

ORDNANCE CORPS  
PICATINNY ARSENAL  
DOVER, NEW JERSEY

405052

Post Hospital  
Walter K. Frankel, M.D.  
Medical Officer

IN REPLY  
REFER TO:

March 17, 1954

The Chairman of  
The Atomic Energy Commission  
Admiral L.L. Strauss  
Atomic Energy Commission  
Washington, D.C.

BEST COPY AVAILABLE

Sir:

It is with relation to the reports in the newspapers of the last days, especially the New York Times of this morning with the headline: Nuclear downpour hit ship during test at Bikini and that "28 Americans and 236 residents of Pacific islands were 'unexpectedly exposed to some radiation' that I take the liberty to address you again respectfully.

In the N.Y. Times report at the end of it is said: They were the result of contact with the ashes and slow exposure." And about the injured fishermen is said: "None are in dangerous condition apparently. Dr. Masao Tsuzuki said the men had suffered from secondary radiation burns. The others ... had swellings of the hands and arms as well as falling hair". In another part of the report is spoken of "atomic particles".

These incidents made me point again to a correspondence I had the honour to have with you, Dr. Dunham and Dr. Nebel of your Commission.

In his letter to me of July 10, 1953 Dr. Dunham wrote:

"The radioiodine released at the time of atomic explosions does not appear to be a limiting factor as far as the hazard from radioactive fallout is concerned. The actual amount of iodine released into the air is diluted to insignificant quantities from the standpoint of the physiological effects of iodine by the time it reaches the ground outside the immediate test area."

Dr. Nebel writing to me in the absence of Dr. Dunham at July 27, 53, said: "In order that no guess work be involved in answering your letter I have taken your letter to one of our physicists and he assures me that the best of modern science and the complete knowledge of what we know today about atomic explosions adds up to this. Even where iodine might be 'heavy' in the air before an atomic explosion, this iodine, even if some of it were made radioactive by an explosion, would not constitute a factual health hazard. As you may know, this study of fallout is being worked upon by some 300 of the best brains of this country involving physicists, biophysicists and medical men; , , ,

As I am since 1931 studying the iodine content of the air, its influence on people sensitized by thyroid gland hyperfunction and therefore its importance in relation to the intake of iodized salt I was trying since 1947 as outlined in my letter

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to you and the two gentlemen mentioned above this my interest became more actual in relation to possible radioactivation of Iodine contained in the air and its different concentration in maritime or continental climate caused by any atomic bomb explosion. Unfortunately I have't the opportunity to proceed in these examinations and researches which even today have't been made.

The recent incidents caused by radio-activated matter which in all publications is rather indistinctly designated as "radio-active fall out" or "atomic particle" or "atomic ashes" with injuries of 28 Americans and 236 residents of Pacific islands should give a very important opportunity to analyse which kind of radio-activated matter has brought about these injuries as these 264 persons I believe are under medical care and observation of physicians and physicists connected with your Commission. It is my strong belief that radioactivated Iodine from the air is a very important factor in these unexpected events and respectfully I repeat to you my appeal that scientific analysis of the air, the maritime as well as the continental one should find the attention and the determination of the scientific branches of the medico-biological departments of your Commission.

I would be very much obliged if I would be furnished with the results of such researches and an explanation what is understood by: atomic ashes as no burnings in the air took place or by atomic particles involving that something grossly visible like snow or raindrops were coming down charged with atomic remnants or matter which would also mean radioactivation of some contents of the air which can be radioactivated and again this seems to me points strongly to Iodine as the greatest content of the atmosphere in organic substances or anorganic substances permanently suspended in the atmosphere.

I think this whole question is of utmost importance for preventive measure to be taken by the Civil Defense which are now not existing.

May I add as a medical man and slightly experienced in the case of radioactive injuries as Xrays Radium etc. that in my opinion the statement of "None are in dangerous condition, apparently." at least is very premature especially in relation to the reported symptoms of swollen hands and arms and falling hairs which appearing in such a short time after the exposure are signs of a very severe damage and that therefore the prognosis of the recovery of these injured 23 fishermen is very dubious if not absolutely unfavorable.

Accept the expression of my highest esteem.

Respectfully yours

Walter K. Frankel, M.D.

FROM THE OFFICE OF THE CHAIRMAN

Via Secretariat for notification  
of Commissioners

TO:

Mr. Nichols

Director, Bureau of Prisons

☒ For appropriate handling  
(Copy of reply to Chairman)

☐ For preparation of reply for Chairman's  
signature (Copy of reply to Secretariat)

☐ For information

REMARKS:

Please prepare acknowledgment or reply to all  
letters for the Chairman's signature within  
six working days.