



Patient & Family Guide  
2022

# Sentinel Node Mapping

South Shore Regional  
Hospital



[www.nshealth.ca](http://www.nshealth.ca)

# Sentinel Node Mapping

You are scheduled to have sentinel lymph node mapping on:

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## What is sentinel lymph node mapping?

- Your lymph system is your body's main defense against infection.
- Sentinel lymph node mapping is a procedure that uses radioactive material (tracers and sometimes blue dye) to map (find) the lymph nodes that drain the area of your cancer. For people with breast cancer, this is the nodes in the axilla (armpit).
- Radioactive tracers are injected (put in) into your breast or around the tumour site (for people with melanoma) using a small needle. These tracers:
  - › tell your surgeon which nodes to remove.
  - › help your surgeon see if cancer has spread from the main tumour into your lymph system.

## What are “sentinel nodes”?

- Sentinel nodes are the first nodes in your lymph system to get the fluid and cells draining from a tumour.
- **If the sentinel nodes do not contain cancer cells**, the cancer has probably not spread to your other lymph nodes.
- **If the sentinel nodes do contain cancer cells**, your surgeon will talk with you about the next steps.

## How do I get ready for this procedure?

If you are having the procedure done on the same day as your surgery:

- › **Do not eat anything after midnight the night before your surgery.**

If you are having the procedure done the day before your surgery:

- › You can eat your meals as usual.

## **What will happen before the procedure?**

**If you are having the procedure done the day before your surgery:**

- Register at the X-Ray Department as soon as you arrive at the hospital.
- The procedure is different for each patient. The radiologist (X-ray doctor) and your surgeon will decide what tests you need and how the mapping is done.
- For people with breast cancer:
  - › If your tumour is not easy to feel, you may also need a procedure called a wire localization. Your health care team will give you more information about this procedure, if needed.

## What happens during sentinel lymph node mapping?

- Using a small needle, the radiologist will give you several injections of radioactive tracers in the area of the tumour.
- For people with breast cancer:
  - › The radiologist usually inserts (puts in) the needle near the areola (dark area around your nipple). The radioactive tracers show where the lymph nodes are.
- You may need an additional injection(s) in the area of the tumour.
- Images of the lymph nodes may be taken the day of your surgery in the Nuclear Medicine Department.
- The technologist will take images of the lymph nodes using a nuclear medicine camera. They will also mark the skin where the lymph nodes are. The technologist may refer to these nodes as “hot nodes”. This **does not** mean they are cancerous.

## **Surgery**

- When it is time for your surgery, you will be taken to the operating room (OR).
- Your surgeon will use a small scanner to find the radioactive tracers. The tracers will show them where the sentinel lymph node(s) is.
- The tracers help your surgeon remove only the node(s) in your lymph system that is most likely to contain cancer cells.
- Your surgeon may also inject a blue dye into your breast after you are asleep. This dye collects in your lymph system and helps your surgeon make sure that they have found the sentinel node(s).
- Your surgeon will then remove the sentinel node(s) to see if it is cancerous.

## **How long will the procedure take?**

This procedure can take 1 to 2 hours. This depends on how long it takes for the radioactive tracers to reach the lymph nodes.

