Who may be at risk for breast cancer?

- One of every nine women will develop breast cancer at some point in her life.
- Risk increases with age.
- Breast cancer rates are highest in North America, northern Europe and Latin America.
- There is a greater risk if your mother or sister had breast cancer.
- The risk is higher if:
  - You have never had children.
  - You had your first child after age 30.
  - You had an early menarche and late menopause.

How to protect against breast cancer: *The best protection is early detection*

- Examine breasts monthly – 7 to 10 days after the beginning of the menstrual cycle. Look for persistent lumps that do not disappear or change.
- Have an annual clinical breast exam by a health care provider.
- Have a mammogram annually after age 40.
- Consider taking the hormone drug Tamoxifen if you are at high risk of being diagnosed with breast cancer. Talk to your physician for more information.

Signs and symptoms of breast cancer

- Lump or thickening in the breast, which may or may not be tender or painful
- Clear or bloody discharge from a nipple
- Retracted nipple
- Change in the size or contours of the breast
- Any flattening or indentation of skin over the breast
- Redness or pitting of the skin over the breast (like the skin of an orange)

Mammograms can help save lives

- The first “baseline” mammogram should be scheduled between age 35 and 40.
- After age 40 you should have an annual mammogram.
- A mammogram can detect a lump as early as two years before it can be felt.
- Because of mammograms, 25 percent of cancers now diagnosed are smaller than 1/3 inch and haven’t spread beyond the breast.
- Mammograms use very low levels of radiation ... less than what a passenger is exposed to flying in an airplane.
Other tests that detect breast cancer

- Ultrasound: Sound waves create a picture of the breast and can show whether a lump is a cyst or solid mass.
- Magnetic resonance imaging (MRI): Used to locate the center of a breast cancer, to evaluate a breast mass or to detect if an implant is ruptured.
- Needle aspiration: A needle is used to withdraw fluid or cells from a lump. It distinguishes between a cyst and a solid mass, and may also drain large cysts.
- Stereotactic breast biopsy: Under local anesthesia, the doctor uses a computer to locate the exact location of a suspicious area and guides a needle in removing a small amount of tissue.
- Surgical biopsy: A surgeon removes the entire lump for microscopic examination by a pathologist.

What treatments are available after a breast cancer diagnosis?

Treatment is typically a combination of surgery, radiation therapy, and hormone therapy or chemotherapy.

- Surgery: Just a few decades ago, women often had a radical mastectomy, which included the removal of the breast, lymph nodes and chest wall muscle. Studies now show that less extensive surgery is equally successful. Options include:
  - Lumpectomy – only the lump is removed, plus a small area of surrounding tissue. The surgeon may also remove some lymph nodes to check for possible spread of the disease.
  - Modified radical mastectomy – breast and underarm lymph nodes are removed; chest wall muscles are left intact.
  - Reconstructive surgery – often started at the time of the mastectomy, reconstructive surgery can help restore the breast’s appearance. Breast reconstruction does not increase chances for cancer recurrence, but may make it more difficult to detect.
- Hormone therapy: Used to help prevent the growth of breast cancer cells that might have spread, but are undetectable. These hormones, like Tamoxifen, usually counteract estrogen.
- Chemotherapy: Anticancer drugs that are more toxic than hormones, but are beneficial in killing cancer cells that might have spread outside the breast. The physician might use a variety of combinations of drugs, depending on your health, prior treatment and the risk of side effects.
- Radiation therapy: Usually necessary after a lumpectomy, and occasionally after a mastectomy, to kill cancer cells that may have escaped surgical removal. If the cancer has spread to other parts of the body, radiation may also be used in those areas.