

The Adult Well-Male Examination

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The adult well-male examination should provide evidence-based guidance toward the promotion of optimal health and well-being. The medical history should focus on tobacco and alcohol use, risk of human immunodeficiency virus and other sexually transmitted infections, and diet and exercise habits. The physical examination should include blood pressure screening, and height and weight measurements to calculate body mass index. Lipid screening is performed in men 40 to 75 years of age; there is insufficient evidence for screening younger men. One-time screening ultrasonography for detection of abdominal aortic aneurysm is recommended in men 65 to 75 years of age who have ever smoked. Screening for prostate cancer using prostate-specific antigen testing in men 55 to 69 years of age should be individualized using shared decision making. Screening for colorectal cancer should begin at 50 years of age for average-risk men and continue until at least 75 years of age. Screening options include fecal immunochemical testing, colonoscopy, or computed tomography colonography. Lung cancer screening using low-dose computed tomography is recommended in men 55 to 80 years of age who have at least a 30-pack-year smoking history and currently smoke or have quit within the past 15 years. Immunizations should be updated according to guidelines from the Advisory Committee on Immunization Practices. (*Am Fam Physician*. 2018;98(12):729-737. Copyright © 2018 American Academy of Family Physicians.)

The goals of the adult well-male examination are to provide evidence-based guidance toward the promotion of optimal health and well-being, to screen for and potentially prevent premature morbidity and mortality from chronic diseases, and to provide age-appropriate cancer screening and immunizations. Most primary care guidelines come from the U.S. Preventive Services Task Force (USPSTF) and have been adopted by the American Academy of Family Physicians (AAFP).^{1,2} Some subspecialty guidelines offer additional guidance but may have conflicting recommendations. Currently, there is no accepted guideline for frequency of adult well-male examinations, although many private health insurance plans and Medicare recommend annual examinations.

In 2007, men 15 to 65 years of age were significantly less likely than women to seek preventive care services from a primary care physician (15% vs. 44% of total visits, respectively).³ In 2000, one in three men reported not having a primary care physician, compared with one in five women.⁴ No data are available on the impact of the Patient Protection

and Affordable Care Act. The life expectancy of U.S. men in 2015 was 76.3 years, a slight decrease from previous averages and five years lower than that of women.⁵ Table 1 includes Centers for Disease Control and Prevention statistics related to men's health and well-being.⁶

History

For the evaluation of men, the patient history should be comprised of medical and surgical histories, current medications, and allergies. Family history relevant to the risk of chronic diseases and cancer should also be included. Social history should focus on lifestyle risks that contribute to premature morbidity and mortality, including substance use, risk of human immunodeficiency virus and other sexually transmitted infections (STIs), and diet and exercise habits.

WHAT IS NEW ON THIS TOPIC

Adult Well-Male Examination

The life expectancy of U.S. men in 2015 was 76.3 years, a slight decrease from previous averages and five years lower than that of women.

The U.S. Preventive Services Task Force found insufficient evidence to recommend for or against lipid screening in any risk group younger than 40 years.

CME This clinical content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz on page 711.

Author disclosure: No relevant financial affiliations.

Patient information: A handout on this topic is available at <https://www.aafp.org/afp/2012/0515/p972.html>.

SORT: KEY RECOMMENDATIONS FOR PRACTICE

Clinical recommendation	Evidence rating	References
Men should be counseled about healthy lifestyle habits, including:		
Smoking cessation	A	7
Limiting alcohol intake	B	8
Receiving age-appropriate immunizations at recommended intervals	C	75
Recommended screening in men includes:		
Human immunodeficiency virus infection in all men	A	13
Hypertension in all men	A	25
Diabetes mellitus in men 40 to 70 years of age who are overweight or obese	B	31
Dyslipidemia in men 40 to 75 years of age	B	33
Prostate cancer in some men 55 to 69 years of age, based on shared decision making	C	55
Colorectal cancer in average-risk men 50 to 75 years of age, using fecal immunochemical testing, colonoscopy, or computed tomography colonography	A	57
Lung cancer in men 55 to 80 years of age who have at least a 30-pack-year smoking history and currently smoke or have quit within the past 15 years	B	59

A = consistent, good-quality patient-oriented evidence; **B** = inconsistent or limited-quality patient-oriented evidence; **C** = consensus, disease-oriented evidence, usual practice, expert opinion, or case series. For information about the SORT evidence rating system, go to <https://www.aafp.org/afpsort>.

TABLE 1

Statistics on Men's Health and Well-Being

- 56% of men \geq 18 years meet the federal physical activity guidelines for aerobic activity through leisure-time aerobic activity*
- 34% of men \geq 20 years are obese†
- 33% of men \geq 20 years have hypertension and/or take antihypertensive medication‡
- 32% of men \geq 18 years have had five or more alcoholic drinks in one day at least once in the past year*
- 18% of men \geq 18 years currently smoke cigarettes*
- 12% of men $<$ 65 years do not have health insurance*
- 12% of men \geq 18 years rate their overall health as fair or poor‡

*—2016 data.

†—2011 to 2014 data.

‡—2015 data.

Information from reference 6.

Evaluation of men with Medicare should also include gait stability, their ability to achieve activities of daily living, and depression screening.

Screening for Lifestyle and Mental Health Risks

Table 2 summarizes screening guidelines for lifestyle and mental health risks in men.⁷⁻²¹

TOBACCO AND SUBSTANCE USE

Men should be asked about tobacco and alcohol use at every visit.^{7,8} The USPSTF found insufficient evidence to recommend for or against screening for illicit drug use⁹; however, the National Institute on Drug Abuse recommends screening for nonmedical prescription drug use and other illicit drug use.¹⁰ Clinicians can use recommended counseling approaches such as the 5 A's (ask, advise, assess, assist, and arrange), the CAGE questionnaire, or motivational interviewing.^{8,22}

SEXUALLY TRANSMITTED INFECTIONS

Men with risk factors, including men with multiple sex partners, men who engage in unprotected sex, and men who have sex with men, should be

screened for STIs.^{11,12,23} There is good evidence of increased yield from routine screening for human immunodeficiency virus infection in persons who report no individual risk factors but are seen in high-risk or high-prevalence clinical settings, including STI clinics, correctional facilities, homeless shelters, tuberculosis clinics, clinics serving men who have sex with men, and adolescent health clinics that have a high prevalence of STIs. However, all men should be offered screening.¹³

One study concluded that counseling patients about the use of condoms is likely to benefit some patients at STI clinics and minimize the risk of infection transmission, although it is unlikely to benefit men who have sex with men.²⁴ The cost-effectiveness of implementing behavioral counseling in STI programs is unclear, but feasibility would be improved if behavioral counseling were implemented in the context of other prevention efforts.

DEPRESSION

Men should be screened for depression using the two-item Patient Health Questionnaire (PHQ; http://www.commonwealthfund.org/usr_doc/PHQ2.pdf). If results of the PHQ-2 are positive, the patient should be further

TABLE 2

Screening Guidelines for Lifestyle and Mental Health Risks in Men

Risk	USPSTF/AAFP recommendation*	Other recommendations/comments
Tobacco use	Inquire about tobacco use at every visit, and provide men who use tobacco with behavioral interventions and U.S. Food and Drug Administration-approved pharmacotherapy to aid in cessation (grade A, 2015) ⁷	—
Alcohol use	Screen for misuse, and offer brief behavioral counseling interventions for patients engaged in risky drinking (grade B, 2013) ⁸	Risky drinking in men is defined as consuming more than 14 alcoholic drinks per week or more than four drinks on one occasion; a maximum of two drinks on one occasion is recommended
Illicit drug use	Insufficient evidence to recommend for or against routine screening (grade I, 2008) ⁹	The National Institute on Drug Abuse recommends checking for nonmedical prescription drug use and other illicit drug use with screening and brief intervention procedures in general medical settings ¹⁰
STIs	USPSTF: Screen for STIs, including syphilis (grade A; 2016), in men at high risk, and provide high-intensity behavioral counseling when appropriate (grade B, 2014) ^{11,12} ; screen all men 15 to 65 years of age for HIV infection (grade A, 2013) ¹³ AAFP: Screen all men 18 to 65 years of age for HIV infection ¹⁴	The Centers for Disease Control and Prevention recommends screening all men up to 64 years of age for HIV at least once, regardless of risk factors ¹⁵ ; all sexually active men who have sex with men should be offered HIV screening at least annually, and some men who have sex with men may be offered screening every three or six months based on individual risk factors and local HIV epidemiology ¹⁶
Depression	Screen all men when adequate care support systems exist to ensure accurate diagnosis, effective treatment, and appropriate follow-up (grade B, 2016) ¹⁷	—
Obesity	Screen all men for obesity using body mass index measurement; refer patients with a body mass index of 30 kg per m ² or higher for intensive, multicomponent behavioral interventions (grade B, 2012) ¹⁸	Gradual and sustained weight loss should be encouraged in men whose weight exceeds the ideal for height
Healthy diet and physical activity	Offer or refer adults who are overweight or obese and have additional CVD risk factors to intensive behavioral counseling interventions to promote a healthful diet and physical activity for CVD prevention (grade B, 2014) ¹⁹	The Dietary Guidelines for Americans recommends a decrease in daily intake of saturated fat, cholesterol, sodium, and added sugar ²⁰ The U.S. Department of Health and Human Services and U.S. Department of Agriculture recommend that men participate in at least 150 minutes of moderate-intensity aerobic exercise per week, as well as muscle strengthening at least twice per week ²¹

AAFP = American Academy of Family Physicians; CVD = cardiovascular disease; HIV = human immunodeficiency virus; STI = sexually transmitted infection; USPSTF = U.S. Preventive Services Task Force.

*See <https://www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions> for definitions of the USPSTF evidence grades. These are different than *American Family Physician's* Strength-of-Recommendation Taxonomy (SORT). Unless indicated, the AAFP supports USPSTF recommendations.

Information from references 7 through 21.

evaluated using the PHQ-9 (https://www.phqscreeners.com/sites/g/files/g10049256/f/201412/PHQ-9_English.pdf).¹⁷

Screening for Chronic Conditions

Table 3 summarizes screening guidelines for chronic conditions in men.^{18,25-40}

CARDIOVASCULAR RISK

Components of the adult well-male examination include blood pressure screening and height and weight measurements to calculate body mass index (BMI).^{18,25}

Hypertension. Men should be screened for high blood pressure.²⁵ When treatment decisions are being made, blood pressure should be considered with global risk of cardiovascular disease (CVD); smoking status; presence of diabetes mellitus, dyslipidemia, or obesity; physical activity level; age; and sex.²⁵ Hypertension (defined as a systolic blood pressure of 140 mm Hg or higher or a diastolic blood pressure of 90 mm Hg or higher by the Eighth Report of the Joint National Committee on the Prevention, Detection, Evaluation, and Treatment of High Blood Pressure [JNC-8]) can be diagnosed after two or more

TABLE 3

Screening Guidelines for Chronic Conditions in Men

Disease	USPSTF/AAFP recommendation*	Other recommendations/comments
Hypertension	USPSTF: Annual screening is recommended for adults 40 years or older and for adults with risk factors; adults 18 to 39 years of age with no risk factors should be rescreened every 3 to 5 years (grade A, 2015) ²⁵ AAFP: Endorses JNC-8 recommendations ²⁶	JNC-7 recommends screening every two years if blood pressure is less than 120/80 mm Hg and yearly if blood pressure is 120 to 139/80 to 89 mm Hg ²⁷ ; JNC-8 does not provide screening guidance ²⁸ Ambulatory blood pressure monitoring is the reference standard for confirming elevated office blood pressure measurements to avoid misdiagnosis and overtreatment of persons with isolated clinic hypertension (white coat hypertension) ²⁹
Obesity	Screen all men for obesity (BMI greater than 30 kg per m ²), and offer or refer for intensive, multicomponent behavioral interventions (grade B, 2012) ¹⁸	The Canadian Task Force on Preventive Health Care recommends measuring height and weight to calculate BMI at appropriate primary care visits ³⁰
Type 2 diabetes mellitus	Screen for abnormal blood glucose levels as part of the cardiovascular risk assessment in men 40 to 70 years of age who are overweight or obese; offer or refer patients with abnormal blood glucose levels for intensive behavioral counseling interventions to promote a healthy diet and physical activity (grade B, 2015) ³¹	The American Diabetes Association recommends diabetes screening in all men 45 years and older and in asymptomatic men with BMI greater than 25 kg per m ² and cardiovascular disease risk factors ³²
Dyslipidemia	Screen men 40 to 75 years of age (grade B, 2016); insufficient evidence to recommend for or against screening in any risk group younger than 40 years; optimal screening interval is uncertain ³³	The National Cholesterol Education Program recommends screening with a fasting lipoprotein profile every five years ³⁴
Abdominal aortic aneurysm	Screen men 65 to 75 years of age who have ever smoked (at least 100 cigarettes smoked within the patient's lifetime) using one-time screening ultrasonography (grade B, 2014); selectively screen men 65 to 75 years of age who have never smoked (grade C, 2014) ³⁵	No subspecialty guidelines endorse screening
Osteoporosis	Insufficient evidence to recommend for or against screening (grade I, 2018) ³⁶	Men most likely to benefit from screening would have a 10-year risk of osteoporotic fracture equal to or greater than that of a 65-year-old white woman who has no additional risk factors ³⁶ The National Osteoporosis Foundation recommends bone mineral density testing for all men 70 years or older and for men 50 to 69 years of age with risk factors (e.g., frailty, low BMI) ³⁷
Chronic obstructive pulmonary disease	Do not screen asymptomatic men using spirometry (grade D, 2016) ³⁸	No subspecialty guidelines endorse screening
Hepatitis C	Screen men at high risk of infection and offer one-time screening for men born between 1945 and 1965 (grade B, 2013) ³⁹	American Gastroenterological Association: Routine hepatitis C screening is recommended for adults born between 1945 and 1965 and for adults with transmission risk factors; patient education on screening, proactive case-finding through electronic health records, and engagement with primary care services for discussions about screening are also recommended ⁴⁰

AAFP = American Academy of Family Physicians; BMI = body mass index; JNC = Joint National Committee on the Prevention, Detection, Evaluation, and Treatment of High Blood Pressure; USPSTF = U.S. Preventive Services Task Force.

*See <https://www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions> for definitions of the USPSTF evidence grades. These are different than *American Family Physician's Strength-of-Recommendation Taxonomy (SORT)*. Unless indicated, the AAFP supports USPSTF recommendations.

Information from references 18, and 25 through 40.

elevated readings are obtained on at least two visits over a period of one to several weeks.²⁸ Recent guidelines recommend a cutoff for stage 1 hypertension of 130 to 139

mm Hg systolic or 80 to 89 mm Hg diastolic⁴¹; however, the AAFP continues to support the cutoff recommended by the JNC-8.^{26,42}

Evidence supports ambulatory blood pressure monitoring as the reference standard for confirming elevated office blood pressure measurements to avoid misdiagnosis and overtreatment of persons with isolated clinic hypertension (white coat hypertension).²⁹ The ASCVD (Atherosclerotic Cardiovascular Disease) Risk Estimator (available at <http://tools.acc.org/ASCVD-Risk-Estimator-Plus/#/calculate/estimate/>) can be used to determine the 10-year risk of cardiovascular events or stroke in men 40 to 79 years of age.

Obesity. Height and weight measurements should be obtained at every visit to calculate BMI.¹⁸ An abdominal (waist) circumference greater than 40 inches is associated with an increased risk of type 2 diabetes, dyslipidemia, hypertension, and CVD in men with a BMI of 25 to 35 kg per m².⁴³ In persons with a BMI of 35 kg per m² or greater, determination of waist circumference has limited additional value in the prediction of CVD risk.⁴³ In Asian and black men, waist circumference and other measures such as waist-to-height ratio may be better indicators of CVD risk than BMI because BMI does not adequately account for differences in visceral fat distribution.⁴³

Diabetes. Among men 20 years and older, more than 15 million have diabetes and approximately 44.5 million have prediabetes.⁴⁴ Diabetes is considered a CVD risk equivalent because diabetes-related comorbidity with other risk factors leads to a higher risk of CVD within 10 years.³¹ The American Diabetes Association defines diabetes as an A1C level of 6.5% or higher; fasting plasma glucose concentration of 126 mg per dL (7.0 mmol per L) or greater; plasma glucose concentration of 200 mg per dL (11.1 mmol per L) or greater two hours after a 75-g oral glucose load; and a random plasma glucose concentration of 200 mg per dL or greater in a patient with classic symptoms of hyperglycemia or hyperglycemic crisis (e.g., polyuria, polydipsia, polyphagia).³²

Dyslipidemia. The USPSTF recommends lipid screening in men 40 to 75 years of age; a risk calculator is then used to determine the need for treatment.³³ The optimal interval for screening is uncertain.³³ Notably, the USPSTF found insufficient evidence to recommend for or against screening in any risk group younger than 40 years.³³

Risk factors for CVD include elevated low-density lipoprotein cholesterol, history of CVD or noncoronary atherosclerosis, diabetes, smoking, hypertension, obesity, and family history of CVD before 50 years of age in male relatives or before 60 years of age in female relatives.^{33,34}

Fasting lipoprotein profile is the preferred screening test for dyslipidemia.^{33,34} For nonfasting samples, total cholesterol and high-density lipoprotein cholesterol measurements are recommended and are sufficient for calculating 10-year cardiovascular risk using most calculators.^{45,46}

Abdominal Aortic Aneurysm. The USPSTF recommends one-time screening ultrasonography for detection of abdominal aortic aneurysm in men 65 to 75 years of age who have ever smoked.³⁵ Randomized trials show that the benefits of screening and surgical repair in this high-risk group outweigh potential harms.³⁵ The pooled prevalence of abdominal aortic aneurysm is 4.4%.⁴⁷ The mortality rate after dissection and rupture approaches 80% for men who reach the hospital and 50% for men who undergo emergent surgical repair.⁴⁸ Smoking is the risk factor most strongly associated with abdominal aortic aneurysm (odds ratio = 5.07) and accounts for 75% of all aneurysms 4 cm or greater.⁴⁹ Other risk factors include hypertension, dyslipidemia, family history, and atherosclerosis. A meta-analysis determined that a well-functioning screening program would reduce abdominal aortic aneurysm-related mortality by at least 45%; the number needed to screen to prevent one rupture is 238.⁵⁰

OSTEOPOROSIS

The USPSTF found insufficient evidence to recommend for or against screening men for osteoporosis, given that the relative benefits and harms of therapy for osteoporosis in men have not been determined.³⁶ Although evidence for screening is lacking, men most likely to benefit from screening would have a 10-year risk of osteoporotic fracture equal to or greater than that of a 65-year-old white woman with no additional risk factors.³⁶ For men, major risk factors include increasing age, white race, and family history. The National Osteoporosis Foundation recommends bone mineral density testing for all men 70 years or older and men 50 to 69 years of age with risk factors (e.g., frailty, low BMI).³⁷ The USPSTF found insufficient evidence to recommend for or against calcium and vitamin D supplementation to prevent fractures.⁵¹

CHRONIC OBSTRUCTIVE PULMONARY DISEASE

The USPSTF recommends against screening adults for chronic obstructive pulmonary disease (COPD) using spirometry.³⁸ Men with COPD, including those with mild or moderate illness, benefit from smoking cessation and annual influenza vaccination. Moderate evidence suggests that influenza vaccination reduces COPD exacerbations.³⁸

HEPATITIS C

Screening for hepatitis C should be offered to men at high risk of infection. Adults born between 1945 and 1965 should be offered one-time screening.³⁹

Cancer Screening

Table 4 summarizes screening guidelines for cancer in men.⁵²⁻⁶¹

TABLE 4

Cancer Screening Guidelines for Men

Type of cancer	USPSTF/AAFP recommendations*	Other recommendations/comments
Testicular	Do not screen asymptomatic men for testicular cancer (grade D, 2017) ⁵²	No other screening guidelines exist
Skin	Insufficient evidence to recommend for or against whole-body skin examination by a primary care clinician (grade I, 2016) or counseling patients about self-examination for the early detection of skin cancer (grade I, 2018) ^{53,54}	No other screening guidelines exist
Prostate	In men 55 to 69 years of age, discuss the potential benefits vs. harms of PSA screening for prostate cancer; decisions should be individualized based on risk factors and take into account the patient's values and preferences (grade C, 2018); do not screen men 70 years and older (grade D, 2018) ⁵⁵	American Urological Association ⁵⁶ : Recommends against PSA screening in men younger than 40 years Does not recommend routine screening in average-risk men 40 to 54 years of age Recommends shared decision making for men 55 to 69 years of age considering PSA screening, and proceeding based on the patient's values/preferences To reduce the harms of screening, a routine screening interval of two years or more may be preferred over annual screening in men who have participated in shared decision making and decided on screening Recommends against routine PSA screening in men 70 years and older and in men with a life expectancy of less than 10 to 15 years
Colorectal	Screen average-risk men 50 to 75 years of age with FIT every year, flexible sigmoidoscopy every 10 years plus FIT every year, colonoscopy every 10 years, or computed tomography colonography every five years (grade A, 2016); the decision to screen for colorectal cancer in men 76 to 85 years of age should be individualized, taking into account the patient's overall health and screening history (grade C, 2016) ⁵⁷	American College of Gastroenterology ⁵⁸ : Screen with colonoscopy every 10 years beginning at 50 years of age If colonoscopy is not available, screen with flexible sigmoidoscopy every five to 10 years, computed tomography colonography every five years, or FIT every year
Lung	USPSTF: Screen for lung cancer annually with low-dose computed tomography in men 55 to 80 years of age who have a 30-pack-year smoking history and currently smoke or have quit within the past 15 years; discontinue screening 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 (grade B, 2013) ⁵⁹ AAFP: Insufficient evidence to recommend for or against lung cancer screening ⁶⁰	American Cancer Society ⁶¹ : Clinicians with access to high-volume, high-quality lung cancer screening and treatment centers should initiate a discussion about lung cancer screening with men 55 to 74 years of age who have at least a 30-pack-year smoking history, currently smoke or have quit within the past 15 years, and are in relatively good health

AAFP = American Academy of Family Physicians; FIT = fecal immunochemical testing; PSA = prostate-specific antigen; USPSTF = U.S. Preventive Services Task Force.

*See <https://www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions> for definitions of the USPSTF evidence grades. These are different than *American Family Physician's* Strength-of-Recommendation Taxonomy (SORT). Unless indicated, the AAFP supports USPSTF recommendations.

Information from references 52 through 61.

TESTICULAR CANCER

The USPSTF recommends against screening asymptomatic men for testicular cancer. Because the incidence of testicular cancer is very low and treatment is often effective even in advanced stages, the benefits of earlier detection are minimal and likely outweighed by the harms of false-positive results and unnecessary workup for benign conditions.⁵²

SKIN CANCER

The USPSTF concludes that there is insufficient evidence to assess the benefits vs. harms of a whole-body skin examination performed by a primary care clinician for the early detection of skin cancer in men. It concludes that there is also insufficient evidence to assess the benefits vs. harms of counseling patients about performing self-examinations.^{53,54}

PROSTATE CANCER

Screening for prostate cancer in primary care is controversial because it is widely believed that screening has resulted in overdiagnosis and overtreatment of clinically insignificant cancers. An editorial on prostate cancer screening was published in *American Family Physician* (available at <https://www.aafp.org/afp/2018/1015/p478.html>).

Previous USPSTF recommendations argued against screening for prostate cancer with prostate-specific antigen testing because of possible harms, based on data from the European Randomized Study of Screening for Prostate Cancer and the Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial.⁶² Current USPSTF and AAFP guidelines align with American Urological Association guidelines in recommending a discussion of benefits vs. risks of screening for men 55 to 69 years of age and using a shared decision-making approach; screening decisions should be individualized based on risk factors (i.e., family history, black race) and take into account the patient's values and preferences.^{55,56,63} The USPSTF and AAFP recommend against prostate-specific antigen screening for prostate cancer in men 70 years and older.^{55,56}

Although not recommended by the USPSTF, expert opinion from the American Urological Association and data from an uncontrolled trial suggest that prostate cancer screening should combine the digital rectal examination and prostate-specific antigen test, which improves detection compared with either test alone (positive predictive value = 18% and 45%, respectively).^{56,64}

COLORECTAL CANCER

Screening for colorectal cancer should begin at 50 years of age for average-risk men and continue until at least 75 years of age.⁵⁷ Colonoscopy is increasingly becoming the test of choice for colorectal cancer screening in primary care, yet there are no randomized controlled trials comparing colonoscopy, flexible sigmoidoscopy, and fecal occult blood testing (FOBT) with a definable outcome of cancer-specific or all-cause mortality.^{57,65,66} Fecal immunochemical testing has greater sensitivity and specificity compared with guaiac-based FOBT.⁶⁷ Fecal DNA testing has not proved more accurate than FOBT or fecal immunochemical testing and has more false-positive results than FOBT (16% vs. 5%).⁶⁸ Computed tomography colonography may result in harms from low-dose ionizing radiation exposure or identification of extracolonic findings.⁶⁹

LUNG CANCER

Lung cancer is the third most common cancer and the leading cause of preventable cancer-related death in the United States.⁷⁰ Smoking is the most important risk factor for lung

cancer, accounting for approximately 85% of cases.⁷¹ The USPSTF recommends annual screening for lung cancer with low-dose computed tomography in adults 55 to 80 years of age who have at least a 30-pack-year smoking history and currently smoke or have quit within the past 15 years,^{59,72} whereas the AAFP concludes that the evidence is insufficient to recommend for or against screening.⁶⁰ Physicians should be aware of the high rate of false-positives with low-dose computed tomography screening; more than one-half of patients require additional testing and tracking, of which only 1.5% receive a lung cancer diagnosis.⁷³ Screening should be discontinued once a patient has not smoked for 15 years or if a patient develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.⁵⁹

Immunizations

The Advisory Committee on Immunization Practices (ACIP) strongly encourages annual influenza vaccination for all adults, with the high-dose preparation recommended for those older than 65 years. ACIP recommends a single tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) vaccination, regardless of when the last tetanus and diphtheria toxoids (Td) booster was given.⁷⁴

A vaccine series does not need to be restarted, even if a long period has passed between doses, although immunity may need to be verified via serologic testing.⁷⁴ Full ACIP vaccine recommendations are available at <https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html>.

This article updates a previous article on this topic by Heidelbaugh and Tortorello.⁷⁵

Data Sources: I performed a bibliographic search of select men's health topics highlighting USPSTF guidelines, the Cochrane Database of Systematic Reviews, Essential Evidence Plus, the American Urological Association, the Agency for Healthcare Research and Quality, DynaMed, and the National Guideline Clearinghouse database. I searched Medline using the terms men's health, guidelines, evidence-based, hypertension, hyperlipidemia, obesity, diabetes mellitus, abdominal aortic aneurysm, osteoporosis, prostate cancer, colorectal cancer, lung cancer, testicular cancer, skin cancer, sexually transmitted diseases/infections, and immunizations. Original research studies cited within these guidelines were reviewed. Search dates: September through November 2017.

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