Breast Cancer Risk Assessment Tool

Breast cancer is the most common cancer among women. It is estimated that about one in eight women will develop breast cancer in their lifetime. Each woman's risk of developing breast cancer is different and depends on her personal and family health history, as well as her lifestyle.

Knowing your personal breast cancer risk can help you make decisions about your health. If you have an increased risk of breast cancer, you may consider making lifestyle changes, increasing surveillance or taking medications that have been shown to help reduce the risk of developing breast cancer in some women.

How is Risk Determined?
The Breast Cancer Risk Assessment Tool (www.cancer.gov/bcrisktool) is a short questionnaire used to help health care providers estimate a woman's personal risk of developing invasive breast cancer.

This tool does not provide estimates of breast cancer risk for women:

- Under the age of 35.
- With a personal history of invasive breast cancer, ductal carcinoma in situ (DCIS) or lobular carcinoma in situ (LCIS).
- With a known mutation in the BRCA1 or BRCA2 genes.

Talk with your health care provider about other methods of estimating risk if this tool is not appropriate for you.

What is Asked on the Questionnaire?
The Breast Cancer Risk Assessment Tool uses the following information to estimate your breast cancer risk:

- Your current age. Your risk of developing breast cancer increases as you get older.
- Your age when you had your first menstrual period. Women who start their period at a young age have a slight increase in breast cancer risk because of earlier exposure to estrogen. Starting your period before age 12 slightly increases your breast cancer risk. Starting your period between ages 12 and 13 has no effect on your breast cancer risk. Starting your period at age 14 or older slightly lowers your breast cancer risk.
- Your age when you gave birth to your first live child. Having your first child at age 30 or older increases your risk of breast cancer. Having your first child before the age of 30 has a protective effect on breast cancer. The younger you are when you have your first child, the greater the protective effect is on breast cancer.
- The number of your first-degree relatives – mother, sisters or daughters – that have had breast cancer. Having one or more first-degree relatives who have had breast cancer increases your breast cancer risk.
- Your history of having breast biopsies. Women who have had breast biopsies have an increased risk because of the breast changes that prompted the biopsy. The biopsy itself does not increase risk. Having a history of more than one biopsy further increases your risk. If a biopsy found atypical hyperplasia, your risk is significantly increased.

- Your race or ethnicity. White women have the highest breast cancer rate, followed by African Americans, Asians, Hispanics and American Indians.

What Do the Results Mean?
The Breast Cancer Risk Assessment Tool estimates your risk for developing breast cancer over the next five years of your life and over your lifetime. The tool also allows you to compare your risk estimate to that of the average woman of your age and race.

Your risk estimate is given as a percentage. The lifetime risk tells you how many women out of 100 women just like you may develop breast cancer. If your lifetime risk is nine percent, this means that out of 100 women with risk factors similar to yours, nine will develop breast cancer in their lifetime. This tool does not provide enough information to say which women will be the nine who develop breast cancer.

The five-year risk estimates your risk of developing breast cancer over the next five years. The lifetime risk estimates your risk of developing breast cancer over the course of your lifetime (to age 90). If the risk assessment shows that your five-year risk is 1.7 percent or higher, or if your lifetime risk is 20 to 25 percent or higher, you are estimated to have an increased risk of developing breast cancer.

If you are estimated to have an increased risk of breast cancer, talk with your health care provider about your options for enhanced screening and surveillance. He or she can also tell you about options to lower your risk, including lifestyle changes and medications.

How Accurate are the Results?
Currently, the Breast Cancer Risk Assessment Tool is the best available. However, it does have some weaknesses. The following weaknesses may cause your risk estimate to be slightly over- or underestimated:

- The tool may overestimate the risk of developing breast cancer for women of certain ethnicities, such as Hispanic women.
- The tool was not developed to address women with significant family histories. It does not ask about extended family history of breast cancer, such as grandmothers, aunts or men in the family, nor does it ask about their age of diagnosis.
- The tool was not designed to estimate the risk of other factors that may influence breast cancer risk, such as age at menopause or use of hormone therapy.
- The tool is not appropriate for women who have had previous radiation therapy to the chest for treatment of Hodgkin lymphoma.

When are Risk Assessments Done?
Women 35 years of age and older may take the Breast Cancer Risk Assessment and discuss the results with a healthcare provider. Women who are not at increased risk should have their risk periodically recalculated. Tell your health care provider if you have a change in your breast health history (for example, a breast biopsy) or if a close relative develops breast cancer, so your risk can be recalculated.

If you are estimated to have an increased risk of breast cancer, your health care provider will talk with you about options to lower your risk, including medications and lifestyle changes. Your health care provider will also talk with you about recommendations for breast cancer screening.