Radiation Therapy to the Head and Neck Area

You will be having four to eight weeks of radiation treatment to the head and neck area. Some common side effects from radiation include skin irritation, dryness or soreness in the mouth and throat, trouble swallowing, taste changes, and fatigue. Some people may have nausea. Side effects can begin two to three weeks after the start of treatments. Side effects can last for two to four weeks after the treatments end. Some side effects may occur at different times. Not everyone has side effects.

Radiation Skin Reaction
Most radiation goes through the skin into body tissues. Even so, the skin in treatment sites can become red and irritated. It can also become dry and itchy. Sometimes, the skin will peel and become moist. This happens most often in skin folds and curves. We will tell you which sites to watch.

Watch your skin closely and report any changes. Use the skin care products as directed. We will watch your skin reaction closely. We may tell you to change the way you care for your skin as it may be painful. Tylenol® or ibuprofen should help. If you need something stronger or help with skin care, let us know.

Skin Care During Treatment
Follow the guidelines in this handout during and after your treatment, until your skin is fully healed.

1. You may bathe or shower using lukewarm water. If you need soap, use one that is meant for dry or sensitive skin such as Aveeno®, Dove®, Basis®, Neutrogena®, Cetaphil® or Ivory®. Rinse skin well and gently pat it dry. Do not rub the skin in treatment fields.

2. Avoid heat. Do not use heating pads, very hot water in the bath or shower, or hot water bottles.

3. Avoid cold. Do not allow the skin to become chilled from ice or very cold water or air.

4. Avoid sunlight or sunlamps on the treatment site. When you are outside, keep the area covered with clothing.

Positioning for Your Treatment
Each day, right before your treatment, the radiation therapists will help you get into the correct position on the treatment table. Some patients are put into “molds.” These molds are made during the treatment planning period.

You may have tiny dots or marks that were put on your skin. These marks relate to your treatment field. They look like tiny freckles and will not be easy to see.

If these marks fade, we will remark them. After your treatment is over, you can let the marks fade. You can also gently remove them using soap and water or baby oil. These marks may rub off on your clothes. Spray the stains with hair spray or Spray’N’Wash® before you wash your clothes.
If clothing does not cover the entire area, use a sunscreen with SPF of 30 or higher.

5. Avoid rubbing or scrubbing the skin in the treatment site. Wear loose, cotton based clothing that will allow good air flow. Avoid clothing made of nylon or synthetics. These fabrics tend to hold moisture next to the skin. Clothes that bind can irritate the treated skin.

6. Avoid tape on the treated skin.

7. Do not apply anything to the treated skin unless approved by your doctor or nurse. This includes bath oils, perfumes, talcum powders, and lotions. If we expect a skin reaction, we will suggest a skin moisturizer. Use it each day as instructed.

**Remember:** Your skin needs to be clean and dry before each treatment. You can apply lotions and creams 2–4 times per day to help your skin feel better. Do not apply lotions or creams 1–2 hours before your treatment. If your treatment is late in the day, you may apply a skin product if it will

**Sore Mouth and Throat**
Most patients will have redness and soreness in the lining of the mouth and throat. These symptoms will last for four to six weeks after the treatments end.

Patients may also have mouth dryness. If the salivary glands are treated, the amount of saliva in your mouth will decrease and become thicker. This symptom may worsen over the first year after treatment ends. Please discuss these symptoms with your radiation doctor or nurse.

**Take special care of your mouth and teeth.** Brush the teeth, top of the tongue, and inside the cheek with a soft toothbrush. A Waterpik® flosser or bulb syringe may also help to clean gently. You may floss but do it gently.

**Rinse your mouth often to keep it moist.** Mix 1 tsp. salt and 1 tsp. baking soda in 1 qt. of water. Rinse your mouth and gargle every two hours while you are awake. Start the rinses before you have any symptoms. Do the rinses until your mouth heals.

If the rinse burns your tissues, reduce the amount of salt. Make the rinse in advance. You are more likely to use it if it is ready to use.

If your spit becomes thick and ropey, keep using the salt and soda rinses. You may also wish to purchase alcohol-free mouth washes. Switch back and forth between the salt and soda rinses and the store-bought rinses.

**Avoid mouthwashes that contain alcohol** such as Scope®, Cephacol®, and Listerine®. They will further irritate and dry your mouth and throat.

**Drink 8 to 12 glasses of fluids daily** and chew sugarless gum. Both will help to loosen up your saliva.

Ask your doctor or nurse about the use of artificial saliva.

Mouth and throat pain can make it hard to swallow and eat. If you have pain in your throat that is making it hard for you to eat and drink, discuss it with your doctor or nurse.
Radiation to your mouth and glands makes your teeth more prone to decay. Fluoride treatment can prevent the decay. Your doctor will suggest that you see your dentist.

Visit your dentist regularly after you finish your treatments. Tell your dentist about the radiation treatments you have had. Before any oral surgery or teeth removal, your dentist should contact Radiation Oncology at 608-263-8500.

If you wear dentures, clean them at least once a day. Try to wear your dentures as little as you can during your treatments and for three to four months after treatments end. Radiation can cause slight changes in your gum line. You may need to have your dentures refitted.

Avoid smoking and drinking alcohol. Both can worsen the side effects in your mouth because they dry and irritate the mouth. They also make these areas more prone to cancer.

Some foods will bother your mouth. Avoid spicy, hot, rough, or coarse foods. Try soft, bland foods. Moisten your food with sauces and gravy.

Dilute citrus juice. Orange, grapefruit, lemon, and lime juices are slightly acidic which can further dry your mouth. You may need to avoid them until you finish treatments and your mouth heals.

Carry water with you to moisten your mouth.

Use a humidifier at home. Change the water and clean out the basin daily.

Check your tongue, the inside of your cheeks, gums, and the roof of your mouth in the morning and before going to bed each day. The tissues should be smooth, pink, and moist. If you notice any red or white areas, or areas that look or feel injured, report it to your doctor right away. Sometimes radiation causes an oral yeast infection, this can be treated with medicine.

**Inner ear pain may occur during treatment.** Some patients report a feeling of fullness or decreased hearing. If this happens to you, report it to your doctor.

**Problems Swallowing**
About two weeks after treatments begin, you may notice that you have problems swallowing. The tissues in the throat and mouth can swell and make it hard to swallow. You may need to change your diet.

Eat foods that are soft, moist, and wet. Eat foods high in protein and calories. Don’t eat anything that bothers your tissues. High protein foods are needed to help heal your body during and after treatments. Take a daily multi-vitamin.

If you do not feel like eating, try to eat six small meals instead of three larger ones. Nausea is rare, but if it you have it, talk to your radiation doctor or nurse.

If you have problems swallowing, choose from the soft food lists. High protein drinks will help to prevent weight loss. We have listed blender recipes for you if you find the soft food lists too thick. A sample daily menu can also be found at the back of this handout.

**Tube Feedings**
Patients often lose weight during treatments because they have problems eating. You need high calorie and protein foods to help heal. If you start to lose weight and are not able to increase your food intake, tube feedings can help give you the protein and
calories you need. We use a soft flexible tube that is a little wider than a cooked spaghetti noodle. The tube is either passed through your nose into your stomach or placed directly into your abdomen. You can take in liquid food through the tube several times each day. We will teach you how to take care of the tube and your feedings at home. Your doctor or nurse may suggest this as a way to help you get the nutrition you need.

Good nutrition is very important during your treatments. **Patients who get enough nutrients, have milder and shorter lasting side effects.**

**Taste Changes**
Many patients notice taste changes as they go through their treatments.

**If your sense of tastes becomes weaker...**
Radiation can destroy your sense of taste for a short time. Protein will help your body rebuild your taste buds. Your taste will slowly return to normal 2-4 months after you complete the treatments. If you eat enough protein during and after treatments, you will help the healing process.

Even if food has no taste for you, you still need to eat well. There are some things that you can do to help your food taste better. Try liquid foods. Add sauces, gravies, and salad dressings to food. Cook foods that have a nice smell. If you can smell the food, you can taste it better. Try adding mild spices such as basil, mint, or vanilla.

**If you have a bad taste in your mouth...**
The cancer may change the way your body is able to sense the taste of food. Drinking 8 to 12 glasses of non-alcoholic fluid may help to clear your body of the byproducts of cancer and treatments.

**If you have a bitter taste...**
Some patients find that beef and pork taste bitter. Either eat other high protein foods or disguise the taste of the meat. You can marinate and cook the meat in a sweet sauce. Sometimes it helps if you aren't in the kitchen when the food is cooked. The smell of the meat may bring on the bitter taste. You can also try to eat the meat cold.

**If you have a metallic taste...**
Avoid serving foods or liquids in metal cans.

**Nausea**
Nausea, although rare, may occur. Some people describe it as feeling “sick to their stomach”. This feeling will not last. You still need to keep eating well.

Some of the tips listed below may be helpful to you.

If you have nausea, tell your doctor or nurse the next time that you come for treatment. We may be able to prescribe helpful medicine.

Try eating small amounts of salty foods like chicken soup, saltine crackers, pickles, or olives. If your mouth is not sore, you may also want to try tart foods such as lemons. Eat low fat foods and avoid fried foods.

Drink small amounts of clear, cold drinks such as apple juice.

Try cool foods such as Popsicles®, gelatin desserts, yogurt, cottage cheese, cheese, deviled eggs, and cold meats.

Relax, eat slowly, and chew your food well. Eat small meals (4-6 per day).

The smell of cooking sometimes can cause nausea. Avoid cooking the food yourself.
If you have nausea during treatment, avoid eating one to two hours before treatment and one to two hours after treatment.

Coughing while trying to rid your throat of thick mucus can make you feel sick. Drink 8-12 glasses of non-alcoholic fluids to keep mucus looser. Rinsing your mouth and gargling with the salt solution and using a humidifier may also help.

**Feeling Tired**
Feeling tired (fatigue) during radiation treatment is a common side effect. Fatigue does not mean that your tumor is getting worse. Some people feel no fatigue and can keep up with their normal routines. Others need to take an extra nap each day. Some change their routines, working only part time. Others don’t do anything that requires a large amount of energy. Fatigue can begin right away, or it can occur after 1 – 2 weeks of treatment. It can go on for a few weeks to months after treatment has ended. Rarely, it can last for up to a year.

Low blood counts may also cause you to feel tired. Your bone marrow makes blood cells. If a lot of bone is in your radiation field, your body may produce less blood cells. This is a short-term side effect. Your doctor may order a blood test from time to time to check your blood cell counts.

**Tips for Dealing with Fatigue**
1. Listen to your body and rest when you need to. A short nap during the day or sleeping a little longer may help.

2. Make time for hobbies you enjoy. Take a walk in the fresh air, visit with a friend, or pursue a hobby during the times that you have the most energy. Do things that help you feel good.

3. Stop smoking and do not drink alcohol to excess. Do something healthy for yourself. If you need help, talk with your doctor or nurse. There are ways we can help you.

4. If you work, you may want to keep working. Some people are able to maintain a full-time job. Others find it helpful to work fewer hours. Many employers will agree to part time work. We can schedule your treatment times to fit in with your work schedule.

5. Plan regular active exercise – daily walks, riding an exercise bike, or any mild exercise. Go at your own pace. Never exercise to the point of fatigue. You should feel less tired after the exercise than you did before the exercise.

6. Find ways to deal with your emotions. Pent-up emotions can add to fatigue. Talk with family or friends. Having a good cry or laugh can be helpful.

7. Eat well. Keep foods around that need little effort to prepare – cheese, yogurt, or slices of meat. When you feel well, prepare and freeze meals to eat later when you are tired. You need extra calories and protein to maintain energy and repair normal skin cells while getting treatments. Speak with a clinic nurse if you have problems eating.

8. Drink at least 8 to 12 glasses of fluid per day. The water will help to flush some of the by-products of your treatment out of your body.
9. If you need help with your basic daily needs, ask your nurse or the social worker to help you contact your local resources. You may be able to receive help with meals, housekeeping, personal care, transportation, support groups, and respite care.

10. Accept help from family and friends. If friends ask if they can help, accept it! If they ask you to call if you “need anything,” they may need ideas from you. Often people want to help but don’t know what things you need help with. Things like mowing the lawn, making meals or watching the kids, can help both you and your friends to feel good.

11. Visits from family and friends can be pleasant, but also tiring. You do not need to be the perfect host or hostess. Let friends and family fix dinner and get the drinks and snacks for you!

12. Some people may have pain from cancer or other causes. Pain can be very tiring. Your doctor and nurse can work with you to achieve good pain control. Let them know about any pain you have during treatment.

**Other Concerns**
Cancer can affect many areas of your life. It can affect your emotions, marriage, family, jobs, finances. You may also feel concerned about your future. The nurses and social workers can help you cope.

**When to Call**
If you have questions or concerns after your treatments end.

**Who to Call**
Radiation Oncology Clinic
8 am – 5 pm
(608) 263-8500

Ask to speak to a nurse. If the clinic is closed, your call will be sent to the paging operator. Give your name and phone number with the area code. The doctor will call you back.

**Cancer Resource Services**
There are many resources for cancer patients and their families.

**Cancer Information Service** has information about cancer care around the country as well as locally. The toll-free number is 1-800-422-6237.

**Support for People with Oral and Head and Neck Cancer** is a non-profit that supports the needs of oral and head and neck cancer patients. [www.spohnc.org](http://www.spohnc.org)

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Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 3/2020. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4825