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Get the Facts About Exposure to I-131 Radiation



Posted: 08/01/2003

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Introduction

During the Cold War in the 1950s and early 1960s, the U.S. government conducted about one hundred nuclear weapons (atomic bomb) tests in the atmosphere at a test site in Nevada. The radioactive substances released by these tests are known as "fallout." They were carried thousands of miles away from the test site by winds. As a result, people living in the United States at the time of the testing were exposed to varying levels of radiation.



Among the numerous radioactive substances released in fallout, there has been a great deal of concern about and study of one radioactive form of iodine--called iodine-131, or I-131. I-131 collects in the thyroid gland. People exposed to I-131, especially during childhood, may have an increased risk of thyroid disease, including thyroid cancer. Thyroid cancer is uncommon and is usually curable. Typically, it is a slow-growing cancer that is highly treatable. About 95 out of 100 people who are diagnosed with thyroid cancer survive the disease for at least five years after diagnosis.

The thyroid controls many body processes, including heart rate, blood pressure, and body temperature, as well as childhood growth and development. It is located in the front of the neck, just above the top of the breastbone and overlying the windpipe.

This brochure is designed to provide information about I-131 and its possible effects on the thyroid gland. A companion brochure offers a decision-making aid to help determine personal risk.

Although the potential of developing thyroid cancer from exposure to I-131 is small, it is important for Americans who grew up during the atomic bomb testing between 1951 and 1963 to be aware of risks.

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