

GUIDE TO RADIATION THERAPY

For People Living with Cancer & Care Partners

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Before You Start Radiation Therapy

Having cancer and cancer treatment can be stressful emotionally and physically. It is normal for you and your loved ones to feel anxious, depressed, afraid, frustrated, or alone. Let your Radiation Oncologist (cancer doctor), Oncology Nurse, or Radiation Therapist (RT) know if you need help.

Interpretation is available if you speak very little or no English. Tell your healthcare team as soon as possible if you would like support with translation during your appointments.



About Radiation Therapy

Radiation therapy (also called radiotherapy) is a type of cancer treatment that uses high-energy X-Rays to destroy cancer cells.

Radiation therapy is used to:

- Cure cancer
- Stop the cancer from spreading and growing
- Relieve painful symptoms

Radiation therapy may be used alone, or together with surgery, chemotherapy, hormone therapy, or other treatments.

Usually you are given radiation therapy in small amounts over a few days or several weeks. The type and amount of radiation treatment you get depends on many factors (like the type of cancer you have).

How Does Radiation Work?

Radiation therapy works by using a machine to deliver high-energy X-rays to the treatment area.

The energy from the X-rays damages cancer cells. When this happens, the cancer cells cannot grow easily. The cancer cells will begin to die, and the body will naturally remove them.

Healthy cells nearby are also affected by the radiation. This is why you may have side effects from treatment. Healthy cells can recover with time.

Types of Radiation Therapy

WRHN Cancer Centre is the only location in Waterloo Wellington that offers radiation therapy. There are 2 ways to deliver it - External Beam or Internal Radiation.

External Beam Radiation Therapy

Uses a machine called a linear accelerator. This machine aims radiation directly at the cancer. The machine moves around you without touching you. You may hear small buzzing sounds when the machine is on. You won't feel anything as you are getting your treatment.

Radiation only affects the part of the body being treated. It does not make you become radioactive.



An external beam radiation treatment machine with a patient and 2 Radiation Therapists.

Internal Radiation Therapy

Brachytherapy is the only type of internal radiation given at WRHN Cancer Centre. It is a type of radiation treatment given directly into your body. The source of radiation is placed inside your body close to your tumour. The radiation dose is focused on cancer cells and does less damage to normal cells nearby. **More information will be given to you if you are having brachytherapy.**

Not all treatment prescriptions are the same. Your Radiation Oncologist will plan what is best for you.

Your Radiation Team

Your team of healthcare experts work together to give you the best possible care. You can ask any member of your team questions as you go through treatment.

Radiation Oncologist (RO)

- Prescribe and develop your radiation treatment plan to make sure each treatment is safe and precise.
- Check your progress during and after your treatment.
- Address side effects of treatment.

Radiation Therapist (RT)

- Work with your RO to help develop your treatment plan.
- Carefully position you and deliver the radiation treatment each day.
- Check your progress and help you manage side effects.

Oncology Nurse

- Registered Nurses (RNs) who work closely with your RO.
- Help explain and manage the side effects of your radiation treatment.
- Support you to access resources that you might need through treatment.

Clinical Physicist

- Make sure the equipment used for treatment is accurate and safe.
- Perform quality checks on each treatment plan.

Clinical Student

- All the students and trainees you meet will be working under the direct supervision of trained health care professionals.

Wheels of Hope

The Canadian Cancer Society (CCS) offers [Wheels of Hope](https://www.cancer.ca/en/living-with-cancer/how-we-can-help/transportation). This is a service where volunteer drivers pick you up and drive you to cancer treatments or appointments. Talk to your healthcare team about a referral.

[cancer.ca/en/living-with-cancer/how-we-can-help/transportation](https://www.cancer.ca/en/living-with-cancer/how-we-can-help/transportation)



Appointment Overview

If you need radiation therapy as part of your cancer treatment plan here are some of the appointments you will attend:

Consult with Radiation Oncologist	This is where your medical case is reviewed and a radiation treatment plan is made. You will be asked to consent to start treatment.
CT Simulation	This is where you have a CT scan to help plan your treatment.
Radiation Treatments	These are your pre-booked treatment appointments.
Radiation Review	These are pre-booked follow-up visits with your Radiation Nurse and/or RO. They happen as you are going through treatment to monitor progress.
Follow-Ups	After finishing radiation treatment, you may have a follow-up with the radiation team.

WRHN Cancer Centre is a scent-free facility.

Do not wear perfume, cologne, or scented products when you come to the hospital.

What To Bring Each Day

- ☐ Health card (OHIP). If you do not have an OHIP card please bring another form of government photo ID (such as driver's license, passport, or other provincial health card).
- ☐ **ANY** medicines that you may need to take while you are here, or in case you are delayed getting home (like your diabetes medicine or blood pressure pills).
- ☐ Wrist band

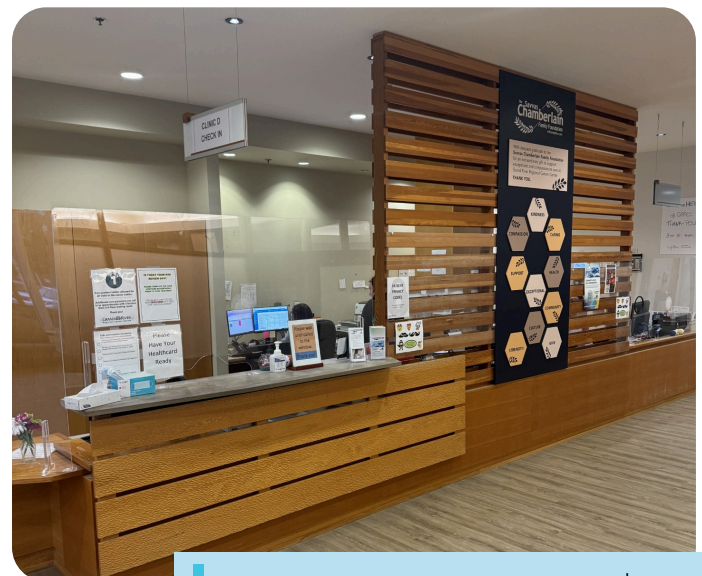
CT Simulation

Once you consent to have treatment, the first step is your **CT simulation appointment**. This is a CT scan that will be used to plan your cancer treatment.

Depending on the area of your body to be treated, you may need to prepare for this first appointment. If so, your team will give you special instructions. **Please follow these instructions carefully.**

When you arrive:

- Check in at the radiation reception desk on the main floor (3rd Floor) of the Cancer Centre.
- You will get an wristband with your name and Medical Record Number (MRN).



Radiation Reception Desk on 3rd Floor

At your CT simulation appointment, one of the Radiation Therapists (RTs) will:

- Come to get you from the waiting area.
- Tell you about the CT simulation procedure.
- Take a photo of your face to add to your radiation chart. This helps to identify you at your treatment appointments.
- Position you in the best way to plan your treatments.

Your RT **may** also use a positioning device or make a mould to help you stay still during your treatment. The RT doing the scan will give you more information.

Images taken from this CT scan will be used to plan your treatment. After the scan, the RT may make tiny, permanent tattoos (dots) on your skin. The tattoos are used to make sure you are in the right position for treatment every day.

After this appointment, the RT will give you more information about your treatment start date.

You may need to wait up to 2 weeks before your treatment is planned and ready to start.

Booking staff will contact you with the date and time of your first treatment.

Radiation Treatments

Treatments are given once a day, Monday to Friday. Not all treatment prescriptions are the same. Some people may have 1 treatment, or many treatments over the course of weeks.

All of your radiation appointments can be found on your **appointment itinerary**. Note that your appointment times may change throughout the course of your treatment. Your healthcare team will tell you if a change is made.

For your treatments:

- Arrive 10 to 15 minutes early for every appointment to allow time to check in.
- On your first day, an RT will come to get you from the waiting area. They will talk to you about the treatment procedure.
- Treatment appointments typically last about 15 to 30 minutes.
- 2 Radiation Therapists will:
 - Use your radiation tattoos and/or a positioning device to put you in the same position as the CT simulation appointment.
 - Deliver your radiation treatment as prescribed by the RO.
 - Monitor you through your treatment.
- Please tell your RT if you have any other medical appointments. We will do our best to coordinate them with your radiation treatment schedule.

You are NOT radioactive after your treatment. You can go about your regular, daily activities.

Smoking

You are more likely to have side effects during radiation treatment if you smoke. If possible, cut back or stop smoking before your treatments start. Quitting smoking can improve your body's response to cancer treatment. Ask your healthcare team for help quitting smoking.

Radiation Review

Once you have started radiation treatment you will meet with your Oncology Nurse and/or Radiation Oncologist weekly for a check-up, called **Radiation Review**. They will:

- Talk to you about side effects.
- Address any concerns you may have.
- Offer support(s) to help you through the rest of your treatment.

You don't need to schedule these appointments. They will be booked for you close to your treatment time(s).

Side Effects

You may have side effects from radiation treatment. Your healthcare team will review possible side effects with you ahead of time. This can help you watch for any changes to your body as you go through your treatment. Your healthcare team will check on you over the course of your treatment to help you manage any side effects.

After Treatment

After you finish your radiation treatment your RO will decide if you need a follow-up appointment. This appointment allows your RO to check on you after treatment.

You should continue to see your family doctor for any other medical needs outside of cancer care (e.g. your regular health checks, diabetes, rashes, etc.)

Resources

Visit the J. Wesley Graham Patient & Family Resource Centre for more information about cancer and supports. You can also scan or click the links below to access more information:



[Parking at WRHN
Cancer Centre](#)



[Wheels of Hope](#)



[About Radiation](#)



[Side Effects of
Radiation Therapy](#)



[How to Manage
Anxiety](#)



[How to Manage
Fatigue](#)

Use this resource for your information only. It does not replace medical advice from your doctor or other health care professionals.



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