



UNITED STATES  
 ATOMIC ENERGY COMMISSION  
 WASHINGTON, D.C. 20545

CC FILE Thyroid 51y

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MAY 12 1966

Mr. John T. Conway  
 Executive Director  
 Joint Committee on Atomic Energy  
 Congress of the United States

Dear Mr. Conway:

This is to provide you with the most recent information on the occurrence of nodular thyroid abnormalities among the 69 surviving Marshallese Islanders exposed to fallout on March 1, 1954. Dr. Robert Conard of the staff of the Medical Department of the Brookhaven National Laboratory has just returned from the Marshall Islands where he and his team during February-March 1966 conducted the latest of the continuing series of medical examinations of these people.

Our last letter on this subject, dated October 26, 1965, advised that a cumulative total of 11 Marshallese had been found to have nodular thyroids at the conclusion of the medical survey conducted during August 1965. A nodular thyroid was first detected during the survey of February 1963.

The just-concluded survey has disclosed five additional people with nodules. This brings to 16 the number of diagnosed cases of nodular thyroids among the 69 survivors of the original 82 at risk. The age distribution of incidence is shown below.

Age at Exposure	Number Exposed	Total Incidence of Nodules through March, 1966	
		Number	Percent
1-5	16	9	56
6-10	9	4	44
11-15	7	0	-
16-20	5	0	-
> 20	<u>32</u>	<u>3</u>	<u>9</u>
	69	16	~25

Fifty-five of the 69 were on Rongelap Island and received estimated whole body doses of 175 R plus possible doses of 700 to 1400 rem to their thyroids from the radioiodine. The remaining 14 were visiting on Ailingnae, a nearby island, and received estimated 69 R whole body exposures plus less certain, but probably smaller thyroid doses. None of the six children (1-10 years of age) who were with the group on Ailingnae has shown nodules, but one of the three adults in the table was on Ailingnae.

Chairman

US DOE ARCHIVES  
 RG 326 U.S. ATOMIC ENERGY COMMISSION  
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 Box 69  
 OTH INCIDENCE OF THYROID  
 FOLDER CANCER OR OTHER DISEASES  
 IN THE EXPOSED GROUPS 1965-1968

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The only instance of cancer of the thyroid was seen in a Rongelap woman who was approximately 30 years of age at the time of exposure. The nodular condition seen in the young people is not a cancerous process, although cancers of the thyroid often grow in nodular fashion.

In August 1965 nearly all these people were placed on tetraiodothyronine, a synthetic thyroid hormone, on the basis that such therapy would modify the incidence and/or course of the nodular process. It appears to have been partially effective but it is still too soon to be definite.

Forty children of the same age grouping who were on Utirik Island and received 14 R whole body plus proportionately smaller thyroid exposures were also examined. They showed no signs of thyroid nodules or thyroid disease.

In addition, 194 unexposed Marshallese now living on these islands were examined; three instances of nodules were found, all among people more than 47 years of age.

Five of the Marshallese with nodular thyroids will be brought to the Brookhaven National Laboratory during May 1966 for further diagnostic study and possible surgery. One is a 46-year-old woman; the others are girls 13, 13, 13 and 20 years old now. They will be accompanied by the Rongelap school teacher who will act as interpreter. The treatment and travel of these six Marshallese have been developed with cooperation of the Honorable Wilfred Goding, High Commissioner, Trust Territory of the Pacific Islands.

You will be kept informed of the progress of these studies. An advanced copy of the public announcement on this subject prepared by the Brookhaven National Laboratory is enclosed.

Sincerely yours,

DOE ARCHIVES

(Signed) S. G. English

S. G. English  
Assistant General Manager  
for Research and Development

Enclosure:

"Five Marshall Islanders to be  
Examined at Brookhaven Medical Center,"  
announcement by Brookhaven National  
Laboratory