What to Expect When Getting Radiation Therapy for Head and Neck Cancer

For patients who are having radiation therapy

Read this brochure to learn more about:

• The main steps in planning radiation treatment
• How to manage common side effects
• What happens when you finish treatment
• Where to get more information

Radiation therapy is the use of a high energy x-rays to kill cancer cells. For more information on Radiation Therapy, please watch our patient education videos. These videos:

• Give a step-by-step guide to the radiation therapy treatment process.
• Explain how radiation works in the body.
• Shows how your health care team works to give high quality treatment.
Your radiation therapy team consists of:

- your radiation oncologist (cancer doctor who uses radiation to treat cancer)
- radiation oncology nurses (nurses who care for patients during radiation treatment)
- radiation therapists (the person who gives you radiation treatment)
- other health care team members

Your treatment team will provide you and your family with care, support and information.

If you have any questions, talk to your radiation therapists at your daily treatment visit. You can also talk to your radiation oncologist or nurse at your weekly review visit.

If you speak very little or no English ask your health care team for someone to interpret (translate in the language of your choice). Tell us as soon as you can if you need someone to interpret for you.

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**Your Radiation Therapy Planning**

To plan your treatment, you will need a CT simulation scan visit. This scan provides detailed x-rays that are used to make your treatment plan.

At this visit you will have:

- your treatment mask made
- your planning CT scan with your treatment mask on

You may also need:

- an MRI (Magnetic Resonance Imaging). An MRI takes a detailed scan of your bones and tissues.
- an IV contrast with your scan

IV contrast is a dye that is injected by needle into your arm vein. The IV contrast helps us see the vessels in your neck.
Once your treatment plan is ready, you will start your treatment.

On the day of your CT simulation scan visit, go to level 1B (one floor below the main floor) of the Princess Margaret Cancer Centre. Check in at the reception desk.

During the scan visit we will take your picture and save it in your file. That way we know who you are when you come for treatment. When you are done, go to the waiting room. Your radiation therapist will come and meet you in the waiting room.

**You can expect to be here for about 1 hour for this visit**

**What can I expect at my CT simulation scan visit?**

- Your radiation therapists will explain what happens during the visit. Ask any questions you may have.

- If you need IV contrast during your scan, you will get a consent form to complete. Read the form with care and ask questions if you have them. If you have an allergy to contrast dye, tell your health care team right away.

- Your custom treatment mask is made, along with any other device that you need for treatment. The treatment mask moulds around your head and neck. It helps us place you into the same position (place) for treatment each time. You wear it during your scan and during your treatment.

- You will have your scan with your mask on and any other device you need. If you are having IV contrast, your radiation therapists start the IV contrast during your CT scan. Your therapists may also give you steps to follow for your CT scan.

- After your CT scan, you will get a green visit card and treatment pamphlets. If you had IV contrast with your CT scan, you would also get an IV contrast information card.

- If you are having a MRI, ask your therapists where you need to wait.

Your health care team will use the information to plan your treatment.
Your Radiation Therapy Treatment

When will I get my first radiation therapy visit?
You will get your first treatment visit at the time of the CT scan. Or you may get a phone call about your treatment visit a few days after your scan. You will be told the date, time and place of your visit.

Where do I go for my radiation therapy?
You get your radiation therapy on level 2B (2 levels below the main floor) of the Princess Margaret Cancer Centre.

Check in at the front desk on level 2B when you arrive. The staff there can show you how to check in.

Can I choose when I have my radiation therapy visit?
A large number of patients are treated every day. Because of this, we may not be able to give you the times you ask for. Your radiation therapists will try to help you if you have special reasons for needing an exact time.

What can I expect at my radiation therapy visit?
Your radiation therapist will bring you into the treatment unit. The therapist will:

• position you on the treatment table in your treatment mask.
• check your treatment plan.
• take a Cone Beam CT scan (sometimes called a “mini CT”). The scan checks that you are in the same position each time.

This process takes a few minutes. Once your position is checked and any changes have been made, you will have treatment. During treatment, the treatment machine slowly rotates around you.
How long is the course of treatment?
A course of treatment for head and neck cancer may last from 4 to 7 weeks. Most patients get a single treatment each day. Some patients will get 2 treatments a day. Your radiation oncologist will tell you what schedule will best manage your cancer.

How long is the visit?
You should plan to be at the hospital for 30 to 60 minutes each day during treatment. The treatment takes about 20 minutes. Most of this time is used to make sure you are in the right position for treatment.

Will I see the oncologist (cancer doctor) during my radiation therapy visit?
You will meet with your radiation oncologist and nurse once a week during your course of treatment. Your oncologist or nurse can answer your questions and talk to you about any concerns you may have. Tell your oncologist or nurse about any side effects you have.

At your treatment visits, you can also talk about your side effects with your radiation therapists. If you need help to manage your side effects, we may send you to the Radiation Nursing Clinic (RNC). At the RNC, you will see our Radiation Nursing Team.
How to Manage Common Side Effects from Radiation Therapy

Some common side effects are listed below. You may also have other side effects. Tell your health care team what side effects you have.

Skin changes
You may have changes to your skin in the treatment area. This is a normal side effect and will get better.

- After 2 to 3 weeks of treatment, your skin may feel sore (warm, red, swollen, dry and tight, itchy).
- In later weeks, areas of your skin may have dry, flaky patches.
- Near the end of your treatment, areas of your skin may be open and moist.
- The treated area will begin to heal about 2 to 3 weeks after your treatment ends. Your skin should heal within 1 to 2 months.

To learn how to care for your skin, see the pamphlet Taking Care of Your Skin During Radiation Therapy. Visit uhnpatienteducation.ca and search by title.

Changes to nose lining and skin on lips
The lining inside your nose and the skin on your lips are very thin and sensitive. If your treatment includes these areas, you may need to care for them a bit differently than other areas of your skin. The tips below are only if your lips or nose are being treated directly with radiation.
Do these things if your lips or nose are sore:

- Use a sterile (germ-free) water-based lubricant gel such as E-Z Lubricating Jelly or Surgilube. A lubricant is a gel that helps reduce friction. You can buy lubricant at a pharmacy. Do not use a moisturizer (lotion or cream).
- Use a clean cotton swab to gently apply the gel.
- Try saline soaks to help soothe and clean these areas. It may be harder to apply saline to other areas of the body.
- Use a clean squirt bottle to gently put saline inside the nose. Do this over a sink. Tilt your head forward to let the saline run into the sink.
- Try products such as Nasa Mist or a Neti Pot if you find a squirt bottle hard to use. Your treatment team can help you find what works best for you.
- Do not try to force saline past any blockages you may have.

Hair loss
Hair loss only happens in areas where you had treatment. For instance, you may lose some facial hair or some hair on the scalp. You may also lose hair in both the scalp and face. In most cases this hair will grow again within 6 months after treatment ends. In some cases the hair may stay thin or not grow again.

If your scalp is sore, wash with a gentle, unscented (no perfume or scent) shampoo (such as baby shampoo). Read the pamphlet “Taking Care of Your Skin During Radiation Therapy”. This pamphlet will help you take care of these areas. It also includes advice about shaving.
Dry mouth
If your saliva glands (glands that helps moisten food) are in the treatment area, you may have less saliva and thicker saliva. These changes may begin during the first and second week of treatment. The changes will likely persist throughout treatment. Your mouth may become dry and sticky, making it harder to swallow. Talk with your doctor about what might help.

Try the mouth rinses without medicine on page 11. These rinses help to clean and remove thick saliva.

How much dryness you have and how long the dryness lasts depends on your treatment. Sometimes your saliva slowly improves after treatment but some dryness may never go away.

Taste changes
If your tongue or saliva glands are in the treatment area, you may have taste changes. You may find that food tastes different or you may lose your sense of taste.

These changes can begin in the first and second week of treatment. The changes may persist throughout treatment. Taste changes usually improve 6 to 12 months after treatment. Some changes may never go away.

Sore throat and trouble swallowing
Your mouth and throat may become dry, sore or swollen during treatment. This may include areas on your:

• tongue
• floor or roof of your mouth
• inside of your cheeks
• areas around your gums
• your lips

The exact area depends on where you got treatment. Tell your health care team if you have any symptoms of a swallowing problem.
These changes usually begin in the first or second week of treatment. The changes will likely persist throughout treatment. How much and how long they last depends on your treatment plan.

It may take a few months for your mouth to heal after your last treatment. Your health care team can help explain what to expect.

**Hoarse voice (raspy or strained) or losing your voice**

If your throat and voice box are in the treatment area, you may get dryness and swelling. This may affect your voice. These changes can begin in the first or second week of treatment. The changes will likely persist throughout treatment. These changes usually improve 1 to 3 months after treatment.

If your voice box is treated with radiation, you may lose your voice. This is because of swelling in the voice box. Your voice should come back when the swelling goes away.

**What if I have trouble eating and drinking?**

Dryness, swelling and pain in your throat and voice box can make it hard to drink and eat. Many patients have to change what they eat and drink. The products listed below can help with eating and drinking:

- pain medicines
- mouth rinses with medicine (medicated)
- mouth rinses without medicine (see the list of mouth rinses without medicine on page 11)

In some cases, you may need intravenous (IV) liquids. These liquids are often a mix of salt and water and they are put into your veins. You will need an IV if you become dehydrated (not getting enough water).

Sometimes a feeding tube may be needed. Your radiation oncologist may suggest a feeding tube at the start of treatment. Your radiation oncologist and nurse will tell you if you need a feeding tube.
Here are some general care tips to start.

**Do these things if you have changes in your mouth:**

- Keep caring for your mouth with:
  - one of the mouth rinses (without medicine) listed on page 11. Do not use store bought mouthwash. It may hurt your mouth and throat.
  - gentle cleaning
  - tips you get from our dental team

- Our dental team may tell you to use oral fluoride trays every day. The trays help prevent long term tooth decay. If you find these fluoride trays painful to use during treatment, talk to your radiation oncologist.

- Sip water or use a spray bottle to keep your mouth and throat moist.

- To help with eating, use prescription pain medicine from your doctor. For instance, Mucositis Mouthwash (medicated) is often used 15 to 20 minutes before eating or drinking. This mouthwash will numb the area and help you swallow.

**Do these things if you have changes to your voice:**

- Use one of the mouth rinses (without medicine) listed on page 11.

- Rest your voice as much as you can.

- Use a cool mist humidifier (device to make air humid) to make the air in your home moist. At night, place it close to your bed. You can also put a bowl of water in your bedroom to keep the air moist.
Mouth rinses (without medicine)
Gargle with any of the mouth rinses below. All of these mouth rinses work well. The mouth rinses will help soothe, clean and remove secretions (extra liquids) from the mouth. Choose the one you find the most soothing and easy to use.

1. Flat Club Soda
   • Open any brand of store-bought Club Soda.
   • Leave it open until the soda is “flat” or no longer fizzes. The bubbles should be gone.

2. Baking soda and water
   • Dissolve 1 level teaspoon of baking soda in 2 cups (500 millilitres) water.
   • Stir until the baking soda is dissolved.

3. Salt and water
   • Dissolve 1 level teaspoon of salt in 2 cups (500 millilitres) of warm water.
   • Stir until the salt is dissolved.

4. Baking soda, salt and water
   • Dissolve ½ level teaspoon of baking soda and ½ level teaspoon of salt in 2 cups (500 millilitres) of warm water.
   • Stir until the baking soda and salt are dissolved.

How to store and use mouth rinse (without medicine):
Allow the solution to cool to room temperature (around 20 degrees) before you use it.

• Store the mouth rinse in a clean, covered container. Store at room temperature.

• Always make a new batch of mouth rinse every 24 hours. Old mouth rinse is less helpful and may contain germs.

• Rinse and gargle (but do not swallow) and spit out the rinse. The rinse will help soothe your mouth and clear out thick saliva.

• Do not swallow any of the mouth rinses except for the flat club soda. You can swallow a small amount of soda to clear the back of your throat.

• Use as often as you can (every hour if you can). Rinsing before and after meals is very helpful.
Do these things to help you eat well during treatment:

- Use the Swallowing Exercise instructions (see pamphlet or video).
- Eat your normal food. Switch to softer foods if eating becomes hard.
- Try different foods if you have taste changes. Some foods may taste better than others.
- Eat 5 or 6 small meals each day instead of 3 large meals.
- Stock up on foods that are easy to make and easy to eat.
- Carry a snack with you when you come for treatment. If your treatment is delayed, you will be able to eat.
- Get some light exercise and fresh air. These may help with your hunger.
- If eating hot or cold food hurts your mouth or throat, try eating them at room temperature.
- Use gravy, sauces and cream soups to make food moist.
- Take your pain medicine as prescribed. Also make sure to use the medicated mouth rinses your doctor has prescribed (ordered).
- Use meal supplements (such as Ensure or Boost) if you are having trouble eating solid food.
- If you have a feeding tube, use it to get the right amount of water and food. Follow the steps your doctor and dietitian gave you.
- Ask your health care team to refer you to a dietitian if you want more eating tips.

Do these things if your mouth and throat are sore:

- Avoid alcohol and smoking.
- Be careful with foods that may hurt your mouth and throat such as:
  - very spicy (hot) foods
  - highly acidic foods (such as oranges, tomatoes)
  - foods with a rough texture (such as chips, nuts, raw vegetables, toast)
Do these things to get enough liquids during treatment:

- Use the Swallowing Exercise instructions (see pamphlet or video).
- You can get your liquids in many ways. For instance: by drinking water, juices, milk, soups, ice cream, Popsicles, tea, meal supplements (such as Ensure).
- Carry a drink in a bottle with you all the time. Take small sips often.
- If you have a feeding tube, use it to get the right amount of liquid into your body.

Will I get tired while on treatment?

Fatigue (feeling very tired) is a common side effect of treatment. The level of fatigue varies with each person. Fatigue often begins early in treatment. It can slowly increase during treatment. It usually gets better 1 to 2 months after treatment is done. Do your normal work and chores if you feel well enough.

Do these things if you have fatigue:

- Pace yourself. Break jobs down into smaller parts.
- Ask for help with daily work and chores that make you tired or you find hard to do.
- Pick something that helps you relax. For instance, walking or a hobby that you can do every day.
- Plan time to rest before and after doing things.
- Keep a regular sleep routine.
- Rest during the day as needed.
- Get enough food and drink. See the tips in this pamphlet.
Will I get constipated?
You can get constipated (trouble going poo) from changes in what you eat. You can also get constipated from the side effects of some opioid pain medicine such as codeine and morphine. If you are taking opioid pain medicine, you may need to take another medicine to help prevent constipation. This is called a “bowel routine”. It may include a stool softener (such as Colace) and laxatives (such as Senokot and Lactulose).

Your health care team will help you manage your pain medicine and bowel routine medicines.

What if I have trouble managing my side effects from treatment?
If you need help to manage your treatment side effects, talk to your radiation oncologist or nurse during your weekly review visit. You can also talk to your radiation therapist at your treatment visits. You can also visit the Radiation Nursing Clinic (RNC) to manage your pain and symptoms. The clinic is on level 2B, behind the front desk.

The clinic is open Monday – Friday from 8:00 am to 5:30 pm. You will need to check in with the 2B main front desk. **You do not need an appointment (visit) to be seen at the clinic.**
Finishing Your Treatment

Near the end of your treatment, we will give you the pamphlets:

- Questions to Ask Before you Finish your Radiation Treatment
- During and After Your Recovery from Head & Neck Cancer Treatment

Visit uhnpatienteducation.ca and search these pamphlets by title.

You will get a follow-up visit to see your radiation oncologist at your final weekly review visit. You will see your radiation oncologist a few weeks or months after your treatment ends.

At your final weekly review visit, ask your doctor or nurse about how you can sign up for the “Getting Back on Track” classes.

After treatment ends, some of your side effects may persist. The side effects may also get worse before they start to get better. This is normal. Follow your health care team’s instructions until you feel better. Call the hospital once you are done with your treatment if you have any questions or concerns.
Where to get more information?
Princess Margaret Cancer Centre Patient & Family Library on the main floor.
Phone: 416 946 4501 extension 5383
Email: patienteducation@uhn.ca
For information about treatment and services at the cancer centre.

Important: This is not a full list of brands or products. The University Health Network does not recommend one brand over another and is not responsible for any products listed. Please contact each company directly to find out more about their products.

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