



This information is for people who may be at risk of developing lymphoedema.

## What is lymphoedema?

Lymphoedema is the swelling of part or parts of the body that happens when the lymphatic system is not working properly.

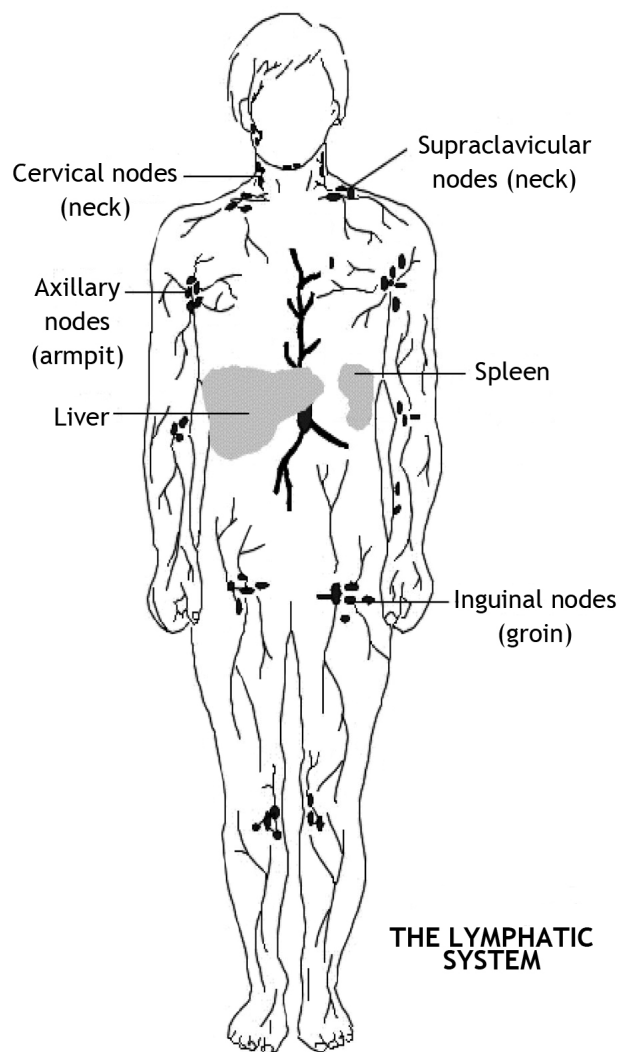
## The lymphatic system

To understand lymphoedema, it helps to know about the lymphatic system. The lymphatic system contains a series of lymph vessels (tiny channels under the skin) that carry the lymph fluid through the nodes back to the blood system. Lymph nodes (also known as glands) are found throughout the body. Lymph nodes are made of tissue containing cells that help fight infection and disease such as cancer. Waste products and destroyed bacteria are carried in the lymph fluid back into the blood stream. They are then disposed of with other body waste. The number of lymph nodes varies in each person. For example, in the armpit the number can vary from 15 to 30 nodes. Lymph nodes also vary in size from a pin point to the size of a baked bean.

Lymph nodes can swell and become tender when an infection is present. There are different causes for swollen lymph nodes. If you develop a swollen lymph node get it checked by your doctor. Sometimes, cancer cells spread into the lymph nodes from a cancer in another part of the body. It is also possible for a cancer to start in a lymph node. This type of cancer is called lymphoma.

The lymphatic system:

- is a one-way drainage system to take extra fluid from body tissue back to the blood circulation
- contains white blood cells (lymphocytes) to fight infection
- gets rid of waste products and proteins from cells.



## Causes of lymphoedema

Cancer-related lymphoedema is caused by the treatments or the cancer itself. Some examples are:

- when lymph nodes are damaged or removed by surgery
- radiation treatment to the lymph nodes causing damage resulting in scar tissue that blocks the

flow of lymph fluid

- cancer cells blocking the flow of lymph fluid
- a cancer that is pressing on the lymph vessels blocking the lymph nodes nearby.

Lymphoedema can develop weeks, months or years after cancer treatment.

Lymphoedema occurs close to the part of the body affected by treatment. For example, treatment or surgery on the breast area affects the arm, remaining breast tissue or chest wall whereas treatment to the abdomen and groin affects the legs. Lymphoedema can also develop in the head and neck.

**Most people who have surgery or radiation treatment will not get lymphoedema. Discuss your risk with your doctor.**

## Signs and symptoms

- Swelling
- Changes in feeling (heavy, tight, full, tingling or stiff)
- Skin changes (your skin may feel tight, or stretched)
- Aching, pain or tension.

Changes in treatment that have reduced the damage to the lymphatic system include:

- sentinel node biopsy-where only a limited number of lymph nodes are removed to check if the cancer has spread. The chance of developing lymphoedema seems to be higher for people who have a number of lymph nodes removed, and for people who have both surgery and radiation treatment to the nodes.
- reducing the amount of radiation treatment to the lymph nodes.

## Looking after yourself

While there is not enough evidence to say that the following procedures cause lymphoedema, these precautions are recommended by experts in the field:

- Look after your skin, especially in the area at risk of lymphoedema.
- Keep your skin clean and well moisturized.

- Wear gloves in the garden.
- If you are going to shave, use an electric razor.
- Use insect repellent and sunscreen.
- Avoid injury to your limb (arm or leg), which is at risk of lymphoedema.
- Avoid extreme cold or heat (use oven gloves).
- Treat any cuts or grazes with antiseptic.
- If your arm is at risk, avoid having injections, blood tests or blood pressure taken from your affected arm, if possible. Most doctors recommend against having blood tests or intravenous therapy in an arm that is affected by lymphoedema. Check with your surgeon if you are unsure.

## Look out for early signs of infection

Contact your doctor straight away if you notice any of the following signs of infection. The lymph is close to the skin and can easily become infected.

- Redness or warmth
- Swelling
- Pain or discomfort
- Red streaks that track up or down from the affected area.

## Be active

- Gentle muscle movement, including deep breathing, increases the flow of lymph fluid that reduces the risk of lymph building up.
- A regular exercise routine is recommended. Be a healthy weight.
- Being overweight may increase the risk of lymphoedema.
- Talk to your doctor or dietician if you have concerns about your weight.

## When travelling

- Consider using a bag with wheels.
- If your arm is at risk, avoid lifting or carrying heavy bags with that arm.
- Try to keep active during the journey.
- Consider wearing a compression garment if your arm/leg is at risk.

If you are worried you have lymphoedema, talk to your doctor and ask for a referral to a lymphoedema therapist.

For more information about lymphoedema, read our resource “Living with lymphoedema”. Get your copy by visiting our website [www.cancernz.org.nz](http://www.cancernz.org.nz), visiting your local Cancer Society, or ringing our Cancer Information Helpline **0800 CANCER (226 237)**.