Factors associated with a decreased risk include breastfeeding for at least one year, regular moderate or vigorous physical activity, and maintaining a healthy body weight. Two medications – tamoxifen and raloxifene – have been approved to reduce breast cancer risk in women at high risk. Raloxifene appears to have a lower risk of certain side effects, but is only approved for use in postmenopausal women.

**Early detection:** Mammography is a low-dose x-ray procedure used to detect breast cancer at an early stage. Numerous studies have shown that early detection with mammography helps save lives and increases treatment options. However, like any screening tool, mammography is not perfect. For example, it can miss cancers, particularly those in women with very dense breasts, and also detects cancers that would never have caused harm, resulting in some overdiagnoses. Most (95%) of the 10% of women who have an abnormal mammogram do not have cancer. For women at average risk of breast cancer, recently updated American Cancer Society screening guidelines recommend that those 40 to 44 years of age have the choice for annual mammography; those 45 to 54 have annual mammography; and those 55 years of age and older have biennial or annual mammography, continuing as long as their overall health is good and life expectancy is 10 or more years. For some women at high risk of breast cancer, annual screening using magnetic resonance imaging (MRI) in addition to mammography is recommended, typically starting at age 30. For more information on breast cancer screening, see the American Cancer Society’s screening guidelines on page 66.

**Treatment:** Taking into account tumor characteristics, including size and extent of spread, as well as patient preference, treatment usually involves either breast-conserving surgery (surgical removal of the tumor and surrounding tissue) or mastectomy (surgical removal of the breast). For early breast cancer (without spread to the skin, chest wall, or distant organs), long-term survival is similar for women treated with breast-conserving surgery plus radiation therapy and those treated with mastectomy. Underarm lymph nodes are usually removed and evaluated during surgery to determine whether the tumor has spread beyond the breast. Women undergoing mastectomy who elect breast reconstruction have several options, including the tissue or materials used to restore breast shape and the timing of the procedure.

Treatment may also involve radiation therapy, chemotherapy (before or after surgery), hormonal therapy, and/or targeted therapy. Women with early stage breast cancer that tests positive for hormone receptors benefit from treatment with hormonal therapy for at least 5 years. For women whose cancer overexpresses the growth-promoting protein HER2, several targeted therapies are available.