

Radiation Therapy

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Radiation Therapy is a treatment that uses radiation from high- energy X-ray machines to kill cancer cells. Most people call it radiation. It is also known as radiotherapy. Radiation is one of many ways to treat cancer, and sometimes other diseases.

How does radiation therapy work?

Your body is made up of many types of cells. Each cell works in a special way to keep us healthy. Cancer forms when a group of cells that are not normal grow and spread out of control. These abnormal cells can affect the way your body normally works. Because your body cannot stop or control the growth of the cancer cells by itself, your doctor may suggest that you have radiation to kill the cancer cells.

Radiation therapy is given to the specific area where the cancer is present or might spread. For this reason, it is called a local treatment.

Radiation can:

- Stop cancer cells from growing and spreading
- Control or slow down the growth and spread of cancer cells

Why is radiation recommended for me?

For some kinds of cancers, radiation is given on its own. Radiation therapy may:

- Control your cancer for awhile
- Reduce the chance of cancer coming back
- Help stop or decrease cancer symptoms, such as pain

Radiation therapy is sometimes used with other treatments such as surgery and systemic therapy (which includes chemotherapy, immunotherapy, hormone and biological therapies). Your radiation oncologist (a doctor who has special training in treating people with cancer using radiation) might suggest that you have radiation to shrink the cancer before you have surgery to remove it. Sometimes, people have radiation after surgery, to kill any cancer cells that may have been left behind when the cancer was removed. Your radiation oncologist will explain why radiation is recommended for you.

What are the different types of radiation treatment?

Type of Radiation	How it Works:
From outside your body, this is called External beam radiation.	<ul style="list-style-type: none">• The machine may move around you during the treatment.• External beam radiation is usually given as a series of treatments.
From inside your body, this is called Brachytherapy. (Pronounced brack-ee-ther-a-pee)	<ul style="list-style-type: none">• Brachytherapy is a form of internal radiation treatment. It uses radioactive seeds or sources that are placed in or near the cancer itself.• In some cases, you may need to go to the operating room to have special applicators put into place to deliver the treatment.

How long will I need to have radiation?

How many treatments you will have depends on:

- The type of cancer you have
- The type of radiation treatment you are having
- The goal of treatment (for example, to stop pain or to cure your cancer)
- You may have one treatment or you may have many weeks of treatment

How often will I need to have radiation?

If you are having external beam radiation, treatments are usually scheduled Monday through Friday. Treatments are not given on weekends and some holidays. You may have one treatment or many weeks of treatment. Your schedule will be confirmed prior to starting treatment.

If you are having brachytherapy, the number of treatments you will have depends on the type of cancer you have. It can range from 1 to 10 treatments. Sometimes it is best to deliver the treatments once or twice a day from Monday through Friday.

Where will I get my radiation treatments?

There are two cancer centres in Nova Scotia (the QEII Cancer Centre and the Cape Breton Cancer Centre) where radiation treatment is given. The radiation cancer centre in Halifax is located in the Dickson Building, at the Victoria General site. The cancer centre in Sydney is located at the Cape Breton Regional Hospital.

Both cancer centres have external beam radiation treatments, but brachytherapy is only available in Halifax.

What can I expect before my external beam radiation?

At your first appointment, you will meet with a radiation oncologist to talk about the treatment that is best for you. You will also meet the radiation nurse at that time who will go over information related to your specific treatment.

Your next appointment will be your simulation or markings appointment. Here's what will happen:

- A radiation therapist (part of the oncology team) will take a CT scan to help plan your treatment.
- The radiation therapist will use special equipment to help position you for treatment.
- The radiation therapist will place marks on your skin. These marks will be used to help position you for your treatment. These marks may be ink or they may be small permanent tattoos.

Your treatments are planned by your radiation oncology team. Once the planning of your treatments is completed and a time has been booked for the radiation treatment machine, you will be notified of your start date.

What happens during external beam radiation?

Radiation therapists give you the treatment. There are at least two radiation therapists with you each day. You may need to change into a hospital gown so that the radiation therapist can access your markings. Although the treatment may last only a few minutes, it can take 15 minutes or more to set up for it. You should plan to be there for about 30 minutes.

Sometimes it takes less than this. You must be in exactly the right position and the machine must be set up accurately. Once this is done, you will need to stay very still.

During the treatment, you will not see or feel the radiation. The machine may move around you. It may come close to you, but it will not touch you.

Although you will be alone in the room when the treatment machine is turned on, the radiation therapists will watch you on a TV monitor. They can also hear you over an intercom. The radiation therapists will be watching you and listening to you all the time.

The team member working with you will explain what is going on, step by step. If you have any questions, feel free to ask.

What are the side effects of radiation?

Radiation is aimed at the cancer cells. It can also affect healthy cells near the cancer. This may cause you to have side effects. Some people do not have any side effects. Other people have a few or many side effects.

The side effects you may have depend on the part of the body that is being treated. Some of the most common side effects are tiredness and skin irritation.

You will be given information specific to the side effects you may have. For most people, the side effects go away gradually after the radiation ends, usually within 4 to 6 weeks. While you are having treatment, your doctor may prescribe something to help deal with the side effects. Your cancer care team will give you more details about the specific side effects you might have and how to cope with them.

Please keep in mind that side effects are NOT a sign of how well the radiation is working against your cancer.

Questions to ask your health care team

- Why is radiation recommended for me?
- What are the benefits and risks of radiation for me?
- How and where will I get my treatments?
- Who can be with me during the treatment?
- Will I be able to work when I am having radiation?
- Can I keep doing things that I used to do?
- How often will I see my cancer doctor during my treatments?
- What happens when the radiation ends?
- How will we know if the radiation worked?

Looking for more information on this topic?

You can contact the call the Cancer Information Service of the Canadian Cancer Society at 1-888-939-3333 or visit their website.

› www.cancer.ca

Patient and family feedback is very important to us.

We would like to invite you to send any comments or suggestions on how to improve this booklet to education.cancercare@nshealth.ca or feel free to call us at 1-866-599-2267.

Looking for more health information?

Find this brochure and all our patient resources here: <http://library.nshealth.ca/cancer>

Contact your local public library for books, videos, magazines, and other resources.

For more information, go to <http://library.novascotia.ca>

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It is not intended to replace the advice or professional judgment of a health care provider.

If you have any questions, please ask your health care provider.