <li>• Offer vaccination to any unvaccinated adult over 60 who would like to be vaccinated</li> </ul>

### RISK FACTORS

Hepatitis B virus infection prevalence varies among racial and ethnic groups, with the highest rates among Black, Asian, and Pacific Islander communities ([HHS, 2018](#); [Kim et al., 2017](#)). Men who have sex with men and individuals who identify as transgender and gender diverse are also at increased risk for contracting Hepatitis B ([Adeyemi et al., 2021](#)). Differences in Hepatitis B virus infection prevalence by race, gender identity, and sexual orientation are likely due to complex interactions of social determinants of health, including access to affordable and equitable medical care, socioecological factors, and experiences of discrimination.

Risk factors for Hepatitis B include:

- Having sex with individuals who have Hepatitis B
- Having a positive HIV infection and/or receive hemodialysis or cytotoxic immunosuppressive therapy
- Being an immigrant or having parents who have immigrated from high-risk areas (born in area with HBsAg prevalence >2% or born in US with parents born in area with HBsAg prevalence >8%)
- Sharing contaminated needles, syringes, and other injecting equipment and drug solutions when injecting drugs
- Having household or sexual contacts with persons with chronic HBV infection
- Being at risk for occupational exposure to blood or blood-contaminated body fluids as a healthcare and/or public safety workers
- Not being vaccinated for Hepatitis B
- See [MHQP's Perinatal Guidelines](#) for guidance for screening pregnant persons



## Hepatitis C

### 18+ Years

- Counsel about risk factor reduction.
- Screen all adults aged 18 – 79 years
- Note that most adults need to be screened only once. However, persons with continued risk for HCV infection (eg. PWID) should be screened periodically
- Periodic testing of all patients at high risk

#### RISK FACTORS

Hepatitis C virus infection prevalence varies among racial and ethnic groups, with the highest rates among Black, American Indian, and Alaska Native patients ([HHS, 2018](#)). In addition, men who have sex with men are at greater risk of contracting Hepatitis C if they are also engaging in higher risk sexual activities ([CDC, 2016](#); [Mayo Clinic, 2023](#)). Differences in Hepatitis C virus infection prevalence by race are likely due to complex interactions of social determinants of health, including access to affordable and equitable medical care.

Risk factors for Hepatitis C infection include:

- Being born between 1945-1965
- Being a recipient of blood product for clotting problems before 1987
- Having had a blood transfusion or solid organ transplant before July 1992 (if not previously tested)
- Having long-term kidney dialysis
- Having HIV
- Being born to mother with Hepatitis C
- Current or past use of intranasal or injection drugs
- Having a tattoo or body piercing by non-sterile needle
- Having been incarcerated

## HIV

### 18+ Years

- Counsel about risk factor reduction
- Screen all individuals 18 years of age and older, with annual testing for those at increased risk
- Test individuals at least once in their lifetimes
- Assess risk to identify people who need more frequent screening
- Offer pre-exposure prophylaxis for anyone who is currently HIV negative but is at significant risk for contracting HIV
- Offer post-exposure prophylaxis when indicated

#### RISK FACTORS

Black and Hispanic/Latino communities are disproportionately affected by HIV compared to other racial/ethnic groups ([CDC, 2023](#)). In addition, HIV infection continues to disproportionately affect transgender women ([HIV.gov, 2022](#)), gay, bisexual, and other men who have sex with men ([CDC, 2023](#)). These differences are likely due to complex interactions of social determinants of health, including socioeconomic status, access to affordable and equitable medical care, socioecological factors, and experiences of discrimination.

Risk factors for HIV infection include:

- Engaging in condomless anal or vaginal intercourse
- Having had more than one sex partner or having sex partners who have had more than one sex partner since their most recent HIV test
- Having a personal history of or currently have sexually transmitted infections
- Exchanging sex for money or drugs and/or having sex with individuals who have HIV
- Engaging in harmful use of alcohol and drugs in the context of sexual behavior
- Sharing contaminated needles, syringes, and other injecting equipment and drug solutions when injecting drugs
- Receiving unsafe injections, blood transfusions and tissue transplantation, and medical procedures that involve unsterile cutting or piercing
- Experiencing accidental needle stick injuries, including among health workers

Indications for pre-exposure prophylaxis: Ongoing sexual contact with partner who is HIV +, men who have sex with men, having anal intercourse without condoms or have had any STD within 6 months and are not in monogamous relationship, heterosexual men or women who have sex without condoms with partner of unknown HIV status, IV drug users who have shared IV drugs or needles within past 6 months

Resources:

[HIV Testing Guidelines](#): The listed documents provide the most updated CDC guidelines on HIV testing for testing providers, program managers; and laboratory personnel.

[Pre-Exposure Prophylaxis \(PrEP\)](#): This resource provides guidelines for clinicians for prescribing PrEP, and educates patients about the benefits of PrEP.

[About Post-Exposure Prophylaxis \(PEP\)](#): This resource provides information for clinicians about PEP and educates patients about the benefits of PEP.

## Tuberculosis (TB)

### 18+ Years

- Screen all patients at increased risk. Determine the need for repeat testing by the likelihood of continuing exposure to infectious TB.
  - ♦ Administer tuberculin skin test (TST) for individuals with no past BCG vaccination
  - ♦ Consider IGRA for individuals who have received BCG vaccination or who are at risk for not returning for reading of the TST

#### RISK FACTORS

The TB case rate is higher among Black, Hispanic/Latino, and Asian individuals than for White individuals ([CDC 2021](#)). These disparities are likely due to complex interactions of social determinants of health, including access to affordable and equitable medical care.

Risk factors for tuberculosis infection include:

- Having a personal history of being immunosuppressed (HIV positive or using immunosuppressant drugs)
- Having a personal history of silicosis
- Being born in or resident of a country with high rates of TB
- Living in or have lived in communities where prevalence of TB is high (prisons, shelters, migrant farm settings)
- Having contacts of patients with active TB, and/or being workers exposed to high risk populations

Resources:

[CDC: Tuberculosis \(TB\)](#): This webpage provides resources for clinicians and patients about how to prevent TB.

[NCHHSTP Atlas Plus: HIV, Viral Hepatitis, STD and TB](#): This resource provides the case rates of STIs across the country, as well as viral hepatitis, HIV, and TB.

## Mosquito- and Tick-Borne Illnesses

### 18+ Years

#### Zika

- Note that there have been no cases in the US and its territories since 2019
- Refer to Preconception Counseling section for Zika recommendations

#### RISK FACTORS

Patients may be more likely to develop Zika infection if they:

- Engage in unprotected intercourse with recent travelers from areas where Zika is present
- Have recently traveled to certain geographic locations, such as Africa, Southeast Asia, the Americas, the Caribbean, and the Pacific

#### Other Mosquito and Tick-Borne Illnesses

- Counsel on prevention of other mosquito-borne illnesses, including [Eastern Equine Encephalitis \(EEE\)](#) and [West Nile Virus](#).
- Recommend that patients who are at risk of exposure to tick-borne diseases use insect repellents that provide protections for the amount of time they will be outdoors and to check skin and clothes for ticks every day.

Resources:

[Zika Virus](#): This webpage provides information about how to prevent Zika infection when traveling abroad.

[Eastern Equine Encephalitis](#): This webpage provides resources for patients on how to prevent EEE infection.

[West Nile Virus](#): This webpage provides resources for patients on how to prevent WNV infection.

[Protecting Yourself from Ticks and Mosquitoes](#): This resource provides information about tick and mosquito borne illnesses, and how you can protect yourself from being infected.

# Screening and Guidance for Age Specific Conditions

## Menstruation

### 18-55 Years

- Ask at every visit for the patient’s first day of her last menstrual period and the pattern of menses
- Screen for abnormal menstrual patterns
- Ask about access to menstrual products
- Educate about range of products for use during menses, including reusable products like pads and cups

Resources:

[Period Products](#): This resource for patients provides information about the types of products to use during your period.

[Flo Period & Ovulation Tracker](#): This app helps patients with tracking their menstrual cycle and ovulation.

## Preconception Counseling

Note: See [MHQP’s Perinatal Guidelines](#) for complete recommendations on prenatal care.

### 18–49 Years

- Advise all females of child-bearing age to take a daily multivitamin containing 0.4 – 0.8 mg folate
- Counsel current smokers to quit smoking (see *Tobacco, Smoking, and Vaping* section for resources to help quit smoking)
- Encourage scheduling a visit for preconception counseling to include review of appropriate immunization status, chronic illnesses, current medications, whether there is need to make any changes based on teratogenicity, and consideration of genetic testing
- Inform patients on the impact of alcohol, drug, tobacco, and environmental exposures in early pregnancy, often before pregnancy is diagnosed
- If patient is overweight or obese, recommend weight loss before becoming pregnant
- Recommend that patients with diabetes or pre-diabetes achieve optimal glycemic control prior to pregnancy
- Counsel patients of child-bearing age on the importance of oral health and routine dental care before pregnancy
- Recommend HIV testing for patient and partner
- Counsel on HIV prevention and ways to reduce HIV transmission during conception and pregnancy, and offer pre-exposure prophylaxis if indicated
- Review travel restrictions during pregnancy and the preconception period, including avoiding travel to an area with active Zika virus transmission
- Advise patients who have been exposed to or have had Zika to avoid conception for 8 weeks from the last exposure or onset of symptoms
- Advise partners who have been exposed to or have had Zika to avoid procreation for at least 3 months from the last exposure or onset of symptoms

#### RISK FACTORS

Black, American Indian, and Alaska Native women have higher rates of pregnancy-related death compared to White women ([KFF, 2022](#)). Black, American Indian, Alaska Native, and Native Hawaiian and Other Pacific Islander women also have higher shares preterm births, low birthweight births, or births for which they received late or no prenatal care compared to White women ([KFF, 2022](#)). These differences are likely due to complex interactions of social determinants of health, including access to quality and equitable health and maternal care, experiences of discrimination, and socioecological factors.

Resources:

[Preconception Counseling and Care of Women of Childbearing Age Living with HIV](#): This resource provides guidelines for clinicians on how to provide preconception counseling for HIV positive women.

[Before Pregnancy](#): This resource provides information for women on what steps they must take to ensure the health of a baby in the future.

[National Preconception Health and Health Care \(PCHHC\)](#): The Preconception Resource Guide is designed to help primary care providers meet their patient’s needs based on the response to this “vital sign” question: “Would you like to become pregnant in the next year?”

## Menopause Management

### 40+ Years

- Counsel symptomatic females on the management of menopause, including the risks and benefits of hormonal and non-hormonal therapies
- USPSTF recommends against the use of combined estrogen and progestin or estrogen only in most females

## Osteoporosis

### 50+ Years

- Counsel about preventive measures, including dietary calcium and vitamin D intake, weight-bearing exercise, and smoking cessation
- Counsel frail patients on specific measures to prevent falls
- Offer bone mineral density (BMD) testing to females over 65
- Recommend exercise interventions to prevent falls in community-dwelling adults  $\geq 65$  who are at increased risk for falls
- Consider offering multifactorial interventions to prevent falls in community-dwelling adults  $\geq 65$  who are at increased risk for falls
- Offer bone mineral density (BMD) testing to post-menopausal females who are at high risk

#### RISK FACTORS

Note that research shows that there are higher rates of osteoporosis in White and Asian women compared to their Black counterparts ([Noel et al., 2021](#)). Other ethnic disparities are understudied. Fracture risk also varies, although there is insufficient data on this. Black women who do suffer osteoporosis-related fractures have poorer outcomes than their White counterparts (National Council on Aging, 2022). These differences are likely due to complex interactions of social determinants of health, including socioeconomic status and access to healthcare and screening services.

Risk factors for osteoporosis include:

- Age, the risk of fracture increases with age and individuals who are ages 50 and older are more likely to develop osteoporosis
- Sex, females are more likely to develop osteoporosis than males
- Having family histories of fractures as an adult
- Having a small bone structure and low body weight (under 127 lbs)
- Having certain menopause or menstrual histories
- HIV infection
- Using anti-retroviral therapy
- Using certain medications
- Having certain chronic diseases
- Using tobacco
- Not being physically active

Resources:

[WHO Fracture Risk Assessment Tool \(FRAX\)](#): This calculator is used by clinicians to calculate the ten year probability of fracture.

[Fall Prevention Checklist](#): This resource helps you identify and implement safety measures in your home to prevent falls.

[Mayo Clinic Bone Health Choice Decision Aid](#): This decision guide is to be used with clinician during clinical encounter to determine which plan is best to reduce risk of fracture.

[A Matter of Balance](#): A Matter of Balance: Managing Concerns About Falls is a program designed to reduce the fear of falling and increase activity levels among older adults.

## Cognitive Impairment

### 50+ Years

- Observe for possible signs of declining cognitive function in older patients. If signs/symptoms are present, conduct structured assessment using validated screening tool (e.g. [GPCOG](#), [MIS](#), [Mini-Cog](#), [MoCA](#))
- Evaluate mental status in patients who have problems performing daily activities

#### RISK FACTORS

Note that research has demonstrated that several adverse determinants such as poverty, low education, access to healthcare, isolation, and chronic conditions are associated with cognitive decline ([Gupta, 2021](#)).

## End of Life Planning

### 18+ Years

- Discuss establishing advance directives for medical and end-of-life decisions, including a living will, designation of a proxy with durable power-of-attorney, or a medical directive established with a physician

#### Resources:

[Making Decisions with Families at the End of Life](#): This resource helps clinicians on how to have fruitful and informative discussions with families during the end of life.

[IHI: The Conversation Project](#): The Conversation Project has toolkits to help patients talk about their wishes for care through the end of life, so those wishes can be understood and respected.

[PREPARE for your Care](#): This toolkit assists patients with how to talk to their doctors, and how to make medical decisions for themselves and others.