

Family Medicine Course

Adult Preventative Care

Mutah University

Adult Preventive Care

Adult preventative health interventions may be performed ad hoc or as part of a scheduled physical exam. Common tasks include **screening** for disease or risk factors, delivery of **immunization**, and **patient education** about lifestyle and other issues.

Cancer Screening

Breast Cancer Screening



Self-Breast Exam (SBE) is a regular test that is performed by women to detect breast cancer. It is performed by observation and touching. This test should be done after the menstrual period (day 7-10 of period). Why?

Clinical Breast Examination has been reported to be effective. It includes clinical assessment of history including family history and breast examination.

Mammogram to screen for breast cancer is indicated at the age of 40 annually in Jordan, while other guidelines recommend it at the age of 50 every 1-2 years.



Lung Cancer Screening

Lung cancer screening is conducted in asymptomatic adults at-risk for lung cancer based on a risk assessment.

Risk assessment for lung cancer is primarily based on smoking history, generally calculated as the number of cigarettes smoked per day (standardized at 20 cigarettes per pack) multiplied by the number of years smoked and expressed as "**pack-years.**"

Screen asymptomatic adults using annual **low-dose computed tomography (LDCT)** of the chest without contrast and use of standardized reporting for LDCT screening, such as Lung-RADS 2.

The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged **50 to 80 years** who have a **20 pack-year** smoking history and **currently smoke or have quit within the past 15 years.**

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.

Colorectal Cancer Screening

Colorectal cancer screening has been shown to effectively reduce mortality by identifying (and usually removing) precancerous lesions and identifying early asymptomatic cancer to allow for treatment before it has spread.

For average risk adults; USPSTF strongly recommends screening for adults aged 50-75 years (USPSTF Grade A).

Consider screening adults aged 45-49 years (USPSTF Grade B).

Decision to screen adults aged 76-85 years should be individualized (USPSTF Grade C).

Population	Recommendation	Grade
Adults aged 50 to 75 years	The USPSTF recommends screening for colorectal cancer in all adults aged 50 to 75 years. See the "Practice Considerations" section and Table 1 for details about screening strategies.	A
Adults aged 45 to 49 years	The USPSTF recommends screening for colorectal cancer in adults aged 45 to 49 years. See the "Practice Considerations" section and Table 1 for details about screening strategies.	B
Adults aged 76 to 85 years	The USPSTF recommends that clinicians selectively offer screening for colorectal cancer in 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.	C

For Persons with 1 first-degree relative with colorectal cancer or a documented advanced adenoma, diagnosed at age < 60 years OR with 2 first-degree relatives with colorectal cancer and/or documented advanced adenomas diagnosed at any age —> Colonoscopy every 5 years beginning at the age that is 10 years younger than when the youngest first-degree relative was diagnosed or at age 40 years, whichever is earlier.

Screening tests

1. High-sensitivity Guaiac-based fecal occult blood test (detects peroxidase activity involving heme portion of hemoglobin).

Medication and dietary restrictions include avoiding vitamin C, aspirin, and nonsteroidal anti-inflammatory medication for 1 week prior to test, as well as red meat and dietary peroxidases found in some fruits and vegetables 72 hours prior to test.

May be vulnerable to:

- False-positive results from nonsteroidal anti-inflammatory drugs that can cause upper GI bleeding, red meat, and dietary peroxidases.
- False-negative results from antioxidants such as vitamin C.

2-3 samples of stool required each year.

Positive test requires follow-up with colonoscopy.



2. Fecal immunochemical test (FIT); (selectively detects globin component of human hemoglobin).

Annually, or every 2-3 years in combination with sigmoidoscopy offered every 5 years.

More sensitive and specific for gastrointestinal bleeding, but more expensive than guaiac-based testing.

Positive test requires follow-up with colonoscopy.

3. Flexible sigmoidoscopy

Every 5-10 years: interval varies, and some organizations recommend a 10-year interval when combined with more frequent stool-based testing.

Requires enema before procedure.

Allows removal of precancerous polyps at time of procedure.

Detection of polyps is limited to distal colon (does not visualize proximal colon).

Positive test requires follow-up colonoscopy to assess the ascending and transverse colon.

May have pain and discomfort as sedation generally not used.

Risk of perforation and bleeding.

4. Colonoscopy every 10 years. (the gold standard)

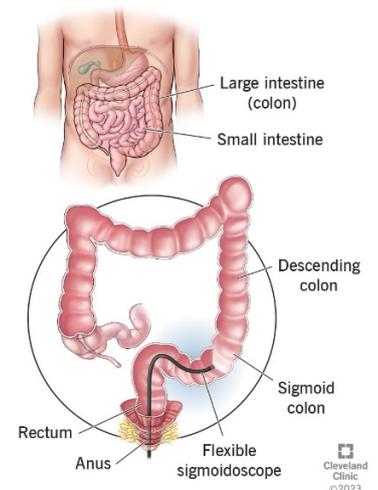
Requires full-bowel cleaning, most commonly with consumption of polyethylene glycol or other diarrhetic solution in the 24 hours prior to procedure combined with liquid diet the day before cleansing.

Allows removal of precancerous polyps at time of procedure.

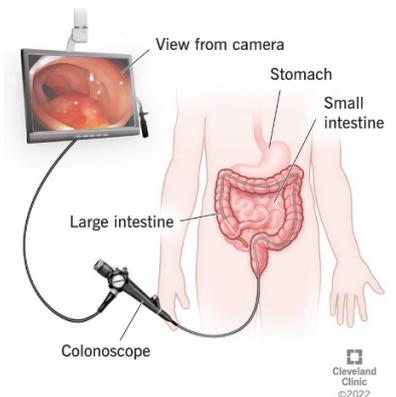
Risks include dehydration from bowel preparation, risks associated with sedation, infections, colonic perforations, and bleeding.

May need to be repeated within 1 year if inadequate bowel preparation.

Flexible sigmoidoscopy



Colonoscopy

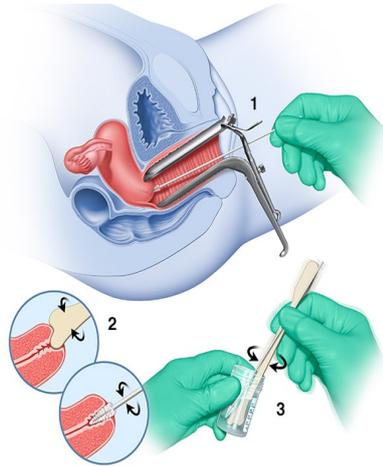


Cervical Cancer Screening

Cervical Cancer: Screening: women aged 21 to 65 years

The USPSTF recommends screening for cervical cancer every 3 years with cervical cytology alone in women aged 21 to 29 years. For women aged 30 to 65 years, the USPSTF recommends screening every 3 years with cervical cytology alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV testing in combination with cytology (cotesting). See the Clinical Considerations section for the relative benefits and harms of alternative screening strategies for women 21 years or older.

A



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Prostate Cancer Screening

Prostate cancer screening does not appear to reduce overall mortality.

Major guidelines recommend some level of **shared decision-making** for prostate-specific antigen (PSA) screening for prostate cancer including USPSTF.

- potential benefits include early detection and associated survival benefit, peace of mind
- potential harms of screening include unnecessary anxiety, detection of clinically unimportant cancer, false results, and potential for subsequent harms of treatment (effect on urinary function, bowel function, or sexual function)

Population	Recommendation	Grade
Men aged 55 to 69 years	For men aged 55 to 69 years, the decision to undergo periodic prostate-specific antigen (PSA)-based screening for prostate cancer should be an individual one. Before deciding whether to be screened, men should have an opportunity to discuss the potential benefits and harms of screening with their clinician and to incorporate their values and preferences in the decision. Screening offers a small potential benefit of reducing the chance of death from prostate cancer in some men. However, many men will experience potential harms of screening, including false-positive results that require additional testing and possible prostate biopsy; overdiagnosis and overtreatment; and treatment complications, such as incontinence and erectile dysfunction. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the balance of benefits and harms on the basis of family history, race/ethnicity, comorbid medical conditions, patient values about the benefits and harms of screening and treatment-specific outcomes, and other health needs. Clinicians should not screen men who do not express a preference for screening.	C
Men 70 years and older	The USPSTF recommends against PSA-based screening for prostate cancer in men 70 years and older.	D

Diabetes and Cardiovascular risk factors Screening

Diabetes mellitus type 2: American Diabetes Association (ADA) recommends regular screening for adults ≥ 35 years old

Hypertension: Screen for hypertension in all adults ≥ 18 years old.

Dyslipidemia: Screen for hypercholesterolemia in all adults.

Smoking: Ask all adult patients (including pregnant women) about tobacco use and provide tobacco cessation intervention.

AAA: Screen men aged 65-75 years once for abdominal aortic aneurysm (AAA) with ultrasonography if they have a history of smoking ≥ 100 cigarettes in their lifetime or if they have a first-degree relative who has had AAA.

Obesity: Screen adults for obesity by calculating BMI. Waist circumference can also be considered.

Newborn and Children Prevention and Screening

Newborn Heel Stick blood spots: for congenital hypothyroidism, phenylketonuria.....

Newborn Hearing screening: screening options include evoked otoacoustic emissions (OAE) or automated auditory brainstem response (aABR).

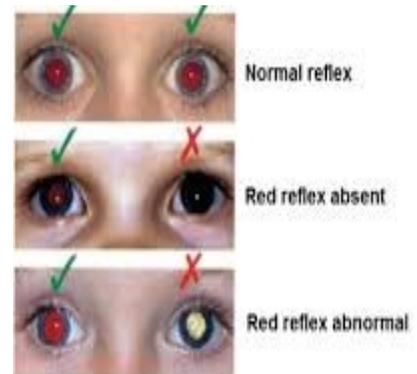
Universal Bilirubin Screening.

Red Reflex Test: to screen for potential eye problems that could affect vision development, such as congenital cataracts, retinoblastoma or other structural abnormalities.

Developmental Dysplasia of the Hip (DDH): Screen all newborns with Ortolani and Barlow maneuvers.

Vision in Children: The USPSTF recommends vision screening at least once in all children aged 3 to 5 years to detect amblyopia or its risk factors.

Dental caries prevention: The USPSTF recommends that primary care clinicians prescribe oral fluoride supplementation starting at age 6 months for children whose water supply is deficient in fluoride and to apply fluoride varnish to the primary teeth of all infants and children starting at the age of primary tooth eruption.



Screening and Prevention in Pregnancy

Folic Acid Supplementation: The USPSTF recommends that all women planning to or who could become pregnant take a daily supplement containing 0.4 to 0.8 mg (400 to 800 mcg) of folic acid to prevent neural tube defects.

Gestational Diabetes: The USPSTF recommends screening for gestational diabetes in asymptomatic pregnant women at 24 weeks of gestation or after.

Asymptomatic bacteriuria: The USPSTF recommends screening for asymptomatic bacteriuria using urine culture in pregnant women at 12 weeks of gestation.

Preeclampsia prevention: The USPSTF recommends the use of low-dose aspirin (81 mg/day) as preventive medication after 12 weeks of gestation in women who are at high risk for preeclampsia.

Hypertensive disorders: The USPSTF recommends screening for hypertensive disorders in pregnant women with blood pressure measurements throughout pregnancy.

Perinatal and postpartum depression screening.

Hepatitis B infection: The USPSTF recommends screening for hepatitis B virus (HBV) infection in pregnant women at their first prenatal visit.

Tetanus, influenza and RSV vaccination.

Additional Screening Considerations

- Osteoporosis in women \geq 65 years old.
- Intimate partner violence in women of childbearing age.
- Depression and anxiety when care support systems are in place.
- Alcohol misuse and tobacco use.

PHQ-2 Screening Instrument for Depression

Over the past two weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed, or hopeless	0	1	2	3

Scoring: A score of 3 or more is considered a positive result. The PHQ-9 (Table 3) or a clinical interview should be completed for patients who screen positive.

PHQ = Patient Health Questionnaire.

Adapted from Patient Health Questionnaire (PHQ) screeners. <http://www.phqscreeners.com>. Accessed February 8, 2018.

Immunization

- Annual **influenza** vaccination recommended for all adults.
- **COVID-19** 2024-2025 vaccine recommended for all adults, with primary series if not previously vaccinated and 2 or more doses of 2024-2025 version if 65 years or older or with moderate or severe immunocompromise.
- **Tetanus** immunization recommended with booster every 10 years, Tdap once as an adult and in third trimester of every pregnancy to protect neonate.
- **Pneumococcal** vaccine single dose is recommended for 65 years old or older (PCV 15 or PCV 20) regardless of prior pneumococcal vaccination.
- Recombinant **herpes zoster** vaccine for all adults \geq 50 years old or with immunocompromising conditions, regardless of prior vaccine status or episodes of shingles.
- **Hepatitis B** vaccine series for all adults not previously vaccinated if aged 19 through 59.
- **Respiratory syncytial virus** (RSV) vaccine (single dose) recommended for

- all adults ≥ 75 years old
- adults aged 60-75 with diabetes (on insulin or sodium-glucose cotransporter-2 inhibitor therapy) and chronic heart, lung (including muscle weakness or other neurologic impairments from clearing the airway), hepatic, renal, or hematologic conditions as well as people with a body mass index ≥ 40 kg/m² have moderate or severe immunocompromise, or who reside in a nursing home
- each pregnancy during the third trimester

