

# Radioiodine Treatment of Hyperthyroidism

This pamphlet is for you, “the patient” who will be treated with radioiodine, a radioactive form of iodine. It includes special instructions for you to follow:

## 1. Why will you receive radioiodine treatment?

You will receive radioiodine because you and your doctor agree that it is best treatment for your thyroid condition. Most of the radiation from the radioiodine will be absorbed by your thyroid gland and will interfere with the function of the thyroid cells. Some of the radiation will leave your body and people who are in close contact with you may be exposed to small amounts. There is no proof that this exposure causes harm. Efforts should always be made to avoid unnecessary exposure to radiation.

## 2. Ask your doctor?

The best source of more information on your treatment is your doctor. This lists some guidelines for you to follow for 2 to 5 days after your treatment, (depending on your treatment and your doctor’s instructions). You may decide that you will want to follow all or only some of the suggested guidelines. These are only suggestions to help you make decisions as you discuss your questions and concerns with your doctor.

## 3. How does radioiodine work?

The thyroid gland gathers the iodine that enters the body in food and uses this iodine to make the thyroid hormone. Radioiodine is collected by the thyroid gland. The radiation given off by this form of iodine lessens the function of the thyroid cells and slows their ability to grow. This is the reason you will be given this medication. Radioiodine treatment is a common, well-accepted form of treatment that has been used all over the world for more than 30 years.

Most of the radiation from the radioiodine will be gathered by your thyroid gland. Other tissues in your body will get a little radiation. This small amount of radiation has **not** been shown to cause harm.

## 4. Potential Side Effects?

Reactions to this treatment are few and minor. One risk is that you will become hypothyroid (underactive thyroid). This can be treated with thyroid hormone pills.

Controlling an underactive thyroid is much easier than an overactive gland.

Other less common reactions are slight swelling and tenderness of the thyroid or salivary glands over several days and occasional short term (several days) worsening of the hyperthyroid symptoms.

No other significant long-term problems have been related to this treatment.

#### 5. **How long does the radioiodine stay in your body?**

The radioiodine from your treatment will stay in your body for a short time. Most of the radioiodine not collected by your thyroid gland will go away during the first 2 days after your treatment. Radioiodine leaves your body in your urine, but small amounts may leave in your saliva, sweat, and stools. The amount of radioiodine left in your thyroid tissue is the desired medical effect. This amount also decreases rapidly. This means that the possibility of radiation exposure to you and others is less with time. At the end of treatment, **no** radioiodine stays in your body.

#### 6. **How can others be exposed to radiation from the radioiodine given to you?**

Exposure to radiation from the radioiodine in your body may occur if other people stay close to you for long periods of time. The radiation given is like the radiation from medical and dental x-rays, which are the most common and familiar sources of radiation exposure.

Contamination with radioiodine can occur if it is left in any place where other people may have contact with it. If some of the radioiodine in your saliva gets on the bathroom sink as you brush your teeth and then on to someone's hands, contamination has occurred. If this radioiodine is then taken into someone's body from the hands or from food that has been touched, it will cause a small amount of radiation exposure to that person.

Radioiodine disappears by itself as part of the physical processes that make it radioactive. It will not remain on the sink long because the amount is reduced by one-half every 8 days.

#### 7. **How can you reduce radiation exposure to others?**

The amount of radioiodine in your body during the treatment is small. It makes sense to take steps to minimize exposure, no matter how small. If you take some simple steps during the first few days after your treatment you can reduce or cut the possibility of radiation exposure to others.

#### **There are three basic rules to remember:**

1. **Distance** – the farther away from others, the less radiation they will get. An increase in distance of a few feet will help to reduce exposure. Try not to be close to others for longer than necessary.
2. **Time** – radiation exposure to others depends on how long you are close to them. You should try not to be in close contact with others.
3. **Hygiene** – good hygiene lessens the possibility of people being contaminated with the radioiodine that leaves your body. Since most of the radioiodine leaves your body in your urine, good toilet hygiene and careful and good hand washing will reduce the chance of contamination.

## Important Guidelines to Help You Apply These Basic Principles:

Your doctor can recommend which guidelines are important to you and how long you should follow them. Do not hesitate to ask your doctor for more information.

- Avoid physical contact with children and pregnant women; the thyroid glands of children and unborn babies are more sensitive to the effects of radioiodine than those of adults.
- If you have a baby, or you are taking care of one, your doctor can tell you how to follow the guidelines. You probably can do all the things necessary to care for your baby. It is better not to have the baby too close (such as sitting in your lap) for more than a short time during the first 2 days after treatment.
- If you are breast feeding a baby, you **must** stop because radioiodine will be in the breast milk.
- If you are pregnant, or think you could be, tell your doctor. Radioiodine treatment should not be given during pregnancy. If you are planning to become pregnant, ask your doctor how long you should wait after treatment.
- Wash your hands with soap and water each time after you go to the toilet.
- **Keep the toilet very clean.** Flush it 2 times after each use.
- **Rinse the bathroom sink and tub carefully after you use them.** Doing this will reduce the chances of others becoming contaminated from the radioiodine in your saliva and sweat.
- **Drink plenty of liquids such as water or juices.** This will make you go to the toilet more often and help the radioiodine leave your body faster.
- Use separate eating utensils for the first few days and wash them separately. This will reduce the chance of contaminating other family members with the radioiodine in your saliva.
- Use separate towels and washcloths. Wash your bath towels, bed linens, and underwear that you use for the first few days separately.

**Important** – Note that these guidelines are carried out for the **first few days (3-5)** after treatment. Your doctor can give you details as to how long you should follow these precautions.

*Nova Scotia Health Authority promotes a smoke-free and scent-free environment.*

*Please do not use perfumed products.*

*Thank you!*

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