

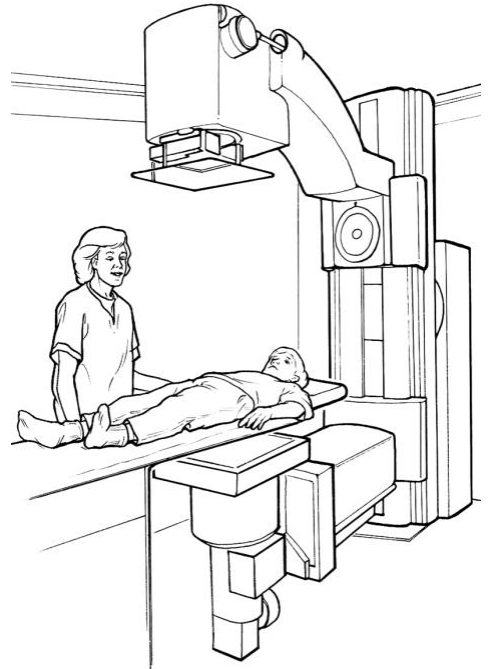
Radiation Therapy

Radiation therapy uses high-energy rays to get rid of cancer cells. A doctor with special training, called a radiation oncologist, gives this treatment. In this handout, the word you/your refers to you or your child. Whoever is getting treatment.

What to Expect

The first visit to the radiation center may take 3 to 4 hours.

- The radiation doctor will explain what to expect during treatments. They will also talk about side effects and answer and of your questions.
- An adult will sign forms that give permission to start treatments.
- You will have a CT scan to find the exact spot(s) that needs treatments.
- A dosimetrist (doh-**sih**-meh-trist) uses a large machine called a simulator to plan radiation treatment (Picture 1). They take measurements and mark where treatment will be on the body.
- A mold of your head and neck will be made if they're in the field of radiation, the place on the body where the radiation beam is aimed. The mold will be used to help keep the head and neck still during treatments.
- Ink marks or stickers may be applied to the area to get radiation. Don't remove these. They will not hurt you.
- You'll likely get treatment each day, Monday through Friday, except on holidays. The number of treatments can vary and could last for many days or weeks.
- Before leaving, you'll schedule upcoming treatments.

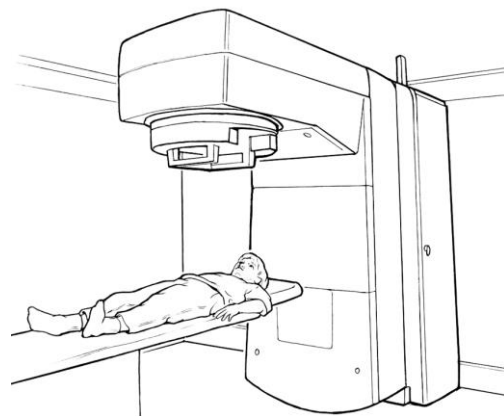


Picture 1 A large machine called a simulator is used to plan your treatment.

What Treatment is Like

The machines are very large. Computers help the doctor figure out how much radiation you need. During treatment, you'll lie on a table and be asked to stay very still (Picture 2). The treatments will not hurt.

- If you are too young to lie still, you'll get medicine to make you sleepy.
- Radiation treatments can last from a few minutes to 30 minutes. The total time is based on the length of the treatment and other visits you have that day. On some days when you have radiation therapy, you will also see the radiation doctor.



Picture 2 Having radiation treatment

Side Effects

Radiation therapy affects healthy cells as well as cancer cells. However, most of the healthy cells can repair themselves. Cancer cells usually can't. Side effects depend on the area(s) that's being treated. Symptoms may be mild or severe, or there may be none at all. Symptoms aren't the same for everyone. There can also be long-term side effects from radiation. These will be discussed with you by the primary cancer and radiation doctors.

Skin

- At the radiation site, skin may look or be dark, dry, itchy, or sunburned.
- The radiation doctor can tell you what to do to help your skin. Don't use any lotions until you talk to the doctor or health care provider.

Hair

- Hair located in the area of radiation may be lost. It may or may not grow back.

Stomach

- You may be sick to your stomach. You may be given medicine to help.

Blood counts

- Radiation therapy may cause low blood counts. This can cause anemia, low platelets, and/or a higher risk for infection.
- You may have bloodwork done at Nationwide Children's or at the radiation center so your blood counts can be monitored.
- If a blood or platelet transfusion is needed, it will be done at Nationwide Children's, **not** at the radiation center.

When to Call the Doctor

Call the cancer doctor if you have any of these side effects:

- Fever at or over 100.4 Fahrenheit (F) or 38.05° Celsius (C)
- Mouth sores or painful areas in the mouth
- Can't keep fluids down due to vomiting
- Feel sick to your stomach and prescribed medicine isn't making you feel better
- Headaches, dizziness, looking pale, or feeling overly tired
- More bruising, nosebleeds, or bleeding from the gums
- Repeated diarrhea
- Vomit for more than 1 day
- Redness, irritation, blistering, or skin pain due to radiation

Tips to Help With Treatment

- Dress in comfortable clothes for radiation treatments.
- Don't use heating pads, sunlamps, or ice bags on the area of the body being treated.
- If you're getting radiation to the head or neck, style your hair so it can stay the same during the full course of radiation therapy.
- Keep the treatment area out of direct sunlight. Use sunscreen with a sun protection factor (SPF) of 30 or more on areas of skin that aren't in the radiation area. You'll get more information about using sunscreen on the skin within the radiation field.
- Tell your doctor or healthcare provider if you start a new medicine.
- Eat well-balanced, healthy meals and drink 4 to 6 glasses of fluid each day.

Location

Nationwide Children's radiation therapy is done at the Proton Center at The James Cancer Hospital on The Ohio State University campus. Radiation therapy is done while you're out of the hospital. If you have problems with transportation or getting to the radiation center, talk to your cancer social worker about getting help. If you need to get radiation therapy while in the hospital:

- Nationwide Children's will arrange for you to be transported by an ambulance.
- A nurse will go with you.