

# Radioactive Iodine (I-131) for a Diagnostic Scan after Treatment of Thyroid Cancer

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This pamphlet provides general information. You can get more information on this treatment from:

- the doctor caring for your thyroid condition or
- the doctor in the Nuclear Medicine Department

## What is radioactive iodine?

The radioactive form of iodine is also called radioiodine. It has been used for over 50 years to treat problems such as hyperthyroidism and thyroid cancer. It is also used to test thyroid function.

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## What is a diagnostic scan and why am I having this done?

Radioactive iodine is given to check for recurrence of thyroid cancer after you have had your thyroid removed by surgery.

After you take a capsule of radioactive iodine a machine takes pictures of your body from your head to your knees. The amount of radioactive iodine given for a body scan is small. **However, you have to follow special precautions for 3 days.**

You must sign a SJHH "Consent to Treatment" form on the day of the scan. By signing this form, you are indicating that you agree to follow the special precautions in order to minimize radiation exposure to yourself and members of the public.

## Will I have to pay for this?

No.

## Is there any preparation?

Before your scan, your doctor will tell you when to stop taking your thyroid hormone tablets. When you stop depends on the medication you are taking.

You may be able to take a medication called Thyrogen™ to prepare for this scan. Your doctor will talk to you about this. Your doctor may also ask you to start a low iodine diet 3 weeks before the scan. This is because iodine in your diet may cause problems with the radioactive iodine uptake.

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## What happens before the scan?

When you arrive for your first appointment, a Nuclear Medicine technologist will call you from the waiting room and take you into the treatment area. At this time you may ask any questions you have. The technologist will discuss the guidelines to follow for **3** days at home. The technologist will have you take the radioactive iodine capsule with a full glass of water.

You are then given an appointment to return to the Nuclear Medicine Department in 2 days for your body scan. This procedure takes about 1 hour.

Some people also return for a 2<sup>nd</sup> scan on the 3<sup>rd</sup> day as well. This depends on your doctor's orders.

## How long does the radioactive iodine stay in my body?

Radioactive iodine that is not taken up by your thyroid is eliminated through your body fluids such as urine, saliva, sweat and bowel movements. Most of this elimination occurs in the first week after treatment. Any radioactive iodine that remains in your body naturally disappears over the next 3 months.

## How can I reduce radiation exposure to my other organs and other people?

Most of the extra radioactive iodine is eliminated in your urine. It is important to drink fluids after your treatment and for the next 2 days. This lowers the amount of radiation exposure to your bladder. You may also be advised to suck on sour candies after treatment to help the radioactive iodine come out in your saliva.

These guidelines depend on your personal health history. Before your treatment begins talk to the doctor who ordered the test about:

- when to start and stop sucking sour candy if you are allowed to suck candy
- the amount of fluids you should drink

## What precautions do I follow at home?

In order to lower the risk of exposing others to radiation, you need to follow these guidelines for 3 (three) days.

### Time

The less time you spend around other people the better. This is very important with children and pregnant women. Avoid being close to pregnant women and children for at least 3 days.

When you are around people, spend no more than:

- 45 minutes a day at 1 meter or 3.5 feet **or**
- 2 hours a day at 2 meters or 7 feet **or**
- 7 hours a day at 3 meters or 10 feet

You can spend as much time as you like at 4 meters or 13 feet from other people. You may need to take time off work or school to meet these guidelines.

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## Distance

The greater distance from other people the better. For example, doubling your distance from someone decreases exposure by a factor of  $\frac{1}{4}$ . Examples of increasing distance include:

- Sleep alone.
- Do not sit right beside someone on a couch or in a vehicle.
- Sit as far away as you can from the person driving you home from the hospital.
- Do not use public transit.
- Do not go to the theatre or any event where you would be close to people.

## Hygiene

Good hygiene is very important to reduce exposure to others.

- If you can, use a separate washroom in the house. Clean this washroom well on the 4<sup>th</sup> day after treatment. If you do not have a separate washroom, clean the toilet and sink well after each use.
  - Wash your hands with soap and plenty of water each time you use the toilet.
  - Have at least 1 shower a day. No baths.
  - Keep the toilet and surrounding area very clean.
  - Men must urinate sitting down to avoid splashing.
  - Flush the toilet 3 times with the lid closed after each use.
  - Rinse the bathroom sink and tub thoroughly after using.
  - After brushing your teeth, spit into the toilet then flush the toilet 2 times.
  - Do not chew gum.
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**Food and dishes**

- Use separate dishes and wash separately for 3 days.
- Eat prepared food or prepare your own food separately from the people in your home.

**Clothes, bedding and towels**

- Wash separately.
- After 3 days of following these guidelines wash these 2 times before returning to general use in your home.

**Close contact**

- Avoid kissing and sexual intercourse.

**What about pregnancy?**

Radioactive iodine is not given during pregnancy. You should wait 6 months after having this scan before becoming pregnant or fathering a child. There may be other reasons why you should avoid being pregnant so talk to your doctor about this.

**What about breastfeeding and caring for a baby?**

You cannot breastfeed since radioactive iodine is secreted in breast milk. Limit time spent in close contact with your baby for 3 days. After 3 days, you can care for your baby again.

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**Please arrive 15 minutes early to allow for parking, getting to the Nuclear Medicine Department and checking in:**

**Check in at the:** Nuclear Medicine Department  
Level 0 – Marian Wing  
St. Joseph’s Hospital  
50 Charlton Avenue East  
Hamilton, Ontario L8N 4A6

**If you need to cancel or reschedule your appointment call:**  
905-521-6095

**If you have any questions call:**  
Radiation Safety Officer  
St. Joseph’s Healthcare Hamilton  
905-522-1155, ext. 33311