

Why is radiation therapy used to treat head and neck cancer?

Head and neck cancers may be treated with a combination of treatments such as surgery, radiation therapy, and chemotherapy. Radiation Therapy uses radiation from high-energy X-ray machines to kill cancer cells. Radiation is used to shrink cancer or lower the chance of the cancer returning in the head and neck area (and lymph node areas).

What will happen on the day I come for my treatment planning?

Your first visit to the radiation therapy department is called your “treatment planning appointment”. This may take up to 2 hours.

If you have a beard you **will need to shave before your treatment planning appointment**. Please discuss this with your Radiation Oncologist.

The first step of your treatment planning appointment is to make a mask. The mask covers your head and neck. The purpose of the mask is to help you stay still during your x-rays, markings, and treatment.

Next, you will be x-rayed and markings will be placed on your mask. Your x-rays for treatment planning may be done by an x-ray machine or a CAT scanner. The x-rays do not hurt and you do not have to hold your breath. It is important that you lie still.

Before you get up off of the x-ray bed, your Radiation Therapists will give you small tattoo marks. They are about the size of the tip of a pen and are permanent. You may have 1 to 3 tattoos on your shoulders or upper chest area. They will be used each treatment day to position you. After your treatment planning appointment, you may have some extra ink on your skin. It can be washed off when you get home.

Your Radiation Therapists will make every effort to make you comfortable during the x-rays. They will explain every step of what they are doing. The measurements from your x-rays will be used to plan your treatments.

Your Radiation Treatment Team members will answer any questions you may have. These may include questions about side effects, when your treatments will start, skin care, lodging or other questions. Many people find it helpful to bring someone along to this appointment.

How long will it be until I start my radiation treatments?

After your treatment planning appointment, you may wait up to 4 weeks before your treatments start.

You may need to have an MRI and/or PET scan done before your treatments start. This MRI or PET is done with you wearing your mask. Your Radiation Oncologist or Radiation Therapist will let you know if you need to have an MRI or PET done after your treatment planning appointment.

You will be notified of the start date as soon as your planning is completed and a time has been booked for the radiation treatment machine. Every reasonable effort will be made to start your treatments as soon as possible, and within the recommended waiting time.

Do I need to see a dental specialist?

Your radiation oncologist will decide if you need to see a dentist before your treatment planning appointment. You may need dental care or a mouthpiece made. Sometimes a few teeth need to be removed. The dentist will refer you to oral surgery to have this done.

Mouth care to prevent problems will be important during and after your treatment. Fluoride or other treatments may be needed to prevent cavities.

How long will my treatments take?

Once your treatments begin you should expect to have 2 to 7 weeks of radiation treatments. The treatments are given 5 days a week, Monday to Friday (except for holidays). Sometimes you may get two treatments in one day depending on the plan your radiation oncologist recommends. You may not necessarily start your treatments on a Monday.

Your appointment each day will take about 30 minutes. This allows 5 to 10 minutes to get you into position and 15 minutes of actual radiation treatment.

Once a week, you will see your Radiation Oncologist and/or Oncology Nurse for a checkup after your treatment. A dietician may also be available to see you. Be prepared to be here longer that day. You may also ask to be seen any other day if you have an urgent problem or question.

What side effects will I have during the radiation treatments (and the first few weeks after)?

In general, radiation therapy to the head and neck area causes many side effects. In the first week of treatment, there should be few side effects except for a little tiredness. For most people side effects appear toward the middle of the radiation treatments and may peak 1 or 2 weeks after they are finished. Many of the side effects will go away over the next several weeks. Some side effects like a dry mouth and facial hair loss may be permanent.

If you have any questions during your treatments, please ask a member of your Radiation Treatment Team- your Radiation Oncologist, Radiation Therapist, or Oncology Nurse.

Common side effects include:

- **Fatigue (Tiredness)**

Fatigue caused by radiation therapy is usually mild. You may be more tired after a usual activity or may need to rest more than usual. You will be given an **information sheet** with suggestions to help you cope with the fatigue.

- **Skin reaction**

Your skin in the treatment area may become dry and itchy, pink or even red. Some dark skinned patients may have increased darkening of the skin. In some areas, the skin may peel or become moist and tender.

We have listed some “Do’s and Don’ts” that will help you cope with the changes your skin may have, and even help prevent your skin reaction from worsening:

1. **You can wash and bathe:** It is best if you take short showers or baths with lukewarm water. Try not to have the stream of water hit your head and neck area

directly. Use a gentle, non-perfumed soap. After bathing, dry your skin with a soft towel and pat dry... **do not** rub or scrub with the towel.

2. **Shaving:** While having your radiation treatments, and for a few weeks after, it is best not to shave. If you want to shave, use only an electric razor. **Do not** use aftershave.
3. **Do not scratch or rub your skin** in the treatment area.
4. **Do not use adhesive tape or sticky bandages** in the treatment area.
5. **Sore or cracked lips:** Use a water based (like KY Jelly©), or lanolin based lip balm (like Lansinoh©) to help with the discomfort. Use a lip balm often, and especially before meals, after cleaning your teeth and at bedtime. Do not put the lip balm on right before your treatment.

You will also be given a separate **information sheet** with suggestions for skin care during the radiation.

- **Dry and sore mouth/throat**

You may notice a gradual thickening of saliva within 2 – 3 weeks after treatment starts. Your glands may produce less saliva than usual, making your mouth feel dry. You may have trouble swallowing because your mouth may be dry or sore. You will need to take good care of your teeth, gums, mouth and throat.

- Drink plenty of fluids like water (2L per day).
- Sugar free candy or gum also may help a dry mouth.
- A humidifier or vaporizer in your main living area and in your bedroom at night may help.
- You should not smoke cigarettes, cigars or a pipe. Do not chew tobacco.

- Avoid drinking alcohol.
- Frequent mouth rinses/gargling is an important part of your mouth care. Use the following combination:

1/2 teaspoon of table salt in 8 oz water

OR

1/2 teaspoon of baking soda in 8 oz water

- Do not use over the counter mouthwashes or throat lozenges without checking with your Radiation Oncologist.
- If you wear dentures, you may notice that they no longer fit well. This may happen because of the changes in your mouth. It is important not to let your dentures cause gum sores that may become infected. You may need to stop wearing your dentures until your radiation therapy is over. Discuss this with your doctor.
- Use a small, soft-headed, rounded-end toothbrush. Rinse the toothbrush in hot water for about 15 to 30 seconds to soften the brush and help ease the trauma of the brushing on your gums. Brush very gently, and at least 4 times a day to make sure that your mouth and teeth are kept free of plaque. Do not use an electric tooth brush.
- If you are not able to brush your teeth, keep your teeth and gums clean by wiping them carefully. Wrap a moist gauze around your finger and gently rub your teeth and gums to wipe away any food or plaque.
- After cleaning your teeth, rinse, swish and spit with the salt or baking soda solution.
- Depending on the area treated, you may notice your throat getting sore. Some people describe a feeling of having a “lump” in their throat. If it becomes too painful or interferes with your swallowing, it is important to mention this to the radiation therapist, nurse or doctor. A special mouth rinse can be ordered to help with the discomfort.

What changes in my eating habits do I need to make?

Foods that you should eat

- Soups (warm not hot)
- Yogurt
- Soft eggs (poached, scrambled)
- Puddings, custards
- Pasta
- Milk and milk shakes
- Juices: apple, pear, peach
- Canned fruits
- Well cooked or mashed vegetables
- Chopped meats with gravy

Foods that you should avoid

- Toast, dry cereal
- Crackers, cookies, cake
- Raw vegetables
- Popcorn, nuts, potato chips
- Regular meats (especially dry, coarse, and stringy meats)
- Tart or acidic foods
- Citrus juices: orange, grapefruit, tangerine
- Spicy foods (pizza, chili)

- Choose foods that taste good to you and are easy to eat.
- Test foods and if they irritate your mouth and throat, do not eat them while on treatment.
- Change the consistency of food by adding fluids and using sauces and gravies to make them softer.
- Eat foods which are soft, moist or pureed.
- Eat small meals and eat more frequently than usual.
- Do not eat hot or very cold foods.
- Drinking water with your meals helps to swallow more easily.
- Maintaining your weight is very important to your health during cancer treatment. You will be weighed every week while on radiation treatments.
- You may need a feeding tube to help with your nutrition. Your oncologist will talk to you about this.

A dietitian may be able to meet with you to discuss your specific nutritional needs while on treatment and in follow-up.

• Changes to sense of smell/taste

- In the first couple of weeks, you may notice an increased sensitivity to smells. This should pass and return to normal during or shortly after the end of your treatments.
- You may find that food tastes different. Some patients describe a metallic or bland taste. Foods that you once enjoyed may now make you sick to your stomach.

- You may eventually lose all taste of food, which often causes lack of appetite.
- You may require liquid nutritional supplements like Boost©, Ensure© or Resource© to help meet your nutritional needs and ease weight loss.
- Your taste may or may not return completely. Your ability to taste may be more limited than prior to your treatment.

Side effects will usually disappear within a month or two after completion of the radiation treatment.

However there are some side effects that are permanent. Please discuss with your doctor at the Cancer Centre any questions you may have regarding long term side effects.

How will the treatments affect My Sexuality?

Most people with cancer (and their partners) experience a number of physical, emotional and practical changes through their treatment and recovery. These changes can happen during treatment and recovery and may affect your sexual health.

There may be changes in how you look, or how you think you look, that can affect how you feel. This may affect how you respond sexually. Reactions of a partner can also add to how you see yourself as a sexual being.

You may notice periods of time during treatment and recovery when you have little interest in sex. This may be upsetting to you and your partner. You may have worries (like concerns about your cancer, treatments and how the illness is affecting your life) and these can affect both your own and your partner's interest and enjoyment of sex.

If you are single, you may have different worries and challenges such as how to talk about sexuality and cancer with a new partner.

If you or your partner would like more information about how your treatment might affect sexual activity, or you would like to discuss concerns, please ask your Nurse, Radiation Therapist, or Radiation Oncologist. We can give you more information to read. If you would like to talk to someone, there are a number of health professionals available in our cancer program who can discuss concerns about sexuality with you (and your partner).

What is Supportive Care?

Cancer is a physical disease but it also can affect how you think and feel. Your emotional health and well-being are very important as you go through your treatments. It is normal for you and your family to have many feelings at this time. You may feel anxious, frightened, worried, angry or depressed.

There is support available in the cancer program. A number of health care professionals may be available for you and/or your family: they can include a social worker, nurse, therapist, spiritual care counselor, psychologist, and psychiatrist. They can help you cope with cancer and the emotions you are experiencing, as well as help with stress management, lifestyle changes, financial concerns or medication coverage.

At any time you can ask your Radiation Oncologist, Nurse or Radiation Therapist to refer you to this support team. You will then receive a call from a member of the team to set up a separate appointment.

There are also Support and Wellness Groups available where you can talk with or listen to others who have a similar experience, or learn more about cancer and how to live well with it. Information about these groups is available at the reception desk at your Cancer Centre or through the Canadian Cancer Society – Nova Scotia Branch.

Questions You May Want To Ask Your Health Care Team

1. Do I have to do anything to prepare for my radiation markings or treatments?
2. What should I expect to happen during my treatments?
3. How will I know the radiation treatments are working?
4. Can I wash my face and neck during treatment?
5. How will I cope with the side effects?
6. Do I need to come back for a checkup?
7. What happens when the treatments end?
8. Will I have any long-term side effects from my treatments?
9. Who can I talk to if I have questions about supportive care; for example, medication costs, insurance, home care, transportation, emotional concerns, or any other questions?
10. Is there a research study for my cancer type that might be appropriate for me? (or that I could be involved in?)



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