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MEMORANDUM FOR CHAIRMAN SEABORG COMMISSIONER RAMEY COMMISSIONER TAPE COMMISSIONER JOHNSON

THROUGH GENERAL MANAGER Donald C, Kull for

SUBJECT: RESULTS OF THE ANNUAL MEDICAL SURVEY OF THE MARSHALLESE PEOPLE EXPOSED TO FALLOUT IN 1954

408301

The subject survey carried out during March 1968 resulted in the detection of two more cases of thyroid nodules in children who were exposed to fallout on Rongelap when they were less than ten years of age. This brings the total number of cases of thyroid abnormalities in the 67 living Rongelapese to 21; of the 19 children in the more heavily exposed group who were less than 10 years of age at time of exposure, 17, or 90%, have developed thyroid abnormalities.

It was decided that 4 cases should be brought to the Brookhaven National Laboratory for complete medical evaluation and, if necessary, surgery. Preparations for their transportation and reception are now taking place. Three are people having thyroid nodules which had not responded to thyroid hormone therapy. The fourth is a 29-year-old woman with an unidentified tumor in the neck lateral to the gland. In the past, 11 Marshallese have undergone surgery; one woman exposed as an adult was found to have cancer of the thyroid, while 10 who were exposed when less than 10 years of age had benign adenomatous goiters.

The incidence of thyroid problems in this population is tabulated on the attached sheet.

John R. Totter

Director

Division of Biology and Medicine

bcc: Cong. Rel. (2)

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Thyroid Nodules Including Hypothyroidis in the Marshallese Populations as of

March 1968

Marshallese Populations as of March 1968

Persons Exposed	Age at Exposure	Whole Body Gamma Dose (rads)	Estimated Added Thyroid Dose from I*, (rads)	No. in Group	No. and Percent with Nodules	
Rongelap Island	V10	175 175	700 - 1400 160	36	17 (90%) 2 (5.5%)	
Ailingnae Island	√10 ∨10	69	275 - 550 55	9 8	0 1 (12,5%)	
Utirik Island	V 10	14 14	55 - 110 15	40	0 2 (3.4%)	
Control Marshallese <10	ve <10 < 10 < 10 < 10 < 10 < 10 < 10 < 10	61 133	0 0	0 0	0 3 (2,3%)	

Estimates of the doses to the thyroids of the Rongelapese were recomputed by R. James and J. Gofman, UCRL #12273. December, 1964. Estimates of the thyroid doses of the Ailingnae and Utirik people were by proportionality to the respective whole body gamma doses. *

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