Screening for High Blood Cholesterol and Other Lipid Abnormalities: Periodic screening for high blood cholesterol, using specimens obtained from fasting or non-fasting individuals, is recommended for all men ages 35-65 and women ages 45-65 ("B" recommendation).

Screening for Hypertension: Periodic screening for hypertension is recommended for all persons $\geq 21$ years of age ("A" recommendation). Measurement of blood pressure during office visits is also recommended for children and adolescents ("B" recommendation).

Screening for Breast Cancer: Screening for breast cancer every 1-2 years, with mammography alone or mammography and annual clinical breast examination (CBE), is recommended for women aged 50-69 ("A" recommendation).

Screening for Colorectal Cancer: Screening for colorectal cancer is recommended for all persons aged 50 or over ("B" recommendation). Effective methods include FOBT and sigmoidoscopy.

Screening for Cervical Cancer: Pap tests should be performed at least every 3 years ("B" recommendation).

Screening for Obesity: Periodic height and weight measurements are recommended for all patients ("B" recommendation).

Screening for Iron Deficiency Anemia--Including Iron Prophylaxis: A hemoglobin analysis or hematocrit is recommended for pregnant women at their first prenatal visit ("B" recommendation).

Screening for Elevated Lead Levels in Childhood and Pregnancy: Screening for elevated lead levels by measuring blood lead at least once at age 12 months is recommended for all children at increased risk of lead exposure ("B" recommendation).

Screening for Hepatitis B Virus Infection: Screening with hepatitis B surface antigen (HBsAg) to detect active (acute or chronic) HBV infection is recommended for all pregnant women at their first prenatal visit ("A" recommendation).

Screening for Tuberculous Infection--Including Bacille Calmette-Guerin Immunization: Screening for tuberculous infection by tuberculin skin testing is recommended for all persons at increased risk of developing tuberculosis (TB) ("A" recommendation).

Screening for Syphilis: Routine serologic testing for syphilis is recommended for all pregnant women and for persons at increased risk for infection, including commercial sex workers, persons who exchange sex for money or drugs, persons with other STDs (including HIV), and sexual contacts of persons with active syphilis ("A" recommendation).
**Screening for Gonorrhea--Including Ocular Prophylaxis in Newborns**: Routine screening for gonorrhea is recommended for asymptomatic women at high risk of infection ("B" recommendation). High-risk groups include commercial sex workers (prostitutes), persons with a history of repeated episodes of gonorrhea, and young women (under age 25) with two or more sex partners in the last year.

**Screening for Human Immunodeficiency Virus Infection**: Clinicians should assess risk factors for HIV infection in all patients by obtaining a careful sexual history and inquiring about drug use. Counseling and testing for HIV should be offered to all persons at increased risk for infection: those seeking treatment for sexually transmitted diseases; men who have had sex with men after 1975; past or present injection drug users; persons who exchange sex for money or drugs, and their sex partners; women and men whose past or present sex partners were HIV-infected, bisexual, or injection drug users; and persons with a history of transfusion between 1978 and 1985 ("A" recommendation). Routine screening for asymptomatic infection with Chlamydia trachomatis during pelvic examination is recommended for all sexually active female adolescents and for other women at high risk for chlamydial infection ("B" recommendation). Pregnant women at high risk of infection (including age under 25) should be tested for chlamydia ("B" recommendation).

**Screening for Chlamydial Infection--Including Ocular Prophylaxis in Newborns**: Pregnant women at high risk of infection (including age under 25) should be tested for chlamydia ("B" recommendation).

**Screening for Rubella--Including Immunization of Adolescents and Adults**: All children without contraindications should receive MMR vaccine at age 12-15 months and again at age 4-6 years (see Chapter 65). To reduce further the incidence of CRS, screening for rubella susceptibility by history of vaccination or by serology is recommended for all women of childbearing age at their first clinical encounter ("B" recommendation). A documented history of vaccination is more accurate than an undocumented history in determining rubella immunity and is therefore preferred. All susceptible nonpregnant women of childbearing age should be offered vaccination. Susceptible pregnant women should be vaccinated in the immediate postpartum period. An equally acceptable alternative for nonpregnant women of childbearing age is to offer vaccination against rubella without screening ("B" recommendation).

**Screening for Visual Impairment**: Vision screening for amblyopia and strabismus is recommended for all children once before entering school, preferably between ages 3 and 4 years ("B" recommendation).

**Screening for Hearing Impairment**: Screening older adults for hearing impairment by periodically questioning them about their hearing, counseling them about the availability of hearing aid devices, and making referrals for abnormalities when appropriate, is recommended ("B" recommendation).

**Screening for Preeclampsia**: Screening for preeclampsia with blood pressure measurement is recommended for all pregnant women at the first prenatal visit and periodically throughout the remainder of pregnancy ("B" recommendation).

**Screening for D (Rh) Incompatibility**: D blood typing and antibody testing is recommended for all pregnant women at their first prenatal visit, including visits for elective abortion ("A" recommendation).

**Screening for Down Syndrome**: The offering of amniocentesis or CVS for chromosome studies to pregnant women aged 35 years and older and to those at high risk of Down syndrome for other reasons (e.g., previous affected pregnancy, known carriage of a chromosome rearrangement
associated with Down syndrome) is recommended ("B" recommendation). The offering of screening for Down syndrome by maternal serum multiple-marker testing at 15-18 weeks of gestation is recommended for all pregnant women who have access to counseling and follow-up services, skilled high-resolution ultrasound and amniocentesis capabilities, and reliable, standardized laboratories ("B" recommendation).

**Screening for Neural Tube Defects--Including Folic Acid/Folate Prophylaxis** : The offering of screening for neural tube defects by maternal serum a-fetoprotein (MSAFP) measurement at 16-18 weeks' gestation is recommended for all pregnant women who are seen for prenatal care in locations that have adequate counseling and follow-up services, skilled high-resolution ultrasound and amniocentesis capabilities, and reliable, standardized laboratories ("B" recommendation). It is also recommended that all women planning pregnancy take a daily multivitamin or multivitamin-multimineral supplement containing folic acid at a dose of 0.4-0.8 mg, beginning at least 1 month prior to conception and continuing through the first trimester, to reduce the risk of neural tube defects ("A" recommendation). Taking a daily multivitamin containing 0.4 mg of folic acid is also recommended for all women capable of becoming pregnant, to reduce the risk of neural tube defects in unplanned pregnancies ("B" recommendation).

**Screening for Hemoglobinopathies** : Screening newborn infants for hemoglobinopathies with hemoglobin electrophoresis or other tests of comparable accuracy on umbilical cord or heelstick blood specimens is recommended ("A" recommendation). Offering screening for hemoglobinopathies with hemoglobin electrophoresis or other tests of comparable accuracy to pregnant women at the first prenatal visit is recommended ("B" recommendation), especially for those who are members of racial and ethnic groups with a high incidence of hemoglobinopathies (e.g., individuals of African, Caribbean, Latin American, Mediterranean, Middle Eastern, or Southeast Asian descent).

**Screening for Phenylketonuria** : Screening for phenylketonuria by measurement of phenylalanine level on a dried-blood spot specimen, collected by heelstick and adsorbed onto filter paper, is recommended for all newborns before discharge from the nursery ("A" recommendation).

**Screening for Congenital Hypothyroidism** : Screening for congenital hypothyroidism with thyroid function tests performed on dried-bloodspot specimens is recommended for all newborns, optimally between days 2 and 6, but in all cases before newborn nursery discharge ("A" recommendation).

**Screening for Suicide Risk** : The training of primary care clinicians in recognizing and treating affective disorders in order to prevent suicide is recommended ("B" recommendation).

**Screening for Problem Drinking** : Screening to detect problem drinking and hazardous drinking is recommended for all adult and adolescent patients ("B" recommendation). All pregnant women should be screened for evidence of problem drinking or risk drinking (2 drinks per day or binge drinking) ("B" recommendation).

**Counseling to Prevent Tobacco Use** : A complete history of tobacco use, and an assessment of nicotine dependence among tobacco users, should be obtained from all adolescent and adult patients. Tobacco cessation counseling is recommended on a regular basis for all patients who use tobacco products ("A" recommendation). Pregnant women and parents with children living at home also should be counseled on the potentially harmful effects of smoking on fetal and child health ("A" recommendation). The optimal frequency for performing counseling to prevent tobacco use has not been determined with certainty, but repeated messages over long periods of time are associated with the greatest success in helping patients achieve abstinence. The prescription of nicotine patches or gum is recommended as an adjunct for selected patients ("A" recommendation).
Counseling to Promote Physical Activity: Counseling to promote regular physical activity is recommended for all children and adults. This recommendation is based on the proven efficacy of regular physical activity in reducing the risk for coronary heart disease, hypertension, obesity, and diabetes ("A" recommendation).

Counseling to Promote a Healthy Diet: Adults and children over age 2 should limit dietary intake of fat (especially saturated fat) ("A" recommendation) and cholesterol ("B" recommendation), maintain caloric balance in their diet ("B" recommendation), and emphasize fruits, vegetables, and grain products containing fiber ("B" recommendation). Women should be encouraged to consume recommended quantities of calcium (adolescents and young adults, 1,200-1,500 mg/day; adults aged 25-50, 1,000 mg/day; postmenopausal women, 1,000-1,500 mg/day; pregnant and nursing women, 1,200-1,500 mg/day123) ("B" recommendation). Parents should be encouraged to offer breastfeeding to their infants ("A" recommendation).

Counseling to Prevent Motor Vehicle Injuries: Clinicians should regularly urge their patients to use lap/shoulder belts for themselves and their passengers, and for their children who have outgrown safety seats, whenever driving or riding in an automobile, including automobiles equipped with air bags ("A" recommendation for wearing seat belts; "B" recommendation for counseling). Operators of vehicles carrying infants and toddlers should be urged to install and regularly use federalally approved child safety seats in accordance with the manufacturer's instructions and the child's size ("A" recommendation for child safety seat use; "B" recommendation for counseling parents). Those who operate or ride on motorcycles should be counseled to wear approved safety helmets; this recommendation is based on the proven efficacy of risk reduction from wearing helmets ("A" recommendation). All patients should be counseled regarding the dangers of operating a motor vehicle while under the influence of alcohol or other drugs, as well as the risks of riding in a vehicle operated by someone who is under the influence of these substances. This recommendation is based on the proven efficacy of risk reduction ("A" recommendation) and the effectiveness of counseling problem drinkers to reduce alcohol consumption ("B" recommendation).

Counseling to Prevent Household and Recreational Injuries: Counseling the parents of children on measures to reduce the risk of unintentional injuries from residential fires and hot tap water, drowning, poisoning, bicycling, firearms, and falls is recommended ("B" recommendation). Persons with alcohol or drug problems should be identified, counseled, and monitored, and referred for treatment as appropriate. All adolescents and adults who use alcohol or other drugs should be advised to avoid engaging in potentially dangerous activities (e.g., swimming, boating, handling of firearms, smoking in bed, hunting, bicycling) while intoxicated ("B" recommendation). Counseling regarding other measures to prevent household and recreational injuries is recommended for adolescent and adult (including elderly) patients based on fair evidence for the efficacy of risk reduction ("B" recommendation). Counseling elderly patients on measures to reduce the risk of falling, including exercise (particularly training to improve balance), safety-related skills and behaviors, and environmental hazard reduction, along with monitoring and adjusting medications, is recommended based on fair evidence that these measures reduce the likelihood of falling ("B" recommendation). Intensive individualized home-based multifactorial intervention to reduce the risk of falls is recommended for high-risk elderly patients in settings where adequate resources are available to deliver such services ("B" recommendation).

Counseling to Prevent Dental and Periodontal Disease: Counseling patients to visit a dental care provider on a regular basis is recommended based on evidence for risk reduction from such visits when combined with regular personal oral hygiene ("B" recommendation); Counseling all patients to brush their teeth daily with a fluoride-containing toothpaste and to clean thoroughly between their teeth with dental floss each day is recommended based on the proven efficacy of risk reduction from doing so ("B" recommendation); Providing advice to parents to put infants and children to bed without a bottle may reduce the risk of baby bottle tooth decay ("B" recommendation). For children
living in an area with inadequate water fluoridation (<0.6 parts per million [ppm]), the prescription of daily fluoride drops or tablets is recommended ("A" recommendation).

**Counseling to Prevent HIV Infection and Other Sexually Transmitted Diseases:** All adolescent and adult patients should be advised about risk factors for STDs and counseled appropriately about effective measures to reduce risk of infection ("B" recommendation).

**Counseling to Prevent Unintended Pregnancy:** Periodic counseling about effective contraceptive methods is recommended for all women and men at risk for unintended pregnancy ("B" recommendation).

**Childhood Immunizations:** All children without established contraindications should receive diphtheria-tetanus-pertussis (DTP), oral poliovirus (OPV), measles-mumps-rubella (MMR), conjugate H. influenzae type b (Hib), hepatitis B, and varicella vaccines ("A" recommendation). Hepatitis A vaccine is recommended for all high-risk children aged U2 years and all high-risk adolescents ("A" recommendation). Annual influenza vaccine is recommended for adolescents and children U6 months of age who are residents of chronic care facilities or have chronic cardiopulmonary disorders, metabolic diseases (including diabetes mellitus), hemoglobinopathies, immunosuppression, or renal dysfunction ("B" recommendation).

**Adult Immunizations--Including Chemoprophylaxis against Influenza A:** Influenza vaccine should be administered annually to all persons ages 65 and older and to persons 6 months of age or older who are residents of chronic care facilities or suffer from chronic cardiopulmonary disorders, metabolic diseases (including diabetes mellitus), hemoglobinopathies, immunosuppression, or renal dysfunction ("B" recommendation). Influenza vaccine is also recommended for health care providers for high-risk patients ("B" recommendation). Pneumococcal vaccine is recommended for all immunocompetent individuals who are aged 65 years and older or otherwise at increased risk for pneumococcal disease ("B" recommendation). The Td vaccine series should be completed for patients who have not received the primary series, and all adults should receive periodic Td boosters ("A" recommendation). MMR vaccine should be administered to all persons born after 1956 who lack evidence of immunity to measles (receipt of live vaccine on or after the first birthday, laboratory evidence of immunity, or a history of physician-diagnosed measles) ("A" recommendation). A second measles vaccination is recommended for adolescents and young adults in settings where such individuals congregate (e.g., high schools, technical schools, and colleges), if they have not previously received a second dose (see Chapter 65) ("A" recommendation). The combined MMR vaccine is preferable to monovalent measles vaccine, since many recipients may also be susceptible to mumps or rubella due to inadequate vaccination or primary vaccine failure. Susceptible individuals should be vaccinated against mumps ("B" recommendation). Hepatitis B vaccine is recommended for all young adults not previously immunized ("A" recommendation). Hepatitis B vaccine is also recommended for susceptible adults in high-risk groups, including men who have sex with men, injection drug users and their sex partners, persons who have a history of sexual activity with multiple partners in the previous 6 months or have recently acquired another sexually transmitted disease, international travelers to countries where HBV is of high or intermediate endemicity, recipients of certain blood products (including hemodialysis patients), and persons in health-related jobs with frequent exposure to blood or blood products ("A" recommendation). Hepatitis A vaccine is recommended for all high-risk adults ("B" recommendation). Two doses of varicella vaccine delivered 4-8 weeks apart are recommended for healthy adults with no history of varicella infection or previous vaccination ("B" recommendation).

**Postexposure Prophylaxis for Selected Infectious Diseases:** Postexposure prophylaxis is recommended for selected persons with exposure or possible exposure to H. influenzae type b, hepatitis A, hepatitis B, meningococcal, rabies, or tetanus pathogens ("A" recommendation).
**Postmenopausal Hormone Prophylaxis:** Clinicians should counsel all women around the time of menopause about the possible benefits and risks of postmenopausal hormone therapy and the available treatment options ("B" recommendation).