



UW Medicine



Fred Hutch
Cancer Center

筛查乳房 X 光造影检查

乳腺癌检查成像测试

本手册解释筛查乳房 X 光造影检查，包括为什么需要做该项检查、何时做该项检查和如何为测试做准备。

什么是筛查乳房 X 光造影检查？

乳房 X 光造影检查是乳腺癌检查成像测试，使用 X 光拍摄乳房图像。

有两类乳房 X 光造影检查：

- 筛查乳房 X 光造影检查被用于检查没有乳房症状或问题妇女的乳腺癌。
- 诊断性乳房 X 光造影检查被用于查找症状的原因，例如乳房内肿块。



一位接受过特殊培训的女性技术员将帮助您以正确的姿势站立，以便拍摄乳房图像。

我为什么应当接受筛查乳房 X 光造影检查？

筛查乳房 X 光造影检查有助于在您或您的医生感觉到您的乳房发生任何变化之前尽早发现乳腺癌。这意味着我们能在乳腺癌较小时发现，更容易治疗。这可以拯救妇女的生命。尽早发现癌症，治愈的机率会更高。

我应当何时接受筛查乳房 X 光造影检查？

几个团体制定了有关筛查乳房 X 光造影检查的指南，其中包括美国癌症协会（ACS）、美国预防服务特别工作组（USPSTF）和全美综合癌症网络（NCCN）。上述每一个团体对接受测试的时间提出了不同的建议，但所有团体均认为在 40 岁开始每年接受筛查乳房 X 光造影检查能够拯救更多人的生命。

这是为什么 ACS 和 NCCN 认为具有一般风险的女性应当选择在 40 岁开始每年接受筛查乳房 X 光造影检查。所有的团体均认同，每一名女性可能对何时接受筛查和筛查频率作出不同的决定。

- 一些女性可能选择在 40 岁以后开始接受筛查。她们亦可能选择以较低的频率接受筛查，例如每隔一年接受一次筛查。

- 具有患乳腺癌较高风险的女性应当在 **40** 岁以前开始接受筛查。
- 筛查乳房 X 光造影检查对于患有其他严重疾病的女性不一定合适。

请与您的医生讨论您的患乳腺癌风险、您的价值观和愿望，共同作出最适合您的选择。

有关乳房 X 光造影检查的更多信息

在乳房 X 光造影检查过程中使用的 X 光被用于拍摄二维（常规）和三维（断层融合）图像。两种图像均可帮助发现乳腺癌。

- 在**二维乳房 X 光造影检查**中，从两个视角为每侧乳房拍摄两张图像：从上至下视角和侧面视角。
- **三维乳房 X 光造影检查**从相同的两个视角拍摄多张图像，从而生成一叠很薄的图像，称为“片段”。

三维乳房 X 光造影检查帮助放射科医生更清楚地查看不健康的组织，从而减少对在二维乳房 X 光造影检查中看起来可能不正常的组织进行后续测试的需求。这是为什么华盛顿大学医疗中心（UWMC）和福瑞德·哈金森癌症中心（Fred Hutch）目前大多数情况下采用三维乳房 X 光造影检查的原因。

截至 **2018** 年 **6** 月，华盛顿州医疗保险公司必须根据与筛查乳房 X 光造影检查相同的承保条款和条件为断层融合提供承保。

接受乳房 X 光造影检查有哪些风险？

对于大多数女性，接受乳房 X 光造影检查的益处超过风险。但是，与所有的测试一样，乳房 X 光造影检查也存在一些风险：

- 大多数乳腺癌都能在乳房 X 光造影检查中发现，但有些乳腺癌则无法发现。如果您有乳房方面的担忧，请与您的医生或乳房健康专科医生讨论您的症状。即使您刚刚接受乳房 X 光造影检查并且显示没有任何问题，也必须这样做。
- 乳房 X 光造影检查可能会导致“假警报”。假警报是乳房 X 光造影检查显示可能存在问题，但在进行更多的测试后证明并非癌症。这些测试可能包括更多的成像检查或提取少量组织样本（活组织检查）进行化验。

在 UWMC 和 Fred Hutch，不到 **10%** 的女性（**100** 名女性中不到 **10** 人）会出现假警报。该比例低于美国的健康护理设施的平均比例。

乳房 X 光造影检查是否安全？

当您接受乳房 X 光造影检查时，您会接触低水平的辐射。在我们的日常生活中，我们都会接触存在于大自然中的“背景辐射”。您从乳房 X 光造影

检查中接受的辐射相当于生活在美国的人在两个月期间从大自然中接受的辐射量。

该低剂量的辐射很安全，不太可能对您的健康造成伤害。如果您对辐射有任何疑问，请在接受检查当天向您的技术员（为您拍摄乳房图像的人）或您的医生洽询。

我如何为乳房 X 光造影检查做准备？

检查当天：

- 不要在腋下或乳房上涂抹体香剂、爽身粉或乳液。这会有助于确保图像的最佳质量。
- 随身携带任何以前的乳房 X 光造影检查结果（如有）。这对查看您的图像的医生（放射科医生）会有帮助。

检查前，如果您有以下情况，请告诉医生或技术员：

- 乳房内发现任何新问题
- 有乳房手术、活检或植入物病史
- 正在服用含有荷尔蒙或影响体内荷尔蒙水平的药物
- 有乳腺癌家族史或个人病史
- 已怀孕或有任何怀孕的可能

在乳房 X 光造影检查过程中会做什么？

首先，一位接受过特殊培训的女性技术员将帮助您以正确的姿势站立。会将您的乳房放在一个特殊的平台上，并短暂地用一块扁板挤压住。一次拍摄一侧乳房的图像。整个检查约需 15 分钟时间。

- 当乳房被扁板挤压拍摄图像时，乳房感到压力是正常现象。
- 如果您感到疼痛，请告诉技术员。我们的技术员将尽最大努力让您尽量感到舒适。

谁解释结果？

一位接受过乳房成像培训的专家将读取和解释您的图像。读取乳房 X 光造影检查图像的 UWMC 和 Fred Hutch 放射科医生获得美国放射学委员会认证，并接受了乳房成像方面的额外培训。我们的放射科医生超越全国优异标准。

我如何获得结果？

您会在 7-10 个工作日内收到一封有关检查结果的通知信函。您的健康护理服务提供者也会收到一份报告，并可以回答您的任何问题。

如果您接受乳房 X 光造影检查 10 天后尚未收到结果通知，请电洽 **206.606.7800**。

如果我的结果通知要求我返回接受更多测试，会怎样？

您的通知可能会要求您返回拍摄更多乳房 X 光造影图像或接受超声波检查。如果出现这种情况，请勿担心。这很常见。只是表示放射科医生希望更好地查看您的乳房的某些部位。或者因为您第一次乳房 X 光造影检查中的技术问题，一些图像可能需要重拍。

请务必返回拍摄额外的图像。我们可能会使用不同的方法和设备，以确保获得最清晰的图像。

如需安排额外图像拍摄，请电洽 **206.606.7800**。

有问题吗？

我们非常重视您的问题。如果您有问题或担忧，请打电话给您的医生或健康护理服务提供者。

如需安排乳房 X 光造影检查，请电洽 **206.606.7800**。

UW Medicine



Screening Mammograms

An imaging test to find breast cancer

This handout explains screening mammograms. It includes why they are used, when they should be done, and how to prepare for the test.

What is a screening mammogram?

A *mammogram* is an imaging test to find breast cancer. It uses X-rays to take images of the breasts.

There are 2 types of mammograms:

- *Screening* mammograms are used to find breast cancer in women who do not have breast symptoms or complaints.
- *Diagnostic* mammograms are used to look for the cause of a symptom, such as a lump in the breast.



A specially trained female technologist will help you get in the right position to take images of your breasts.

Why should I have a screening mammogram?

Screening mammograms help find breast cancers early, before you or your doctor can feel any changes in your breasts. This means we find the cancer when it is smaller and can be treated more easily. This can save a woman's life. When cancer is found early, the chance of cure is higher.

When should I get a screening mammogram?

Several groups have guidelines about screening mammograms, including the American Cancer Society (ACS), the United States Preventive Services Task Force (USPSTF), and the National Comprehensive Cancer Network (NCCN). Each of these groups suggests a different timeline for testing. All groups agree that starting yearly screening mammography at age 40 saves the most lives.

That's why both the ACS and the NCCN agree that women with an average risk for breast cancer should have the choice to start yearly screening mammograms at age 40. All of the groups recognize that each woman

might make a different decision about when and how often to have screening.

- Some women might choose to start screening later than age 40. They may also choose to have screening less often, such as every other year.
- Women with higher risk for breast cancer should start screening earlier than age 40.
- Screening mammograms may not be a good idea for women who have other serious health problems.

Please talk with your doctor about your breast cancer risk, your values, and your desires. Together, you can make the choice that is best for you.

More About Mammograms

X-rays taken during a mammogram are used to make 2D (*conventional*) and 3D (*tomosynthesis*) images. Both types of images help find breast cancer.

- For **2D mammograms**, an image of each breast is taken in 2 views: a top-to-bottom view and a side view.
- **3D mammograms** take many images in the same 2 views. This creates a stack of very thin images called *slices*.

3D mammograms help your radiologist see any unhealthy tissue more clearly. This may lessen the need for follow-up tests of tissue that may appear abnormal on 2D mammograms. That's why the University of Washington Medical Center (UWMC) and Fred Hutchinson Cancer Center now use 3D mammograms most of the time.

As of June 2018, health insurance providers in Washington state are required to cover tomosynthesis under the same terms and conditions as they cover screening mammography.

What are the risks of getting a mammogram?

For most women, the benefits of getting a mammogram outweigh the risks. But, like all tests, mammograms have some risks:

- Most breast cancers can be seen on mammograms, but some cannot. If you have breast concerns, talk with your doctor or breast health specialist about your symptoms. It is important to do this even if you just had a mammogram that did not show any problems.
- A mammogram can result in a "false alarm." A false alarm is when a mammogram shows a possible problem that turns out to not be cancer after more tests are done. These tests may include more imaging exams or having a small tissue sample (*biopsy*) taken for testing in the lab.

At UWMC and Fred Hutch, false alarms occur for less than 10% of women (fewer than 10 out of 100 women). This is better than the average rate for healthcare facilities in the U.S.

Are mammograms safe?

When you have a mammogram, you are exposed to a low level of radiation. In our daily lives, we are all exposed to the “background radiation” that is found in nature. The radiation you receive from a mammogram is about the same that someone living in the U.S. picks up from nature over a 2-month period.

This low dose of radiation is very safe and is not likely to harm your health. If you have any questions about radiation, please talk with your *technologist* (the person who takes the images of your breasts) or doctor on the day of your exam.

How do I prepare for a mammogram?

On the day of your exam:

- Do **not** put deodorant, talcum powder, or lotion under your arms or on your breasts. This will help ensure that your images are the best quality.
- Bring any past mammograms (if you have them) with you. These are helpful to the doctor (*radiologist*) who will look at your images.

Before your exam, tell your doctor or technologist if you:

- Have any new problems in your breasts
- Have a history of breast surgeries, biopsies, or implants
- Are taking medicine that contains hormones or affects the hormone levels in your body
- Have a family or personal history of breast cancer
- Are pregnant, or if there is any chance you might be pregnant

What should I expect during the mammogram?

First, a specially trained female technologist will help you get in the right position. Your breast will be placed on a special platform and briefly compressed with a paddle. Images are taken of one breast at a time. The entire exam takes about 15 minutes.

- It is normal to feel pressure on your breast when it is compressed by the paddle for each image.
- Tell the technologist if you feel pain. Our technologists will do all they can to make you as comfortable as possible.

Who interprets the results?

An expert trained in breast imaging will read and interpret your images. The UWMC and Fred Hutch radiologists who read mammograms are certified by the American Board of Radiology and have received extra training in breast imaging. Our radiologists exceed the national criteria for excellence.

How do I get the results?

You will receive a letter with your results in the mail in 7 to 10 working days. Your healthcare provider will also receive a report and can answer any questions you have.

If it has been 10 days since your mammogram and you have not received your results letter, please call 206.606.7800.

What if my results letter asks me to return for more tests?

Your letter may ask you to return for more mammogram images or for an ultrasound. Please do not worry if this happens. This is fairly common. It only means that the radiologist would like a better look at areas of your breast. Or, some images may need to be done again because of technical problems with your first mammogram.

It is important that you return for this extra imaging. We may use different methods and equipment to make sure we get very clear images.

To schedule extra imaging, please call 206.606.7800.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns

To schedule a mammogram, call 206.606.7800.