

RADIATION SAFETY INSTRUCTIONS FOR PATIENTS ADMINISTERED THERAPEUTIC RADIOACTIVE IODINE “I-131”

The thyroid gland accumulates the iodine entering your body in food and uses this iodine to perform its normal functions, which is to make thyroid hormone. The thyroid processes radioiodine in a similar manner. The radiation given off by this form of iodine decreases the function of the thyroid cells and inhibits their ability to grow, which is the desired medical effect. However, some of the radioiodine will leave your body, and individuals who are in close physical contact with you may be exposed to small amounts. There is no evidence that such exposure has caused harm, but efforts should be made to avoid unnecessary exposure to radiation.

For the next few days you will be excreting large amount of radioiodine mainly in your urine. Smaller amounts may be present in your saliva, perspiration, blood, and other body fluids. Your body will be giving off radiation (much like a radiator gives off heat), the amount of this estimated radiation will decrease rapidly during the first 2-3 days and then more slowly after that. Unlike the heat that is given off by a radiator, you and others will not be able to feel, smell, or hear this radiation. Therefore, it is important that you observe the following instructions regarding your behavior after I131 therapy. This will ensure safety of your family, friends, and co-workers.

You can reduce radiation exposure to others by using the following guidelines (usually seven days after your treatment). However, your doctor can recommend which guidelines you should follow and will give you specific instructions as to how long you should follow these precautions. Be sure to discuss your questions and concerns with your doctor.

There are three basic principles to remember to reduce radiation exposure to others:

1. **Distance.** The greater the distance you are from others, the less radiation they will receive.
2. **Time.** Radiation exposure to others depends on how long you remain in close contact to them. The less time you spend with others, the less radiation they will receive.
3. **Hygiene.** Good hygiene lessens the possibility of contaminating / transferring I131 to others.

Other important information:

1. If you are pregnant, or think you are, tell your doctor because radioiodine should not be given during pregnancy. If you are planning to become pregnant, ask your doctor how long should wait after the treatment.
2. If you have been breastfeeding your baby, you must stop because radioiodine is secreted in breast milk. Talk to your doctor to find out when you can resume breastfeeding.

More specific instructions are listed below: