

Breast Cancer



Your right to know

Illinois Department of Public Health

The information contained in this brochure regarding recommendations for the early detection, diagnosis and treatment of breast disease and breast cancer is only for the purpose of assisting you, the patient, in understanding the medical information and advice offered by your physician. This brochure cannot serve as a substitute for the sound professional advice of your physician.

The availability of this brochure or the information contained within is not intended to alter, in any way, the existing physician-patient relationship, nor the existing professional obligations of your physician in the delivery of medical services to you, the patient.

Introduction

As a woman, you know what it is to be busy. A routine visit to your health care provider can be the last thing you want to do. However, it is important that you make time for mammograms and breast examinations. Do it for yourself...do it for those who depend on you. Early diagnosis of breast cancer could save your life.

Breast cancer strikes thousands of women each year. Early detection of breast cancer is maximized through a combined approach of routine mammograms, annual clinical breast examinations by a doctor or a nurse and monthly breast self-examinations.

Screening and Early Detection

It is important to take an active part in the early detection of breast cancer. Talk with your doctor about symptoms to watch for and an appropriate schedule of checkups. There are three important ways to detect breast cancer:

- Mammogram (X-ray of the breast)
- Clinical breast exam (breast exam by a doctor or nurse)
- Breast self-examination

Mammogram

A mammogram is a special kind of X-ray that uses very low levels of radiation. Mammography performed in women with no symptoms of breast cancer is usually called screening. Mammography is the most accurate method available to detect breast cancer in its earliest stage. However, no diagnostic tool is 100 percent effective. In many cases (but not all), mammograms can show breast tumors before they cause symptoms or can be felt. Even though your mammogram may be normal, you should not ignore changes in your breasts. The American Cancer Society recommends a mammogram each year if you are 40 years of age or older.

Mammography should be done only by specially trained medical staff using approved machines designed just for taking X-rays of the breast. The Mammography Quality Standards Act is a federal law requiring all mammography facilities to be certified. You can talk to your doctor, the American Cancer Society at 1-800-227-2345, or the Cancer Information Service at 1-800-422-6237 for help in finding a certified mammography facility.

Clinical Breast Exam

For women of all ages, a breast exam by a doctor or nurse (called a clinical breast exam) is usually part of a regular medical checkup. During a clinical breast exam, your doctor will carefully feel your breasts and under your arms to check for lumps and other unusual changes.

Breast Self-examination

You also should examine your breasts once a month. It's important to remember that every woman's breasts are different. Your breasts may undergo changes because of aging, your menstrual cycle, pregnancy, menopause, or taking birth control pills or other hormones. It is normal for the breasts to feel a little lumpy and uneven. Also, it is common for a woman's breasts to be swollen and tender right before or during her menstrual period. You should contact your doctor about any unusual changes in your breasts. When breast cancer first develops, there may be no symptoms at all. But as the cancer grows, it can cause changes that women should watch for:

- A lump or thickening in or near the breast or in the underarm area;
- A change in the size or shape of the breast;
- A discharge from the nipple; or
- A change in the color or feel of the skin of the breast, areola or nipple (dimpled, puckered or scaly).

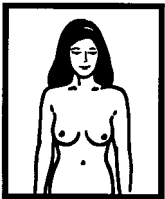
See your doctor if you notice any of these changes. Most often, they are not cancer, but only a doctor can tell for sure. If you do not have a

doctor, call your medical society or one of the numbers provided on the back of this brochure. Staff members will try to help find a doctor or breast cancer clinic close to where you live.

The Y-ME National Breast Cancer Organization recommends performing a breast self examination (BSE) seven to 10 days after the first day of your period, when your breasts are least tender. If you no longer menstruate, choose the same day each month to do a BSE.

Monthly Breast Self-Exam

Look For Changes

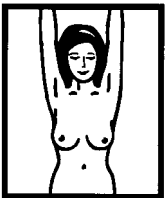


Hands at side.
 Compare for symmetry.
 Look for changes in:

- shape
- color

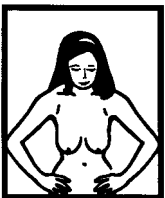
Check for:

- puckering
- skin changes
- nipple discharge
- dimpling



Hands over head.
 Check front and side view for:

- symmetry
- puckering
- dimpling



Hands on hips, press down, bend forward.
 Check for:

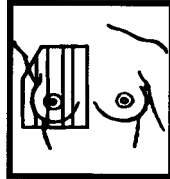
- symmetry
- nipple direction
- general appearance

Be sure to examine both breasts in the same way. If there are any lumps, knots or changes, tell your doctor right away.

Feel For Changes

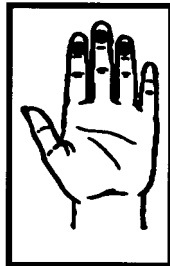


Lie down with a towel under right shoulder; raise right arm above the head.



Examine area from:

- underarm to lower bra line
- across to breast bone
- up to collar bone
- back to armpit



Use the pads of the three middle fingers of the left hand.
 Hold hand in bowed position.
 Move fingers in dime-sized circles.



Use three levels of pressure:

- light
- medium
- firm



Examine entire area using vertical strip pattern.

Diagnosing Breast Cancer

An abnormal area on a mammogram, a lump or other changes in the breast can be caused by cancer or by other, less serious problems. To find out the cause of any of these signs or symptoms, a woman's doctor does a careful physical exam and asks about her personal and family medical history. In addition to checking general signs of health, the doctor may do one or more of the breast exams described below.

- *Palpation.* Palpation means carefully feeling the lump and the tissue around it. The doctor can tell a lot about a lump – its size, texture and whether it moves easily. Benign lumps often feel different from cancerous ones.
- *Mammography.* X-rays of the breast can give the doctor important information about a breast lump. If an area on the mammogram looks suspicious or is not clear, additional X-rays may be needed.
- *Ultrasonography.* Using high-frequency sound waves, ultrasonography can often show whether a lump is solid or filled with fluid. This exam may be used along with mammography.

Based on these exams, the doctor may decide that no further tests are needed and no treatment is necessary. In such cases, the doctor may need to check the woman regularly to watch for any changes.

Often, however, the doctor must remove fluid or tissue from the breast to make a diagnosis.

- *Aspiration or needle biopsy.* The doctor uses a needle to remove fluid or a small amount of tissue from a breast lump. This procedure may show whether a lump is a fluid-filled cyst (not cancer) or a solid mass (which may or may not be cancer). Using special techniques, tissue can be removed with a needle from an area that is suspicious on a mammogram but cannot be felt.

- *Surgical biopsy.* The surgeon cuts out part or all of a lump or suspicious area. A pathologist examines the tissue under a microscope to check for cancer cells.

When Cancer is Found

When cancer is present, the pathologist can tell what kind of cancer it is (whether it began in a duct or a lobule) and whether it is invasive (has invaded nearby tissues in the breast).

This booklet is written especially for you if you have been diagnosed with breast cancer. You probably have many questions and concerns. You may be feeling confused, worried or anxious. It may be hard for you to concentrate or to make decisions. These reactions are normal.

The information in this booklet should help you understand your diagnosis and the treatments that are available. It is very important that you become a partner with your doctor in deciding what treatment is best for you.

Who Gets Breast Cancer?

Breast cancer is one of the most frequently diagnosed cancers in women in the United States today. Every woman has some chance of developing breast cancer during her lifetime. Since age is a major risk factor, as women get older, their chances of getting breast cancer increase. Even though breast cancer is more common in older women, it also occurs in younger women and even in a small number of men.

While we don't yet know what causes breast cancer, we do know that—

1. Breast cancer is not caused by stress or by an injury to the breast.
2. Most women who develop breast cancer do not have any known risk factors or a history of the disease in their families.
3. You should not feel guilty. You haven't done anything wrong in your life that caused breast cancer.

4. You cannot “catch” breast cancer from other women who have the disease. It is not contagious.

Remember, you don’t have to face breast cancer alone; there are knowledgeable and caring people who can help you.

Treatment Choices

Breast cancer is a complex disease. All cases are not the same. Once breast cancer has been found, more tests will be done to find out the specific pattern (description) of your disease. This important step is called staging. Knowing the exact stage of your disease will help your doctor plan your treatment. Your doctor will want to know –

- The size of the tumor and exactly where it is in your breast.
- If the cancer has spread within your breast.
- If cancer is present in your lymph nodes under your arm.
- If cancer is present in other parts of your body.

Specific Stages of Breast Cancer

- Stage 0 Very early breast cancer. This type of cancer has not spread within or outside the breast. It is sometimes called DCIS, LCIS, or breast cancer in situ or noninvasive cancer.
- Stage I The cancer is no larger than about 1 inch in size and has not spread outside the breast.
- Stage II The doctor may find any of the following:
- The cancer is no larger than 1 inch, but has spread to the lymph nodes under the arm.
 - The cancer is between 1 inch and 2 inches; it may or may not have spread to the lymph nodes under the arm.
 - The cancer is larger than 2 inches, but has not spread to the lymph nodes under the arm.

Stage III	This stage is divided into stages IIIA and IIIB:
Stage IIIA	<p>The doctor may find either of the following:</p> <ul style="list-style-type: none"> • The cancer is smaller than 2 inches and has spread to the lymph nodes under the arm. The cancer also is spreading further to other lymph nodes. • The cancer is larger than 2 inches and has spread to the lymph nodes under the arm.
Stage IIIB	<p>The doctor may find either of the following:</p> <ul style="list-style-type: none"> • The cancer has spread to tissues near the breast (skin, chest wall, including the ribs and the muscles in the chest). • The cancer has spread to lymph nodes inside the chest wall along the breast bone.
Stage IV	The cancer has spread to other parts of the body, most often the bones, lungs, liver or brain. Or, the tumor has spread locally to the skin and lymph nodes inside the neck, near the collarbone.
Inflammatory Breast Cancer	Inflammatory breast cancer is a rare, but very serious, aggressive type of cancer. The breast may look red and feel warm. You may see ridges, welts or hives on your breast; or the skin may look wrinkled. It is sometimes misdiagnosed as a simple infection.
Recurrent Breast Cancer	Recurrent disease means that the cancer has come back (recurred) after it has been treated. It may come back in the breast, in the soft tissues of the chest (the chest wall) or in another part of the body.

Prognosis (Chance of Recovery)

Once your doctor has determined your specific type and stage of breast cancer, you can begin to plan for your treatment and recovery. Your chance of recovery will depend on many factors:

- The type and stage of your cancer (what kind of cancer, the size of the tumor and whether it is only in your breast or has spread to

any lymph nodes or to other parts of your body)

- How fast the cancer is growing. Special lab tests on the tissue can measure how fast the cancer cells are dividing and how different they are compared to normal breast cells.
- How much the breast cancer cells depend on female hormones (estrogen and progesterone) for growth, which can be measured by hormone receptor tests. Patients whose tumors are found to be dependent on hormones (described as estrogen-positive or progesterone-positive) can be treated by hormonal therapy to prevent further growth or recurrence of breast cancer.
- Your age and menopausal status (whether or not you still have monthly menstrual periods)
- Your general state of health

Treatment Options

Today, most women with breast cancer are diagnosed at an early stage and they benefit from newer, more effective treatments. There are treatments available for patients at all stages of breast cancer. Often, more than one type of treatment is needed.

Surgery

Surgery is taking out the cancer in an operation. Surgery has an important role in the treatment of patients with breast cancer. Most women can choose between breast conserving surgery (lumpectomy with radiation therapy) or removal of the breast (mastectomy). Clinical trials have proven that both options provide the same long-term survival rates for most types of early breast cancer. However, neither option guarantees that cancer will not recur. Whichever choice you make, you will need close medical follow-up for the rest of your life.

Lumpectomy. The surgeon removes the breast cancer and some normal tissue around it (in order to get clear margins). This procedure usually results in removing all the cancer, while leaving you with a breast that looks much the same as it did before surgery. Usually, the surgeon also takes out some of the lymph nodes under the arm to find

out if the cancer has spread. Women who have lumpectomies almost always have radiation therapy as well. Radiation therapy is used to destroy any cancer cells that may not have been removed by surgery.

Partial or segmental mastectomy. Depending on the size and location of the cancer, this surgery can conserve much of the breast. The surgeon removes the cancer, some of the breast tissue, the lining over the chest muscles below the tumor and usually some of the lymph nodes under the arm. In most cases, radiation therapy follows.

Total (or simple) mastectomy. The surgeon removes the entire breast. Some lymph nodes under the arm may be removed, also.

Modified radical mastectomy. The surgeon removes the breast, some of the lymph nodes under the arm, the lining over the chest muscles and, sometimes, part of the chest wall muscles.

Radical mastectomy. The surgeon removes the breast, chest muscles, and all the lymph nodes under the arm. This was the standard operation for many years, but it is used now only when a tumor has spread to the chest muscles.

Possible problems. As with any kind of surgery, these procedures pose certain risks, including infection, poor wound healing, bleeding or a reaction to the anesthesia used in surgery. Fluid may collect under the skin, or tingling, numbness, stiffness, weakness or swelling of the arm (see discussion of lymphedema below) may occur. Physical therapy and exercise can help to restore arm movement and strength.

Removal of lymph nodes. Whether you have a lumpectomy or mastectomy, your surgeon will probably remove some of the lymph nodes under your arm. This procedure is usually done at the same time as the breast surgery to check if the cancer has spread outside the breast. Clear lymph nodes are reported as negative nodes. If cancer is found, you have positive nodes. Your doctor will talk with you about any additional treatments needed to destroy and control cancer cells.

The lymph nodes under your arm drain lymph fluid from your chest and arm. Both surgery and radiation therapy can change the normal drainage pattern, resulting in a swelling of the arm called lymphedema. The problem can develop right after surgery or months to years later. Treatment of lymphedema depends on how serious the problem is. Options include an elastic sleeve, an arm pump, arm massage or bandaging the arm. Exercise and diet also are important. If you have this problem, talk with your doctor and see a physical therapist as soon as possible. Many hospitals and breast clinics offer help with lymphedema. There is no cure for this condition, so you should do what you can to prevent it.

Radiation Therapy

Some surgical procedures are followed by radiation therapy. During radiation therapy, high-energy X-rays are used to destroy cancer cells that still may be present in the affected breast or in nearby lymph nodes. Radiation therapy is sometimes used to shrink tumors before surgery. Doctors sometimes use radiation therapy along with chemotherapy, before or instead of surgery, to destroy cancer cells and to shrink tumors.

Possible problems. Some women may feel more tired than usual; skin problems such as itchiness, redness, soreness, peeling, darkening or shininess of the skin may occur; or there may be decreased sensation in the breast. Radiation to the breast does not cause hair loss, vomiting or diarrhea.

Long-term changes may include changes in the shape and color of the treated breast or a feeling of heaviness in the breast. Once a breast has been irradiated, it cannot be irradiated again. Any local recurrence or new tumor would have to be treated by mastectomy.

Chemotherapy

Research suggests that, even if a lump is small, cancer cells may have spread outside the breast. Doctors can use chemotherapy drugs to destroy cancer cells. Some chemotherapy drugs work better when combined with other chemotherapy drugs than when used alone.

Chemotherapy drugs travel throughout the body to slow the growth of cancer cells or kill them. Often, the drugs are injected into the bloodstream through an intravenous (IV) needle that is inserted into a vein. Some drugs are given as pills. Treatment can be as short as a few months or as long as two years.

Chemotherapy affects all fast-growing cells throughout the body. Therefore, in addition to killing cancer cells, it also kills fast-growing normal cells. This is what may cause side effects such as hair loss, mouth sores and fatigue. Today, because of what has been learned in research studies, doctors are able to control, lessen or avoid many side effects of chemotherapy.

Possible problems. Chemotherapy can cause short-term and long-term side effects that are different for each patient, depending on the drugs used.

The most common short-term side effects that may appear during chemotherapy include loss of appetite, nausea, vomiting, diarrhea, constipation, fatigue, infections, bleeding, weight change, mouth sores and throat soreness. Some of these problems may continue for some time after chemotherapy ends. There are drugs that may help with these side effects.

Some drugs cause short-term hair loss. Hair will grow back either during treatment or after treatment is completed. Before you start chemotherapy, you may want to have your hair cut short, or buy a wig, hat or scarves that you can wear while going through treatment.

Serious long-term side effects may include weakening of your heart, damage to your ovaries, infertility, early menopause or second cancers such as leukemia (cancer of the blood). These side effects may not appear until some time after chemotherapy is completed.

High-dose Chemotherapy

In breast cancer treatment clinical trials, researchers at the National Cancer Institute and other health institutions are testing high-dose chemotherapy to find out if it is better than standard chemotherapy. They are trying to learn if higher doses of drugs can prevent or delay the spread or return of breast cancer better than standard doses of drugs, and which type of treatment helps patients to live longer.

Patients who receive high-dose chemotherapy are at great risk of suffering life-threatening side effects because the treatment damages bone marrow and they no longer are able to produce needed blood cells. To help repair the damage done by high doses of drugs, the treatment includes peripheral blood stem cell transplantation and/or bone marrow transplantation.

Peripheral Blood Stem Cell Transplantation

Peripheral blood stem cell transplantation involves the removal of a certain type of blood cell, called a stem cell, from a patient's blood. Stem cells are immature cells from which all blood cells develop as they are needed. Stem cells are able to divide and form more stem cells (copies of themselves) or they can become fully mature red blood cells (erythrocytes), platelets and white blood cells (leukocytes).

The removed stem cells are frozen and stored while the patient is treated with high-dose chemotherapy. After chemotherapy ends and the drugs are gone from the body, the stem cells are returned to the patient through a vein. The healthy stem cells can then begin to grow and produce all types of blood cells the patient needs to survive.

Bone Marrow Transplantation

Bone marrow is the sponge-like material found inside bones that produces blood cells. Autologous bone marrow transplantation is used in breast cancer treatment. In this procedure, some of a patient's own healthy bone marrow is removed with a needle before treatment begins. The bone marrow is then frozen and stored while the patient is treated with high-dose chemotherapy. Several days after the treatment ends and the drugs are gone from the body, the healthy bone marrow is given back to the patient through a vein. The healthy bone marrow can then begin to produce blood cells that the patient needs to survive. Peripheral blood stem cells and bone marrow transplantation may be used together as part of high-dose chemotherapy.

Possible problems. There are major risks involved with high-dose chemotherapy. Talk with your doctor about possible complications and severe side effects, and whether this would be an appropriate treatment for your type and stage of breast cancer.

Hormonal Therapy

Hormonal therapy is used to prevent the growth, spread or recurrence of breast cancer. If lab tests show that your tumor depended on your natural hormones to grow, it will be described as estrogen-positive or progesterone-positive in the lab report. This means that any remaining cancer cells may continue to grow when these hormones are present in your body. Hormonal therapy can block your body's natural hormones from reaching any remaining cancer cells.

Research has proven that hormonal therapy can extend the lifespan of a breast cancer patient who has cancer cells that depend on hormones to grow. Tamoxifen has been used for nearly 20 years to treat patients with advanced stage breast cancer. Now it is being used also as additional treatment for early stage disease after breast cancer is removed by surgery. Clinical trials show that taking tamoxifen as part of the treatment for breast cancer helps to reduce the chances of recurrence in the treated breast and of new cancer developing in the

other breast.

Possible problems. Side effects could include hot flashes, nausea, vaginal spotting (small amounts of blood) or increased fertility in younger women. Less common side effects include depression; vaginal itching, bleeding or discharge; loss of appetite; eye problems; headache; and weight gain.

Biological Therapy (Immunotherapy)

Your own immune system is your body's natural defense against diseases, including cancer. Your immune system also defends your body against infections and other side effects of cancer treatment. A strong immune system detects the difference between healthy cells and cancer cells, and it can get rid of those that become cancer. The immune system can be strengthened and improved by new biological therapies. These treatments are designed to repair, stimulate or increase your body's natural ability to fight infections and cancer.

Medical researchers are looking at many types of biological therapies that use and boost the substances produced naturally by the body's own cells. They also are creating new substances that can imitate or help the body's natural immune system to work against infection and disease. These are being used in clinical trials with chemotherapy and radiation therapy.

Possible problems. Biological therapies may produce side effects such as rashes or swellings at the site where shots are given; flu-like symptoms, including fever, chills and fatigue; digestive tract problems; or allergic reactions.

Clinical Trials

Your doctor may suggest that you consider taking part in a breast cancer treatment clinical trial. A clinical trial is a research study where patients help scientists find new, improved treatments. You may want to ask your doctor if you should consider joining such a research study.

It's important to make this decision before you start treatment because you may not be eligible if you have had certain treatment already. Every successful treatment used today started as a clinical trial, and the patients who participated were the first to benefit from improved therapy.

Research studies for breast cancer treatments take place in many hospitals and cancer centers across the country. In these clinical trials, doctors use the newest treatments to care for cancer patients. Each carefully planned study is designed to answer certain questions and to find out specific information about how well a new drug or treatment method works.

As time goes on, new and better ways to help cancer patients are being developed. It takes time, often several years, for clinical trials to prove the true value and effectiveness of a new treatment. All clinical-study patients receive the best care possible, and their reactions to the treatment are watched very closely. If the treatment doesn't seem to be helping, a doctor can take a patient out of a study. Also, a patient may choose to leave at any time. If a patient leaves a research study for any reason, standard care and treatment are still available.

If you are thinking about joining a breast cancer treatment clinical trial, your doctor can give you information that will help you decide if the choice is right for you. You should consider carefully what is involved and all possible benefits and risks of the treatment that is being offered.

Options After Treatment

Breast Prosthesis

Wearing an artificial breast form may be an option after mastectomy. Some women wait several months to have reconstruction and decide to wear a breast prosthesis until they have surgery.

Breast Reconstruction

Breast reconstruction. This surgery to rebuild a breast's shape is often an option after mastectomy. Some health insurance plans pay for all or part of the cost of breast reconstruction and, also, for surgery to the other breast so that both breasts are about the same shape and size.

Reconstruction will not give you back your breast. Although the reconstructed breast will not have natural sensation, the surgery can give you a result that looks like a breast. If you are thinking about reconstruction, you should talk with a plastic surgeon before your mastectomy. Ask your surgeon for a referral to a plastic surgeon with experience in breast reconstruction. Some women begin reconstruction at the same time the mastectomy is done; others wait several months or even years.

Breast implants. A plastic surgeon is able to form a breast mound by using an implant or by using tissues from another part of your body. Breast implants are silicone sacs filled with saline (salt water) or silicone gel. The sacs are placed under your skin behind your chest muscle. Your body type, age and cancer treatment will determine which type of reconstruction will give you the best result.

Saline-filled breast implants are available for anyone who wants them. Some scientists are concerned about possible short-term and long-term health problems associated with silicone gel-filled implants. The U.S. Food and Drug Administration (FDA) has decided that breast implants filled with silicone gel may be used only in an FDA-approved clinical trial. Your surgeon can determine if you are eligible and can make arrangements for you to join the study.

Possible problems. As with any surgery, reconstruction or implants may cause some pain, swelling, bruising and tenderness. These problems should disappear as you recover. Scars will fade over time. You should let your doctor know immediately about any fever, infection or bleeding.

Implant side effects that could appear later include rupture, leakage, deflation or shifting of the implant, or interference with mammography readings. Breast implants age over time and may need to be replaced.

Reconstruction With Tissue Flaps

A flap (section) of skin, muscle and fat can be moved from another part of the body to the chest where it is formed to create a breast shape. This tissue can be taken from the lower abdomen, back, or buttocks.

Choose a plastic surgeon who has been trained in this procedure and has performed it successfully on many women. Of course, you will need to have regularly scheduled follow-up care and mammograms.

Possible problems. Tissue flap reconstruction is a major operation, resulting in large surgical wounds. If there is a poor blood supply to the flap tissue, part or all of the tissue in the breast area may not survive the transplant. Infection and poor wound healing are possible problems.

Glossary

Anesthesia – Drugs or gases given before and during surgery so the patient won't feel pain. The patient may be awake or asleep.

Breast cancer *in situ* – Very early or noninvasive abnormal cells that are confined to the ducts or lobules in the breast. Also known as DCIS or LCIS.

Clear margins – An area of normal tissue that surrounds cancerous tissue, as seen during examination under a microscope.

Duct – A small channel in the breast through which milk passes from the lobes to the nipple.

Erythrocytes – Red blood cells that carry oxygen from the lungs to cells in all parts of the body and carry carbon dioxide from the cells back to the lungs.

Estrogen – A female hormone; one of the hormones that can help some breast cancer tumors grow.

Hormones – Chemical substances in the body that affect the function of organs and tissues.

Hormone receptor tests – Lab tests that determine if a breast cancer depends on female hormones (estrogen and progesterone) for growth.

Implant – A silicone gel-filled or saline-filled sac inserted under the chest muscle to restore breast shape.

Intravenous (IV) – Injection into a vein.

Lobe, lobule – Located at the end of a breast duct, the part of the breast where milk is made. Each breast contains 15 to 20 sections, called lobes, each with many smaller lobules.

Leukocytes – White blood cells that defend the body against infections and other diseases.

Lymphedema – Swelling in the arm caused by fluid that can build up when underarm lymph nodes are removed during breast cancer surgery or damaged by radiation.

Menopause – The time of life when a woman stops having monthly menstrual periods.

Menstrual cycle – The hormone changes that lead up to a woman's having a period. For most women, one cycle takes 28 days.

Pathologist – A doctor who examines tissues and cells under a microscope to determine if they are normal or abnormal.

Platelets – The part of a blood cell that helps prevent bleeding by causing blood clots to form at the site of an injury.

Progesterone – A female hormone; one of the hormones that can help some breast cancers grow.

Stage, or staging – Classification of breast cancer according to its size and extent of spread.

Standard – Usual, common, customary.

Illinois Department of Public Health

Office of Women's Health

217-524-6088

TTY (hearing impaired use only) 800-547-0466

Women's Health Helpline

1-888-522-1282

Cancer Information Service

800-422-6237

TTY (hearing impaired use only) 800-332-8615

Y-ME National Breast Cancer Organization

800-221-2141

Fax 312-294-8597

American Cancer Society

800-227-2345

Fax 312-641-6588

Susan G. Komen Breast Cancer Foundation

800-462-9273

Fax 312-986-0020