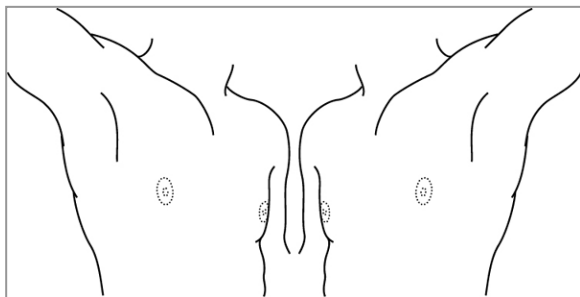


Radiation Therapy to the Chest Wall

You will have five to six weeks of radiation treatments to your chest. Some of the side effects of this treatment are skin irritation and fatigue. You may also have heartburn, but it is rare. The side effects may begin about one to two weeks into treatment and last for two to four weeks after the final treatment. You may have some or all the side effects. They may occur at different times or all at once. This handout will give you the information you need to care for yourself during and after your treatment.



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 finished, 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. If this happens, spray the stains with hair spray or Spray'N'Wash® before you wash your clothes.

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 has 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. 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 be fully absorbed before your treatment.

Care of Skin After Treatment

1. Although rare, late effects may occur months to years after the end of treatment. Treated skin may still be dry. It may also darken in color or become firm and tough. Using a skin moisturizer or Vitamin E oil may help.

2. The skin in treatment areas may always be extra sensitive to sunlight. When outdoors, use a sunscreen of SPF 30 or higher on treated skin exposed to the sun. Treated skin is at a higher risk for skin cancer.

Indigestion

A few people whose treatment includes the breastbone area will have heartburn. Nausea is rare. If you have either of these symptoms, try drinking small amounts of clear, non-carbonated fluids.

Some patients find 1-2 tablespoons of a liquid antacid soothing. Check with your doctor before using a liquid antacid. If you still have these symptoms after a few days, ask your doctor for other medicine. If you have problems swallowing, your nurse can advise you on a soft food, high protein diet.

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.

Arm Exercises

Sometimes, after treatment people find they have stiffness in their shoulders. They may also have swelling in their arms or hands on the treated side.

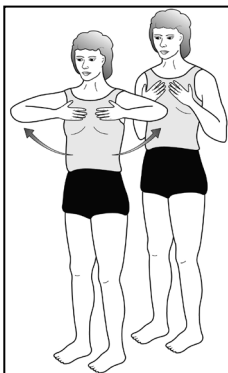
Sometimes, lymph nodes from the armpit are tested or taken out during surgery. This can lead to a blockage of the normal flow of lymph fluid from the arm to the body. When this happens, swelling of the arm can occur (lymphedema).

After radiation, changes to the tissues in armpit can also cause lymphedema. These tissue changes can also cause stiffness of the shoulder muscles. These side effects can occur weeks to months after treatment is over.

To help ease or prevent these problems, we suggest you do shoulder exercises. You should take special care to protect your hand and arm. You can use the exercises in this handout along with those you learned after surgery.

Shoulder Check

Once a day you stand undressed in front of a mirror. Place both hands beneath your collarbones and lift your elbows up towards your shoulders.



Watch closely to see that your elbows move evenly to shoulder height and that both shoulders are level. This helps to maintain normal range of motion in your shoulders. If you see that your treated shoulder shrugs (or moves towards the ear), please contact your doctor.

Axillary Stretch

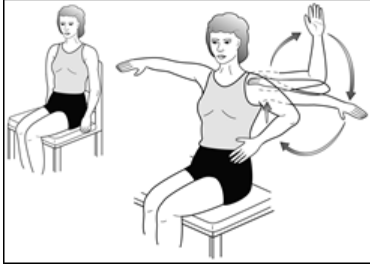
1. Sit in a straight-back chair with your feet flat on the floor. Let your hands hang loosely at your sides
2. Grasp your hands together in front of you.
3. Lift your arms up and overhead. Slide your hands to the back of your neck. Slowly twist the upper part of your body toward the side that has not had surgery. This should stretch the armpit area on the side where you received treatment.



Shoulder Rotation and Stretch

1. Sit in a straight-back chair with your feet flat on the floor. Let your hands hang loosely at your sides.
2. Bring both your arms straight out to the side at shoulder height. Keep your arms at shoulder height. Pull backwards as if you were doing the

"backstroke" with the arm on the treated side. Do the stroking sequence 5 times. Return to the starting position and relax.



Shoulder Internal Rotation

1. Sit in a straight chair and move forward to the edge of the seat so that your back does not touch the chair. Your feet should be flat on the floor.
2. Reach behind your back with the arm on the treated side and touch the bottom tip of the opposite shoulder blade. Try to hold for 5 seconds. Relax and return to the starting position.

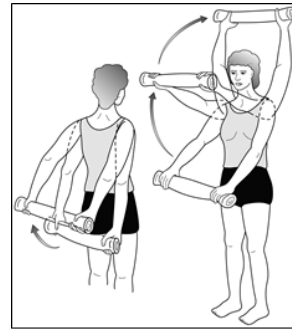


Stretch

1. Stand with your feet about six inches apart.
2. Put your arms in front of your body and hold one end of a towel in each hand. Bring your arms over your head and stretch towards the upper back. Do not arch your back. Do not

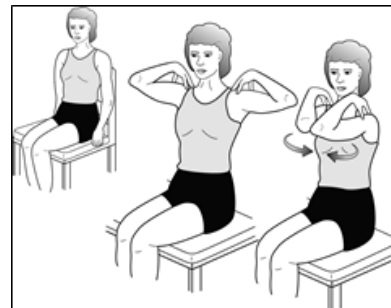
force the movement if it is hard. Try to hold for 5 seconds. Relax and return to starting position.

3. Stand as in (1). Start with your hand grasping the towel behind your back and lift upward as far as you can. Be sure to stand straight. Try to hold for 5 seconds. Return to the starting position.



Stretch for the Back and Shoulder Muscles

1. Sit in a straight-back chair with your feet flat on the floor. Let your hands hang loosely at your sides.
2. Place your right hand on your right shoulder and your left hand on your left shoulder (palms down). Try to touch your elbows together in front of your body. Keep your hands in position. Hold for 5 seconds.



Help Prevent Infection

It is important to prevent infection in the arm on the treated side. Below are some simple rules to prevent infection.

- Stop smoking.
- Avoid burns while cooking.
- Avoid sunburns.
- Have injections, blood samples and blood pressure done on the other arm.
- Use an electric razor to reduce the risk of nicks or scratches.
- Avoid heavy lifting. Carry heavy items or handbags in the other arm.
- Wash cuts right away. Treat them with antibacterial medicine and cover with a sterile dressing. Check often for redness, soreness, or other signs of infection.
- Never cut cuticles, use hand cream or lotion.
- Wear watches or jewelry loosely on the treated side.
- Wear gloves to protect your hands when working in the garden or when using strong cleaning products.
- Do not keep your hands in water so long that they become wrinkled.
- Use a thimble when sewing.
- Use insect repellent to avoid bites and stings.
- Avoid elastic cuffs on blouses and nightgowns.

Cancer Resources

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

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 © 2/2020. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4501

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 suddenly have a swollen arm or if the arm is also red, hot, or painful, call your doctor right away.

If the swelling comes on slowly, and the arm is not red, hot, or painful, schedule a visit with your doctor. Keep the arm raised above your heart as much as you can. Keep doing the arm exercises. Moving your muscles may help some of the lymph fluid flow out of your arm.

Call if you have questions or concerns after your treatments end.

Who to Call

Radiation Oncology Clinic
8 am–5 pm
(608) 263-8500

If the clinic is closed, your call will go to the paging operator. Give your name and phone number with the area code. The doctor will call you back.