



Canadian Cancer Society  
Société canadienne du cancer

# Radiation Therapy

*A guide for people with cancer*



Let's Make Cancer History  
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**This booklet is a guide to help you understand radiation therapy and its possible side effects. Your family and friends may also find it helpful to learn about your treatment.**

**The information in this booklet is general and should not replace discussions with your healthcare team.**

## Table of contents

3	Working with your cancer treatment teams
7	An overview of cancer and radiation therapy
10	What to expect from radiation therapy
20	Radiation therapy and side effects
23	Managing side effects from radiation therapy
47	Talking to others about your treatment
49	Managing stress
52	Follow-up care
54	Other resources

## Radiation Therapy

### *A guide for people with cancer*

This booklet is a guide to help you understand radiation therapy. It suggests questions you can ask about your treatment and provides tips on managing possible side effects.

When you have radiation therapy, a treatment plan will be developed just for you. It's important to note that everyone's cancer experience is different, so how you feel during treatment or how you react to your situation is unique to you. Talk to your radiation therapy team about the information included in this booklet and how it applies to you. Don't be afraid to ask questions – your team is there to help.

## Working with your cancer treatment teams

Teamwork is needed to treat cancer. Many different healthcare professionals will help you throughout your cancer treatment – some of them will play a special role as members of your radiation therapy team. Before your treatment begins, you will meet with members of your radiation therapy team. They will recommend treatment options and talk to you about the choices that are available to you. Your radiation therapy team will consider:

- the type of cancer you have
- how far the cancer has progressed
- your age
- your general health
- any other medical problems you might have

### Your radiation therapy team

Your radiation therapy team may include:

#### **Radiation oncologist**

A radiation oncologist is a doctor who specializes in the treatment of cancer using radiation. This member of your team develops your treatment plan.

#### **Radiation therapist**

A radiation therapist helps plan and deliver your treatment. This member of your team also supports you in managing your side effects.

#### **Cast/Mould staff**

Cast/Mould staff make and fit devices used in treatment (for example, plastic shells that help you keep still or in place, or blocks that protect some parts of your body during treatment).

**Dosimetrist**

A dosimetrist uses the radiation oncologist's instructions to plan the amount (*dose*) of radiation you will receive during radiation treatment. This is done using computer-based planning to make the treatment plan specific to you.

**Medical physicist**

A medical physicist checks the treatment plans for accuracy and makes sure that the radiation equipment and radiation levels are safe.

**Radiation therapy nurse**

A radiation therapy nurse provides information and support relating to your treatment and, with other members of your team, helps you manage side effects.

**Oncology social worker**

An oncology social worker can help you and your family cope with cancer and its treatment.

**Psychologist**

A psychologist can help you and your family cope with cancer and its treatment.

**Registered dietitian**

A registered dietitian has received special education in nutrition and has additional clinical training. This member of your team can advise you about your diet.

**Oncology pharmacist**

An oncology pharmacist prepares and dispenses cancer drugs and other medications, and helps teach you about your medications.

**Dentist**

A dentist provides care for your teeth and gums, which may need special attention before, during and after radiation therapy.

**Your healthcare team**

Other healthcare professionals are often involved in your care. They work with your radiation therapy team, but look after different parts of your diagnosis, treatment and recovery. Your healthcare team may include:

**Surgeon**

A surgeon is a doctor who performs biopsies (cells or tissues are removed from the body and examined to help with a diagnosis) or surgery that you may need.

**Surgical oncologist**

A surgical oncologist is a surgeon who has received specific training in treating cancer by removing lumps or tumours from the body.

**Radiologist**

A radiologist reads and interprets x-rays and other imaging tests. This member of your team may also perform biopsies during specialized x-ray procedures.

**Pathologist**

A pathologist looks at the tissue from a biopsy under a microscope to see if it has cancer cells.

**Medical oncologist**

A medical oncologist is a doctor who specializes in the treatment of cancer using different medications, such as chemotherapy drugs.

**Oncology nurse**

An oncology nurse has received special education and has experience in caring for people with cancer. Oncology nurses provide information and support, and work in a variety of settings such as chemotherapy or radiation therapy departments, oncology units and in the community.

### Physiotherapist

A physiotherapist helps with the physical recovery from your illness. This member of your team can help maintain and improve your overall fitness and health.

### Occupational Therapist

An occupational therapist helps you manage daily activities. This member of your team can design and provide devices to help you regain your independence and improve your quality of life.

### Family doctor

Your family doctor plays an important part in your general healthcare, before, during and after your cancer treatments.

**You** are the most important member of your cancer treatment team. Your situation is unique and your treatment will be developed just for you. You can:

- Be involved in decisions that affect you.
- Learn about cancer and your treatments in a way that feels right for you.
- Talk to your team about your worries or concerns.
- Keep your doctor, clinic and hospital appointments.
- Write down questions to ask your team, so that you won't forget them at your next appointment.
- Ask your team how to contact them between appointments if you have any questions that need answers quickly.

## An overview of cancer and radiation therapy

Cancer is a disease that starts in our cells. Our bodies are made up of millions of cells, grouped together to form tissues or organs such as muscles and bones, the lungs, or the liver. Genes inside each cell order it to grow, work, reproduce and die. Normally our cells obey these orders and we remain healthy.

Sometimes a cell's instructions get mixed up and it behaves abnormally. After a while, groups of abnormal cells can circulate in the blood or immune system, or they can form lumps or tumours.

Tumours can be either *benign* (non-cancerous) or *malignant* (cancerous). Benign tumour cells stay in one place in the body and are not usually life-threatening.

Malignant tumour cells are able to invade the tissues around them and spread to other parts of the body. Cancerous cells that spread to other parts of the body are called *metastases*. The first sign that a malignant tumour has spread is often swelling of nearby lymph nodes, but cancer can metastasize to almost any part of the body. It is important to find malignant tumours early and treat them.

### What is radiation therapy?

Radiation therapy is the use of a certain type of energy (radiation) from x-rays, gamma rays, electrons and other sources to destroy cancer cells. Other names for this common method of treating cancer are radiotherapy, x-ray therapy or irradiation.

Radiation in high doses destroys cells in the area being treated by damaging the DNA in their genes, making it impossible for them to grow and divide. During radiation therapy, both cancer cells (which are growing in an uncontrolled way) and healthy cells are affected, but most healthy cells can repair themselves afterwards.

## The types of radiation therapy

The different types of radiation therapy are:

- external beam radiation therapy  
(also called *external radiation therapy*)
- brachytherapy  
(also called *internal radiation therapy* or *implant therapy*)
- systemic radiation therapy  
(also called *unsealed internal radiation therapy*)

Your treatment plan may include more than one type of radiation therapy.

### External beam radiation therapy

In external beam radiation therapy, radiation is directed at the cancer and surrounding tissue from a machine outside the body. It is used to treat most types of cancer.

### Brachytherapy

Brachytherapy makes it possible to treat the cancer with a high total dose of radiation in a concentrated area in a short period of time. In brachytherapy, sealed radioactive sources are placed in the body, in or near the cancer. A sealed radioactive source is often called an *implant*.

The different ways of placing the implant in the body are:

- **Interstitial:** the implant is placed right into the tumour (for example, into the prostate).
- **Intracavitary:** the implant is placed in special applicators inside a body cavity (for example, inside the cervix).
- **Intraluminal:** the implant is placed in special applicators inside a body passage (for example, inside the esophagus).
- **Surface or mold:** the implant is placed on the surface of a tumour (for example, on the eye).

## Systemic radiation therapy

In systemic radiation therapy, the radiation source is given as a liquid (either as a drink or in capsules that are swallowed) or by injecting it into a vein (an intravenous injection). The radiation source travels throughout the body.

## The goals of radiation therapy

Radiation therapy can have many different purposes, and it can be combined with other ways to treat cancer. The goals of your treatment may be to:

### Destroy cancer cells

Radiation therapy, by itself or with another treatment, is given to destroy cancer cells in the body.

### Shrink a tumour before other treatments

Sometimes radiation therapy is given to shrink a tumour before surgery or chemotherapy.

### Destroy cancer cells after other treatments

Radiation therapy is sometimes given after surgery or chemotherapy to destroy cancer cells that may remain.

### Relieve symptoms caused by cancer

Radiation therapy may be given to reduce pain and other symptoms of cancer.

## What to expect from radiation therapy

Because there are different types of radiation and many ways to deliver it, planning for treatment is an important step. Radiation therapy is planned in detail to make sure that the radiation is aimed at the exact area needing treatment, but does as little damage as possible to the surrounding healthy tissues and organs. During the planning process, you may need to have special tests, scans or x-rays that will help the team make decisions about your treatment.

Planning for your treatment will include:

- locating the tumour and deciding what area should be treated
- deciding on the number of treatments and dose of radiation
- planning how to deliver the treatment to the area

Your radiation therapy team will see you regularly throughout your treatment to:

- follow your progress
- check whether you are having any side effects
- suggest ways to manage those side effects
- talk about any concerns you may have

You might have blood tests, physical exams or other tests to monitor your progress. Depending on your response or reaction to the therapy, your schedule or treatment plan may change as your treatment continues.

Your radiation therapy team may meet with other healthcare professionals to discuss your progress and make sure that your treatment is going as planned. The full effect of the radiation therapy will not be clear until after you've finished your treatment.

## External beam radiation therapy

External beam radiation therapy is usually done on an outpatient basis, which means you won't have to stay overnight at the hospital. For many, one treatment is given each day from Monday through Friday and these treatments may continue for several weeks.

Before your treatment begins, you will meet with your radiation therapy team to discuss treatment options. This will be followed by a planning session.

### What happens at a planning session

Almost everyone who has external beam radiation therapy will have a planning session (*simulation*) before treatment can begin. The radiation therapist uses a machine called a *simulator* to set up your treatment. A simulator is not a treatment machine. The most common type of simulator used in Canada is a CT simulator. It can take images or scans, which provide a picture of the area to be treated. These pictures help your radiation therapy team plan your treatment and decide how to direct the radiation to your body.

You will need to lie very still during your simulation, which may take up to an hour. The process can be tiring.

Using the images as a guide, the radiation oncologist will start the planning and the radiation therapist will often mark the area to be treated with a marker or with lines of dots in permanent ink. These marks are very important. They act as a map and will help make sure that the radiation is targeted at the same area each time.

If you're having radiation to the head or neck, or if your team thinks it might be hard for you to keep still during treatment, they will make a plastic form or mould that will help you stay in the right position for each treatment. Marks to pinpoint the treatment area can be made on the mould and not on your skin.

## What happens at a treatment session

You may feel nervous before your first treatment session. Your radiation therapy team will explain what will happen and will answer your questions. You may need to change into a hospital gown.

Treatment may only take a few minutes, but you'll probably spend 15 to 30 minutes in the treatment room. It takes time to get you in place on the treatment table and check the machine settings. Your therapist may place blocks between the machine and certain parts of your body to help protect healthy tissue and organs. It is important for you to remain very still once you're in position.

Once you're in place, your therapists will leave the room to turn on the machine. You won't see or feel the radiation while you are being treated. The treatment itself is painless. You will be alone while you are receiving treatment, but your therapists will watch you on a closed-circuit television monitor and listen on an intercom. They might come back into the treatment room to adjust the machine's position from time to time. If you need to, you can call out or signal to them. They can stop the treatment and assist you.

The machines used for treatment are quite large. They can also make strange noises as they work and move about you. Remember that your radiation therapists are constantly checking to make sure everything is working as it should. Your radiation therapists are there to help you if you have concerns or feel alone or nervous at any time during your treatment.

External beam radiation therapy doesn't make you radioactive, and it is safe for you to be with other people right after your treatment.

## Brachytherapy

If you have brachytherapy, you will need to be at the hospital for several hours or longer. Having an implant inserted is usually done in a hospital operating room using a local or general anesthetic. Imaging tests, such as an ultrasound or a CT scan, may be used to make sure the implant is placed correctly, and computers are used to help calculate and plan treatment.

Implants come in different shapes (in the form of seeds, needles or wires) and can contain different radioactive materials. Implants can be permanent or temporary.

### Permanent implants

A permanent implant stays in place forever. The implant (sometimes called a seed) releases small doses of radiation slowly over a period of time, until the radioactivity gradually fades away.

The radiation affects only a very small area around the implant, and there is little danger of it affecting other people. You may, however, need to take certain safety measures for a period of time. Your radiation therapy team will talk to you about what you need to do after having a permanent implant.

### Temporary implants

A temporary implant does not stay in place forever. If you have a temporary implant, part of the process will be to have special applicators (such as hollow tubes) placed in the body. These are used to deliver the radiation sources.

Temporary implants can be either low-dose-rate or high-dose-rate:

**If you have low-dose-rate therapy**, you may need to stay in the hospital for a few days. Once the applicator is in place, the radioactive sources will be inserted into it. Once they are inserted, you will need to stay in a special room in the hospital or cancer centre. Hospitals have procedures so that hospital staff and visitors are protected from the radiation.

Members of your radiation therapy team may limit their time in your room, and children and pregnant women won't be allowed to visit you.

The radioactive implant delivers the dose slowly during your stay. You will not feel the treatment as it is being given, but if an applicator is holding the implant in place, you may find it somewhat uncomfortable. Depending on where the applicator is placed, you may have to stay in bed and lie still to keep it from shifting. If you need it, you may be given some medicine to help you relax or relieve pain.

When your treatment is done, the radioactive sources and applicator will be removed and it will be safe for others to be with you. This will likely be done in your hospital room and you won't need anesthetic. The treated area may be sore or sensitive for some time.

**If you have high-dose-rate therapy**, it may be done on an outpatient basis. Once the applicator is in place, it can be attached to a machine that is able to give high doses of radiation. The machine sends the radioactive sources to specific spaces within the applicator. Treatment takes a few minutes and once it is finished, the radioactive sources go back into the machine. You are not radioactive.

Depending on the area being treated, you may have one to six sessions over a period of time. The only time that you are kept away from other people is during the actual treatment.

Once your treatment is completely finished, your applicator will be removed. An anesthetic is not usually needed and most applicators can be taken out right in your hospital room. The area that has been treated may be sore or sensitive for some time.

## Systemic radiation therapy

If you have systemic radiation therapy, you may need to stay in a special room in the hospital for a number of days after the radioactive sources have been swallowed or injected. Some of the radioactive sources will leave your body through body fluids such as saliva, sweat and urine. Most of the radiation is gone from your body within a few days, but until the high levels of radioactivity are gone, you may have to take certain safety measures or precautions. Your radiation therapy team will tell you what you need to do, and when and if you can have visitors.

The therapy itself isn't painful, and you can't feel the radiation travelling throughout your body. If you are given a drink or capsule, it will be like swallowing any other type of medicine. It doesn't have a strong taste or smell. If your treatment is given by intravenous injection, you will need to have a needle. Some people find this uncomfortable, but after the needle is inserted, the treatment itself isn't painful.

Systemic radiation therapy can sometimes be given on an outpatient basis. Although you may not need to stay in the hospital, you may still need to take certain safety measures at home. Your radiation therapy team will talk to you about what you need to do.

## Questions to ask about radiation therapy

In making decisions about your treatment, you may have many questions to ask your radiation therapy team. This list can help get you started:

### About radiation therapy

What are the benefits and risks of having radiation therapy?

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How successful is this treatment when it is given for the type of cancer I have?

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Are there other treatments for this type of cancer?

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When will my radiation therapy begin?

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How long will my radiation therapy last?

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Who will be giving me the treatments?

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Where will I receive my treatments?

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Do I need to stay in the hospital for my treatment?

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Will I be able to have visitors while having the treatment?

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Will special steps or precautions need to be taken while I'm in the hospital?

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How often will I receive treatments and how long will each treatment session be?

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Will I feel anything during treatment?

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When will I be able to go home after the procedure?

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Do I need any special care when I get home?

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Will I have to pay for any of my radiation therapy?

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Will I be able to work while I am having radiation therapy?

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What tests will I have to see if treatment is working?

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Will I need other treatment along with radiation therapy?

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Will I be able to travel out of the country between my treatments?

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## Before your radiation therapy starts

Is there anything I should do before treatment starts, such as visiting my dentist to have my teeth cleaned and cavities repaired?

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Should I tell my dentist or any other healthcare professional that I will be having radiation therapy?

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I take another medicine regularly for other health reasons. Will I be able to keep taking it during radiation therapy?

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I sometimes take medicine when I have a cold, cough, flu, headache or allergies. Will I be able to take these medicines during radiation therapy?

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I'm taking vitamin/mineral and herbal supplements. Will I be able to take these during radiation therapy?

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Should I eat before or after treatment?

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Can I drink alcohol (beer, wine, spirits)?

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Are there any special foods I should or shouldn't eat?

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Are there any activities I should avoid after radiation therapy?

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Will radiation therapy affect my sex life?

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Will radiation therapy affect my fertility? Should I continue to use birth control?

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If radiation therapy affects my ability to have children after my treatment, what are my options?

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How do I contact my radiation therapy and healthcare team after-hours?

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## Radiation therapy and side effects

Many treatments for cancer can have side effects but it's hard to know if and when they might happen to you. Side effects from radiation therapy vary from person to person, depending on:

- the amount of radiation
- the part of your body being treated
- your treatment schedule
- your general physical health
- other medications you are taking

Some people think that having side effects means that the radiation is working and not having them means that it's not. Side effects are caused by damage to healthy cells during treatment. They are different from person to person and are not a sign of whether the treatment is working or not.

Your radiation therapy team is there to help you manage any side effects you have. They will explain which side effects to report right away, and which ones can wait until your next appointment. Ask them about ways to reduce your side effects or make them easier to deal with. If you notice any unexpected side effects or symptoms, talk to your radiation therapy team.

## Other medications and side effects

Before your first treatment, let your radiation therapy team know about any other medications you are taking. Other medications include:

- prescription drugs, including creams or ointments
- over-the-counter drugs, including creams or ointments
- vitamin/mineral supplements
- herbal remedies and other natural health products
- complementary and alternative therapies

Taking any of these medications at the same time as having radiation therapy may cause side effects or make your side effects worse. It may even affect how well your radiation therapy works. You might want to take a written list or the actual medications with you to talk to your radiation therapy team. If you make a list, include the name of each medication, the dose, how often you are taking it, how long you have been taking it and the reason why you are taking it.

During your treatments, talk to your radiation therapy team or pharmacist before taking any new medication.

## How long do side effects last?

It takes time for healthy cells to recover from the effects of radiation therapy, so side effects may continue even after treatment is over. Some may continue for weeks or months after your treatment. Other side effects, such as infertility, might be permanent.

## Questions to ask about side effects

Your radiation therapy team will be able to help you with your questions about side effects. Your questions and answers may depend on the area of your body being treated and the type of radiation therapy you have. Here are some questions you may want to ask:

What are the possible side effects from the radiation I will be receiving?

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Are any of these side effects likely to be long-term or permanent?

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How do I deal with these side effects?

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Are there any side effects that I should see my healthcare team about or report right away?

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Will the radiation therapy have any effect on my ability to have children or on the health of children I might have later on?

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Will the radiation therapy cause any blood-related effects (for example, bruising, anemia or infection)?

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Can I have vaccinations (for example, a flu shot)?

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Will having radiation therapy affect my feelings or emotions?

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Should I avoid other people and pets during radiation therapy?

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## Managing side effects from radiation therapy

As radiation therapy affects everyone in different ways, it is difficult to predict exactly how you will react to treatment. You may not have side effects at all, or only a few mild ones during your treatment. But being aware of possible side effects can help you cope with any problems that arise.

### General side effects

The side effects that are possible with radiation therapy to any area of the body are listed below. These side effects are often called **general** side effects. For information about the side effects – and tips to help manage them – go to the pages listed.

**If you have radiation therapy to any area of the body, you may have these side effects:**

Fatigue	go to page 26
Skin changes in the treatment area	go to page 28
Changes in appetite	go to page 30
Hair loss in the treatment area	go to page 31
Anxiety or depression	go to page 32
Changes in sleep patterns	go to page 34
Feelings about sexuality	go to page 35

## Specific side effects

Some side effects are related to the treatment of a specific area of the body. These side effects are often called **specific** side effects. Specific side effects for different treatment areas are listed below. For information about the side effects – and tips to help manage them – go to the pages listed. For specific side effects, you only need to read the pages that relate to your treatment area.

### If you have radiation therapy to the brain, you may have:

Nausea and vomiting	go to page 36
Swelling of brain tissue	go to page 37
Earaches or difficulty hearing	go to page 37

You may also have the general side effects listed on page 23.

### If you have radiation therapy to the head and neck, you may have:

Nausea and vomiting	go to page 36
Earaches or difficulty hearing	go to page 37
Mouth sores	go to page 37
Changes to teeth and gums	go to page 38
Dry mouth and throat	go to page 39
Difficulty swallowing	go to page 39

You may also have the general side effects listed on page 23.

### If you have radiation therapy to the chest, you may have:

Difficulty swallowing	go to page 39
Cough	go to page 40

You may also have the general side effects listed on page 23.

### If you have radiation therapy to the breast, you may have:

Skin changes to the breast in particular (page 28) and the general side effects listed on page 23.

### If you have radiation therapy to the stomach and abdomen, you may have:

Nausea and vomiting	go to page 36
Diarrhea	go to page 41

You may also have the general side effects listed on page 23.

### If you have radiation therapy to the pelvis, you may have:

Nausea and vomiting	go to page 36
Diarrhea	go to page 41
Bladder and rectal irritation	go to page 42
Infertility	go to page 44
Menopausal symptoms	go to page 46

You may also have the general side effects listed on page 23.

## Fatigue

Radiation therapy to any area of the body may make you feel a lot more tired than usual. These feelings of fatigue are different than normal feelings of being tired. During radiation therapy, the body uses a lot of energy for healing, so your fatigue will not always be relieved by rest. Symptoms include:

- feeling too weak to carry out normal activities
- having trouble concentrating or remembering
- feeling exhausted all the time

While fatigue can be related to the effects of radiation on healthy cells, it can also be related to the type of cancer you have, poor appetite, lack of exercise, drugs to stop nausea, stress related to your illness, anxiety or depression. Making daily trips for treatment can also affect your energy levels.

Most people begin to feel tired after a few weeks of radiation therapy. Feelings of weakness or tiredness will go away gradually after your treatment has ended.

### ***What you can do:***

- Keep track of your energy levels during and after radiation therapy in a journal. Write down when you feel most tired and when you have more energy. Then try to schedule activities that you enjoy or appointments when you have the most energy.
- Do the things that mean the most to you first.
- Keep in touch with friends and loved ones by phone or e-mail if you don't have the energy to meet in person.
- Eat when you have the most energy.

- Talk to your radiation therapy team about your nutrition needs. A registered dietitian may suggest that eating extra protein and calories could help your energy levels.
- Exercise if you can. Being active, even if it's only gentle exercise such as walking, will help you relieve stress. It may boost your appetite and help you sleep. Ask your radiation therapy team for activities that are right for you.
- Watch that you don't become inactive. Too much rest can make you feel more tired.
- Ask about a flexible work schedule or reduced hours if you continue to work during your treatment.
- Save your longest sleep for the night by taking only short naps during the day.
- Keep a regular sleep routine.
- Make sure your bed, pillows and sheets are comfortable.
- Plan rest periods before activities.
- Limit visitors and ask them to call before they visit.

### ***What to watch for***

If you feel very fatigued, depressed, sleepy or are having trouble doing everyday things like bathing or cooking, talk to your radiation therapy team.

## Skin changes in the treatment area

Radiation therapy can cause skin changes where the radiation has passed through the skin. Your radiation therapy team will check your skin regularly and make suggestions for your care.

Your skin may look as if it is sunburned or tanned. People with darker skin may find that their skin has a black or blue tinge. Skin in the treatment area may become red, irritated or swollen. After a few weeks of treatment, your skin may become very dry. It may peel or develop blisters.

With some kinds of radiation therapy, skin in the treatment area may develop a moist reaction, especially in areas where there are skin folds. When this happens, the skin is wet and may become very sore. Your radiation therapy team can tell you how to care for these areas.

During and after your treatment, the skin in the treatment area is sensitive to sunlight, so your risk of getting a sunburn is very high.

Most skin changes will go away a few weeks after treatment has ended. In some cases, the treated skin will remain slightly darker than it was before and it will likely continue to be more sensitive to the sun.

**If you have radiation therapy to the breast**, the nipple and the fold under the breast can be very sensitive or sore. If the underarm area is included in your treatment plan, it may be tender due to rubbing of the skin.

During or after treatment, you may find that your treated breast has changed in size or shape. It may also feel slightly firmer. While these changes are possible, they are quite rare.

## What you can do:

- Follow the bathing instructions suggested by your radiation therapy team.
- Ask your radiation therapy team to recommend products that will not irritate your skin or interfere with treatment. Do not use any powders, creams, perfumes, aftershave, deodorants, body oils, ointments or lotions in the treatment area unless approved by someone on your team.
- Use an electric shaver rather than a razor to prevent cutting your skin in the treatment area. If you do cut or scrape your skin, talk to your radiation therapy team.
- Do not put anything hot or cold (such as heating pads or ice packs) on the area being treated.
- Do not squeeze or scratch pimples.
- Protect skin in the treatment area from the sun with clothing or a hat. Sunscreen may irritate the area being treated and should only be used after treatment is finished and after any skin-related side effects have gone away (likely 4 to 6 weeks after treatment).
- Protect treatment areas from rubbing, pressure or irritation. Cotton or silk clothing is less irritating on the skin than harsh fabrics such as wool and corduroy. Avoid tight clothing of any kind.

## Changes in appetite

Radiation therapy to any area of the body can cause temporary changes in taste and smell, which can make foods seem less appetizing. Some people lose interest in food completely and can't eat, even though they know they need to. This can lead to weight loss. Other people may gain weight from frequent snacking to control nausea.

### ***What you can do when food tastes different:***

- Serve foods cold or at room temperature to reduce strong tastes.
- Try using plastic cutlery and glass cooking pots, if foods taste metallic.
- Suck on sugarless lemon candies or mints, or chew sugarless gum to get rid of unpleasant tastes that remain after eating.

### ***What you can do when you lose your appetite:***

- Eat smaller amounts every 1 to 2 hours.
- Use soft lights, quiet music or brightly coloured table settings where you eat – whatever makes you feel good.
- Have meals with your family or friends.
- Exercise lightly, if you are able, or take a walk before meals to increase your appetite.

### ***What you can do when you feel hungry and are gaining weight:***

- Eat smaller portions and plan your meals around vegetables, fruit and grain products. Choose fish, legumes, nuts and seeds as alternatives to meat.
- Replace some of the high-fat snack foods and baked goods with lower-fat choices. Choose vegetables and fruit, low-fat yogurt, air-popped or low-fat microwave popcorn and low-fat crackers.
- Talk to your radiation therapy team or dietitian if you want to lose weight for health or other reasons. They may suggest that you wait until your treatment is finished.

## Hair loss in the treatment area

Radiation therapy can make you lose your hair in the area that has been treated with the radiation. The amount of hair loss, and whether it comes back, depends on the amount of radiation you are receiving. The hair may feel softer or coarser when it grows back.

**If you have radiation therapy to the brain or head**, you may lose some or all of your hair on your scalp. If you start to lose your hair, you may find that it becomes thinner or falls out entirely. You may also notice that your scalp feels tender. If your hair doesn't grow back, you may consider a hair transplant to the affected area after you have recovered.

### ***What you can do:***

- Be gentle with your hair. Use a mild shampoo and a soft hairbrush. Let your hair dry naturally.
- Get a shorter cut if you have long or medium-length hair. This will make your hair look fuller and thicker. It won't prevent any hair loss, but it might help to make it less dramatic for you.
- Avoid dyeing, perming or straightening your hair during treatment. Talk to your radiation therapy team to find out when you can begin these activities again.
- Protect your scalp when you are outside. Wear a wide-brimmed hat or scarf.
- Try wearing a scarf, turban or hat if you feel sensitive about your loss of hair. This will help keep your head warm as well.
- Consider buying a wig or toupée. You may want to select it before your hair falls out so that it will be easier to match to your own hair colour and style.

## Anxiety or depression

Each person reacts differently when diagnosed with cancer and will find different ways to cope with the experience. Starting radiation therapy or other treatments can lead to new worries and fears that may make you feel anxious, sad or down.

Although feeling anxious or very afraid is an emotional state, it can have effects on your body. Talk to your healthcare team if you are feeling anxious most days. They may prescribe medications or perhaps refer you to a professional such as a social worker or psychologist.

Signs of anxiety include:

- rapid heartbeat
- trouble swallowing
- pressure or tightness in the throat or chest
- rapid, shallow breathing (which can cause dizziness)
- dry mouth
- sweating
- trembling
- upset stomach
- feeling unreal or disconnected
- problems falling asleep or staying asleep

### What to watch for

Sometimes feeling anxious can be a symptom of depression. Other possible signs of depression include:

- trouble sleeping
- overeating or no interest in eating
- crying a lot
- feeling hopeless
- thoughts of harming yourself

If you have any of these possible signs of depression, talk to your healthcare team. They may recommend a medication to relieve depression or therapy to help you during treatment, or both.

### What you can do:

- Try to figure out what makes you feel anxious or depressed. Sometimes talking to someone who has had a cancer experience similar to yours can help you cope with anxiety or depression and reduce your fears.
- Decide how much you'd like to know about your cancer. Some people become anxious because they have too little information, while others feel better not knowing everything.
- Keep a journal or diary while you are having treatment. This is a good way to release anxiety and other thoughts and feelings. It's also a good place to set down positive feelings that you can return to when you're feeling low. You may discover new strengths in yourself and those around you. You may find new reasons to appreciate your family and your life.
- Share your worries and concerns with your healthcare team. Discuss your feelings with your family doctor if that makes you feel more comfortable.
- Try not to keep your feelings bottled up inside. Talk to family members or friends.
- Seek out positive people and events to keep your spirits up. People who have pets, especially cats or dogs, say contact with these animals can be soothing.
- Look to your spiritual faith for comfort to keep you going in difficult times.
- Learn and practise some meditation or relaxation exercises to help you feel less anxious.
- Eat well and be as physically active as possible.
- Reduce your intake of caffeine (coffee, tea, cola drinks) by switching to decaffeinated drinks.

## Changes in sleep patterns

Having trouble sleeping (insomnia) is a common problem for many people during treatment. Signs of insomnia include:

- being unable to fall asleep
- waking up often during the night
- waking up very early and not being able to go back to sleep
- feeling sleepy during the daytime

Pain, anxiety, depression and some medications can affect your sleep. If you often have insomnia during radiation therapy treatment, talk to your radiation therapy team.

### ***What you can do:***

- Go to bed and get up at the same time every day.
- Relax before bedtime. Different habits work for different people – try reading, listening to books on tape, writing in a journal, having a bath or doing some easy stretches.
- Avoid alcohol, drinks with caffeine or smoking for several hours before bedtime.
- Make sure your bed, pillows and sheets are comfortable. Block outside light with blinds or drapes if needed. Use earplugs if noise is keeping you awake.
- Make sure that your room is at a comfortable temperature for sleeping.
- Don't stay in bed tossing and turning when you have trouble falling asleep. Get up and go into another room. Read or watch TV until you feel sleepy enough to return to your bed.

## Feelings about sexuality

Some people go through radiation therapy without having their feelings and attitudes about sex affected. Others find that their sex lives change in some way due to their treatment. You may find that your sexual interest declines because of the physical and emotional stresses of having cancer and getting radiation therapy. These stresses may include:

- being worried about changes in your appearance
- coping with side effects of treatment, including fatigue and hormonal changes
- feeling anxious about your health, family or finances

Your partner's concerns or fears also can affect your sexual relationship. Try to share your feelings with each other, and talk to your healthcare team if you need to. If talking to each other about sex, cancer, or both, is hard, a counsellor may be able to help you talk more openly.

You may find that intimacy changes during treatment. Hugging, touching, holding and cuddling may become more important, while sexual intercourse may become less important. Remember that there are many ways to express your sexuality. Together, you and your partner can decide what gives both of you pleasure.

## Nausea and vomiting

If you have radiation therapy to the brain, head and neck, stomach and abdomen, or pelvis, you may feel nauseated or be sick to your stomach. Your radiation therapy team can prescribe a type of drug called an *anti-emetic* to prevent or reduce this side effect. Different drugs work for different people, and you may need more than one drug to feel better. Work with your team to find the drug or drugs that work best for you.

It is important to take anti-emetic drugs as directed, because it is easier to prevent nausea than treat it once it happens. Anti-emetic drugs often work best when taken before radiation therapy and for a few days after. Sometimes they can have side effects of their own, such as sleepiness, general fatigue or problems with concentration, but most people feel that these side effects are worth the benefits.

### What to watch for

If you cannot stop vomiting or it continues for more than 24 hours after your treatment (even if you are taking the anti-emetics as directed), talk to your radiation therapy team as soon as possible.

### What you can do when you have nausea and vomiting:

- Eat smaller meals more often throughout the day.
- Nibble on dry foods, such as crackers, toast, dry cereals or bread sticks, as soon as you wake up and every few hours during the day.
- Avoid foods that are overly sweet, greasy, fried or spicy, or that have a strong odour.
- Sip water, juices and other caffeine-free liquids (flat ginger ale, sport drinks) throughout the day. Cool liquids may be easier to drink than very hot or very cold liquids.
- Remove your dentures or partial dentures on days when you are having your radiation therapy treatments. Sometimes objects in your mouth can make you feel like vomiting.
- Take slow, deep breaths through your mouth.

## Swelling of brain tissue

If you have radiation therapy to the brain, a possible side effect is swelling of brain tissue. Your radiation therapy team will pay very close attention to you to monitor and manage this possible side effect.

You may be prescribed a type of medication called a *corticosteroid* to prevent or minimize the swelling. A corticosteroid can help, but it may cause side effects of its own. Talk to your radiation therapy team if the side effects make you want to stop taking this medication. It is very important that the dose be reduced slowly.

## Earaches or difficulty hearing

If you have radiation therapy to the brain, or head and neck, you may have earaches or difficulty hearing. If this happens to you, let your radiation therapy team know. You may be referred to an ear specialist.

### What you can do:

- Protect your ears from the cold or the wind.
- Ask your radiation therapy team if there are drops or medications that might help earaches.

## Mouth sores

If you have radiation therapy to the head and neck, this may lead to painful sores in the mouth. Talk to your radiation therapy team if you have sores in your mouth, including on the tongue or on the lips. They can prescribe medication to reduce the pain.

### What you can do:

- Keep your teeth and gums healthy. Your family doctor or dentist can suggest gentle ways of cleaning your teeth. Ask your healthcare team about flossing. It may not be recommended if your mouth is very sore or your blood counts are low.
- Ask your dentist to contact your radiation therapy team before doing any dental work. Depending on the timing, you may be more at risk for infection and bleeding.

- Remove dentures frequently. This will give your gums a rest.
- Avoid tart, salty or acidic fruits and juices (such as orange and grapefruit). Try drinking fruit nectars like pear, peach or apricot.
- Avoid spicy foods that may irritate your mouth.
- Do not smoke or drink alcohol.
- Rinse your mouth often with club soda or a baking soda and water mixture of 5 mL (1 teaspoon) of baking soda to 250 mL (1 cup) of water. Your treatment centre may also have a suggested recipe for you to follow. Talk to your healthcare team about mouthwashes that are alcohol-free.

## Changes to teeth and gums

**If you have radiation therapy to the head and neck**, your chances of getting cavities are increased. Taking care of your mouth is very important and you will probably see a dentist often during radiation therapy.

If you wear dentures, you may notice that they no longer fit well. This will happen if the radiation causes your gums to swell. You may need to stop wearing your dentures until your radiation therapy is over. If you continue to wear them, you may get sores on your gums which can become infected and heal slowly.

### ***What you can do to keep your teeth and gums healthy:***

- Talk to your radiation therapy team about having your teeth cleaned and cavities repaired before treatment starts.
- Follow the dentist's instructions on brushing your teeth and rinsing your mouth.
- Clean your toothbrush well after each use.
- Choose a mouthwash with baking soda. Avoid mouthwashes that contain alcohol as it will sting or make your mouth continue to feel dry.

## Dry mouth and throat

**If you have radiation therapy to the head and neck**, this can make your mouth and throat very dry. This can make talking, chewing and swallowing difficult. Talk to your radiation therapy team if a dry mouth or throat is causing you problems. They may suggest ways to moisten your mouth or prescribe artificial saliva.

If you wear dentures, you may notice that they no longer fit well. This happens if the radiation causes your gums to swell. You may need to stop wearing your dentures until your treatment is over.

### ***What you can do to moisten your mouth, throat and lips:***

- Sip water or suck on ice chips. Carry a bottle of water with you all the time.
- Suck on sugarless hard candy or chew sugarless gum.
- Avoid alcohol and tobacco.
- Apply a lip balm that is lanolin-based or use plain lanolin.

## Difficulty swallowing

**If you have radiation therapy to the head and neck**, your jaw may feel stiff and you may not be able to open your mouth quite as wide as you did before. This can make eating difficult.

**If you have radiation therapy to the chest**, you may find it difficult or painful to swallow after a few weeks of treatment. You may feel as if you have a lump in your throat. Talk to your radiation therapy team if you're having trouble eating. They will make suggestions or may refer you to a dietitian. Your doctor may also give you some medication to make swallowing easier.

### ***What you can do to make swallowing foods easier:***

- Try different food textures to find one that you can swallow. Foods with a smooth texture like mashed potatoes may be easier to swallow.

- Use a blender or food processor to chop foods that are too hard to chew. Use fruit or vegetable juices, broth, or milk to blend the foods together.
- Thicken liquids as much as needed to make them easier to swallow. Adding gelatin, puréed vegetables or fruits, instant potatoes, cornstarch, infant rice cereal or commercial thickeners may help.
- Dip dry, crisp foods such as biscuits into milk, coffee or tea to make them softer.
- Make sure your diet includes plenty of liquids, especially water, every day so that you don't get dehydrated. Other good sources of liquids are juices, soups, milk, popsicles, gelatin, pudding, yogurt and ice cream.

## Cough

**If you have radiation therapy to the chest,** you may develop a cough. The amount of mucus in your cough may increase as your treatment goes on. You may also find that you are short of breath. Talk to your radiation therapy team if you're having trouble breathing or if you're coughing a lot.

### **What you can do:**

- Use a cool-air vaporizer or humidifier to keep the air in your room moist.
- Use extra pillows to raise your head and upper body while resting or sleeping. This may help you breathe easier.
- Pace yourself and plan activities with rest periods if you're feeling short of breath.
- Drink plenty of fluids.
- Avoid going outside on hot, humid days or on very cold days. Being outdoors in very hot or cold weather may irritate your lungs.
- Wear light, loose-fitting clothing. Avoid anything tight, such as ties or shirt collars, around your neck.

## Diarrhea

**If you have radiation therapy to the stomach and abdomen, or pelvis,** it can cause you to have loose, frequent stools (*diarrhea*). Ask your radiation therapy team if diarrhea is likely to be a side effect of your treatment. They may recommend that you buy some over-the-counter medicines to have at home just in case you need them.

### **What you can do:**

- Eat small meals and snacks often throughout the day.
- Drink plenty of non-carbonated, caffeine-free fluids such as water, juice, sports drinks and clear broth. This will keep you from getting dehydrated.
- Limit greasy, fried, spicy or very sweet foods.
- Avoid sugarless gum and candies that are made with sorbitol because sorbitol acts like a laxative (makes you have a bowel movement). Stay away from foods that are natural laxatives such as prunes, prune juice, rhubarb and papaya.
- Choose foods that contain less fibre. Foods that are high in fibre tend to increase diarrhea. White bread and pasta, refined cereals, cooked fruit and vegetables, meat, poultry and fish are examples of foods that are low in fibre.

### **What to watch for**

If diarrhea continues for more than 24 hours, or if you have pain and cramping as well as diarrhea, talk to your radiation therapy team. You may need extra fluids to replace the water and nutrients your body is losing.

## Bladder and rectal irritation

If you have radiation therapy to the pelvis, you may have some bladder or rectal irritation. Your abdomen may also feel bloated and gassy.

If your bladder is irritated, you may have the urge to urinate more often than usual, especially at night. Your urine may have an unpleasant odour, or you may have a burning feeling when you urinate. Talk to your radiation therapy team about any of these possible signs of infection.

If your rectal area is irritated, you may feel pain or have an itchy feeling when you have a bowel movement. If you have had hemorrhoids before, they may flare up again during treatment. In most cases, your bowel habits will go back to normal after treatment. Talk to your radiation therapy team about ways to help manage itchiness and hemorrhoids. They may suggest over-the-counter creams to help manage irritation.

### **What you can do:**

- Drink plenty of fluids during the day to ensure a regular flow of urine. Empty your bladder frequently. This will also help to prevent urinary tract problems.
- Ask your healthcare team how much fluid you should be taking in each day. Water, juice, herbal teas, broth, ice cream, soup and gelatin are all examples of fluids.
- Avoid caffeine and carbonated beverages.
- Check with your radiation therapy team before drinking wine, beer or spirits.
- Drink fluids in small sips during the day. Taking in large amounts at one time may upset your stomach.

- Avoid drinking fluids for a few hours before going to bed if your sleep is being interrupted by having to empty your bladder.
- Sitting in warm water for a few minutes a couple of times a day may help soothe irritated areas.

### **What to watch for**

Signs of a bladder, kidney or urinary tract infection:

- a burning feeling when you urinate
- a reddish colour or blood in your urine
- an unpleasant odour to your urine
- the need to urinate often
- not being able to urinate at all
- a feeling that you must urinate right away
- a fever or chills (especially chills that make you shake)

Talk to your radiation therapy team if you have any of these signs.

## **Infertility**

**If you have radiation therapy to the pelvis**, it may affect your sexual organs and how they work. This can lead to infertility, which means you won't be able to become pregnant or father a child. Infertility is sometimes permanent, so it is important to discuss any concerns you have with your radiation therapy team before your treatment begins.

Talk to your radiation therapy team about whether it is safe to have sexual intercourse while you are having radiation to the pelvis.

### **FOR MEN**

Radiation may affect your fertility by reducing the number of sperm produced or affecting their ability to reach and fertilize a woman's egg during sexual intercourse.

These changes can lead to infertility. Some radiation treatments may also damage sperm, which may lead to birth defects if your partner becomes pregnant during your treatment.

### ***What you can do:***

- Talk to your doctor about the possibility of banking your sperm, a procedure that freezes sperm for future use, before your treatment starts.
- Use a reliable method of birth control during treatment. Talk to your healthcare team about what method is right for you and your partner, and how long to continue to use it.

### **FOR WOMEN**

**Pregnancy:** It's important to use birth control during radiation treatments. Although pregnancy may be possible during radiation therapy, it's not a good idea because radiation can be harmful to a developing fetus. Discuss birth control choices with your healthcare team.

If you are pregnant when your cancer is discovered, talk to your radiation therapy team. They may suggest waiting until after the twelfth week of pregnancy before having radiation therapy, or there may be ways to lessen the baby's exposure to radiation by using special shields or other measures. Your radiation therapy team can help you decide what is best for you. Your preferences are a key factor in planning your treatment, along with where the cancer is, how quickly it is growing, and how far along you are in your pregnancy.

Radiation to the pelvis can make your ovaries stop releasing eggs. If this happens, you won't be able to get pregnant. Some women's ovaries start releasing eggs again once their treatment ends and their periods return to normal. Whether infertility occurs, and how long it lasts, depends on many factors, including your age and the dose of radiation you are receiving.

## Menopausal symptoms

If you have radiation therapy to the pelvis, it may affect your sexual organs and how they work. Radiation therapy can affect the ovaries and reduce the amount of hormones they produce. Some women find that their menstrual periods become irregular or stop completely while having radiation therapy. This may bring on symptoms related to menopause.

Your age and the dose of radiation you are receiving will influence whether your periods stop during radiation therapy, and whether they will start up again afterwards. Radiation therapy may also cause menopause-like symptoms such as hot flashes and dry vaginal tissues. These tissue changes can make intercourse uncomfortable and can make you more prone to bladder and/or vaginal infections. Talk to your healthcare team right away if you think you have an infection.

### **What you can do to help control hot flashes:**

- Choose light clothing and wear it in layers that can be removed.
- Avoid caffeine and alcohol.
- Get as much exercise as you can.

### **What you can do to relieve vaginal symptoms and prevent infection:**

- Use a water-based vaginal lubricant when having sex. Avoid using petroleum jelly. It increases the risk of infection.
- Ask your pharmacist about vaginal gels that help with dryness.
- Ask your doctor about an estrogen ring or estrogen cream to relieve dryness.
- Ask your doctor about a vitamin E vaginal suppository to help ease symptoms of dryness.
- Wear cotton underwear and pantyhose with a ventilated cotton lining.
- Avoid wearing tight slacks or shorts.

## Talking to Others About Your Treatment

You may feel a range of emotions after your cancer diagnosis, and talking to others about your treatment may be difficult. Here are some thoughts and feelings that others have shared about how they felt during treatment.

***“I could cope with the treatments if that was all I had to do. But the demands of daily life don’t stop on the days I don’t feel well. I find it hard to ask others for help.”***

Try to be honest with family and friends about your treatment, how it makes you feel, and when you could use some help. People often don’t know how to support you, and giving them day-to-day tasks will give them a way to do this. Don’t be afraid to ask for help with grocery shopping, making meals or child care – especially on days when you are having a treatment or when side effects are at their worst. Your friends and family may be waiting for you to ask.

***“I’m worried about my job. I’m having radiation therapy and I don’t know if I’ll be able to keep up with my work hours.”***

Talk to your employer about your situation. Based on discussions with your radiation therapy team, explain what your treatment schedule will be. Your employer may be able to arrange shorter work hours or change some of your duties during your radiation treatment. Discuss different options that might be available to you so that you can focus on getting well.

Try to be flexible and kind to yourself. Many people keep working while they’re having radiation therapy, but you need to figure out what is best for you.

***“I find it hard to talk to my family and friends about what I’m going through.”***

You may decide that you don’t want to share your feelings with every person who asks. With casual friends or co-workers, it may be easier just to say a few words without going into detail. When they ask “How

are you?” you can give a brief but honest answer, such as, “I had a bad day yesterday, but today is better. Thanks for asking.”

Having cancer and going through weeks or months of treatment isn't easy. Your family and friends may have their own fears too. If they ask how you're feeling, it means they care. Try to respond honestly. Talking to family and friends may help you feel better.

## Managing Stress

Everyone feels and handles stress differently. If you are not having any side effects from treatment or they are easy for you to manage, you may feel less stress than someone who is having many side effects. But for others, just thinking about cancer and its treatment may cause stress.

Many people learn to relax and ease their minds and bodies by using self-help methods or by seeking help from trained therapists. These methods can help you relax during your treatment sessions and whenever you feel tense or overwhelmed. Some of the different methods are deep relaxation, guided imagery and distraction.

### Deep relaxation

This self-help method can help you fall asleep, relieve nausea or pain, give you more energy and reduce anxiety. Some of the techniques require deep breathing. If you have any breathing problems, talk to your healthcare team before you begin.

Most deep relaxation techniques can be done sitting up or lying down. Some people like to listen to music through earphones or a headset.

- Choose a quiet place and make sure you are comfortable.
- Wear comfortable, loose-fitting clothing to help your circulation.
- Begin by staring at an object or closing your eyes and thinking of a peaceful scene.
- Concentrate on your breathing for a minute or two.

Once you're settled, two ways of reaching deep relaxation are *tension-relaxation* and *rhythmic breathing*:

### Tension-relaxation

Do this for a few minutes several times a day if you can. Try it when you are feeling tense or anxious.

- Take a slow, deep breath.
- As you breathe in, tense a particular muscle or group of muscles. For example, squeeze your eyes shut, frown, make a fist or stiffen your arms or legs.

- Hold your breath and keep your muscles tense for a second or two.
- Then let go. Breathe out and let your body go limp while you feel the tension drain away.
- You can start with one group of muscles and move up or down the entire body. For example, start with your feet and legs. Follow with your stomach and back muscles, and finish with your arm, neck and face muscles.

## Rhythmic breathing

You can do this exercise for just a few seconds or for as long as 10 minutes.

- Take slow, deep breaths, keeping a slow rhythm.
- Keep saying to yourself, “**In**, one, two; **out**, one, two.”
- Each time you breathe out, feel yourself relax and go limp.
- To end your rhythmic breathing, count silently and slowly from one to three.

## Guided imagery

Guided imagery is a kind of daydreaming that uses all your senses. Try doing it with your eyes closed.

- To begin, breathe slowly and feel yourself relax.
- Concentrate on breathing comfortably from below your stomach (abdomen).
- Imagine a ball of healing energy forming somewhere in your body. When you can see the ball of energy, imagine that the air you breathe in is carrying it to the part of your body where you feel sick or have pain.
- When you breathe out, picture the air moving the ball away from your body, taking the pain and sick feeling with it, along with the tension.
- Breathe naturally. Be careful not to blow as you breathe out.

- Continue to picture the ball moving toward you and away each time you breathe in and out. You may see the ball getting bigger as it carries more and more tension away.
- To end the imagery, count slowly to three. Breathe in deeply, open your eyes and say to yourself, “I feel alert and relaxed.” Begin moving about slowly.

## Distraction

Many people use distraction to manage stress without realizing it. They watch television or listen to music to take their minds off their worries or discomfort. Any activity that holds your attention can be useful to distract you. Working with your hands, doing needlework or puzzles, building models or painting are good examples. Losing yourself in a good book is another way to keep from thinking about pain and other worries.

## Other methods

There are many other methods you could try to help you manage stress, such as yoga, meditation, biofeedback, hypnosis, aromatherapy, reflexology and more. Your healthcare team may be able to give you more information about finding a qualified therapist who can help you with these methods of managing stress.

## Follow-up care

Your healthcare team will usually set up a follow-up appointment for 4 to 6 weeks after your radiation therapy treatments are completed. During this time, your treatment is still working on your system. You may still have side effects and will likely need to continue some of the special care you used while you were being treated.

You may still need extra rest after finishing treatment because your healthy tissues are recovering and rebuilding. Be kind to yourself – it may take some time to get your strength back and to return to your normal activities.

Your follow-up care depends on:

- the type of cancer
- how far the cancer had progressed at the time of diagnosis
- how successful the radiation therapy was in treating the cancer
- your age and overall health

Follow-up care helps you and your healthcare team monitor your progress and how well you are recovering from any side effects. Follow-up care may include a physical exam, blood tests and imaging exams.

The schedule of follow-up visits is different for each person. You might be seen more frequently in the first year after treatment, and less often after that. Your follow-up care may be managed by your family doctor or your oncologist, depending on your type of cancer and how successful the radiation therapy was in treating it.

The end of cancer treatment may bring mixed emotions. You're probably glad it's over and looking forward to going back to your normal activities. But you may feel anxious as well – you may feel that as long as you were having radiation therapy, you were safe. If you feel anxious about ending radiation therapy, talk to your healthcare team. They are there to help you through this transition period.

Follow-up appointments give you a chance to discuss how you feel now and how you felt about having cancer. You can ask more about your care and anything that you should watch for in the future. It's also a good time to talk about making healthy changes to your life.

### Questions to ask about your follow-up care

Which doctor will be responsible for my follow-up care?

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How often do I have to see the doctor once radiation therapy is over?

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Will I need to have tests after my treatment is over?

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What kind of tests will I need and how often?

---

What should I watch for and report to my doctor?

---

How is my family doctor involved?

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## We'd like to hear from you

E-mail us at [publicationsfeedback@cancer.ca](mailto:publicationsfeedback@cancer.ca) if you have comments or suggestions to help us make this booklet more useful for you and other readers.

## What we do

The Canadian Cancer Society fights cancer by:

- doing everything we can to prevent cancer
- funding research to outsmart cancer
- empowering, informing and supporting Canadians living with cancer
- advocating for public policies to improve the health of Canadians
- rallying Canadians to get involved in the fight against cancer

Contact us for up-to-date information about cancer, our services, or to make a donation.



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Let's Make Cancer History

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