

## UNITED STATES ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION WASHINGTON, D.C. 20545

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Mr. Oscar DeBrum
District Administrator
Marshall Island District
Trust Territory Pacific Islands
Majuro, Marshall Islands 96960

Dear Mr. DeBrum:

In July 1976 the people of Utirik Atoll wrote a letter to Mr. Roger Ray of ERDA's Nevada office. Their letter, a copy of which is enclosed, contained a number of comments and questions about ERDA activities at Utirik.

Set forth below, numbered and arranged in the order in which they were asked, are our best answers to the questions which have been raised. We believe it is entirely appropriate that the people receive information of this nature through their District Administrator.

As you are aware, the exposed people of Utirik have been given regular physical examinations by the medical team from ERDA's Brookhaven National Laboratory. During the past six years, special attention has been paid to thyroid examinations on an annual basis, and all of the people of Utirik have been encouraged to be examined and treated by the Brookhaven physicians at sick call. From 1973 until September 1976 the ERDA resident physician visited Utirik on a quarterly basis. These quarterly visits have been suspended only because of an expressed request of the people of Utirik.

1. Why is there not a control group in Utirik?

A comparison (control) group was selected so that the exposed and non-exposed people could be compared. This comparison group was selected in 1958 from the unexposed people of Rongelap. A separate group of exposed people from Utirik was not considered necessary since the Rongelap group was considered adequate for comparison with both the peoples of Rongelap and Utirik.



la. The people of Utirik are different from the people of Rongelap--they are a different gene pool and breeding population.

1b. The people of Utirik were exposed to different levels of radiation than the people of Rongelap--Utirik had 14 rads and Rongelap had 175 rads.

Despite the slight genetic difference between the two populations, the Rongelap control group was considered adequate and, hence, there was no reason to select a separate comparison group for Utirik.

Ic. There were different return times for the Utirik people and the Rongelap people from Kwajalein (following their evaluation) in 1954--the people of Utirik returned to their atoll after three months and the people of Rongelap returned to their atoll after three years.

After the evacuation of the Utirik people and after their examination at Kwajalein, it was determined that they should remain away from their atoll so long as the 1954 test series continued. Although extraordinary care was taken to prevent a recurrence of the March 1954 accident, the extra precaution of delaying the return of the people to Utirik was considered to be in their best interest. Soon after the 1954 test series was completed in May 1954, their return was authorized.

In the case of Rongelap, however, because the fallout had been much heavier than at Utirik, it was three years before the radiation decayed to levels which were acceptable for resettlement.

Id. Would it be correct to say that perhaps the Utirik people received more than only 14 rads in light of their quick return time to Utirik?

There is a critical difference between the estimated radiation dose and the incidence of thyroid nodules and cancer between exposed people of Rongelap and Utirik. Whereas the dose to the Rongelap people was more than 10 times higher than the dose received by the Utirik people, the incidence of thyroid cancers is not significantly different. Although we have no indication that the estimated dose was seriously in error, we are presently looking into the possibility of reexamining available information on the exposures on Utirik. We are specifically interested in determining whether the early return of the people of Utirik has affected their exposure history.

le. Would it be correct to say that we can expect many more cases of thyroid problems in the future?

At this time, it is impossible to predict whether more thyroid nodules will develop in the Utirik population. It is, therefore, of the greatest importance that the regular medical examinations be continued in the future. By having regular medical examinations, signs of thyroid disease can be detected early and promptly treated.

2. How come the ERDA doctors told us that there was just a little bit of radiation in Utirik and a lot in Rongelap? That is, why are there the same number of malignant thyroid glands in Utirik as there are in Rongelap?

The ERDA doctors gave the Utirik people their best estimate of the radiation dose they had received as a result of the 'March 1, 1954, accident. However, the three cases of thyroid cancer in the Utirik people, compared with four in the Rongelap people, is definitely a higher incidence than would be expected based on the estimated dose. The reason for this discrepancy is not known.

3. Why is it that the ERDA doctors do not examine the children of the exposed Utirik group?

Examination of children of the exposed Utirik islanders has not been considered necessary because large groups of children of radiation-exposed parents have been studied in Japan. Since these studies, supported by the findings of limited surveillance of Marshallese children of exposed parents, revealed no evidence of adverse health effects attributable to the parents' exposure, it was felt that regular examination of these children for this reason was not warranted. Recent discussions, however, have led to a decision that all Utirik children will be examined in the interest of improving their general level of health care.

4. Why is it that the ERDA doctors give different treatment to the people of Utirik than the people of Rongelap? They do not give full examinations to the people of Utirik every year as they do in Rongelap. Why not?

In past surveys, the same treatments were given to the exposed people of Rongelap and Utirik. The only difference between these two islands is that physical examinations were also given to a group of non-exposed people on Rongelap. This was done so that the physicians could compare the health of exposed and non-exposed people. For the non-exposed people on Utirik, medical expertise was available during sick calls.

Recently, during a review of the medical program, the decision was made to expand the ERDA medical program as may be required to assist the Trust Territory of the Pacific Islands in providing general medical care to the people of Rongelap and Utirik.

- 5. The people of Utirik should be able to choose their own doctor:
- a. The people of Utirik do not like Dr. Knudsen because he does not examine all of the Utirik people, and looks at the people of Utirik as if they are merely animals in a scientific experiment; and further, he does not provide a "sick call" for the people.
- b. The people of Utirik do not like Dr. Conard because he lies to the people, and has not helped the people to understand the problems that they confront in regards to the radiation and its effects.

We believe Drs. Knudsen, Conard, and Kotrady to be very capable and conscientious physicians who are deeply committed to the health and welfare of the people of Utirik. Moreover, as you are aware, in its report to the Congress of Micronesia, the Special Committee on Rongelap and Utirik commented favorably upon their work. Of course we are both surprised and distressed to learn of the dissatisfaction expressed by the people of Utirik. I feel that this must be due to misunderstanding and I am most appreciative of your efforts to assist us in resolving this problem.

- 6. Some years ago, the ERDA doctors discovered that a number of the Utirik people had adult-onset diabetes, and said that 25% of the people had the disease.
- a. Why haven't the ERDA doctors given medicine to the people who have the disease in Utirik (medicine: Diabinase)?
- b. Dr. Konrad Kotrady had asked the Trust Territory Gov't. (in Majuro) for the medicine (Diabinase), and they refused to give him any for the people of Utirik, and therefore, the people with this disease have not been properly treated.

Because of our overall concern for their welfare, the medical team has been studying diabetes in the Utirik people and other Marshallese people. With regard to the use of Diabenase in the treatment of this disease, Dr. James Field, an expert on diabetes from the University of Pittsburgh who had been studying diabetes in the Marshall Islands with the medical team, states that "there would be inherent risks in the use of the drug Diabenase in treating diabetes on Utirik or other outer islands in the Marshalls since long-term medical supervision and laboratory tests are necessary to insure its safe and effective use."

- 7. At present, the people of Utirik have much fear of the radiation that came from the bomb:
- a. Therefore the people of Utirik feel the need to have someone come out and do a study of Utirik for possible lingering radiation.

According to measurements made by the Brookhaven team in September 1976, the present radiation levels on Utirik are almost at a level one could expect from natural background radiation. However, a complete radiation survey of Utirik is expected to take place early next year. As soon as the results become available, we will be happy to discuss the results of the survey with the people of Utirik.

b. The people of Utirik feel that their arrowroot has been damaged as a result of the radiation. At present the arrowroot stalks measure one foot, whereas before the radiation they measured five feet.

With regard to your comment about the reduced size of arrowroot plants on Utirik, we can state that the results of studies of radiation effects on plants would not support radiation exposure as being responsible for a reduction in size of arrowroot or of any other plants growing on Utirik Atoll. Numerous studies of radiation on Utirik show the levels have been too low to result in such effects.

I deeply appreciate the support and advice which you have given to ERDA's medical and other scientific and technical teams over the years. I especially appreciate your candor in discussing our relationship with the people and their perceptions of ERDA's programs. If you or the people of Utirik have further questions or desire clarification of any of the matters discussed in this letter, please contact me.

Sincerely,

James L. Liverman, Director Division of Biomedical and Environmental Research

cc: R. Conard, BNL
R. Ray, NV
Ruth Van Cleve, Dept. of
Interior

