

Contact information for the Nuclear Medicine Department

Regular hours



905-521-6095
Monday to Friday
7:30 a.m. to 4:30 p.m.

After hours



905-522-1155, ext. 33311 (hospital paging system)
Page the "Radiation Safety Officer".

Please arrive 15 minutes early to allow for parking and registration.

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 or if you have any questions call:

Nuclear Medicine Department
905-521-6095

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

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

- the doctor caring for your thyroid condition, or
- the Nuclear Medicine Department (see page 8)

What is radioactive iodine?

The radioactive form of iodine is also called radioiodine. It has been used since the 1950s to treat problems such as hyperthyroidism and thyroid cancer. It is also used to test thyroid function.

Am I radioactive after treatment?

Yes, but only as long as the radioactive iodine remains in your body. Some radioactive iodine stays in your thyroid to get the desired treatment effect. The rest is eliminated in your body fluids such as urine, saliva, sweat and bowel movements.

You need to follow precautions for 3 days to make sure you reduce the amount of radiation to which you expose others.

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 after you take the radioactive iodine capsule.**

You must sign a "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 you, your family and members of the public.

Is there any preparation?

Before treatment, 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 eligible to take a medication called Thyrogen™ to prepare for this scan. Your doctor may also ask you to follow a low iodine diet for 2 weeks before the scan and 2 days after the scan. This is because iodine in your diet may block the radioactive iodine uptake.

Women must be certain that they are not pregnant at the time they get the radioactive iodine. You may need to have a pregnancy test. If there is any chance that you are pregnant, the treatment will be cancelled.

Breastfeeding must be stopped completely since radioactive iodine is secreted in breast milk.

What about pets?

Many of the measures used to protect family members are also suitable for pets (cats, dogs).



For example:

- Do not allow your pets to sleep with you for 3 days.
- Avoid preparing food for your pets for 3 days, unless you wear gloves.
- Wash your hands well with soap and water before petting them.
- Follow the contact time/distance guidelines on page 4 as much as possible.

If you follow these precautions, pets will not receive harmful radiation exposure.

Emergency information

- If you vomit or spill urine at home in the 3 days after receiving the radioactive iodine capsule, clean up the spill yourself and contact the Nuclear Medicine Department.
- In the event of a medical emergency during the 3 days after receiving the radioactive iodine capsule do not delay treatment. Contact the Nuclear Medicine Department.
- In the event of death of a person who has received radioactive iodine, contact the Nuclear Medicine Department.



Preparing food

- Use separate dishes (regular non-disposable plates and cutlery) and wash separately from those of others in your home.
- Do not prepare food for others, unless you wear gloves.



Clothes, bedding and towels

- Wash bedding, towels and clothing worn during the 3 day period separately from that of others in the home.
- Wear slippers or shoes and socks.



Close contact

- Do not kiss, have sex or take part in any other sexual activities.



What about pregnancy?

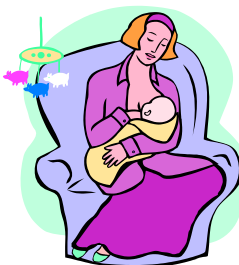
Radioactive iodine is not given during pregnancy. You should also wait 6 months to become pregnant or father a child.



What about breastfeeding and caring for a baby?

You cannot breastfeed after radioactive iodine as it 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.



The day you receive the capsule

On the day you receive the radioactive iodine capsule **do not eat or drink anything for 2 hours** before your appointment time. This is to make sure the radioactive iodine capsule will be absorbed.

What happens before the scan?

Go to the Nuclear Medicine Department. After you arrive, you are taken to a treatment room. The doctor will review the special precautions that you need to follow for 3 days. At this time you may ask any questions you have. You then sign a "Consent to Treatment" form. By signing this form, you are indicating that you agree to follow the special precautions in order to minimize radiation exposure to you, your family and members of the public.

The doctor 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 2 days later for your whole body scan. This procedure takes about 1 hour.

How long does the radioactive iodine stay in my body?

Radioactive iodine that is not used by your thyroid tissue will be eliminated through your body fluids. Also, every 8 days, half of the radioactive iodine present in your body becomes non-radioactive.

After 3 days of taking the radioactive iodine, you will have low levels of radioactive iodine which may remain in your body for a few months. This would only be a problem if you want to cross the border or take a plane as this radiation will be noticed by detectors. We will give you a letter stating that you received radioactive iodine to present at the border or airport if you need to travel.

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

Most of the radioactive iodine that your remaining thyroid tissue does not take up is eliminated in your urine. It is important to drink fluids after your treatment for the next 2 days. This lowers the amount of radiation exposure to your bladder.

These guidelines depend on your personal health history. Before your treatment begins, ask your doctor about the amount of fluid you should drink.

What precautions do I follow?

While travelling home from the hospital

Sit as far away from the driver as you can. For example, sit opposite the driver in the back seat. There should be no other passengers.



Once at home

In order to lower the risk of exposing others to radiation, you need to follow these guidelines for 3 days after taking the radioactive iodine capsule.

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 3 days**.



Distance

The **greater the distance** from other people **the better**.



Examples of increasing distance and decreasing time include:

- Sleep alone.
- Do not sit right beside someone on a couch or in a vehicle.
- Do not use public transit.
- Do not go to the theatre or any event where you would be close to people.

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, school or your normal activities to meet these guidelines.

Use good 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 4th day after treatment.
- If you do not have a separate washroom, clean the toilet bowl and sink well after each use.
- Wash your hands with soap and water each time you use the toilet.
- Have at least 1 daily shower. 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, shower and tub thoroughly after using.
- After brushing your teeth, spit into the toilet then flush the toilet 2 times.
- Do not chew gum.