

Your doctors have decided on radiation therapy as part of your treatment plan. You may receive radiation to the head and neck area if you have cancer of the larynx, pharynx, tonsil, palate, tongue, salivary glands, or elsewhere in the soft lining of the mouth. After your consultation appointment with your radiation oncologist, you will have an appointment for a planning simulation/CT.

Simulation

A simulation is used to map your treatment site, ensure delivery of the right dose of radiation to the target area, and ensure that tissues near the target area get as little radiation as possible during treatment.

During your simulation, you'll undergo a CT scan in the radiation department. Your skin will be marked by a radiation therapist. These marks will be used to help position you for your daily treatment. Some of these marks will be made with black marker and should not be rubbed off. When bathing or showering, let the water run over them, but do not scrub the marks. Some of the marks will be permanent tattoos that are about the size of a tiny freckle.

During the simulation, you'll be lying in one position for a long time (appointments are about 45-60 min). To help you stay in the same position for each treatment, you will wear a mask that covers your face and upper body and attaches to the treatment table. You will wear the mask during your simulation and each of your treatments.

Your radiation therapists will make your mask during the simulation appointment. A warm wet sheet of plastic mesh will be placed over your face and upper body while you're lying on the simulation table. The mesh has openings for your eyes, nose, and mouth, so you won't have any trouble seeing or breathing while it's over your face.

Over the next 15 minutes, the mesh will cool and harden. As the mesh is cooling, your radiation therapists will shape it to your face and upper body. You will feel some pressure as they do this. If you feel uncomfortable at any time, tell your radiation therapists.

Unless instructed otherwise, you may eat and drink as you normally would on the day of your simulation.

Make sure to wear comfortable clothes that are easy to take off because you may need to change into a gown. Do not wear jewelry, powders, or lotions.

Dental Check-Up

You will be asked to make an appointment with a dentist at the NorthShore Dental Clinic or a dentist of your choosing in preparation for radiation. They will evaluate you and let you know if you need any type of extensive dental work such as oral surgery, tooth extractions, root canal, or cleaning. Any major dental work that is recommended will need to be completed prior to starting radiation to avoid complications such as infection and poor wound healing. Once you begin treatment, there is a greater risk of bleeding and infection. Your dentist will also provide you with specific instructions on good oral hygiene and make fluoride trays for your mouth.

Side Effects

Some people develop side effects from radiation therapy. Which side effects and how severe depend on a number of factors: the area being treated, the dose of radiation, the number of treatments, and your overall health. Below are some side effects you may experience and what you can do if you experience them.

Dry Mouth

What you can do.

Notify your doctor or nurse

- Rinse your mouth every 4-6 hours with a solution made by mixing 1 quart of water with 1 tablespoon of salt and 1 teaspoon of baking soda
- Brush your teeth with a soft-bristle tooth brush after every meal
- Avoid smoking, vaping, or chewing tobacco.
- Avoid alcoholic beverages
- Use mouth moisturizing rinses such as Biotene
- Use lip moisturizer
 - o Do not apply it within 4 hours prior to treatment

Dry Nose

What you can do.

- Keep the inside of your nose moist:
 - o Saline nose spray
 - o Humidifier in your bedroom (change water and clean daily)

Ear Pain

What you can do.

Notify your doctor or nurse

- This can be due to swelling associated with treatment, but is also a sign of infection, so please notify your care team
- DO NOT try to clean or clear out your ears

Nausea or Vomiting

What you can do.

Notify your doctor or nurse

- A medicine to prevent nausea can be prescribed
 - If prescribed, take the anti-nausea medication 1 hour before each treatment
- Eat a light meal before each treatment
- Eat 5-6 small meals a day
- Plan to eat when you feel your best
- Choose:
 - Foods at room temperature or cooler
 - Liquids that are cooled or chilled
 - Dry starchy foods such as toast, crackers, dry cereal, pretzels
 - Yogurt, sherbet, gelatin, popsicles, and clear liquids
 - Broiled or baked chicken without the skin
 - Soft fruits, canned fruits, and vegetables
- Avoid:
 - Foods with strong smells
 - Spicy, fatty, greasy foods
 - Very hot or very cold foods
 - Acidic foods
 - Alcohol

Heartburn or Pain/Difficulty with Swallowing

What you can do.

- Notify your doctor or nurse
 - They may prescribe pain medicine for swallowing or an antacid for heartburn
- Choose:
 - Soft, moist, bland foods
 - Puree foods if needed
 - Small bites and chew well
- Don't eat within 30 minutes of bedtime
- Sit upright for at least 30 minutes after eating

Voice Changes (hoarseness)

What you can do.

- Rest your voice
- Don't whisper
- Use a humidifier
- Gargle with salt/baking soda solution listed in "Dry Mouth" section

Pain with Swallowing

What you can do.

Notify your doctor or nurse

- Your doctor may prescribe a medication to help
- Eat soft, moist, bland foods
 - Take small bites and chew well
- Avoid acidic, spicy, and crunchy foods
- Avoid very hot foods and liquids
- Blend or puree foods if needed

Appetite Loss

What you can do.

Notify your doctor or nurse

- You may be referred to a dietician
- Eat small meals throughout the day
 - Set up a schedule to eat if you do not ever feel hungry
- Choose high calorie foods
- Drink meal supplements in addition to eating

Skin Reaction

- Dry, flaky skin
- Darkening or reddening to skin
- Blistering and/or peeling

What you can do.

- Notify your doctor or nurse
 - Your doctor may prescribe a prescription cream
- Apply aquaphor to irritated skin
- Bathe or Shower daily with warm water and mild unscented soap
 - Pat dry with a towel
 - Do not rub or scrub area
- Do not use alcohol or products with alcohol on the irritated area
- Wear loose-fitting, cotton clothing in treatment area
- If your skin itches, don't scratch it. Apply moisturizer instead.
- Don't shave treatment area
- No extreme temperatures (hot or cold) should be applied to the treatment area (this includes hot tubs, hot baths, water bottles, heating pads, ice packs)
- Keep treatment area out of the sun or use SPF 30+
- Hair loss may occur in treatment area
 - Usually grows back in 3-6 months

Fatigue

What you can do.

- Plan time to rest or take short naps (10 to 15 min) during the day.
- Try to sleep at least 8 hours every night.
- Plan your daily activities. Do activities that are necessary and most important to you first. Do those when you have the most energy.
- Ask family and friends to help.
- Continue to do light exercise (walking, stretching, yoga).

Dry Cough

What you can do.

- Notify your doctor or nurse
- Use a humidifier at home

Contact Your Radiation Oncologist or Radiation Nurse if You Have:

- A temperature of 100.4°F (38°C) or higher
- Chills
- Painful, peeling, blistering, moist, or weepy skin
- Pain not relieved by medication
- Nausea or vomiting that keeps you from eating or drinking anything for 24 hours
- Flu-like symptoms, such as headache, cough, sore throat, body aches, or a fever
- Any new or unusual symptoms

These guidelines are designed to help you feel your best throughout therapy. Talk to your treatment team if you have any questions or concerns.

Evanston Hospital: (847) 570-2590

Glenbrook Hospital: (847) 657-5950

Highland Park Hospital: (847) 480-3908