

Radiation Therapy to the Head and Neck

You and your doctor have chosen radiation therapy as part of your cancer treatment. This handout describes:

- › What to expect
- › How to care for yourself during treatment
- › How to reduce side effects and increase your comfort during treatment

If you have any questions, please talk with a member of your care team.

Your doctor will discuss the number of radiation treatments with you. The radiation treatment itself is just like having an X-ray. It is not painful, and you will not feel anything.

Treatment Schedule

You will have treatments Monday through Friday (no weekends or holidays). Your therapist will work with you to set up daily appointment times. Each appointment lasts 30 minutes. While the actual treatments take only a few minutes, it is best to allow 1 hour for:

- › X-rays
- › Meetings with your doctor or nurse
- › Any unexpected delays

You will have X-rays as prescribed by your doctor to make sure you are in the correct position on the table. Your doctor does not use the X-rays to diagnose problems or assess treatment effects.

You will meet with your doctor at least 1 time a week. During these visits, your doctor will check your treatment and side effects. You may discuss any concerns you have with your treatment during this time.

Common side effects

Radiation is a very specific treatment. It affects only the area where the beams are aimed. As a result, you can expect to have side effects only in the treated area. The side effects are cumulative. This means that at first you will feel no effect, but the effects will develop as you get more treatments. You can expect most of the effects listed below to start after 10 to 15 radiation treatments. Once you are finished with your series of radiation therapy, your symptoms may last up to 7 to 14 days.

Skin changes

You may notice some changes to the skin in the treated area over time. After 2 to 3 weeks of radiation, your skin in the treated area may redden, darken, or become dry and irritated. Your skin may itch, burn or peel. If you are getting both chemotherapy and radiation, these changes may happen sooner.

Throughout the course of radiation, your doctor or nurse will check your skin and prescribe the proper treatment. To ease discomfort and protect your skin from more irritation, follow these guidelines to care for the affected skin:

- › Clean the area with a bath soap for sensitive skin. Avoid scented and antibacterial soaps.
- › Use lukewarm water on the affected area. Hot water can further irritate the skin.
- › Gently clean using the palm of your hand or a very soft cloth.
- › Pat your skin dry. Do not rub.
- › Do not shave the treated area. For men with beards, please keep your beard at the same length for the duration of treatment using an electric shaver. Do not use a razor with blades.
- › Do not use heating pads or ice packs on the treated area.
- › Avoid exposing the affected skin to sunlight.
- › For clothing, choose soft materials like cotton. Loosen collars to prevent irritation to the skin of the neck.
- › Your doctor or nurse may suggest a special cream to help moisturize the affected skin. You may apply moisturizing creams 2 times per day. **Do not apply any cream within 2 hours before your radiation treatment.**



In some cases, your doctor may prescribe other treatments such as:

- › Silvadene® (an antibiotic cream)
- › Domeboro® soaks (to help with dry and itchy skin)
- › Steroid cream/ointment

Our treatment team **may** prescribe a topical steroid cream. **If prescribed**, start applying the steroid cream on your 1st day of treatment. Then, put 1 of the approved moisturizing creams on top. Apply the creams 2 times a day, once in the morning and once at bedtime.

How to apply the cream:

1. Apply a thin layer of the steroid cream to your treatment area if prescribed by your doctor.
2. Let it dry.
3. Apply a moisturizer on top of the same area.

Please do not put any cream on your skin within 2 hours before your treatment. Doing so can cause your skin to be more sensitive to the effects of radiation. You do not need to scrub off creams that you applied more than 2 hours before.

Dry mouth

Sometimes radiation can cause the salivary glands in your neck and mouth to produce less saliva. You may notice that your mouth is very dry or your saliva has become thicker.

Both of these effects can make it difficult to swallow or to eat your usual foods. There are a number of different products that you can use to help keep your mouth moist and make eating easier. Some examples are Oasis® moisturizing mouthwash, Oral Balance Gel®, Xylimelt® lozenges or Biotene®. You can find these at most drug stores. You do not need a prescription. Your doctor may also prescribe medications for your dry mouth. Please talk with your doctor if you feel this would be helpful.

Problems with dry mouth may be short-term or permanent. Ask your doctor how long this is expected to last.

Mouth sores

Depending on the area being treated and if you are receiving chemotherapy, you may get some sores in your mouth. These sores may be painful and make it hard to eat.

It is important to keep your mouth clean so that the sores do not get infected.

- › Brush your teeth, gums and tongue after every meal with an extra soft toothbrush.
- › If brushing hurts, soften the bristles in warm water. You can use the special fluoride trays prescribed by your dentist.
- › Floss your teeth gently every day.
- › Rinse your mouth several times a day.

During treatment, a salt and soda rinse may be soothing to your mouth. This rinse will help sores and ulcers heal while keeping your mouth clean. Some people find it helpful to place a cup or water bottle of this mixture in areas of their home that are used frequently, such as a bathroom or kitchen, as a reminder to use it often:


Salt and soda rinse

1. Mix 1/4 teaspoon of baking soda and 1/8 teaspoon of salt in 1 cup of warm water.
2. Rinse your mouth with this mixture after every meal.
3. If your throat is irritated, you can gargle with this mixture as well.

Other helpful tips:

- › Avoid using toothpaste or mouthwash made with alcohol, as they can be painful to mouth sores.
- › Avoid high-acid foods, such as tomatoes, citrus fruits and juices, as well as spicy foods.
- › Try bland, soft foods that will not sting your lips or mouth.

If your mouth becomes sore and makes it hard to eat, let your doctor or nurse know. Your doctor can prescribe medication to help relieve the pain.



Taste changes

During your treatment, you may find that foods taste different. Around the 3rd week of treatment, you may lose your sense of taste.

This may be temporary, or may last for several months after treatment is completed. In some cases, some taste changes may be permanent.

Loss of appetite

For many reasons, you may not feel like eating during your treatment. You may:

- › Feel full after eating very small portions
- › Have nausea or vomiting


Let your doctor or nurse know if you have nausea or vomiting. They can prescribe medication that you can take before meals to help relieve your nausea.

If you find that you become full quickly, try eating 5 or 6 small meals instead of 3 larger meals during the day. Try to avoid drinking liquids 30 minutes before you eat.

Try to eat high-protein, high-calorie foods, such as cheese, whole milk, yogurt, eggs, puddings and ice cream. Your doctor or nurse may suggest a diet supplement, such as Ensure®, Boost® or Scandishakes®, for extra calories and protein. If you would like more diet information during treatment, your nurse can give you some suggestions or refer you to a dietitian.

Sore throat

Radiation therapy to the head and neck may cause a sore throat. You may feel a burning sensation or discomfort when swallowing. If you find that your throat is so sore that you cannot eat your usual foods, tell your doctor or nurse. They may prescribe medication to help to relieve the pain.



Try to eat foods that are soft and bland, such as mashed potatoes, yogurt, eggs, ice cream, applesauce and pudding. The following may irritate your throat and may be painful to eat:

- › Foods with sharp edges, such as chips, pizza crust, dry toast or crackers
- › Hot liquids or spicy foods
- › Foods that are high in acid such as tomatoes, citrus fruits and citrus juices

If you need some suggestions about which foods to try and which to avoid, ask your nurse.

Fatigue

Fatigue is a common side effect of radiation treatment. Daily trips for treatment combined with the effects of radiation may make you more tired. Patients most often feel decreased energy levels after about 10 treatments.

Staying active, such as going on regular walks, and keeping a consistent sleep schedule can help improve energy levels. Try not to do too much. If you become tired, plan for rest periods during your day.

If you have any questions or concerns about your treatment, talk with your doctor or nurse.

For more information about Northwestern Medicine, please visit our website at [nm.org](https://www.nm.org).