

Radiation Therapy for Head and Neck Cancer

Radiation therapy is the use of high-energy rays to damage cancer cells. You will receive treatments 5 days a week for up to several weeks.

Before your treatments begin, you will come in for a planning session (called a simulation session). At the planning session, we will decide exactly where to aim the radiation and what dose to use.

- You will lie on an X-ray table.
- We may draw colored marks on your body to outline the treatment area. You will be told whether or not you can wash these marks off.
- A mask or other device will help you stay in the right position on the table. You will stay in this position for each treatment session.
- We will take X-rays pictures of the area to be treated. We may also do a CT scan.

All of this will make your treatment as safe and precise as possible.

Some people need more than one planning session. It may take 7 to 10 business days to complete the planning for your treatment.

How often will I have radiation?

You will have daily treatments, Monday through Friday. Some people have treatments twice a day. Most people have treatments for 4 to 7 weeks. Your doctor will tell you how many treatments you need.

It is important to go to every treatment session. Try not to skip a day. If you need to miss a treatment, please let us know.

How do I get ready for my treatments?

Your doctor may ask you to see a dentist or oral surgeon before starting treatment. It is important to see a dentist who knows about radiation side effects.

- The dentist will clean your teeth and take care of any problems (such as cavities, abscesses, gum disease or poorly fitting dentures).
- Ask your dentist to show you the best ways to brush and floss. Radiation can make you more likely to get cavities, so your dentist may suggest a fluoride rinse or gel to help prevent decay.
- If you have teeth removed, you may need to wait 10 to 14 days after your gums have healed before starting radiation.
- Your radiation doctor may ask you to get fluoride trays, guards or both. If needed, we'll contact your dentist with instructions.

You may have a video swallow study before starting radiation treatment. This gives a baseline guide for swallowing during and after treatment.

What will happen at each session?

Treatments usually take 15 to 30 minutes. A machine will send high-energy rays to the treatment area. You will not feel anything during the treatments.

You will be alone in the treatment room, but we will watch you on a TV screen. You can talk to us through a speaker in the room.

You will have a longer visit one day each week to see the nurse and your doctor. This is usually the same day every week. You do not need to schedule this visit—we will bring you to an exam room after your treatment. We will weigh you and discuss any side effects you might be having.

What can I expect during radiation treatment?

Radiation affects normal cells in your body as well as cancer cells. For this reason, it may cause side effects. We will help you manage your side effects to make your treatment as easy as possible.

Not everyone has the same side effects. Side effects will depend on the person, the cancer, the amount of radiation and the area being treated. Your nurse will give you specific information to help you deal with side effects.

It's important to tell your nurse about any symptoms so we can treat them right away.

Mouth and dental care

Radiation damages the cells that make up the lining of your mouth and throat. You will likely have soreness in the mouth and throat during and after treatment. Your mouth and gums may become red, swollen and painful, and you may have open sores (called oral mucositis).

Radiation can also affect how well your saliva glands work. You may have a very dry mouth during and after treatment. Foods may lose their taste or taste different.

Please report these symptoms to your therapist, nurse or doctor. We have a number of medicines to make you more comfortable during treatment. Most of your symptoms will slowly improve after treatment has ended. It may take several weeks to months.

To reduce your risk of problems:

- Clean your teeth and gums after every meal. Use a soft toothbrush and a gentle touch. Brushing too hard can damage soft mouth tissues. If your gums are bleeding or very sore, use a cotton swab or gauze instead of a toothbrush.
- Choose a mild toothpaste or ask your dentist to suggest one. If toothpaste hurts your mouth, try making paste from baking soda and water. Use fluoride if your dentist told you to. You will have special trays made for the fluoride.
- Do not use any store-bought mouthwash that contains alcohol. The alcohol may dry out the mouth tissues.
- Limit the use of toothpicks. Do not bite or chew foods that might hurt your mouth or teeth (such as chips, pretzels and popcorn).

- If you wear dentures or oral prosthetics, be sure they fit correctly. Wear them only as needed. Clean them every day. Soak them every night in fresh solution.
- Your speech language pathologist may have you do stretching exercises for your mouth to prevent jaw stiffness.
- You will meet with your speech language pathologist during your radiation treatment course. They will teach you exercises that can help limit stiffness in the jaw and throat. These exercises are very important. You should do them at least every day.

To help relieve mouth pain and dry mouth:

- Rinse your mouth with salt and soda water every two hours. Do this as soon as you begin treatment. To make the mouth rinse, mix:
 - 1 teaspoon salt
 - 1 teaspoon baking soda
 - 1 quart water
- Your doctor may prescribe special mouthwash, gargle or ointment to help numb the mouth and throat. Use this before meals and at bedtime.
- You may take Tylenol or other pain relievers. If your pain is severe, ask your doctor for stronger pain medicine. Liquid pain medicine may help.
- If your lips become sore or cracked, Aquaphor may help.
- A humidifier may help with dry mouth, especially at night.
- Avoid tobacco and alcohol. Both will irritate the tissues of the mouth and throat, and they may make your mouth even drier.

Coping with weight loss or a change in appetite

It is very important to maintain your weight and nutrition at this time. Getting enough protein is vital for healing. You may meet with a registered dietitian to help improve your nutrition during your treatment course.

Radiation may reduce your desire to eat or make foods taste different. But even if you don't feel hungry, you must eat enough to maintain your weight. If large meals don't appeal to you, try eating smaller meals every few hours.

We will check your weight during your treatment. We also urge you to weigh yourself and report any weight loss to your nurse or doctor. You may need more calories than normal to keep up your weight.

The following diet tips may also help:

- Eat soft foods cut into small, bite-sized pieces.
- Avoid sharp-edged foods, hot or spicy foods, citrus fruits (oranges, grapefruit) and carbonated (fizzy) drinks. Foods mixed in a blender may be easier to swallow.
- You may prefer foods chilled or at room temperature. Avoid hot foods and drinks.
- Drink 8 to 10 glasses of fluid each day, if you can. Clear fruit juice or Gatorade will give you more calories. Extra fluids may help keep your saliva thinner and less sticky. This often makes it easier to swallow.
- Use nutrition drinks to help keep your weight up (such as Carnation Instant Breakfast, Ensure or Boost).

Despite your best efforts to eat, you may still lose weight. In some cases, a feeding tube may be needed. This can make cancer treatment easier—and allow you to recover more quickly afterward.

What will happen after my treatment ends?

Be sure to ask your nurse or doctor about any concerns you have at the end of your treatment. We are always ready to answer your questions.

Many side effects are temporary. They will slowly improve after your treatments have ended. Mouth pain, throat pain and skin problems often improve within two to four weeks. It can take longer for your energy and sense of taste to return. Some side effects, such as dry mouth, may never return to normal.

- Go to all of your follow-up visits with your doctor. Call if you have new symptoms or problems.
- Keep up with your dental care. See your dentist regularly. Continue to use fluoride treatments. You should wait 6 months before having special dental work done (like being fitted for dentures or bridges).
- Good nutrition is still important after your treatment ends. If you maintain your weight and nutrition, you will recover faster.
- A dry or sticky mouth may slowly improve. Here are some things that can help with dry mouth:
 - Continue to rinse your mouth with salt and soda water.
 - Carry a squirt bottle to wet your mouth as needed.
 - Drink plenty of water and other fluids.
 - Moisten food with liquids and sauces to help you swallow.
 - Chew sugar-free gum or suck on sugar-free candies.
 - Use a humidifier in your room at night.
 - Avoid alcohol and tobacco.

When should I call my doctor?

Call your doctor if you have any of these new symptoms:

- Nausea or vomiting (feeling sick to your stomach or throwing up).
- Feeling dizzy.
- Weight loss.
- Increased pain.
- Continuing skin problems.
- New mouth or throat sores.
- Unusual bleeding from the mouth or gums.
- A fever over 100.4°F (38°C), taken under the tongue.
- Any sudden change in your condition.