What is Iodine-131 (I-131) therapy?
This therapy uses a form of iodine that is radioactive and is given in capsules. You will be given two separate capsules that have different strengths or doses. The first capsule is a low-dose capsule called a tracer dose. This dose helps your doctor make decisions about your treatment. The second capsule is a higher dose called a therapy dose. After receiving the therapy dose, you will be placed in a radiation isolation room until you are released by the Radiation Safety staff. The room has shielding in the door and in the walls to prevent the radiation from leaking into the hall and other rooms to keep other people safe.

Why do I need I-131 therapy?
This treatment is used to destroy any thyroid tissue not removed by surgery or to treat some types of thyroid cancer that have spread to lymph nodes or other parts of the body. I-131 collects in thyroid cells with little effect on the rest of your body. For a period of time after your therapy, blood, sweat, tears, saliva, urine, and stool will be radioactive.

What are the side effects of I-131 therapy?
You may experience dry mouth, an upset stomach, and/or lose your sense of taste and/or smell. These symptoms usually last for a short period of time. Sucking on sour candies or lemon wedges help with the dry feeling in your mouth. The nurse will offer these on a regular basis while you are on radiation isolation. Ask your doctor or nurse to give you medicine before taking the I-131 if you have a sensitive stomach.

Why am I on a low-iodine diet?
Your physician will discuss this with you before your I-131 therapy. You will be asked to follow a low-iodine diet at least 2 weeks before your treatment. You need to follow this diet to “starve” the thyroid cells of iodine. This lets the radioactive iodine enter those cells more easily. Your thyroid cells do not know the difference between iodine that is radioactive and iodine that is not radioactive. Please read the patient handout titled “Low-Iodine Diet: Preparing to Receive Radioactive Iodine” to learn more about your low-iodine diet.

What should I do with my thyroid medication?
You may be asked by your healthcare provider to stop taking your thyroid medicine(s) 4 to 6 weeks before your therapy, or you may be scheduled to get Thyrogen injections for 2 days before the therapy. If your doctor decides to give you Thyrogen, there is no need to stop the thyroid medication. Your healthcare provider will explain the best treatment for your condition.

What do I need to know while I am inside the Radiation Isolation Room?
**Room Set-up:** There will be a paper cover on the floor, and there will be plastic covers on the furniture, doors, handles, and electronic switches. Please touch the covered parts only while inside the room. The coverings make it easier to clean the room of radioactive contamination after you leave. A string is placed across the door to remind you, visitors, and staff of your isolation status. You can leave the door open, remain in bed, or stay at least 8 feet away from the door.

**Visitors:** Visitors are not allowed inside the Radiation Isolation Room. They can stay outside of the room.

---

**Patient Information**

---

**Iodine I-131 Therapy**

---
while you are standing, sitting, or lying on the bed at the other end of the room. We encourage you to talk to your family and friends on the telephone instead of having them visit you.

Nursing Staff
The nursing staff will monitor you regularly. Use your call bell if you need any assistance. Do not step out of the room. Follow these instructions when medicine, water, food, or other items are delivered to you:

1. Roll the bedside table by the door.
2. Step back to your bed, at least 8 feet away from the door.
3. Once the item(s) are placed on the bedside table, wait for the staff to leave before rolling the table back to your bedside.

Personal Items
You may bring in your personal items like eyeglasses, dentures, rings, or contact lenses. These items should be washed or rinsed frequently before you are released from radiation isolation. Any other items like books and magazines must stay in the room and will be thrown away after you leave. You will be wearing hospital provided gowns or scrubs the entire time that you are on radiation isolation. If you need extra gowns, scrubs, towels, or wash cloths, let your nurse know.

Preparation for release from radiation isolation
How long you stay inside the Radiation Isolation Room depends on how much I-131 you received and how fast I-131 is eliminated from your body. Radiation Safety staff will come to your room daily to measure your radiation levels. These radiation levels will decrease every day. Once the Radiation Safety staff determine that your radiation level has reached a safe level, you will be released from radiation isolation. The following steps will help lower radiation levels in your body during your stay:

- Drink a lot of water, at least a cup per hour while you are awake.
- Void frequently, at least every 2 hours while awake. Flush the toilet at least 3 times after each use.
- Shower frequently, at least 2 to 3 times daily, and change into a clean gown after every shower.
- Increase your body’s metabolism by frequently walking rather than lying on the bed.

What special precautions do I have to follow when I go home?
When you go home, you will still have some radioactive I-131 in your body. The Radiation Safety staff will give you instructions that you and your healthcare provider will review before you go home. You need to follow these instructions for the next 7 to 14 days while at home to reduce radiation exposure to other members of your family. These instructions will address caring for your children, having sex, sleeping in the same room with other family members, using the toilet, and washing your dishes and clothes. Do not breastfeed or save your milk until instructed by your health care provider. If you plan to get pregnant or father a child, speak with your doctor about this before your treatment.

This information is prepared specifically for persons taking part in clinical research at the National Institutes of Health Clinical Center and may not apply to patients elsewhere. If you have questions about the information presented here, talk to a member of your health care team.

Products/resources named serve as examples and do not imply endorsement by NIH. The fact that a certain product/resource is not named does not imply that such product/resource is unsatisfactory.

Patient Information

Iodine I-131 Therapy