

## IF URINE OR VOMIT SPILLS ON THE TOILET OR FLOOR

- Wear rubber gloves to clean up any spill.
- Small amounts should be cleaned up with toilet paper and flushed down the toilet.
- Far larger amounts of vomit, use paper towels or cloths and collect these in a separate plastic bag. Bring the bag to the Nuclear Medicine Department at St. Catharines Hospital for disposal.
- Notify the Nuclear Medicine Department if a non-caregiver has helped with the clean-up procedure. This person may need thyroid screening.

## IF YOU HAVE CONTACT WITH SMALL CHILDREN

Here are some simple suggestions that can reduce the radiation exposure to your child:

- For the first 2 days after your radioiodine treatment, arrange for another adult to do most of the child care. An occasional hug is not harmful.
- You cannot breastfeed after a radioiodine treatment.
- For the rest of the first week after your radioiodine treatment:
  - Cradle the child in your arms at waist level (not over your shoulder where he/she is closer to your thyroid).
  - Holding your child for 30 minutes 6 times a day is safe and should allow you to look after essential activities (feeding, changing, etc.).
  - Do not sleep with your child.

## ASK YOUR DOCTOR:

Your doctor can best decide which items are important for you and if these need to be changed for your specific situation. Talk to your Endocrinologist.



## NUCLEAR MEDICINE: Instructions for Patients Receiving Radioiodine Treatment

You will be treated with radioiodine, a radioactive form of iodine. The pamphlet will briefly describe the treatment and provide special instructions for you to follow when you go home afterwards.

### WHY WILL YOU RECEIVE RADIOIODINE TREATMENT?

You will receive radioiodine because you and your doctor have agreed to it as the most appropriate treatment for your thyroid condition. The radiation from the radioiodine will be absorbed by your thyroid gland and will interfere with the function of the thyroid cells. This is the desired and beneficial medical effect of the treatment. Some of the radiation will leave your body, and people who are in close physical contact with you may be exposed to small amounts. There is no evidence that such exposure has ever caused any harm. Efforts should always be made to avoid unnecessary exposure to radiation.

### COULD YOU BE PREGNANT OR ARE YOU BREAST-FEEDING?

If you are pregnant, or think you could be, tell your doctor because radioiodine treatment should not be given during pregnancy. You should avoid pregnancy after the radioactive iodine treatment for a minimum of 6 months. Radioactive iodine is excreted in breast milk so breast feeding mothers should not be treated with radioactive iodine.

## HOW DOES RADIOIODINE WORK?

The thyroid gland takes the iodine from food sources and uses it as a building block in thyroid hormone production. Radioiodine is also collected by the thyroid gland. The radiation given off by this form of iodine causes the thyroid cells to stop working and growing, and this is why you will be given this treatment. Radioiodine is a common, well-accepted form of treatment that has been used all over the world for more than 40 years. Most of the radiation from the radioiodine will be concentrated in your thyroid gland. Other tissues in your body will also receive some radiation but this small amount has not been shown to produce any adverse effect.

## HOW LONG DOES THE RADIOIODINE STAY IN YOUR BODY?

The radioiodine from your treatment will remain in your body for only a short time. Most of the radioiodine not collected by your thyroid gland will be eliminated during the first 2 days after your treatment. Most radioiodine will leave your body in your urine, but very small amounts will also be in saliva, sweat, vomit and stool. The amount of radioiodine remaining in your thyroid tissue is responsible for the desired medical effect. However, this amount also decreased rapidly and eventually no radioiodine remains in your body. This means that the amount of radiation exposure to you and others falls with time. The radioactivity is reduced by one-half every 8 days. This is what is meant when it is said that the "half-life" of the radioiodine is 8 days.

## HOW CAN OTHERS BE EXPOSED TO RADIATION FROM THE RADIOIODINE GIVEN TO YOU?

Exposure to radiation from the radioiodine in your body occurs if other people stay very close to you for long periods of time. The radiation received is very similar to that radiation from medical and

dental x-rays. If radioiodine in your urine gets on your hands it can be transferred to other objects and people. If someone else takes this radioiodine into their body from food that you have touched, it will cause a small amount of radiation exposure to that person.

## HOW CAN YOU REDUCE RADIATION EXPOSURE TO OTHERS?

There is no evidence that small amounts of radiation will cause any problem, but it makes sense to take steps to minimize exposure, no matter how small. Simple precautions can reduce or eliminate the possibility of radiation exposure to others. There are three basic rules to think about during the first 2 days after your radioiodine treatment:

**Distance:** The greater the distance you are from others, the less radiation they will receive. A distance of one arm's length should be maintained between you and others whenever possible.

**Time:** The radiation dose to others depends on how long you spend with them.

**Hygiene:** Good hygiene is important since most of the radioiodine leaves your body in your urine. Careful and thorough washing of your hands will reduce the possibility of contamination.

## WHAT ARE THE POTENTIAL SIDE EFFECTS OF THIS TREATMENT?

Nausea and vomiting, sore throat/neck, salivary gland pain and change in taste are common reported side effects that are generally temporary. It may take months for the treatment to work and you may require a second treatment.

If you feel your symptoms markedly worsen, or you feel the most fatigued you have ever felt, contact your doctor. This may represent hypothyroidism or under active thyroid which then is treated with oral thyroid hormone replacement.

## IMPORTANT INSTRUCTIONS FOR THE FIRST 4 DAYS AFTER YOUR RADIOIODINE TREATMENT:

- Sleep alone and avoid intimate contact such as kissing or sexual intercourse.
- Wash your hands with soap and plenty of water after you use the toilet.
- Keep the toilet especially clean and flush two times after each use. Men should sit to urinate. Thoroughly clean up any spilled urine while wearing rubber gloves.
- If you have problems with bladder control, tell your doctor.
- Use separate towels and wash separately.
- Bath or shower daily.
- Drink plenty of liquids. This will help the radioiodine to leave your body more rapidly.
- Do not prepare meals for others.
- Use separate eating utensils and wash them thoroughly. Sharing food, such as drinks, ice cream etc. should be avoided.
- Limit time in crowded places such as cinemas, theaters, malls and restaurants.
- Do not travel by airplane, bus or train on the first day after your treatment if the trip will take more than 4 hours.
- If you cross the border to the US, you will potentially set off radiation alarms for the next 95 days. (Society of Nuclear Medicine Statement)
- Take at least 2-4 days off from work if possible to limit exposure to other workers.