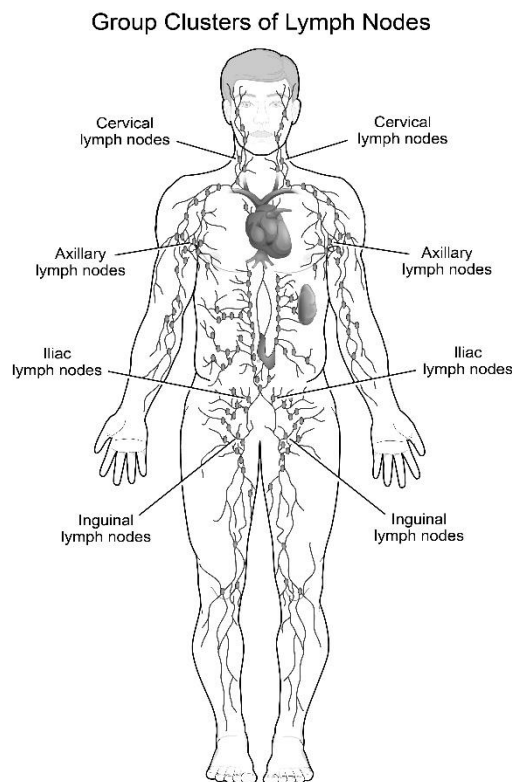


## Lymphedema

Lymphedema happens when there has been injury or damage to the **lymph system**. This injury/damage does not allow for the proper drainage of lymph fluid. This can cause extra fluid building up and swelling in the associated arms, hands, and legs. This build-up of fluid is called lymphedema.

### Causes for Lymphedema

Lymphedema can occur from abnormal development or damage to the lymph system. Damage can occur from, surgery to remove lymph nodes, radiation of lymph nodes, vascular disease, obesity, and other trauma to the lymphatic system.



**Surgery:** The doctor may remove some of the lymph nodes from the under arm or groin to see if cancer has spread. The doctor

may remove some of the lymph nodes if there was trauma to the surgical area. Some lymph vessels that carry fluid from the arm or leg to the rest of the body are removed also because they are entwined with the nodes. This changes the way the lymph fluid flows on that side of the body. If the lymph vessels that remain cannot remove enough of the fluid in the chest or limb area, then swelling (lymphedema) occurs.

**Radiation:** Radiation treatment to the lymph nodes in the under arm or groin can affect the flow of lymph fluid in the arm and chest, or leg area, in the same way.

Radiation can result in fibrosis (thickening and firm tissue) and can cause blocking of the lymph system.

Patients who have both **surgery** and **radiation** to the lymph nodes have a higher risk of lymphedema than if they have either treatment alone.

### What are the symptoms of lymphedema?

- Slight swelling, making your rings feel tight on your fingers or socks feeling tight on the skin, or more severe swelling, causing your entire arm or leg to swell.
- Your arm or leg may feel achy, tired or heavy.
- Thickening or tight feeling in the skin
- Numbness/tingling of the involved arm or leg.

### When does lymphedema occur?

Lymphedema can occur weeks to even years after surgery. Take the steps below to reduce your risk.

## Ways to Reduce Your Risk

### Prevent Infection

Your body responds to infection by making extra lymph fluid to fight the infection. You may be more likely to get an infection in the affected limb because the lymph channels have been damaged or removed. This can trigger lymphedema.

- Avoid sun burns. Use sunscreen that is labeled “SPF 30” or higher.
- Use oven mitts.
- Avoid oil splash and steam burns from cooking.
- Clean even small cuts right away with soap and water. Use an over-the-counter antibacterial cream after cuts are cleaned. Cover the cuts with a bandage.
- Have all shots, IVs, blood draws, or blood pressure tests done on the unaffected arm if you can.
- Wear gloves when working in the garden or cleaning up after pets.
- Use a thimble when sewing.
- Use an electric razor if shaving under your arm or on your legs to prevent cuts or nicks or choose a shaver with rounded heads.
- Use bug spray when outdoors to avoid bug bites. If you get stung by a bee in the affected arm or leg, clean and elevate it, apply ice, and contact your doctor if it becomes infected (warmth, redness, swelling, fever).
- Use your washcloth to gently push back cuticles while in the shower instead of cutting them. Avoid having cuticles trimmed with manicures.

### Avoid Saunas/Hot Tubs

Avoid spending time in saunas or hot tubs since heat can increase fluid build-up.

### Control Your Weight

Try to avoid gaining weight because extra fat in the arm or leg requires more blood vessels. Fat tissue makes more fluid in the arm or leg and places a greater burden on the remaining lymph vessels.

### Exercise Regularly

Slowly return to your past level of activity after surgery. This will reduce your risk of strain which can lead to injury.

During radiation and up to 18 months after, do simple stretching daily to keep your range of motion.

Research shows that regular exercise at a level that is right for you, can reduce symptoms of fatigue, improve strength, improve sleep, decrease pain and reduce your risk of lymphedema.

### Helpful Hints for Your Upper Arm

Exercise your affected arm while it is raised by opening and closing your hand and bend and straighten your elbow 15 – 30 times. Repeat these 3 – 4 times a day. This will decrease swelling by pumping lymph fluid out of your arm.

When you have full motion of your arm and shoulder after surgery, you may gradually begin strengthening exercises. Start with a 1-pound weight using your post breast surgery shoulder exercises and increase the weight in one-pound increments when you can easily complete three sets of 10 repetitions. If you don't have weights, start by using a soup can or a bottle of water.

Use your unaffected arm to carry heavy things with shoulder straps such as suitcases and handbags. Use both arms when you carry packages, children, or foods, to reduce strain on the affected side. If you need to lift something heavy that is outside your

typical daily activity, ask for help to avoid straining your involved limb (which causes inflammation).

### **Helpful Hints for Your Lower Leg**

Return to walking and exercise when your doctor says it is okay. Start slowly, add time or distance, and slowly increase each time you exercise.

Exercise your affected leg by squeezing your butt muscles, pressing your knee into the bed, and pumping your ankle for 10-15 times. Repeat this 3-4 times a day. This will decrease swelling to allow the muscles to pump excess fluid out of the leg.

If swelling is present right after surgery, elevate your leg on pillows at night and as able during the day. Talk with your health care team about compression stockings if it stays swollen.

Avoid crossing legs while sitting or sitting in one position for longer than 30 minutes.

### **Lymphedema Measurements and Treatment**

Some people develop lymphedema, even when all tips are followed.

During your follow-up visits, you may have measurements taken of the affected limb(s). If there are major changes you may be sent to a therapist trained in lymphedema therapy.

Exercises may be prescribed to help reduce swelling and increase movement.

A therapist may train you in massage to open lymph channels to help reduce swelling.

A special snug fitting sleeve (a compression sleeve or stocking) may be ordered for you to wear. Some patients learn how to bandage their arm or leg with special lymphedema bandages to reduce their swelling before being fitted for a compression sleeve or stocking.

### **When to Call**

- Your arm or leg stays swollen and/or painful for several days. This may be as little as your rings feel tight on your fingers, or your whole arm or leg may be swollen.
- You have constant symptoms of lymphedema like achy, tired and/or numbness/tingling of the involved arm or leg.
- You have any sign of infection in your arm or leg (redness, warmth, swelling, drainage, fever).
- Your arm or leg feels heavy and tight, or your hand, wrist or ankle is less flexible.
- You can't move the involved arm or leg as much as before.
- You develop thin or thick cords in your under-arm area that you can see or feel when you lift your arms over your head or out to the side.
- The skin is hard or changes color on your involved arm or leg.

**The sooner lymphedema is noticed, the better the treatment will work to reduce the effects.**

If you need a referral, below is a list of the clinics with therapists trained in lymphedema:

## **Wisconsin Clinics**

### **Yahara Rehabilitation Clinic**

1050 East Broadway  
Monona, WI 53716

**Scheduler: (608) 890-6110**

**Fax: (608) 221-6250**

**Voice Mail: (608) 221-6253**

### **East Madison Hospital**

4602 Eastpark Blvd.  
Madison, WI 53718

**Phone: (608) 263-7540**

### **UW Health Hospital**

600 Highland Ave., E3/211  
Madison, WI 53792

**Phone: (608) 263-8060**

**Fax: (608) 262-7679**

### **UW Health Hand Clinic**

1 South Park Street  
Madison, WI 53715

**Phone: (608) 890-6170**

**Fax: (608) 890-6718**

## **Northern Illinois Clinics**

### **9<sup>th</sup> Street Clinic**

209 Ninth Street  
Rockford, IL 61104

**Phone: (779) 696-4590**

**Fax: (779) 696-5869**

### **Carbone Cancer Center- Rockford**

3535 N. Bell School Road  
Rockford, IL 61114

**Phone: (779) 696-4590**

### **Orth Road Clinic**

**(YMCA)**

8451 Orth Road  
Loves Park, IL 61111

**Phone: (779) 696-4590**

### **Roscoe Clinic**

4282 E. Rockton Road  
Roscoe, IL 61073

**Phone: (779) 696-4590**

### **Belvidere Clinic**

**Physical Therapy**

1624 S. State Street  
Belvidere, IL 61008

**Phone: (779) 696-4590**

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 © 12/2022 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7660

### Arm Circumference

Using a soft tape measure, measure the circumference of each arm at these areas if your therapist or doctor recommends you do so. These measurements are meant to serve as a baseline at the time of your surgery or injury to your lymphatic system, to help monitor the swelling over time.

	Left	Right
Circumference at the mid-hand	___ cm	___ cm
Circumference at the wrist crease	___ cm	___ cm
10 cm below elbow crease	___ cm	___ cm
10 cm above elbow crease	___ cm	___ cm

### Leg Circumference

Using a soft tape measure, measure the circumference of each leg at these areas:

	Left	Right
Arch of foot	___ cm	___ cm
Ankle bones	___ cm	___ cm
10 cm below knee crease	___ cm	___ cm
20 cm above knee crease	___ cm	___ cm