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## Get the Facts About Exposure to I-131 Radiation



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### How Do Doctors Diagnose and Treat Thyroid Cancer?

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### NCI Highlights

## How Do Doctors Diagnose and Treat Thyroid Cancer?

There are two methods of investigating a thyroid lump or nodule:

1. **Ultrasound**--to locate and describe the lump, and
2. **Biopsy**--to determine if the lump is cancerous.

Thyroid ultrasound creates pictures by bouncing sound waves off the gland. This technique is painless and quick. But it cannot determine whether a lump is cancerous. The ultrasound device uses sound waves that people cannot hear. A computer uses the echoes to create a picture called a sonogram. From the picture, the doctor can see:

- How many nodules are present
- How big they are
- Whether they are solid or filled with fluid



Confirmation of cancer requires biopsy, usually using fine needle aspiration. Cells removed from a nodule during biopsy are directly examined in the laboratory with a microscope.

Fine needle aspiration biopsy—in which a few cells are withdrawn from a nodule in a thin, hollow needle—is fast and carries minimal risk. Most people with a thyroid nodule who have a biopsy turn out not to have thyroid cancer. But even noncancerous nodules require medical follow-up. If a diagnosis cannot be made from the biopsy, the doctor may operate to remove the nodule. A pathologist then checks the tissue for cancer cells.



If thyroid cancer is found, it is treated by removing the thyroid gland. People who undergo surgery will need to take thyroid hormone replacement pills for the rest of their lives.

Unlike many other far more common and threatening cancers, thyroid cancer is generally cured by surgery, often along with postoperative radioiodine treatment. People who think they may be at risk for thyroid cancer should discuss this concern with their doctor. The doctor may suggest a schedule for checkups.

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