Most benign breast changes do not increase a woman’s risk for getting cancer.

Over her lifetime, a woman can encounter a broad variety of breast conditions. These include normal changes that occur during the menstrual cycle as well as several types of benign lumps. What they have in common is that they are not cancer. Even for breast lumps that require a biopsy, some 90 percent prove to be benign.

Each breast has 15 to 20 sections, called lobes, each with many small lobules. The lobules end in dozens of tiny bulbs that can produce milk. Lobes, lobules, and bulbs are all linked to thin tubes called ducts. These ducts lead to the nipple, which is centered in a dark area of skin called the areola. The spaces between the lobules and ducts are filled with fat. There are no muscles in the breast, but muscles lie under each breast and cover the ribs.

These normal features can sometimes make the breasts feel lumpy, especially in women who are thin or who have small breasts. In addition, from the time a girl begins to menstruate, her breasts undergo regular changes each month around the time of menses. Eventually, about half of all women will experience symptoms such as lumps, pain, or nipple discharge. Generally these disappear with menopause.

Some studies show that the chances of developing benign breast changes are higher for a woman who has never had children, has irregular menstrual cycles, or has a family history of breast cancer. Benign breast conditions are less common among women who take birth control pills or who are overweight. Because they generally involve the glandular tissues of the breast, benign breast conditions are more of a problem for women of child-bearing age, who have more glandular breasts.

**TYPES OF BENIGN BREAST CHANGES**

**Generalized Breast Changes**

Generalized breast lumpiness is known by several names, including fibrocystic breast changes and benign breast changes. Such lumpiness, which is sometimes described as “ropy” or “granular,” can often be felt in the area around the nipple and areola and in the upper-outer part of the breast. Such lumpiness may become more obvious as a woman approaches middle age and the milk-producing glandular tissue of her breasts increasingly gives way to soft, fatty tissue. Unless she is taking replacement hormones, this type of lumpiness generally goes away after menopause.

The menstrual cycle also brings cyclic breast changes. Many women experience swelling, tenderness, and pain before and sometimes during their periods. At the same time, one or more lumps or a feeling of increased lumpiness many develop because of extra fluid collecting in the breast tissue. These lumps normally go away by the end of the period.

During pregnancy, the milk-producing glands become swollen and the breasts may feel lumpier than usual. Although very uncommon, breast cancer has been diagnosed during pregnancy. If you have any questions about how your breasts feel or look, talk to your doctor.

**Solitary Lumps**

Benign breast conditions also include several types of distinct, solitary lumps. Such lumps, which can appear at any time, may be large or small, soft or rubbery, fluid-filled or solid.

**Fibroadenomas** are solid and round benign tumors that are made up of both structural (fibro) and glandular (adenoma) tissues. Usually, these lumps are painless and found by the woman herself. They feel rubbery and can easily be moved around. Fibroadenomas are the most common type of tumors in woman in their late teens and early twenties, and they occur twice as often in African-American women as in other American women. Fibroadenomas have a typically benign appearance on mammography (smooth, round masses with a clearly defined edge), and they can sometimes be diagnosed with fine needle aspiration. Although fibroadenomas do not become malignant, they can enlarge with pregnancy and breast-feeding. Most surgeons believe that it is a good idea to remove fibroadenomas to make sure they are benign.

**Cysts** are fluid-filled sacs. They occur most often in women ages 35-50, and they often enlarge and become tender and painful just before the menstrual period. They are usually found in both breasts. Some cysts are so small they cannot be felt; rarely, cysts may be several inches across. Cysts are usually treated by observation or by fine needle aspiration. They show up clearly on ultrasound. Cysts are so rarely associated with cancer that the fluid removed from a cyst is not usually tested unless it is bloody or the woman is older than 55 years of age.

**Fat necrosis** is the name given to painless, round, and firm lumps formed by damaged and disintegrating fatty tissues. This condition typically occurs on obese women with very large breasts. It often develops in response to a bruise or blow to the breast, even though the woman may not remember the specific injury. Sometimes the skin around the lumps looks red or bruised. Fat necrosis can easily be mistaken for cancer, so such lumps are removed in a surgical biopsy.
Breast Lumps & Other Breast Changes

Nipple Discharge
Nipple discharge accompanies some benign breast conditions. Since the breast is a gland, secretions from the nipple of a mature woman are not unusual, nor even necessarily a sign of disease. For example, small amounts of discharge commonly occur in women taking birth control pills or certain other medications, including sedatives and tranquilizers. If the discharge is being caused by a disease, the disease is more likely to be benign than cancerous.

Nipple discharges come in a variety of colors and textures. A milky discharge can be traced to many causes, including thyroid malfunction and oral contraceptives or other drugs. Women with generalized breast lumpiness may have a sticky discharge that is brown or green. Bloody discharge always needs further evaluation.

The doctor will take a sample of the discharge and send it to a laboratory to be analyzed. Benign sticky discharges are treated chiefly by keeping the nipple clean. A discharge caused by infection may require antibiotics.

One of the most common sources of a bloody or sticky discharge is an intraductal papilloma, a small, wartlike growth that projects into breast ducts near the nipple. Any slight bump or bruise in the area of the nipple can cause the papilloma to bleed. Single (solitary) intraductal papillomas usually affect women nearing menopause. If the discharge becomes bothersome, the diseased duct can be removed surgically without damaging the appearance of the breast. Multiple intraductal papillomas, in contrast, are more common in younger women. They often occur in both breasts and are more likely to be associated with a lump than with nipple discharge. Multiple intraductal papillomas, or any papillomas associated with a lump, need to be removed.

IF YOU FIND A LUMP
If you discover a lump in one breast, check the other breast. If both breasts feel the same, the lumpiness is probably normal. You should, however, mention it to your health care provider at your next visit. But if the lump is something new or unusual and does not go away after your next menstrual period, it is time to call the health care provider. The same is true if you discover a discharge from the nipple or skin changes such as dimpling or puckering.

You should not let fear delay you. It is natural to be concerned if you find a lump in your breast. But remember that 80% of all breast lumps are not cancer. The sooner any problem is diagnosed, the sooner you can have it treated. Perform monthly self breast exams. If you need further information, schedule an appointment with your medical provider.

Contact Health Services if you have any additional questions or concerns.