Early detection through mammography

Early breast cancer detection – improved chances of recovery
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Experts recommend breast screening (mammography)

Breast screening by mammography is the best way to detect breast cancer as early as possible. The association swiss cancer screening, the Federal Office for Public Health, the Swiss cancer league and experts both in Switzerland and abroad recommend that women aged over 50 should be screened every two years as part of a quality-controlled breast cancer screening programme. The benefits of screening outweigh the risks.

Breast cancer screening is voluntary. The aim of this brochure is to inform you of the advantages and disadvantages. Please read it through carefully. Technical words and expressions are explained on page 18. It is important for you to be well informed and that each woman personally takes the decision to go for screening or not.

If you have any other questions, please contact the breast cancer screening programme in your canton.
What is a mammogram?

Mammograms are special X-rays of the breasts. Mammograms can detect even very small tumours, long before they can be felt with the hand or diagnosed as a result of other symptoms.
What is screening?

Certain diseases often cannot be diagnosed right from the start. So, for these diseases there are medical examinations that – when carried out regularly – can detect changes in the body in the early stages. These examinations are referred to as screening. Their purpose is to detect a disease without delay so that it can be treated more effectively and less invasively. Examples of these are examinations to detect cervical cancer or X-rays of the breasts (mammograms) to detect breast cancer. Screening is carried out on individual women or as part of a general campaign for specific population groups.

What is a breast cancer screening programme?

A screening programme gives women over 50 the opportunity to have a mammography every two years. Most of the cost of this programme is covered by the basic health insurance. Mammographies as part of a breast cancer screening programme are scientifically recognized and recommended by many specialists and organizations. This systematic examination is also known as mammography screening. Regular screening can improve the chances of a cure and increase the life expectancy of women with breast cancer.

Systematic programmes are subject to high quality standards that are constantly checked and updated. The mammogram X-rays are examined separately by two specially trained radiologists. The X-ray equipment is also subject to strict quality controls. Mammograms are only performed at authorized radiology centres by technicians specially trained in medical radiology.

In several cantons in Switzerland there are breast cancer screening programmes. Should you have any questions, you can contact the breast cancer screening programme in your canton, the cancer hotline, the cantonal branch of the Swiss cancer league or your family doctor.
What does a mammogram cost in a screening programme?

The basic health insurance pays about CHF 200 towards the cost of the examination, and this is not charged to patients as part of the annual excess.

You will be charged only 10% of the cost of the examination (patient’s contribution: approx. CHF 20). In some cantons the entire cost is covered by the insurance company. You can find out more about this from your canton’s screening programme.

Who can take part in this screening programme?

All women over 50 living in a canton with a breast cancer screening programme have the right to go for screening regardless of their nationality or their residential status. Even cross-border workers with Swiss health insurance are entitled to take part.

The programme in your canton will send you a personal written invitation with information on how to take part every two years until your 70th birthday, or in some cantons until your 74th birthday. Some programmes suggest an actual appointment date in the invitation, while others simply tell you how to make an appointment for your mammogram.

You decide for yourself whether you go for screening or not. Participation in the screening programme is voluntary.
And what should you do if …

… you have already noticed changes in your breast?
In that case, do not wait for an invitation from your screening programme; go directly to see your doctor.

… you have already had breast cancer?
In that case, ask your doctor what check-ups are best for you.

… your mother, sister or daughter has breast cancer?
Then consult your doctor or consult your local screening programme.

… you have a breast implant?
Then consult your doctor or consult your local screening programme.

… you are under 50 and you are worried about breast cancer?
We recommend that you discuss this with your doctor.

How should I prepare myself for a mammogram?

- Appointments: If you still have regular periods you should arrange a screening appointment in the first few days of your period. Your breasts are less sensitive then.

- If you would like your screening appointment with a female mammogram technician, it is important to mention this when you make your appointment.

- If you are in a wheelchair, please mention this when you make your appointment so that suitable arrangements can be made beforehand.

- You will receive a health questionnaire with your invitation. Please complete it and bring it with you to your appointment.

On the day of your appointment:

- If possible, wear a top that is easily removable, as you will need to strip to the waist for the breast X-ray.

- You should not apply any deodorant, talcum powder, body lotion or perfume to your breasts or armpits as these can affect the quality of the X-ray.

- You should not wear any jewellery (necklace, etc.) on the upper body during the examination.
The mammogram is performed by specially trained technicians.
What happens during the mammogram?

- The X-ray itself only takes a few minutes; however, you should allow about 20–30 minutes in all for the appointment.
- During this time you will be looked after by a specially trained technician, who will also take the X-ray.
- You will be asked to strip to the waist for the X-ray.
- To ensure the X-ray is as clear as possible, and to keep your exposure to radiation low, each breast is pressed between two plates for a few seconds. The procedure may be unpleasant, but it only lasts a short while.
- The X-rays are examined separately by at least two radiologists. For this reason there is no consultation with a doctor at the time of the screening.

When will I get the result, and how?

- You will be informed of your result in writing within eight working days. This is the time it takes for the radiologists to examine your X-rays carefully. If you experience any feelings of fear or uncertainty in the meantime, feel free to talk about them with the staff of your screening programme or your family doctor.
- If you provide your doctor’s name in the health questionnaire, he or she will also receive a copy of the results.
Results of women examined in a breast cancer screening programme

The following diagram shows the results of 1,000 women who were screened five times over a period of 10 years:

1,000 women without screening

20 women are diagnosed with breast cancer

15 women do not die of breast cancer

5 women die of breast cancer

32 women die from a disease other than breast cancer

200 women must have an abnormality on their X-ray interpreted

24 women diagnosed with breast cancer (4–7 women will have breast cancer that isn’t detected by screening)

20 women do not die of breast cancer

4 women die of breast cancer

32 women die from a disease other than breast cancer

One less breast cancer death in the screening group

It is assumed that one breast cancer death can be prevented in the “women with screening group”. Approximately four out of every 24 breast cancer diagnoses will be what is called an overdiagnosis (see page 15). A woman who regularly goes for screening from the age of 50 has a risk of about 1% of being overdiagnosed and treated in her lifetime.
When must further tests be carried out?

- If abnormalities are detected in the mammogram, additional tests must be carried out to find out what changes have taken place in the breast. This is necessary in about 4–5% of mammograms.

- If you have provided your doctor’s name in the health questionnaire, he or she will be informed of the result and will receive a recommendation about the type of further tests needed. The recommendation is usually for an ultrasound or for more X-rays.

- You are also recommended to contact your doctor. Your doctor will advise you and take the necessary steps.

- In the majority of cases however, the changes will be benign and you will then be invited back every two years for screening until you reach the age limit.

Who pays for these additional tests?

The cost of these additional tests is covered by the basic health insurance. However, you will need to pay the annual excess and personal contribution yourself.

What happens if breast cancer is detected?

Breast cancer is detected in 0.5–1% of mammograms.

If breast cancer is detected, your doctor will discuss what you need to do in detail with you. You will be cared for by a team of various specialists who will define the best treatment for you.
What are the advantages and benefits or disadvantages and risks of screening?

Mammograms performed as part of a screening programme are no different from any other medical procedure: the advantages and benefits have to be weighed up against the disadvantages and risks. Most experts agree that the benefits outweigh any risks. This was confirmed by an independent study in England and an analysis of 25 years of mammography screening in the Netherlands. Experience in other neighbouring countries that have been running breast cancer screening programmes for many years confirms these results.

In women over the age of 50, age is the biggest risk factor in developing breast cancer.

Screening cannot prevent breast cancer.

By taking part in the screening programme, you have the chance to have any potential breast cancer detected early so any treatment you may need will be less invasive and more effective. This contributes to a better quality of life and may prolong your life.

However you also run the risk that a malignant tumour will be diagnosed that may perhaps not have affected your life in any way (overdiagnosis). Modern medicine is not currently able to predict how a tumour will evolve. For this reason all malignant breast tumours detected during screening are treated.

It is important for you to take any changes in your breasts seriously and consult a doctor immediately.
Advantages and benefits

Screening: Breast screening can detect even small tumours, most of which have not yet formed metastases (secondary malignant tumours). Early detection and treatment improves your chances of being cured and surviving.

Better quality of life through less invasive, more effective treatment: When tumours are detected early, the treatment is less invasive. For example, often it is possible to perform a minor operation without removing the breast and chemotherapy may not even be necessary. This reduces the side-effects and increases the quality of life – both during the disease and later on.

Helping to reducing the mortality rate from breast cancer: Detecting breast cancer early and improving treatment opportunities helps to reduce the mortality rate from breast cancer in women of this age group. In Switzerland, roughly 1,250 women over 50 currently die from breast cancer every year. The women who die of breast cancer between 50 and 70 years of age lose almost 4,200 potential years of life. A woman who goes for screening every two years considerably reduces her risk of dying of breast cancer.

Reassurance: 95% of the women who go for screening will be reassured because the results of their mammograms are normal.

High quality in the programme: Taking part in a breast cancer screening programme is an advantage because the examination is carried out in accordance with defined quality standards, that are checked regularly and made public.
Quality

Women who take part in the screening programme have the benefit of a guaranteed high-quality service:

- The programmes are based on high national and international quality criteria;
- The X-ray machines are subject to regular strict quality controls;
- Every specialist in medical radiology has specific qualifications in mammography screening;
- The quality of the X-rays is regularly checked;
- The mammograms are examined separately by two specially trained radiologists;
- If the experts draw different conclusions, either a third radiologist is called in or the X-rays are examined by several radiologists together in a consensus conference;
- The quality of the programme is constantly improved following regular testing and evaluation of the results.

The quality of examinations outside the cantonal breast cancer screening programmes is not transparent and is not monitored. The costs of the examinations are not reimbursed by the basic health insurance nor are they exempt from excess payments.
Disadvantages and risks

Overdiagnosis: This refers to malignant tumours that would never even have been discovered without the mammogram and are therefore of no significance for the women involved. When the malignant tumour is detected, it is not known how it will evolve and whether it will cause health problems, so it is automatically treated. (The term “overdiagnosis” is used to describe a purely statistical observation.)

False-positive results: If any abnormalities are found in the mammogram, additional tests must be performed to find out what changes have occurred in the breast. In most cases, it turns out that these changes are benign and not cancerous. We call these false-positive results.

Interval cancer and false-negative results: Interval cancer is breast cancer that is detected during the two-year interval between screenings. If the mammogram is considered to be normal even though breast cancer is present, we call these false-negative results.

Once it has been diagnosed, the course of the disease cannot be influenced: It is possible that the mammogram detects a tumour at a stage where it is no longer possible to cure the cancer. In such cases these women live for longer with the knowledge they have the disease.

Exposure to radiation from the X-rays: The exposure to radiation is extremely small thanks to the use of good quality X-ray machines, the regular control of which is required by law. The risk of exposure to radiation for women over 50 is considered to be much smaller than the benefits of screening.
What you should know about breast cancer

In Switzerland, breast cancer is the most common form of cancer and is the most common cause of death in women between 50 and 70. Every year almost 5,200 women are diagnosed with breast cancer and more than 1,350 die from the disease.

The chances of survival and a cure from breast cancer are clearly greater if it is diagnosed early and receives proper treatment. International studies show that regular breast examinations as part of a quality-controlled screening programme enable many women to be cured of the disease. Early detection of breast cancer also means that less invasive treatments with milder side-effects are often possible, and this leads to greater quality of life.

Incidence of breast cancer in Switzerland, per age group

About 80% of all breast cancer cases affect women over 50.
At a glance

Every well informed woman can decide for herself whether she takes part or not, based on the benefits and risks.

Here is a summary of the most important points.

• In the early stages cancer does not produce any symptoms;
• The time and costs involved in screening are small;
• Breast cancer can be cured and the chances of survival can be improved by early diagnosis and the right treatment.
• For every death prevented, there are four overdiagnoses (see pages 10 and 15).

Every two years after you turn 50 your cantonal breast cancer screening programme will send you a personal invitation to come in for screening.

As part of the screening examination an X-ray will be made of each of your breasts by specially trained personnel.

Each X-ray will be examined separately by at least two radiologists.

You and also your doctor, if you have indicated him or her, will receive the result of the screening in writing no more than eight days later.

Any abnormalities will be explained in detail.

This brochure is intended to help you decide whether or not to take part in the screening programme. If you have any other questions, you can obtain more information from the breast cancer screening programme in your canton, the cancer hotline, the cantonal branch of the Swiss cancer league, or your family doctor.
**Terminology**

**Metastases:** Development of secondary malignant tumours in other tissues.

**Result:** Outcome of the screening examination, whether breast cancer is suspected or not.

**Chemotherapy:** Treatment to destroy cancer cells. The medicine prevents new cancer cells from forming.

**Excess:** The patient’s own contribution towards the cost of the doctor, hospital and medicines. The amount of the annual excess varies, depending on the type of insurance coverage, it can range between CHF 300 and CHF 2,500.

**Early diagnosis tests:** Medical examinations that aim to detect disease early, before any symptoms arise.

**Mammogram:** X-rays of the breasts.

**Specialist in medical radiology:** Specially trained technician who performs mammograms.

**Side-effects:** Adverse effects of a medicine or treatment.

**Radiologist:** Specially trained doctors who use X-rays, ultrasound, etc. to diagnose diseases.

**Screening:** Used to denote examinations performed in specific population groups in order to make an early diagnosis.

**Radiation exposure:** The amount of X-ray radiation received by the body during an X-ray, in this case during a mammogram.

**Symptom:** A sign that indicates disease or injury.

**Tumour:** A growth or lump somewhere in the body. There are tumours that contain cancer cells and others that do not.

**Ultrasound:** An examination of part of the body, in this case breast tissue, using sound waves to detect any changes.
Contact addresses and further information

The Swiss cancer screening website is in three languages. There you can find further information about the screening programme in your canton.

www.swisscancerscreening.ch

Further information about breast cancer in general

The following organizations are dedicated to providing good access to screening for breast cancer, treatment and aftercare:

Krebsliga Schweiz: www.krebsliga.ch,
cancer hotline: 0800 11 88 11
To order a brochure: 0844 85 00 00 or shop@krebsliga.ch
Europa Donna Schweiz: www.europadonna.ch

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This brochure exists in various languages; contact your screening programme or the Swiss cancer screening website.

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This information brochure is available in several languages and can be downloaded free of charge from www.swisscancerscreening.ch:

- German
- French
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- English
- Albanian
- Macedonian
- Portuguese
- Spanish
- Turkish
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