

Why radiation therapy?

Radiation therapy (also called radiotherapy) uses targeted, high-energy X-rays to kill cancer cells. It's effective in killing fast-growing cells like breast cancer cells. It kills cancer cells that may remain in or around the breast after surgery. This lowers the chance of the cancer coming back.

Radiation therapy can harm normal tissue. It's carefully planned and precisely given. This helps make sure as many cancer cells as possible are killed with as little damage as possible to other parts of your body.

What to expect - Planning step-by-step

1. You will meet with your radiation oncologist to discuss your treatment plan in detail. Your **radiation therapy** is planned just for you. It's based on the:
 - Tumor size, type and location
 - Number of lymph nodes that contain cancer
 - Type of breast surgery (and lymph node surgery) you had
 - Shape of your breast or chest wall and
 - The shape and location of nearby organs
2. Your radiation oncologist oversees your radiation planning session (called a simulation or mapping). You will lie on a special table. The radiation oncologist will decide the proper dose and the areas to receive the radiation.
3. During the planning, the radiation oncologist will put small marks (about the size of a pinhead) on your skin. These marks make sure you are correctly positioned for each treatment. They may be ink marks, or they may be tattoos. Be sure to tell your radiation therapist, who runs the radiation therapy machine, if the marks start to fade.
4. You will meet with a radiation therapy nurse to discuss skin care and how to cope with possible side effects.
5. Your treatment will begin a few days or weeks after the planning session.
6. After you complete your radiation therapy, you may have a few more sessions (called a boost). This boost is extra radiation given to the area of the original tumor. This is the area most at risk for recurrence.

At a radiation therapy session...

You will lie on a special table. Most often your whole breast will be given a dose of radiation. The lymph nodes in the underarm area may also get a dose. At each session, you get a small amount of radiation to the treatment area. This results in the least amount of damage to normal cells and allows them to recover quickly.

- Each session lasts about 10 - 20 minutes. Most of this time is spent positioning you to make sure the treatment is given exactly as planned.
- Treatment usually is given once a day, 5 days a week, for 1 - 6 weeks. This is an outpatient treatment. You don't stay overnight in the hospital.
- Some women get **partial breast radiation** therapy after a lumpectomy. This is radiation only to the area around the tumor bed. This is the space where the tumor was removed. It's most often done in a shorter course over 5 -10 days. It may be done over 3 - 4 weeks. It may be done at the same time as surgery.

RADIATION THERAPY

for Breast Cancer

Resources

Susan G. Komen®
1-877 GO KOMEN
(1-877-465-6636)
komen.org

Questions to Ask Your Doctor
komen.org/questions

National Cancer Institute
1-800-4-CANCER
cancer.gov

National Comprehensive Cancer Network
1-888-909-NCCN
nccn.org

National Lymphedema Network
1-800-541-3259
lymphnet.org

Related online resources:

- [Clinical Trials](#)
- [Side Effects After Breast Cancer Treatment Ends](#)
- [Lymphedema](#)
- [Treatment Overview for Breast Cancer](#)
- [Questions to Ask Your Doctor - Lymphedema](#)

Coping with side effects

Most often, [side effects](#) from radiation therapy begin within a few weeks of starting treatment. They should go away within a few weeks after treatment ends.

Skin irritation and redness

During and just after treatment, the treated breast may be rough to the touch, red (like a sunburn) swollen and itchy. Sometimes the skin peels, as if it were sunburned. Your radiation oncologist may suggest special creams to ease this discomfort. Try to treat your skin like you would if you had a sunburn. Wear loose, soft clothing over the treated area. For example, wear a soft cotton bra without an underwire and use lukewarm water for bathing.

Sometimes the skin peels further, and the area may become tender and sensitive. This is most common in the skin folds and the underside of the breast. If this occurs, let your radiation team know. They can give you creams and pads to make the area more comfortable until it heals.

Not all lotions and sunscreens should be used during treatment. Check with your doctor before using any on your treated skin. Cover up when you are outside and use a sunscreen of SPF 15 or higher.

Breast tenderness

During and just after treatment, your treated breast may be sore. Talk with your doctor about using mild pain relievers such as ibuprofen (Motrin) or acetaminophen (Tylenol) to help ease breast tenderness. Wearing loose cotton clothing and not wearing a bra may also help.

Fatigue

You may feel [tired](#) during and just after treatment. Your body is using a lot of energy to heal. Try to get as much sleep as possible. If you can, adjust your work schedule or activities to give you more time to rest. Even though it may be hard, exercise may help increase your energy.

Lymphedema (swelling of the hand or arm)

[Lymphedema](#) can occur if the lymph nodes were treated with radiation therapy. If you notice any changes to your arm or hand, see your doctor. Although there is no known way to prevent lymphedema, injury or infection to the arm or hand may trigger it. Treat any infections right away.

Clinical Trials

[Clinical trials](#) in radiation therapy are ongoing. The results of these trials will decide whether they become part of the standard care.

This content provided by Susan G. Komen® is designed for educational purposes only and is not exhaustive. Please consult with your personal physician.