

Question and Answer Booklet
on Effects of Fallout on Rongelap and Utirik

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July 1974

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TRUST TERRITORY OF THE PACIFIC ISLANDS

Question and Answer Booklet
on Effects of Fallout on Rongelap and Utrik

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TRUST TERRITORY OF THE PACIFIC ISLANDS

January 4, 1974

Message from the Director:

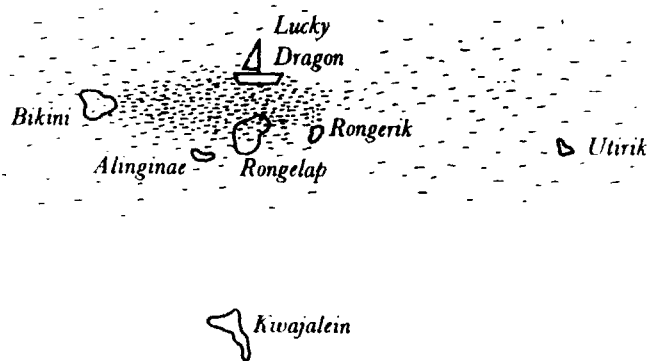
This educational booklet represents a significant effort to provide information to the people of Rongelap and Utirik about "radiation" and the circumstances of their exposure and illness.

Highlighting this project is the Department's attempt to provide facts to the people of the two atolls to satisfy the need for knowledge of this unusual health problem. The booklet is being prepared in both English and Marshallese language to assure clear understanding of the people who will read the booklet.

Much has been accomplished through the collection of data to be printed as public information in the booklet; but much more remains to be done.

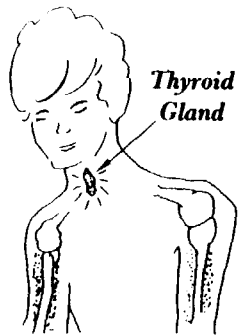
I would like to extend my appreciation to the staff and other participants for their dedication and effort to make this booklet possible. I also extend my greetings to the people of Rongelap and Utirik.

DR. MASAO KUMANGAI
Director of Health Services



Marshall Islands

Majuro



How does radiation cause diseases in our bodies?

Radiation in fallout caused injury to parts of the body. Later on these parts became sick and cannot do their job properly. There is very little radiation left in the body now.



How can we tell if we have radiation in our bodies?

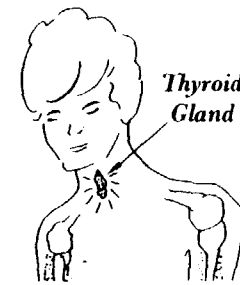
It is difficult for you to know if you have radiation in your body because there is so little. Only the experts can tell by checking you every year with special machines.

How can we get rid of the radiation in our bodies, trees, ground, crabs, etc?

Your body will remove some of the radiation naturally when you use the benjo but this takes a long time. The only way to get rid of the radiation in the trees, soil, crabs, etc. is to collect them and dump them into the ocean. But, since the radiation is weak there is no reason to do this.



Lush growth on Rongelap



Ewi wewen in poison komon naninmij ilo enbwini?

Poison in emaron komon bwe en wor nananmej ilo jet ian jikin ko ilo enbwini. Tokelik moton enbwin kein rej naninmij im jab maron in eman aer jermal. In — kio erik wot moton poison in eber ilo enbwin.

Ewi wewen bwe jen jela ke elon poison ilo enbwini?

Ekanoj in bin bwe jen jela ke elon poison ilo enbwini kinke edrik. Drimeletlet ro wot im aer jermal renaj jela ilo aer lale kom aolep year kin kein jermal ko air.

Ewi wewen bwe jen maron jolok poison in jen enbwini, kein ikan ko, bwirij ko, baru ko im men ko jet?

Enbwiniim enaj jolok poison in ne kwoj etal non mon bwirij ko botab erumwij. Juon wot wewen jolok poison in jen keinikan ko, bwirij ko, baru ko im men ko jet, jen aini im juloki na ilojet. Botab kin an poison in majno ejelko unim kommane menin.

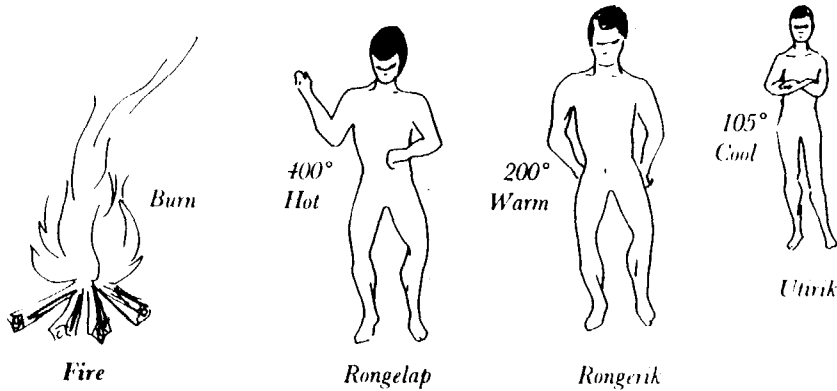


E aemourur keinikkan ko ion Rongelap

Did we people on Utrik get as much radiation as the people on Rongelap?

No, because Utrik is farther away from Bikini than Rongelap. One way to measure radiation is by counting the "rads". Below is the number of rads the people got in 1954:

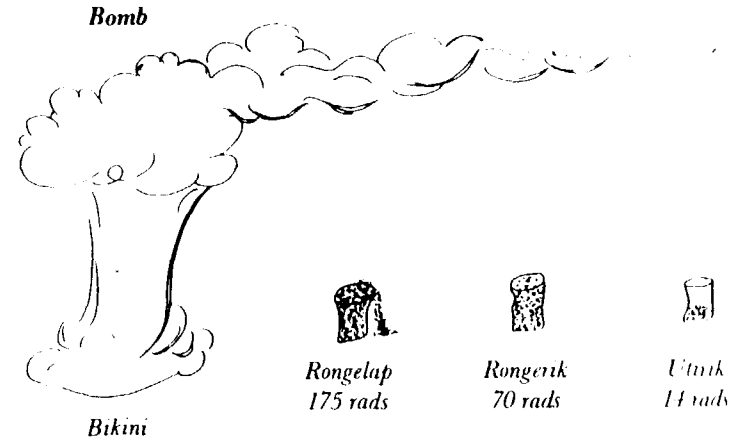
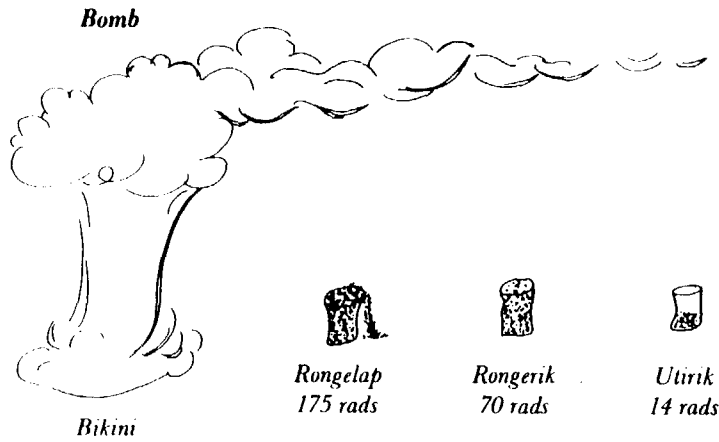
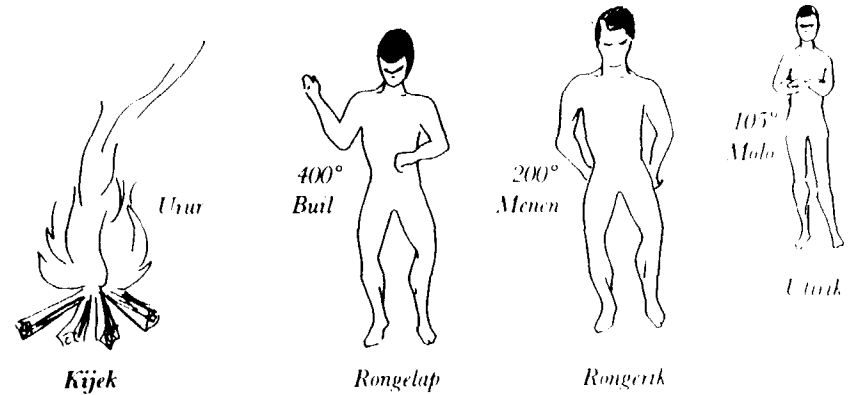
People on Rongelap.....	175 rads
People on Ailinginae.....	69 rads
Americans on Rongerik.....	70 rads
People on Utrik.....	14 rads



Kim armij in Utrik kim ar poison ke einwot armij in Rongelap?

Jab, kinke Utrik etolok jen Bikini jen Rongelap. Juon wewen jone poison co ej kin "rads". Lajrak in ilal ej number in rad ko rar walok non armij ilo 1954:

Armij in Rongelap.....	175 rads
Armij in Ailinginae.....	69 rads
Dri America ro ilo Rongerik.....	70 rads
Armij in Utrik.....	14 rads



No, because Utrik is farther away from Bikini. It is like fire. The closer you get to fire the hotter it gets. Heat is measured by degrees. Radiation is measured by rads.

Jab, kinke ettolok Utrik jen Bikini. Einwot kijek. Kijek ebakelok kijek co bice ej lablok am buil. Degree ej kowalok jonon buil. Rads ej kowalok jonon radiation

Is there still radiation in the ground? How long will it last?

Yes, there is a little radiation left in the ground but it gets weaker and weaker as time goes by.

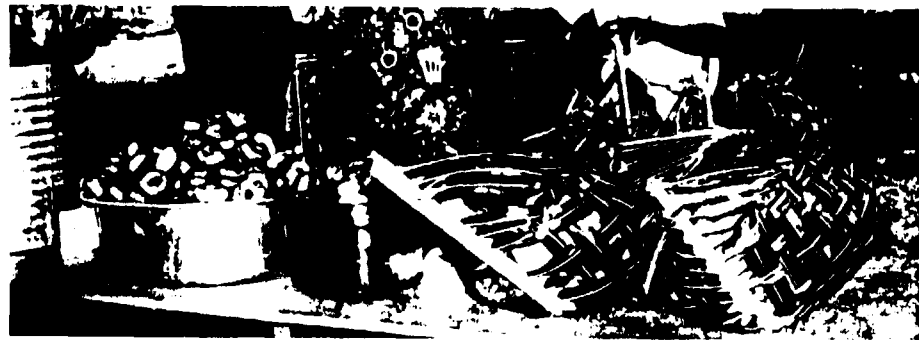


Woman washing clothes

It is like dirty clothes. If you wash them and lay them in the sun the dirt and poison will come away. The ground is too big to wash like clothes so the rain does it for you.

If the radiation is still in the soil of these islands, why is there no restriction of people moving into these islands?

The radiation in the ground is so weak that it is safe to live on the islands and eat the foods. There is no place in the world that does not have some radiation in the soil.



Feast on Rongelap

Ej wor wot ke poison ilo bwirij? Ewi to in an ber?

Act, ej wor wot jirik poison in ilo bwirij botab ej jakajurlok wot ne etolok an ber.



Lio ej kualkol nuknuk

Einwot nuknuk etton. Elane emwaj am kuali in nuknuk kojeyeki etton, meer in boyin ko renaj jako. Kinke ailin kane rellab kwojab meron in kuoli emwot ke kwoj meron in kuolkal nuknuk kinnenin wot rej kuoli nan yok.

Elane ej wor wot poison ilo bwirij in ailin kein, etke ejab mo an armij etal noni?

Poison eo ilo bwirij elukun jakajur inem ejelok jorren in jokwe ion eilin kein in kani mona ko ie. Ejelok jikin ion lal in en eban ejelok mottan poison in ilo bwirijin.



Kwojkwoj men ne rar komone ion Rongelap

Why can't we eat coconut crab and arrowroot?

You can eat the coconut crabs from the southern islands of Rongelap if you do not eat more than three crabs per week. There is still some radiation in the crabs because they eat their old shells when they grow new ones. The people on Utirik may eat all the crabs they want. Arrowroot may be eaten on Rongelap and Utirik.

Is there anything else that we are not supposed to eat?

No, you may eat anything else that is good for you.



*Person eating pandanus
You may eat anything else like pandanus.*

If the U.S. can reach the moon, how come they did not know that the wind was going to be shifted over to the islands?

There were some mistakes made. The U.S. can reach the moon because the equipment used to get man to the moon is under his control. The direction of the wind is more difficult to predict because the wind is not controlled by man.

Ta unin am jab maron mona baru im makmok?

Kwo maron mona baru ko jen ailin in rak ko i Rongelap elane kwojab kane elonlok jen jilu baru ilo juon week. Ej wor wot mottan poison ilo baru ko kinke rej kani kil mor ko kilier ne rej kokal kilier. Armij ro ion Utirik remaron mona baru jonan wot air konan. Armij ro ion Rongelap im Utirik remaron mona makmok.

Ebar wor ke men en jej jab aikuij in mona?

Ejelok, komaron mona jabdrewot men ko remon non juk.



*Armij in ej oror bob
Kwo meron in mone jabdrewot
mone einwot bob.*

Elane U.S. emaron in tobar alon, etke rar job jele bwe koto eo enaj kar mktak an kooj im ieok lok ene ko?

Ewor motan bwor ko rar komani. U.S. emaron tobar alon kon koin jetbal ko air im roj wanlon lok ilo kilan an lowaro maron. Ak koto ko eban ar ukot jen ial ko air.

Are miscarriages caused by the fallout?

Some of the miscarriages in exposed Rongelap women during the first years after the fallout may have been due to radiation exposure. Since that time there were only a few miscarriages and this is normal. Women no longer have to worry about miscarriages due to radiation.



*Children and women
They are healthy.*

If I have trouble with my thyroid, will I be healthy again?

If you are treated properly and you follow the doctor's advice, you should be healthy and strong like anybody else. You should be examined every year so the doctor can find out if you have thyroid disease. If the doctors operate on your thyroid, they will give you medicine. If you listen to the doctor and keep taking your medicine, you will stay strong and healthy.

Since people who were not exposed to fallout have been living on the islands for some time, have the Brookhaven doctors found any signs of radiation sickness in them and if so will they be compensated?

There is practically no chance that any of these people will develop any radiation sickness since the amount of radiation left on the islands is so small. If it did happen the government probably would consider compensation.

Poison in ear komon ke bwe en walok ak wor jibun (mej lojen)?

Jet ian limaro im rar jibun ak mej lojer elkin wot juon year in an kar walok poison in, bolen rar joren jen air bok poison in eil ien eo. Jen ien eo non kio, jet wot ak eiet jibun emovair walok im men in ejab men in ar bwilon. Kora ro rejab aikuj in inebata kin air naj jibun jen poison in.



*Ajiri ro limaro
Eman air mour.*

Ne ewor jorren ilo thyroid eo ao en bar emon ke ao mour?

Elane emon aer lale yuk im kwoj bokake nan ko an doctor ro, kwoj aikuj ejmur im kajor einwot bar armij ro jet. Kwoj aikuj kakolkol aolep year bwe doctor ro ren lale ne ewor naninnij ilo thyroid eo am. Elane doctor ro rej mwijit thyroid eo am, renaj elewoj uno. Elane kwonaj ronjake doctor ro im idrak uno ko nimom kwonaj kajur im ejmur.

Kio ke eto an armij rein ber ilo ailin kein, AEC enanin elolo ke naninnij in poison ibeir? Im ne act ren kolja ke wonair?

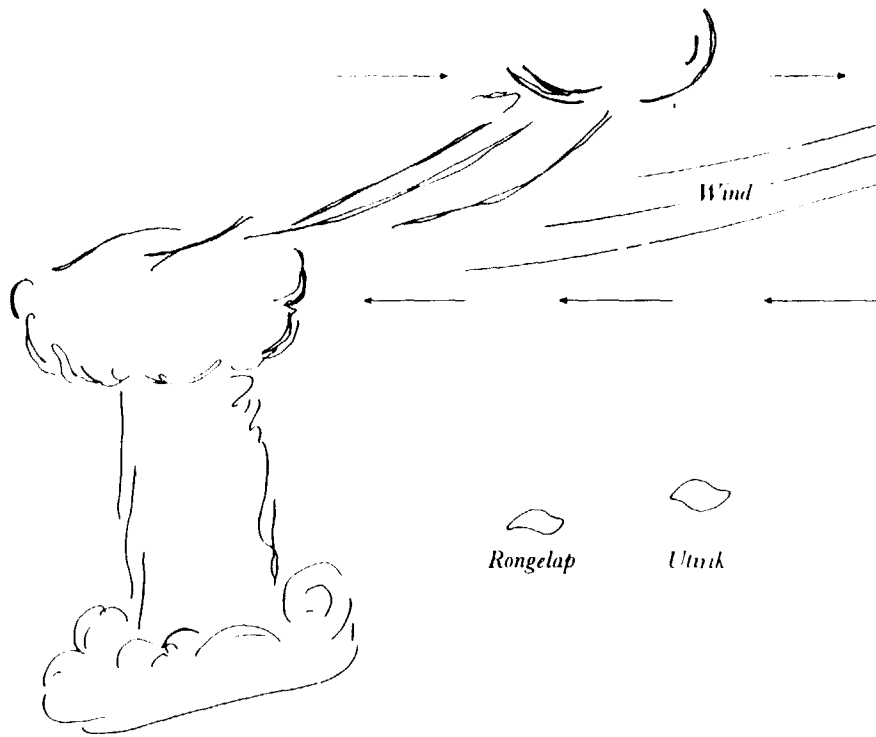
Enanin ejelok en ian armij rein renaj bok naninnij in poison in kinke drettan poison eo ion ailin kein ekanuj drik. Elane enaj wor kien eo enaj bolen lemnak kin wonair.

Why doesn't the AEC remove the radiation from the soil and plants?

It is impossible to do so and since the radiation is so small, there is no reason to do this.

Why didn't the U.S. explain to the people the dangers of the fallout before the test?

The people were not warned of the dangers of the fallout because the likelihood that fallout would occur outside the restricted area was considered too remote to justify warning the people. The occurrence of fallout in an unrestricted area after the Bravo Test was the first accidental event of this kind to happen after a nuclear weapon test.



Bomb explosion

Why did the U.S. not take extra precaution?

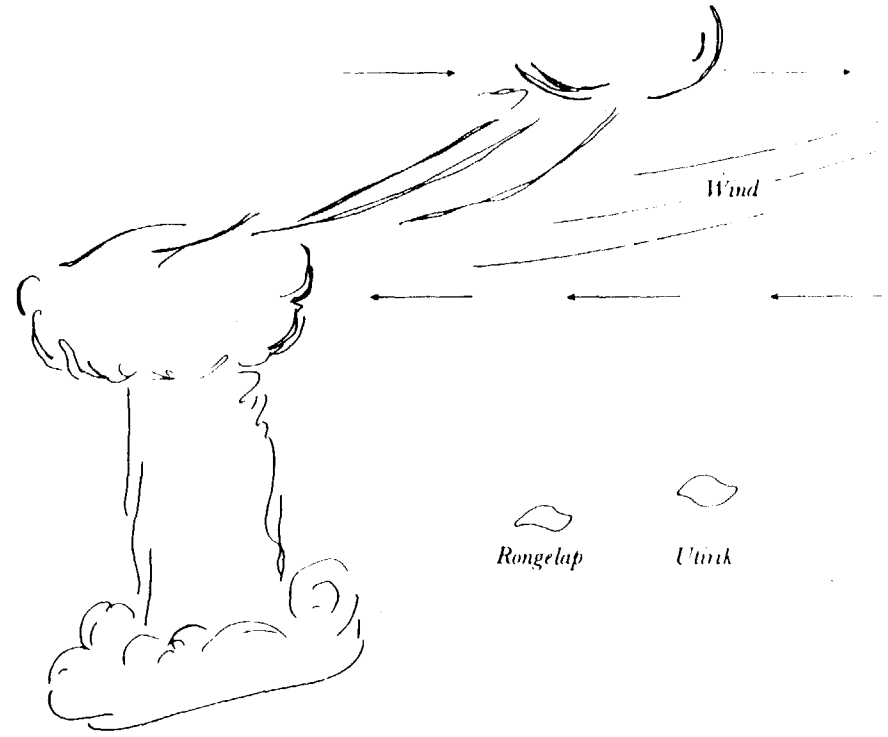
The U.S. took the precaution of trying to keep people out of the area where they expected fallout to occur.

Etke AEC ejab jolok poison eo jen bwirij im keinikan?

Men in ebin komone dredrein ke poison in elap an drik im ejelok unin komone menin.

Etke U.S. ear job kojele ak komele ik armij ro mokta jen air komane komelmel eo?

Rar job kojeleik armij ro kon air kar tomak ben eban wor joren enaj kar walok ijoko elkin jikin komalmel im ekauatata. Joren in ej kab juon wot alen an walok ilkin ijo ekauatata.



Bomb eo ekar rub

Etke U.S. ear jab lukun kojbarok?

U.S. ear komone juon kilen kujbarok eo kin wewen eo im rar lala hwe en ejelok armij en drelone jikin kar komelmel eo im ear walok poison ie.

I was not exposed to radiation so why do I have to be examined?

The doctors examine people who were not exposed because they need to know when the exposed people become sick, if their sickness is caused by radiation or something else. If you were not exposed and got sick and your brother was exposed and got the same sickness, then the doctors would suspect that the sickness was not caused by radiation. You do not have to be examined if you do not want to be. Remember, though, that you are helping your family and friends when you are examined. Also, you are receiving a free medical examination by the best doctors in the world.



*Doctor examines a patient
You are examined to make sure nothing is wrong.*

Why do I have to be examined every year?

Doctors still do not know everything about radiation sickness so they are checking you to make sure that you are healthy. They check you every year so that if you are sick, they can find it early and treat you. Doctor Conard's team treat many people every year, even when the sickness does not come from radiation. The Congress of Micronesia recommends that everyone take the examination.

Why are some people becoming sick now 20 years after the test?

The radiation was in their bones and certain parts of their bodies such as the thyroid gland. Doctors still don't understand all about radiation disease. That is why they are checking you every year to make sure you are healthy.

Iar jab jorren ilo poison eo inem ta unin ao kakolkol?

Doctor ro rej kaklen armij ro rar jab jorren kinke raikuij in jela nat armij ro rar jorren rej naninmij, elane naninmij ko air rej walok jen poison ak bar jet kain mij. Elane kwar jab jorren im naninmij im likao eo jeim ear jorren im bok eja mij eo wot, inem doctor ro rejela ke mij eo ejab walok jen poison eo. Kwoj jab aikuij in kakolkol ne kwoj jab konan. Kememej bwe kwoj jiban family eo am im ro jeram ilo am kakolkol. Barcinwot kwoj kakolkol im ejelok wonan ibben doctor ro rejelatata ion lal in.



*Doctor ej kakilen dri naninmij
Kakilen yuk im kejberok bwe en ejelok kouotata.*

Ij aikuij ke kakolkol aolep year?

Doctor ro rejanin lukun jela kin naninmij in poison in inem rej aikuij in kaklen yuk im lukun lala ne emon am mour. Rej kaklen yuk aolep year bwe ne kwonaj naninmij en mokaj aer lo mij ko am im unok yuk. Team eo an Dr. Conard rej unok elon armij aolep year, jekdron ne naninmij kein rej jab walok jen poison eo. Konan eo an Congress of Micronesia bwe aolep ren kakilkil.

Etke jet armij rej naninmij kio elkin 20 year jen ien kokemelmel eo?

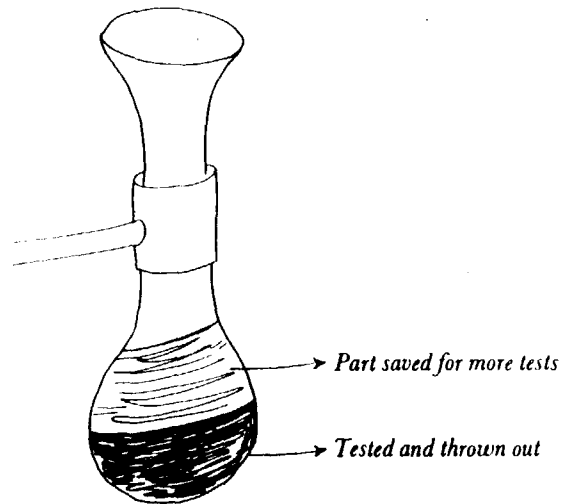
Poison eo ear ber ilo dri ko drier im bar jet jikin ko ilo enbwiniir, einwot thyroid gland. Doctor ro rejanin melele kin aoleben wewen poison in. Unin in bwe ren kaklen yuk bwe ren jela ke emon am mour.

Why do you have to take our blood? urine?

The doctors check your blood to find out if you have blood disease. They check your urine to find out if you have other diseases. For example, Dr. Conard found some people with diabetes (sugar sickness) which is not caused by radiation and he was able to give them medicine. Another reason is that the urine removes radiation from your body so the doctors want to find out if you still have radiation by looking in your urine.

Why do they take our blood for examination and then throw some of it away?

The doctors take your blood to study it. They need to study your blood three or four times so they want to make sure that they have enough blood. It is better to take more blood than not enough because if they need more, they don't have to stick the needle into your arm again. You have plenty of blood so it won't hurt you to lose a little.



Blood test

*Part of the blood is tested and can be thrown away.
Another part is saved for other tests at Brookhaven.*

Why do you have to drill into our bones?

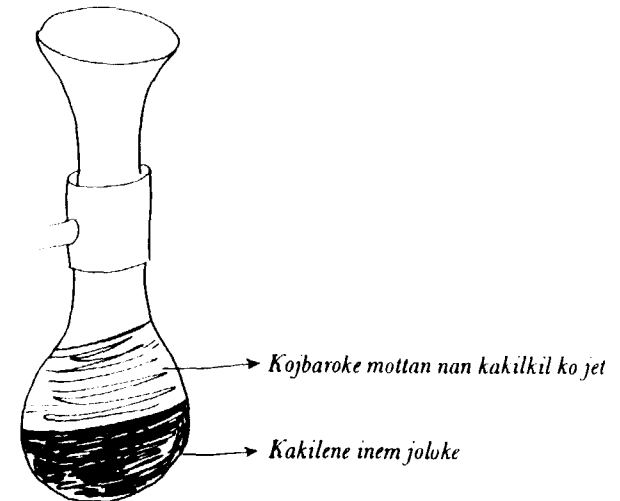
Radiation can cause blood disease and your blood is made inside of your bones. The doctors drill your bones to see if they are healthy.

Etke komij bok botoktok im dren in raut?

Doctor ro rej kakilen botoktokim im lale ne ewor naninmij in botoktok. Rej kakilen dren in raut bwe ren jela ewor ke bar jet kain naninmij. Juon example, Dr. Conard ear lo jet armij elon tonal ibeir eo me ear jab walok jen poison im ear maron in lelok uno non ir. Bar juon un kinke dren in raut ej bok poison eo jen einbwin im rekonau jela ne ej wor wot poison ibam ne rej loe ilo drenin am raut.

Etke rej bok botoktok non kakilkil inem jolok ijoko jimetan?

Doctor ro rej bok botoktok im katak kake. Rej aikuij in katak kin botoktokim jilu ak emen katen im rekonan bwe en bwe botoktok non aer jermal. Emon lok bok ebwe botoktok jen ne ejabwe bwe ne ejabwe inem rej aikuij bar wakar peim im bar bok botoktok. Elap botoktok ibam im ejelok jorren ne enaj jako jidrik.



Kokolkol botoktok

Mottan botoktok eo rej kakilene im maron joloke. Mottan eo juon rej kojbaroke nan bar jet kakilkil ko ilo Brookhaven.

Etke komij kimliji dri ko drim?

Poison ej komon naninmij in botoktok im botoktok ej walok ilo dri. Doctor ro rej kimlij dri im lale ne rej emon wot.

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Why do I need to take medicine for my thyroid?

If you had an operation and your thyroid gland was removed, the medicine will do the job that your thyroid used to do. So, you must keep taking your medicine. Some people who did not have the operation also take the medicine so that their thyroid glands do not get sick. It is very important that you take your medicine if you want to stay healthy.

What kind of radiation caused thyroid sickness and leukemia?

Thyroid sickness in the Rongelap people exposed to fallout was caused by damage to the thyroid gland from a "thyroid radiation poison." It took a long time for the sickness to show. A few unexposed Rongelap people as well as some people in the Marshall Islands and all over the world develop thyroid sickness, but it is not due to radiation. All the "thyroid poison" on Rongelap was gone when the people moved back. Leukemia is a disease of the blood. Some cases were caused by radiation in Japan and it is possible that leukemia may have been due to radiation. Time is about past for any more leukemia to be expected from radiation.

What will happen to the people who were not exposed to radiation but are now living on Rongelap and Utirik?

They don't have to worry because there is practically no chance that any of the people will get sick from radiation since there is so very little radiation left on the islands.



Feast - People

They are Rongelap people. They are healthy, too.

Ij aikuij ke idrak uno kin thyroid eo an?

Elane kwar mwijuwij im thyroid gland eo am ejako, uno in enaj komone nerbal eo an kar thyroid gland eo. Kin menin kwoj aikuij idrak uno. Jet armij ro rar jab mwijuwij rej bareinwot boke uno eo bwe thyroid ko air ren jab naninmij. Ekanoj lap tokjen bwe kwon bok uno ko elane kwokonon bwe kwon ejmur.

Kain rot poison eo ear komon naninmij in thyroid ak leukemia?

Naninmij in thyroid eo ibben armij in Rongelap ro ear walok poison in nan ir ear walok jen jorren eo ilo thyroid gland jen juon "poison in thyroid." Ear to an walok naninmij in. Jejojo ian armij in Rongelap ro ear jab walok poison in nan ir im einwot jet armij in ailin Marshall im aoleben lal in ej walok naninmij in thyroid nan ir, ak ejab jen poison in. Aoleben "poison in thyroid" eo ion Rongelap ear jako ien eo armij rar drollok. Leukemia ej juon naninmij in botoktok. Jet naninmij rot in ear walok jen poison eo jen Japan im naninmij in leukemia eo an ear bolen maron kar walok jen poison. Enanin motlok ien an bar wor leukemia en en kar walok jen poison in.

Ewor ta enaj walok non armij ro rar jab jorren ak rej joke kio ilo ailin kein?

Komin jab inebata bwe ejelok en enaj naninmij jen poison in kouke jonon ne eben ion ene kaue kio ekanwij in drik.

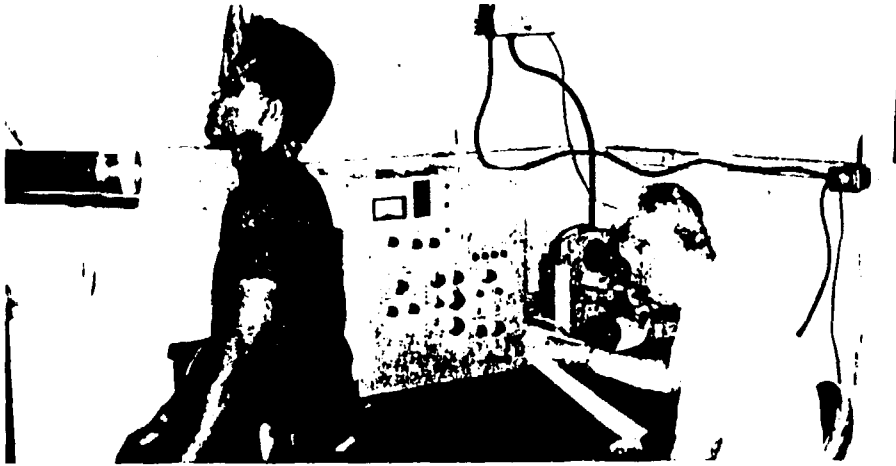


Kojkoj in mone - Armij

Rej armij in Rongelap. Eman ain mour, bareinwot.

Why do the doctors feel our neck?

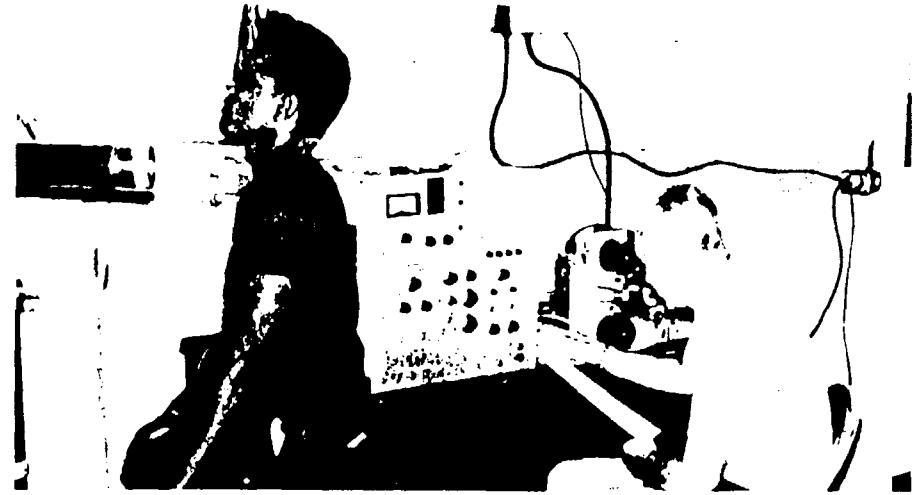
Your thyroid glands are in your neck. The doctors feel your neck to find out if you have a sickness in your thyroid gland. Another way to check your thyroid is with a special machine.



*Thyroid examination
Special machine for checking thyroid gland.*

Etke doctor ro rej kakilen buruomi?

Thyroid gland ko rej ber iburuomi. Doctor ro rej kakilen buruomi im lale ne ewor naninmij ilo gland ko ibemi. Bar juon wewen kakolkol ej kin juon kain engine.



*Kakilen ebboj in buru
Kein jermal in kakilkil thyroid gland.*

What is the thyroid gland?

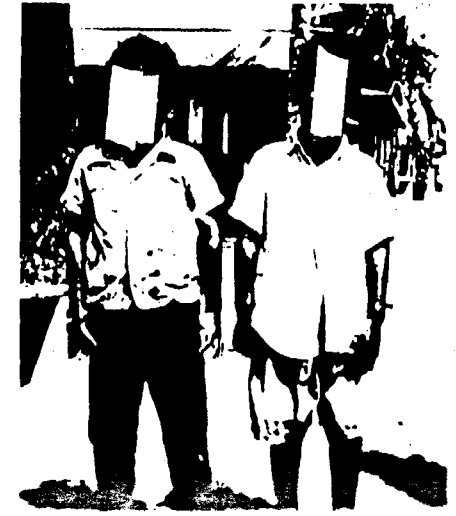
Your thyroid gland does a certain kind of work in your body. Your ears allow you to hear, your eyes make you see and your thyroid makes you grow normally and stay healthy. Because radiation affected their thyroid glands, some of the boys in Rongelap grew slowly after the fallout. In 1965, they were given special medicine and they grow normally. If you have a thyroid operation, it is very important that you take the medicine that is given to you. The medicine will do the same work as your thyroid and it will keep you healthy.



They were sick before. They are healthy now.

Ta in thyroid gland?

Thyroid gland ej komon jet jermal ko ilo enbwin. Lojilnin ej ronjake, mejam ej loc im thyroid ej komon bwe en emon am edrek im komonmon am mour. Kiuke poison eo ear kakure thyroid gland ko, jet ladrik in Rongelap rar dritto bat elkin jorren eo. Ilo 1965 rar lellok juon kain uno im ear bar emon air edreklok. Elane emoj an mwijmwij thyroid eo am, elap an lap tokjen bwe kwon boki uno ko rej liwoji non yuk. Uno kein renaj jermal einwot kar thyroid gland eo am im naj kokomonmon am mour.



Rar naninmij mokta. Eman air mour kio.

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What is cancer?

Cancer is a disease which happens when a certain part of your body becomes sick and does not do its job. The sickness can spread to other parts of your body. Cancer of the blood is called leukemia and that is the disease that had. Some kinds of cancer can be controlled by medicine and others must be stopped by operation. Some types of cancer, such as leukemia, cannot be cured. Cancer is dangerous but if the doctors examine you and find it early, they have a better chance to help you.

So far, what are the health findings? Are we healthier or sicker?

The medical examinations show that you are a healthy and strong people. The only significant differences have been the early fallout effects on the blood and skin, the higher number of miscarriages in 1957 and 1958 and the thyroid troubles.

What is our future in regards to our health?

Dr. Conard and the other doctors feel that most of you are healthy and that you do not need to worry about the future. This is also true for the unexposed people who moved onto the island after the fallout and for the children who were born after 1954. Some of you may become sick but you will be given the best medical care possible . . . even if the sickness is not caused by the radiation. If you allow the doctors to examine you and if you follow their advice, you should be able to live a normal, healthy life. Examinations of thousands of children of exposed parents in Japan have not shown any diseases from radiation. Examinations of your children also show that they are healthy.



Ta in cancer?

Cancer ej juon naninmij eo ej walok ne jet jikin ko ilo enbwin rej jorren im jab komoni jermal ko aer. Naninmij in emaron itoitak non bar jet jikin ko ilo enbwinir. Cancer in botoktok ej etan leukemia' im naninmij eo an kar in. Jet kain cancer remaron bwijrak kin uno im jet iair remaron jako kin mwijnwij. Jet kain cancer, einwot leukemia, ejelok uno in kabojrake. Cancer ekauatata botab ne doctor ro rej kakilen kom im mokaj aer loe elaplok aer maron jiban kom.

Kio ewi wewen mour? Kim ejmur lok ke ak kim naninmij lok?

Kakilkil in naninmij ko rej kwalok ke kom armij ejmur im kajur. Oktak ke wot rellab kar ilo poison eo mokta rar walok ilo botoktok im kil, lonlokin oran jiban ko ilo 1957 im 1958 im jorren in thyroid ko.

Ta ilju eo am ikijen ejmur eo am?

Dr. Conard im doctor ro jet rej enjake ke enanin aolepemi kom ejmur im komin jab inebata kin tokelik. Menin ej bar einwot mol non armij ro rar jab jorren im rar etal non ailin kein elkin jorren eo im non ajiri ro rar lotak elkin 1954. Jet iami remaron naninmij ak renaj lale kom jonan wot aer maron. Jekdron ne naninmij ko rejab walok jen jorren eo. Elane kom naj kotlok bwe doctor ro ren kakilen kom im elane kom naj bokake nan ko aer inem kom naj mour ilo mour emon im ejmur. Kakilkil in taujin ajiri ro ear wolok poison in nan jineir im jemeir i Japan ear janin kalikareke naninmij ko rej walok jen poison in. Kakilkil in ajiri ro nejimi ej bareinwot kalikane ke rejimur.



PRIVACY ACT MATERIAL REMOVED