How Often Should I Get a Mammogram?

Ages 50-74

BREAST CANCER SCREENING

Last updated: 1/28/2021
Introduction

Breast cancer is one of the most common cancers among women. All major health professional groups recommend routine mammograms for women between ages 50 and about 74 to screen for breast cancer. While the benefits of routine screening mammograms are clear for women ages 50-74, it is not clear how often mammograms should be done. Some groups recommend a mammogram every year and others every two years. To decide what is right for you, you should think about the possible benefits and harms that can result from getting mammograms. You also need to understand your risk of breast cancer and your personal health concerns. Some women may choose not to have any mammograms, but this is not recommended by any current guideline.

This tool is designed to help you decide how often to get a screening mammogram.

If you currently have any breast symptoms such as pain or lumps, please see your primary care provider right away and don’t wait for a screening test.
What is a screening mammogram?

A mammogram is an X-ray of the breast. Screening mammograms are done to check for breast cancer in women who have no signs or symptoms of the disease. Mammograms can show changes in the breast up to two years before a patient or physician can feel them.

Mammography technology has improved in recent years, and Confluence Health uses up-to-date equipment and methods. All current guidelines are based on studies done with older mammogram technology. Newer technology may change some of the data in this decision aid. It is not likely to create major changes in key points of this decision aid.

Should I have a screening mammogram every year or every two years?

Confluence Health Recommendation:
All women ages 50-74 should have a mammogram at least once every two years.

Key Points

- For women ages 50-74 with AVERAGE risk for breast cancer, most studies tell us that having a mammogram every two years gives about the same overall benefit as having a mammogram every year.
- For women ages 50-74 with HIGHER risk for breast cancer, yearly screening mammograms may be better.
- There may be a slightly better chance of finding a cancer at an earlier and more curable stage with yearly mammograms.
- Having a mammogram only every two years lowers the possible harms of mammography.
- Women may differ in their feelings about the possible benefits and harms of screening mammography.

Before you decide how often to have regular screening mammograms:

1. Understand your personal breast cancer risk.
2. Weigh the benefits and potential harms of screening mammography.
3. Discuss this decision with your primary care provider.
What are the possible benefits of having screening mammograms?

Screening mammograms can find breast cancer early, before you have symptoms. Finding breast cancer early may make it easier to treat. Finding cancer early may also reduce the chances of dying from it.

Breast cancer happens more often as women get older. This means the possible benefits of screening are higher as women age.

What are the possible harms of mammograms?

Mammograms are not a perfect test. They do not change your chances of getting breast cancer. They do make cancer more likely to be found in early and more curable stages. Some breast cancers will not show up on mammograms. Some women will die of breast cancer even if they have regular mammograms. **In deciding whether to get a mammogram every year or every two years, there are two problems with mammograms you should know about:**

1. **False positives**
   You may have a “false positive” on a mammogram. This happens when a mammogram shows a spot that looks worrisome for cancer, but further testing shows there was no problem after all. This usually just means taking more x-rays or getting an ultrasound. Some women will need a biopsy to show there is no cancer. False positive tests can cause psychological harm through needless worry. Women who experience false positive tests may be reluctant to have more mammograms in the future. Also, screening mammograms are usually covered by insurance at no cost to you. But the cost of follow up tests related to false positive results may not be covered the same way.

2. **Overdiagnosis and overtreatment**
   Although it seems strange, some cancers found by screening mammograms will never cause any health problems in the future. This is called “overdiagnosis.” This is especially true of a certain type of cancer called “ductal carcinoma in situ,” or DCIS. It is not possible to predict which cancers found by mammogram will never become a problem, so all cancers found are generally treated. We do not know how often overdiagnosis of breast cancer happens. Studies have shown a wide range of how often overdiagnosis may happen. About one in 8 women diagnosed with breast cancer by screening mammograms every 2 years from ages 50-75 will likely be overdiagnosed. Overdiagnosis is more common in younger women than older women. About 2 to 3 women will receive cancer treatment they did not need for every 1 life saved by mammograms.

Radiation Exposure

Some women are worried about radiation from mammograms. **Screening mammography is considered a very low risk examination.** It is important to understand that we are exposed to radiation from natural sources all the time. The amount of radiation that a woman receives from a digital mammogram is about one seventh of the total dose that we are exposed to yearly from natural sources.
Screening Every Year vs. Every 2 Years

Comparing the possible harms
The numbers in the boxes are the estimated total harms for 1,000 women over the entire period of screening from age 50 to 74. Some women may have more than one harm event.

<table>
<thead>
<tr>
<th></th>
<th>Screening every year</th>
<th>Screening every two years</th>
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<tbody>
<tr>
<td>False-positive tests</td>
<td>1800</td>
<td>950</td>
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<tr>
<td>Unnecessary breast biopsies</td>
<td>230</td>
<td>150</td>
</tr>
<tr>
<td>Overdiagnosed breast tumors</td>
<td>25</td>
<td>19</td>
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Adapted from US Preventive Services Taskforce

How are the possible benefits and harms different?

1. **False Positives**
   - If 1,000 women get a mammogram every year from age 50-74, about 1,800 false positive tests will happen over those years. This will lead to about 230 biopsies that will not show cancer. If mammograms are done every 2 years, about 950 false positives will happen. This will lead to about 150 biopsies that do not show cancer.

2. **Overdiagnosis and overtreatment**
   - If 1,000 women get a mammogram every year from age 50 to 74, about 25 women will be overdiagnosed over those years. If mammograms are done every 2 years, about 19 women will be overdiagnosed.

3. **Preventing death from breast cancer**
   - If 1,000 women get a mammogram every year from age 50 to 74, about 9 of these women will be saved from breast cancer death. If mammograms are done every 2 years, about 7 women will be saved from breast cancer death.

Data source: US Preventive Services Task Force
Who is at increased risk for breast cancer?

Many women are at average or "standard" risk for breast cancer. There are many factors that can increase risk. Age is the most common risk factor. Breast cancer risk rises in all women as they get older.

This is a list of some other risk factors, ordered approximately from highest to lowest risk:

- Previous radiation treatment to the chest.
- A first degree relative (mother, sister, daughter) who had breast cancer. More than one first degree relative with breast cancer adds to this risk. First degree relatives who had their cancer at a younger age add more risk than those who had breast cancer later in life.
- Extremely dense breast tissue. This is not something you can determine without a mammogram.
- A previous breast biopsy not showing cancer but with abnormal result (called “atypia”).
- Never had children or birth of first child after age 30.
- A previous but normal (called “benign”) breast biopsy.
- Menstrual periods started before age 12.

Some of these factors increase risk much more than others. Other risk factors may play a role as well. Having some risk factors does not always mean you are at high risk. It is not possible to predict your exact personal risk of developing breast cancer. But there are tools to help estimate your risk. A Breast Cancer Risk Assessment Tool is available through the NCI (National Cancer Institute). This link will take you to the web site: www.cancer.gov/bcrisktool

Should women at higher risk of breast cancer consider more frequent screening tests?

Yes. Many expert groups recommend that women with strong risk factors or several risk factors have mammograms every year. You should discuss this with your primary care provider.
The possible benefits and harms that matter most to you should help you decide how often you will have mammograms. Here are some questions you should think about before you talk with your primary care provider about this choice:

1. How worried are you about breast cancer?
2. How much comfort would you gain from a normal mammogram result?
3. How important are the possible harms of false positives, overdiagnosis, and overtreatment to you?
4. Yearly mammograms give a small gain in protection from breast cancer death compared to mammograms every two years. How important is that difference to you?
5. How would you feel if you chose not to get mammograms every year and later were diagnosed with advanced breast cancer?

Recommendations from Professional Groups

<table>
<thead>
<tr>
<th>Age Group</th>
<th>American College of Radiology</th>
<th>American Cancer Society</th>
<th>The U.S. Preventive Services Task Force</th>
<th>American College of Obstetricians and Gynecologists</th>
<th>American Academy of Family Physicians</th>
<th>The American College of Physicians</th>
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<tbody>
<tr>
<td>Ages 50-74 yearly mammograms</td>
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<td>Ages 50-74 mammograms every two years</td>
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<td>Ages 50-54 every year Ages 55 and older every 1-2 years</td>
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<td>Ages 50-74 mammograms every 1-2 years per informed personal choice</td>
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The information in this decision aid applies to people assigned female at birth and who have maintained that status. Current screening mammography guidelines are the result of long and extensive studies of this population. Transgender women, transgender men, cisgender men, and people who identify as gender non-binary, gender non-conforming, or intersex may have breast health needs not fully addressed by standard screening mammography guidelines. They should discuss their individual screening needs with their primary care provider. An excellent resource to prepare for this discussion can be found at: https://komenpugetsound.org/wp-content/uploads/2018/04/LGBTQ-Breast-Health-Toolkit-final.pdf

The committee that created this content was composed of board-certified physicians in various medical specialties: Internal Medicine, Family Medicine, Obstetrics-Gynecology, Geriatrics, Oncology, and Radiology. The final content was based on consensus, and some committee members did not agree with some of the statements in this decision aid.

Confluence Health and its affiliated hospitals and physicians are compensated for the clinical care they provide to patients seen at Confluence Health clinics and hospitals. This includes compensation for screening mammograms.

REFERENCES


