

Information about

MAMMOGRAPHY SCREENING

Program for early breast cancer
detection for women aged between
50 and 69



**MAMMOGRAPHIE
SCREENING
PROGRAMM**



**Gemeinsamer
Bundesausschuss**

WHY AM I BEING OFFERED MAMMOGRAPHY?

If you're between 50 and 69 years of age, you are entitled to a mammogram every two years for early detection of breast cancer. The costs are covered by your health insurance. If you are privately insured, please contact your health insurance fund regarding coverage ahead of any examination.

This examination is also known as mammography screening. A screening means people within an age range are offered a specific examination. A mammogram is an x-ray of the breast tissue. To ensure high-quality, early detection, the examinations are only performed at specialised facilities, which are part of the German Mammography Screening program.

The goal is to detect breast cancer as early as possible to ensure more successful treatment and increase the prospects of curing any cancer diseases. Unfortunately, the early detection examination also has drawbacks: for example, it may result in unnecessary treatment.

WHAT IS BREAST CANCER?

Breast cancer can develop when cells alter pathologically and begin to divide uncontrollably. Cancer cells can spread to healthy tissue, so-called metastases.

Breast cancer is more varied than nearly every other type of cancer. Often, breast cancer can be cured, is slow to develop and does not form metastases. However, it can also grow quickly and spread throughout the body.

Important to know: a mammogram cannot prevent cancer.

You decide yourself whether to participate in Mammography Screening. This brochure will help you make that decision.

Before the examination, you are entitled to a personal consultation with a physician in the Mammography program. This will require an appointment. Please refer to the invitation letter for the address. A physician is typically not present during the mammogram.

WHAT IF I DON'T PARTICIPATE?

If you decide not to participate, you will be reminded again in two years – unless you decline future reminders. This does not affect your insurance coverage: even if you ever develop breast cancer, your health insurance fund will pay for treatment.

HOW COMMON IS BREAST CANCER?

Imagine that 1,000 women are invited like you to an early detection screening. About 35 of these women will develop breast cancer within the next ten years. About a third of them can be cured.

The breast cancer risk also depends on individual risk factors. The risk increases slowly with age. Many women also worry about a possible family history. If a woman's mother or sister has or had breast cancer, the risk doubles. A distant relative with the disease, however, hardly increases the risk.



Photo: PantherMedia / Monkeybusiness Images

WHAT CAN I EXPECT DURING A MAMMOGRAM?

The examination is offered in special rooms at a doctor's surgery or clinic in your region, sometimes even in specially-equipped vehicles. These facilities are called "screening facilities".

The examination is performed by an x-ray technician. A physician is not always present.

The technician takes two x-rays of each breast from different angles. The breast is compressed between two platforms. This can be uncomfortable or painful. However, the more the breast is compressed, the less x-ray radiation is required and the more meaningful the image.

The mammogram images are carefully reviewed within a few days. Two physicians independently from one another, carefully examine the images for changes.

Any abnormal findings are then discussed with another specialist.

A letter with the results is typically sent within seven business days after the examination. Most women receive a normal result.

Important: Even if the findings are abnormal, this does not mean cancer was detected.

WHAT IF THE RESULTS ARE ABNORMAL?

Even specialists are unable to determine with certainty if an abnormal finding is benign or malignant solely based on the x-ray images. The findings will therefore require further examinations.

The respective physician will then ask the woman for an additional appointment. During the follow-up appointment the breast will be examined using ultrasound or x-rayed again. This will often suffice to eliminate any suspected cancer.

If this is not possible, a biopsy of breast tissue will be recommended. This is done under local anaesthesia using a hollow needle. Specialists will then examine the tissue under a microscope.

The findings of these examinations are then discussed among several physicians. The results are then typically communicated to the woman within a week.

MAMMOGRAPHY SCREENING IN NUMBERS: WHAT RESULTS CAN BE EXPECTED?

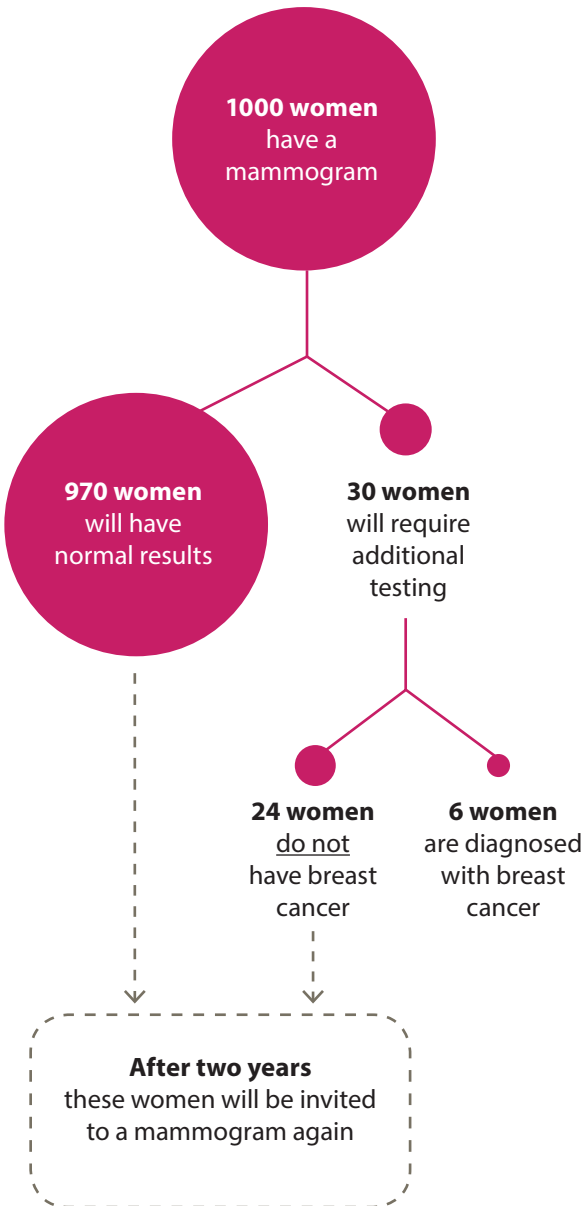
Imagine 1,000 women have a mammogram performed next week. The following results can be expected:

- About **970 of 1,000 women** will receive an **all-clear result** after the exam.
- About **30 of these 1,000 women** will have an **abnormal result** requiring a follow-up appointment.
- For **24 of the 30 women** with abnormal findings the suspicion will prove to be false.
- For **6 women** the suspected cancer will be confirmed.

Overall this means: about 6 out of 1,000 women will then be diagnosed with breast cancer. The physician at the mammography facility will then schedule these women for a separate appointment to discuss the further proceedings.

These numbers apply to one examination. A woman may have up to ten mammograms through the early detection program. Any of these examinations may result in suspicious findings.

WHAT HAPPENS IF 1,000 WOMEN ARE EXAMINED?



WHAT IF BREAST CANCER IS DETECTED?

A breast cancer diagnosis will initially be a shock. However, the chances of recovery can be very good. This depends particularly on how advanced the cancer is.

Most women will be recommended surgery. This will either remove the tumour and the surrounding tissue, or the entire breast. Other treatment options are radiation, hormone therapy and chemotherapy. Which treatment should be used also depends on the precise diagnosis.

- **A malignant tumour** is detected in about **5 out of 6 women** diagnosed with breast cancer. Without treatment, this type of cancer will often spread throughout the body.
- In about one out of **6 women** diagnosed with breast cancer, the mammogram detects a change in the breast called **ductal carcinoma in situ (DCIS)**. With this diagnosis the cells inside the milk ducts in the breast have changed. They are only present inside the milk ducts and do not cause symptoms. It is not known how often DCIS spreads and develops into a life-threatening tumour. Since it is impossible to predict if the DCIS will remain malignant, treatment will typically be recommended.

WHAT IS OVERDIAGNOSIS?

Studies have shown more tumours and DCIS are detected in women who receive a mammogram. These include changes which would not have been detected in a woman's lifetime without early detections screening. This can, for example, be due to mammography also detecting malignant changes, which do not spread and would therefore not become life-threatening. These diagnoses are called overdiagnosis.

Unfortunately, these changes cannot be distinguished from truly dangerous tumours. Overdiagnosis therefore results in unnecessary treatment.

DECIDING WHAT TO DO - THE BENEFITS AND DRAWBACKS OF EARLY DETECTION THROUGH MAMMOGRAPHY

The following numbers are estimates intended to highlight the key benefits and drawbacks. They illustrate what women with routine mammograms over the course of 10 years can expect.

The most important benefit: Mammography can detect breast cancer in its early stages.

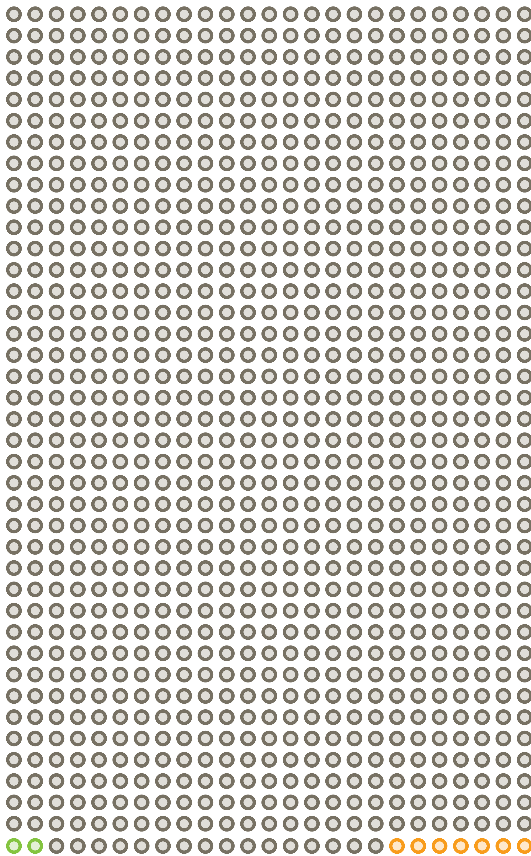
- This increases the chances of recovery for women diagnosed with breast cancer. If **1,000 women** participate in Mammography Screening over 10 years, **death due to breast cancer will be prevented for 1 to 2 women**. This number may be slightly higher in women with a higher risk of breast cancer.

The most important drawback: mammography can result in a false-positive breast cancer diagnosis.

- As mentioned above, it can detect tumours and suspicious cell changes, which do not become dangerous and would never have caused problems. Out of **1,000 women** with routine mammogram screenings over **10 years**, about **5 to 7** will be overdiagnosed and as a result receive **unnecessary treatment**.

DEATHS PREVENTED AND OVERDIAGNOSES

If **1,000 women** have a mammogram over **10 years...**



1 to 2 women
will be
saved from
dying of breast cancer

5 to 7 women
will be
overdiagnosed

The result of the examination has **additional benefits and drawbacks**.

- **Benefit:** A normal result provides peace of mind.
- **Drawback:** women worry due to false positive findings.

Just the information that a mammogram showed an abnormal finding often causes anxiety. Women often find the time until a final result is received very stressful. Even if the suspicion is not confirmed, this experience can continue to affect them.

Women assess the benefits and drawbacks of mammography differently. Some certainly want to benefit from early detection. Others decide against it because they feel the drawbacks outweigh the benefits.

DOES EARLY DETECTION EXTEND LIFE?

Mammography can only be beneficial to women where dangerous cancer is detected in its early stages. Early treatment can extend their lives.. Most women that have a mammogram, however, never develop breast cancer – and therefore have no health benefits.

Studies have not shown if women with regular mammograms generally live longer than women who do not have this examination.

HOW HIGH IS THE EXPOSURE TO RADIATION?

A mammography is performed using x-rays. The denser the breast tissue, the more radiation is required for accurate imaging. Even in this case, the exposure to radiation is so low that there normally are no consequences. However, it cannot be rules out that x-ray examinations do contribute to cancer forming in very rare cases.

THE LIMITATIONS OF EARLY DETECTION

Routine mammograms cannot prevent breast cancer from developing. However, it can help to detect cancer early.

Despite all care being taken, mammography is unable to detect all malignant tumours. Cancer may also develop in the two years before the next examination.

Therefore, it is important to contact a physician promptly if you notice changes in your breasts before your next mammogram, such as

- Palpable lumps, dimpling or hardening of the skin,
- Noticeable deformations, skin changes or the nipple inverting,
- Bleeding or other secretions from the nipple.

WHAT HAPPENS TO YOUR PERSONAL DATA?

The handling of personal data is subject to the German data protection laws. The mammography program will treat all data just as confidentially as a regular physician's surgery. The physicians and all staff are subject to medical confidentiality.

The results of the exams are routinely analysed at a central office. This is important in order to monitor the program. Personal information such as the name or address is not required for this analysis and is not disclosed. So the analysis cannot reference a specific woman.

The central office is responsible for handling personal data. Contact information is contained in the invitation letter.



Gemeinsamer Bundesausschuss

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The Federal Joint Committee (G-BA) is a decision-making body of the joint self-government of physicians, dentists, psychotherapists, hospitals and health insurance funds in Germany, and patient representatives have also been actively involved since 2004.

www.g-ba.de