



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

DC FILE

January 6, 1965

MEMORANDUM FOR CHAIRMAN SEABORG  
COMMISSIONER BUNTING  
COMMISSIONER PALFREY  
COMMISSIONER RAMEY  
COMMISSIONER TAPE

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THROUGH GENERAL MANAGER *Jak V. Chingone* JAN 7 1965

SUBJECT: FURTHER INFORMATION ON THREE MARSHALLESE GIRLS OPERATED ON FOR REMOVAL OF THYROID NODULES (SEE ATTACHED COPY OF PREVIOUS MEMO, THIS SUBJECT).

Dr. Robert A. Conard, Medical Department, Brookhaven National Laboratory, who has responsibility for conducting the clinical surveys, reports: "Sections of the nodules have been examined by a number of pathologists including Drs. S. Warren, G. H. Klink, H. A. Johnson and S. Lindsay. The consensus is that the nodules are benign, though with certain bizarre areas, and resemble iodine deficiency adenomata."

Dr. Lindsay noted that the nodules in the Rongelap cases are similar to ones he has seen in children following I<sup>131</sup> therapy. This Division has a file of Dr. Lindsay's histological reports and a review paper by Lindsay and Chaikoff, Cancer Research, 24:1099, 1964.

The radiation dosages which these children's thyroids may have received are being re-evaluated by Dr. John Gofman's group, Lawrence Radiation Laboratory.

It should be added that nodules in the thyroid glands of young people frequently become malignant in the course of time. Therefore, while these which were removed promptly after discovery were not malignant, there is a chance that in time they might have assumed neoplastic characteristics. Dr. Conard's next clinical survey will take place in February 1965.

*C. L. Dunham*

C. L. Dunham, M.D.  
Director  
Division of Biology and Medicine

Attachment:	
US DOE ARCHIVES	Memo dated 10/2/64
326 US ATOMIC ENERGY COMMISSION	from C. L. Dunham to Chairman Seaborg
RG _____	
Collection <i>Former Comm. Seaborg Files</i>	
Box <i>69</i>	
Folder <i>AM 2 INCIDENCE OF THYROID CANCER OR OTHER DISEASES IN THE EXPOSED GROUPS</i>	

NON-CCRP

STATUS VERIFIED BY *Arthur A. [Signature]* DATE *5-5-81*

Department of Energy  
Washington Office

C O P Y

October 2, 1964

MEMORANDUM FOR CHAIRMAN SEABORG

THROUGH GENERAL MANAGER

SUBJECT: THYROID DISEASE IN RONGELAP ISLANDERS

During the February 1964 annual medical survey of the Marshallese Islanders exposed to fallout from the March 1, 1954, shot over Bikini, three young teenagers, 13-14 years old, were found to have nodules in their thyroid glands. The medical team felt that two of them should have immediate thyroidectomies, and these operations were successfully carried out at the Naval Hospital on Guam with the full cooperation of the Trust Territory people and the medical services of the Department of Defense.

The pathological diagnoses were papillary adenocarcinoma, a malignant tumor of the thyroid. The prognosis, of course, is uncertain, but the surgeons are reported to have felt that they may have removed all the neoplastic tissue. While this information has not been transmitted formally, it is regarded as reliable. It is planned that a ten year summary of the health status of the exposed Marshallese, including these recent developments, will be prepared for prompt publication in a prominent journal such as the Journal of the American Medical Association.

Preparations are now going ahead to have the third child with a small nodule operated on as soon as possible. The estimated doses to these thyroids are some 100 to 175 rads external gamma plus 100 to 150 rads from absorbed radioiodine.

C O P Y

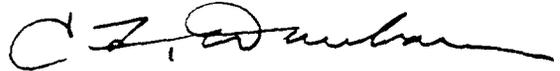
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C O P Y

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October 2, 1964

Since the spontaneous occurrence of two, and possibly three, cases of thyroid neoplasm among the small number of exposed Marshallese children is most unlikely, these observations will probably give rise to comment in various quarters. For this reason, it seems desirable to consider this matter as tentative until the documented data are in hand. You and the Commission will be informed promptly at that time.



C. L. Dunham, M.D.  
Director  
Division of Biology and Medicine

cc: Commissioner Bunting  
Commissioner Palfrey  
Commissioner Ramey  
Commissioner Tape

C O P Y

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Materials Office  
AMM-1100