Patient Guide
Radioiodine (Iodine-131) Therapy

Radiation Safety Office
You and your doctor have decided on radioiodine therapy to treat your thyroid condition. The procedure itself is a common and painless one, in which you swallow one or more capsules (or in some cases drink a liquid) containing a radioactive form of iodine called iodine-131, or I-131. Once administered I-131 is quickly taken up by your thyroid gland. The radiation emitted by I-131 reduces the size of the thyroid, or destroys diseased thyroid tissue. Your body has the natural ability to eliminate the radioiodine once it has served its purpose. This allows the treatment to be completed in a few days.

During treatment you are radioactive, emitting radiation and excreting radioactive iodine in body fluids including urine, feces, saliva, and sweat. This means that for a number of days after you swallow the radioiodine you can cause radiation exposure to others, and items and surfaces that you contact could become radioactively contaminated. In order to limit radiation exposure to others and to prevent the spread of radioactive contamination it is necessary for you to remain in the hospital in a specially prepared room, generally for 2 to 5 days. For this reason you will be given a private room with a private bath. The room is basically no different from other private hospital rooms except you will notice that paper and plastic have been placed on the floor and other surfaces to make it easier for us to control radioactive contamination and to clean the room after you are released from the hospital. Avoid bringing personal items to the hospital during treatment. Personal belongings are likely to become radioactively contaminated. Radiation Safety will have to hold contaminated personal effects for months until they are free of contamination before they can be returned to you.

On the day of treatment a personalized dose of radioiodine will be prepared according to your doctor’s orders. It will be brought to you in capsules or liquid form in a lead container. At the time you take the medicine there will be several people present including your doctor and a Radiation Safety Technologist, or RST. Take the medicine quickly to avoid unnecessary radiation exposure to hospital staff.

The RST will visit you several times each day during your hospital stay. The RST is a qualified professional trained in the safe use and handling of radioactive materials. It is the RST’s responsibility to prepare your hospital room before you are given your medicine. More importantly to you, The RST will monitor the progress of your treatment. The RST will use a special meter to measure the radiation emitted from your body to determine how quickly your body is getting rid of the radioiodine. Meter readings will help the RST determine when your body has gotten rid of enough of the radioactive iodine so that you may be safely released from the hospital. Since everyone is biologically different, there is no way to accurately predict how long it will take for your body to get rid of the iodine. Typical hospital stays range from 2 to 5 days. The RST will keep you informed of your progress in eliminating the radioiodine.
Frequently Asked Questions

Will I be radioactive?

Yes, but only as long as the radioiodine remains in your body. The radioiodine will be eliminated by the body through all of the normal routes of elimination, including urine, feces, sweat, and saliva. Radioiodine will transfer to anything that you handle or that contacts your skin, such as bed linens or eating utensils. It is for this reason that you will use disposable eating utensils. It is also why we request that you avoid bringing personal items to the hospital room during treatment. Permanent fixtures and furnishings in your room will be covered with disposable materials. This is to aid in the complete removal of the radioiodine contamination after the completion of your treatment. We request that you make every effort to remain in the areas of the room covered by paper. Hospital personnel will use gloves, gowns, and other protective apparel to avoid getting the iodine on them. Nursing personnel have been instructed to attend to your needs quickly and then to leave the room to keep their radiation exposure low.

What does the iodine taste like?

There should be no strange taste after swallowing your medication. The radioiodine may be either in capsule or in liquid form. There may be anywhere from one to several capsules depending on the dose your doctor has ordered. You should swallow them as you would a vitamin tablet or any other capsule, one at a time. If your medicine is in liquid form you may notice a slight salty taste. There should be no immediate side effects and you should not feel differently immediately after taking the medicine. Although uncommon, some patients who are receiving large radioiodine doses may notice a slight dryness in their throats. This is perfectly normal and can be relieved by drinking water or sucking on some hard candy.

May I have visitors?

Visitors are not permitted during your hospital stay to protect them from radiation and contamination.

How do I handle personal needs?

Nursing staff will provide personal care items as well as a hospital gown to wear. Leave these items in the room after you are released from the hospital. The Radiation Safety Office will dispose of these items since they will be radioactive. Shower twice a day and wash your hair at least once a day to remove iodine from your skin and hair. This reduces the amount of radioactive iodine in your room and helps to get more accurate readings of the iodine levels remaining in your body. Put on fresh clothing after you shower. Flush the toilet twice after each use to help reduce the amount of radioactive iodine present. Men should sit when using the toilet to avoid splashing contaminated urine in the bathroom.
How do I get my meals?

The diet recommended by your doctor will be provided through the normal hospital channels. Disposable food items such as paper plates, forks, knives, and spoons should be placed in the bag or container provided in your room for pickup by the Radiation Safety staff.

Why must I remain in my room?

The treatment that is beneficial for you is potentially harmful to hospital staff, the general public, and members of your family. The radioiodine is a drug prescribed just for you by your doctor.

State law limits the amount of radiation that hospital staff and members of the public may be exposed to from medical treatments involving radioactive material. Radiation safety precautions are taken to comply with state law and to ensure the safety of others. One precaution is remaining in your room during your hospitalization. This prevents the unnecessary spread of radioiodine and the unnecessary radiation exposure of others.

Can I bring personal items such as my cell phone, tablet computer, or laptop?

No, personal items such as electronic devices are not permitted in the hospital room during radioiodine treatment. Anything in the room is subject to radioactive contamination. Electronic devices are very difficult to decontaminate, and generally must be stored by Radiation Safety for an extended period until the radioactive material dissipates. This process may take months.

When can I go home?

How long you are hospitalized depends on many factors, including the nature of your medical condition and the dose of radioiodine that you receive. Normally hospitalization lasts 2 – 5 days. You may be able to speed up the process by drinking lots of fluids. The RST will inform the nursing staff when the radioiodine has decreased to the desired level in your body to permit safely releasing you from the hospital.
Once the amount of radioiodine in your body has decreased to the desired level, all that remains is to get the doctor’s release order, take a final shower, and change into clean clothes. The RST will give you radiation safety instructions at the time of release. Even though the amount of radioactive iodine in your body will be very low at this time, a very small amount will remain for several more days. This will not interfere with most daily activities, but you should read the discharge instructions carefully.

What precautions should I take after being released from the hospital?

Your release from the hospital is based on limiting the radiation exposure that you could give to family members or the public. Because the exposure from your body is low, you may be released with limited restrictions. However, small amounts of radioactive iodine remain in your body and will be released in the ways we discussed earlier. For added safety, for the next five days following release from the hospital:

- Remain at least six feet from pregnant women and persons under 18 years of age.
- Avoid mouth-to-mouth kissing and unprotected sex (use a condom).
- Do not share eating utensils with others.
- Do not prepare food for others.
- Drink plenty of fluids (preferably water).
- Men should sit on the toilet when they urinate.
- Flush the toilet twice after each use.
- Wash hands thoroughly after using the bathroom.
- Wash your eating utensils and clothing separately from those of others.
- If you have recently delivered a baby discontinue breastfeeding for that child.
- If you need emergency surgery or medical attention, inform the attending medical staff, contact your doctor and the Radiation Safety Office.

Please feel free to ask questions at any time during your stay with us. Radiation safety related questions may be directed to the Radiation Safety Office at (706) 721-9826. Medical questions should be directed to your doctor.