

Information on Health Effects of Nuclear Testing: 1951-1962

From 1951 to 1962, approximately 90 above-ground, atmospheric nuclear bomb tests were conducted in Nevada. Based on recent studies, Americans may have been exposed to varying levels of radioactivity for about two months following each of the 90 tests. Exposure would depend on where a person lived, their age at the time of the tests, and the foods they consumed.

In 1990 Congress passed the Radiation Exposure Compensation Act for people who may have contracted cancers due to the radiation exposure from nuclear testing, principally from above ground nuclear testing between 1951 and 1962. The Act provides \$50,000 to victims and their survivors. People in 21 southwestern counties in Utah, Nevada and Arizona are currently covered.

Iodine 131

The most common radioactive material absorbed by people following these tests was Iodine 131. This radioactive material, which is absorbed through food and drink, builds up in the thyroid gland, a small gland in the throat that makes and controls hormones. Concerns have been raised that the fallout could cause thyroid disease, including cancer, in people who were exposed to it as children.

The average cumulative thyroid dose to people in the United States from the Nevada tests was about 2 rads. A rad expresses the amount of energy absorbed by the body during radiation exposure. In comparison, a chest x-ray gives the thyroid a dose of 0.007 rad; the average American receives a dose of 0.1 rad per year from cosmic rays and naturally occurring radioactivity.

National Cancer Institute Study

In October 1997 the National Cancer Institute released a report that investigated releases of fallout from testing at the Nevada site. Dose estimates for exposure to Iodine 131 were given for every county in the contiguous United States. The report shows Idaho had four of the five highest fallout readings in counties nationwide. These counties were Blaine, Custer, Gem and Lemhi counties with an average dose of 13.4 rad, 15.7 rad, 15.4 rad, and 13.0 rad, respectively. In addition, Idaho County was listed among the top ten nationwide with an average dose of 9.4 rad.

Idaho Hearings

In November, 2004 the National Academies Board on Radiation Effects Research held a public hearing in Idaho about possibly adding people from Idaho's Iodine 131 affected counties to the Radiation Exposure Compensation Act. The board is expected to report to Congress in March 2005 on its findings.

If you are concerned about thyroid disease or notice any unusual symptoms, you should talk with your health care provider. Thyroid diseases include Hypothyroidism, Hyperthyroidism and Thyroiditis. Radiation exposure can

cause nodules to grow on the thyroid, which can be malignant or benign. Persons who have thyroid nodules may notice an enlarged thyroid or small lumps on the thyroid. Other symptoms may include tenderness in the neck near the thyroid, difficulty in swallowing or hoarseness.

Your health care provider can do a physical exam of your thyroid and may order other tests to see if your thyroid is working normally. When diagnosed early, thyroid disease can be effectively treated. You also may want to contact your healthcare provider if you were a resident of the affected Idaho counties during the 1950-1962 radiation exposures and are concerned about your health.

Helpful Links

You may find the following Internet links helpful:

For information on cancer and exposure from 1950-1962 nuclear testing, the National Cancer Institute: <http://www.nci.nih.gov/i131>

For information on the Radiation Exposure Compensation Program: <http://www.usdoj.gov/civil/torts/const/reca/>

The National Academies Review of the 1997 National Cancer Institute Report and Public Health Implications (1999) <http://www.nap.edu/books/030906175X/html/1.html>