CANCER SCREENINGS

**Breast:** Periodic breast examination by your healthcare provider and, beginning at age 40, a mammogram every one to two years. Those with a family history of cancer may be advised to begin screening earlier. Women between ages 50 and 79 who are at low risk should have screening mammograms at least every two years.

**Cervix:** First Pap test by age 21, followed by repeat tests every three years up to age 30 if results are normal. After age 30, every three to five years as long as the HPV test is negative. HPV tests should be done at the time of Pap smears starting at age 30. If you are over age 30 with a normal Pap smear and negative HPV test, you may extend Pap/HPV testing to every five years. However, annual visits for well woman care are still recommended. Pap tests are done more frequently in women with a history of multiple sexual partners or prior abnormal Pap tests, smokers, and especially women with HPV or HIV infection. (Pap smears may be discontinued at age 65 at physician/patient discretion.)

**Colorectal:** Colonoscopy every 10 years, or annual fecal occult blood test from age 50 with either flexible sigmoidoscopy every five years or air-contrast barium enema every five to 10 years. Recommendations may differ for women at high risk (who have certain medical conditions or a first-degree relative with colon cancer). Women with a family history of colon cancer and black women may want to begin screening sooner.

**Skin:** Use broad-spectrum sunscreen whenever you are in the sun and get periodic skin examinations. (Be sure to take a vitamin D supplement if you avoid all ultraviolet radiation.)
SCREENING FOR SEXUALLY TRANSMITTED INFECTIONS

Sexually active women at risk and women under age 25 should be checked yearly for sexually transmitted infections (STIs), including chlamydia, and counseled about HIV screening and contraceptive needs.

SCREENINGS AND IMMUNIZATIONS DURING PREGNANCY

Pregnant women need special screenings (for example, for gestational diabetes), as well as breastfeeding counseling and support. Two vaccines are also recommended: the seasonal influenza (flu) vaccine for all pregnant women during flu season, and the Tdap (tetanus, diphtheria and pertussis or whooping cough) vaccine during the second half of pregnancy.

SCREENINGS FOR MENOPAUSAL AND POSTMENOPAUSAL WOMEN

Heart disease and osteoporosis are two of the most serious health risks for women after menopause. Diet, exercise and lifestyle choices, such as avoiding tobacco and excessive alcohol use, help to modify your risks.

Heart Disease

Heart disease remains the most significant cause of death in women. Risk factors for cardiovascular disease in women include being overweight, having a sedentary lifestyle, smoking, being over age 55, having hypertension, having diabetes, going into premature menopause and having a family history of heart disease.

High levels of cholesterol and triglycerides are associated with an increased risk of heart disease. High levels of HDL cholesterol (largely inherited) are usually protective, but not always. Ultrasensitive C-reactive protein testing (us-CRP) can further assess your risk of cardiovascular disease. (Note that this test cannot be interpreted if you are on oral hormone therapy.)

Medicine. Medications proven to reduce cardiovascular risks, including heart attack and stroke, in women with known heart disease or at high risk of heart disease include:

- Cholesterol-lowering statin drugs, including atorvastatin (Lipitor®), simvastatin (Zocor®), pravastatin (Pravachol®), lovastatin (Mevacor®) and rosuvastatin (Crestor®)
- ACE inhibitors for hypertension such as remipril (Altace®)
- Diabetic control agents such as metformin (Glucophage®)

The statins have NOT been effective in preventing the development of cardiovascular disease, called primary prevention. They also increase the risk of developing type 2 diabetes.

Diet. A Mediterranean-type diet is effective in the primary prevention of heart disease. The FDA suggests replacing animal protein with 25 grams of soy protein per day to help lower cholesterol. Other foods that may help lower cholesterol include apple pectin, flax seed, oat bran, garlic and Benecol® spread in place of butter. Foods containing omega-3 fatty acids (fish and/or almonds, walnuts and flax seed) should be consumed at least twice a week. Foods high in trans fatty acids (partially hydrogenated vegetable oils) should be completely avoided.

Hormone therapy. Hormone therapy (HT) does not reduce cardiovascular risks such as heart attack and stroke among women who already have heart disease and is not used solely to prevent heart disease. Blood clots are the major risk of oral hormone therapy. The risk of blood clots may be lower with the use of a transdermal patch, and vaginal estrogen can be used for urogenital atrophy alone.

The risk of a breast cancer diagnosis is slightly higher among women on long-term oral estrogen-progestin hormone therapy. However, estrogen given alone to women after hysterectomy does not increase breast cancer risk. The risks of gallbladder disease and stroke are higher among older women on hormone therapy.
Hormone therapy reduces the risk of diabetes, colon cancer, osteoporosis and bone breakage, and is primarily used to treat menopausal symptoms.

**Osteoporosis**
Osteoporosis can occur after menopause as the trabecular bone thins in women at risk. Risk factors for developing osteoporosis include low bone density, a family history of osteoporosis, prednisone use, rheumatoid arthritis, smoking, excessive alcohol intake and being underweight for your height.

**Supplements.** The risks of developing osteoporosis at an advanced age may be reduced by taking 1,200 milligrams of calcium in divided doses plus 1,000 to 2,000 international units (IU) of additional vitamin D3 daily, starting in early adolescence. Many people are deficient in vitamin D, which is important for strong bones. Deficiency can lead to musculoskeletal aches and pain, a higher risk for diabetes and even some cancers.

Calcium citrate (Citracal®) is well-absorbed and easier on the stomach than calcium carbonate (like Tums®), which requires stomach acid for absorption. (Check your calcium supplement for a USP symbol to ensure purity because some calcium supplements are contaminated with lead and heavy metals.)

**Medicines/hormone therapy.** The risk of developing postmenopausal osteoporosis can be prevented with the use of hormone therapy. In addition, these drugs may be used to manage osteoporosis:

- Risedronate (Actonel® or coated weekly Atelvia®)
- Alendronate (Fosamax®)
- Raloxifene (Evista®)
- Ibandronate (Boniva®)
- Calcitonin nasal spray (Miacalcin® or Fortical®).
- Injectable PTH (Forteo®), a newer agent used to build bone given by injection daily for two years
- Once-yearly IV zoledronic acid (Reclast®), available to treat postmenopausal osteoporosis; may also be used every other year to prevent postmenopausal osteoporosis
- Subcutaneous denosumab (Prolia®), injected every six months for women at high risk of osteoporosis fractures

**Bone Mineral Densitometry (BMD).** Bone mineral densitometry is available to diagnose and monitor treatment for osteoporosis. Bone mineral density correlates with fracture (bone breakage) risk. It is imperative to return to the same DXA machine for serial studies. Women should consider a bone density test within two years of menopause or by age 65, or at a younger age if they have had a fracture or have other risks for osteoporosis.

**SCREENING BLOOD TESTS**
A history of gestational diabetes and/or preeclampsia increases women’s risks for diabetes and hypertension. For all women, fasting blood sugar testing is recommended every three years starting at age 45.

Fasting lipid levels and TSH (thyroid) tests are considered every five years. Baby boomer women may want to discuss a one-time blood test to screen for hepatitis C. All adults are offered a one-time HIV screening blood test to screen for asymptomatic infection. Other blood and urine testing depends on your individual and family medical history.

**DOMESTIC VIOLENCE SCREENING**
It is important to talk with your healthcare team about any safety concerns that you may have.

**FINDING A PRIMARY CARE PHYSICIAN**
All women are encouraged to have a primary care physician for general medical concerns.
**IMMUNIZATIONS**

In addition to the usual childhood immunizations, the following are recommended:

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<th>Vaccine</th>
<th>Details</th>
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<td><strong>Influenza vaccine.</strong> All adults, including all pregnant women, should receive the flu shot yearly in the fall. (This vaccine is not a living virus and does not carry excess risk of illness.) The nasal flu mist spray is available for those ages 5 to 49.</td>
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<td><strong>Tetanus-diphtheria (Td).</strong> A booster injection should be given every 10 years and at least once at age 50. The Tdap (tetanus-diphtheria with acellular pertussis, or whooping cough) vaccine also is available. All adults should receive at least one booster to cover whooping cough.</td>
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<td><strong>Pneumococcal vaccine.</strong> This should be given between ages 50 and 65 and at any age in patients at high risk. A booster can be given five years later if the first vaccine was received prior to age 65.</td>
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<td><strong>Hepatitis B.</strong> This is a three-shot immunization now given to all children and teenagers.</td>
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<td><strong>Hepatitis A.</strong> This two-shot immunization is given to women traveling to third-world countries with poor food-handling conditions. (The second shot can be administered 6 to 12 months after the first.)</td>
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<td><strong>Varivax®.</strong> This two-shot immunization is given to non-pregnant women who did not have chicken pox during childhood to prevent chicken pox during pregnancy.</td>
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<td><strong>Zostavax® (shingles vaccine).</strong> This is available for adults ages 50 and older. Most adults should receive the vaccine at about age 60 or older. (Check with your insurance company regarding coverage.)</td>
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<td><strong>Menactra® (meningitis vaccine).</strong> This currently is given to college-bound, dormitory-residing students and may be considered in other women.</td>
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<td><strong>Gardasil® (HPV cancer vaccine/genital warts vaccine).</strong> This is now available in a series of three injections for girls (and boys) ages 9 to 26.</td>
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<tr>
<td><strong>Ceravix® (HPV cancer vaccine).</strong> This is now available in a series of three injections for girls.</td>
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