



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE  
WASHINGTON 25, D. C.

*Dunham*

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HEALTH AND MEDICAL

SEP 16 1957

Dear Dr. Dunham:

To keep you fully informed of the actions being taken reference possible exposures of military personnel to radioactive materials and their subsequent review, in Doctor Berry's absence from the office I am inclosing a copy of our last letter to Congressman Ashley.

Sincerely yours,

*Sheldon S. Brownton*

SHELDON S. BROWNTON  
Brigadier General, USAF (MC)  
Director of the Staff

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Dr. Charles L. Dunham

Director, Div of Biology & Medicine  
Atomic Energy Commission  
Washington 25, D. C.

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DIVISION OF BIOLOGY & MEDICINE  
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Radiation Doses + NTS  
11/11/57



ASSISTANT SECRETARY OF DEFENSE  
WASHINGTON 25, D. C.

HEALTH AND MEDICAL

SEP 16 1957

Dear Mr. Ashley:

Your letter of 22 August 1957 addressed to the Secretary of Defense concerning the effects of nuclear testing on members of the Armed Forces has been referred to me for reply inasmuch as this office is following this topic.

As you may or may not know, the military medical services are currently maintaining a record of exposure to ionizing radiation (DD Form 1141) on personnel who are employed by or are members of the Armed Services. At the time of initiation of this form, it is to be completed to the maximum extent possible for all personnel who have been exposed to ionizing radiation within the past 10 years and are now in assignments where further exposure is probable. These forms are part of the individual health record for military personnel and will be available for review by authorized persons as are all other items in the individual medical histories.

Your suggestion for an inquiry into the medical histories of service personnel who have participated in or been present at the time of nuclear testing is in agreement with the views of this office. The administrative details and the scope of such a survey are currently being considered to determine the most efficient and economical method of obtaining the statistics required in the most reliable form.

An extensive and continuous study of the ionizing radiation received by the Japanese at Hiroshima and Nagasaki is being made under the auspices of the National Academy of Science - National Research Council. Also, the Atomic Energy Commission has conducted continuous studies on the natives of the Marshall Islands exposed on 1 March 1954, to radioactive fallout. To date, no evidence of permanent physiological damage has been demonstrated. The 21st Semi-Annual Report of the Atomic Energy Commission indicates the records of the various exposures and the results of the follow-up studies within this group.

To develop a thorough and comprehensive review of the effects of ionizing radiation will entail considerable time and expense and must be a cooperative effort of the Atomic Energy Commission, the National Academy of Science - National Research Council, the Veterans Administration, the Department of Defense, and other Federal agencies concerned. Because of

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the security classification of matters pertaining to the results of nuclear testing, much of the medical information has not been immediately available to agencies not directly concerned. Steps are being taken to relieve this situation to the degree consistent with the national security.

Reference our previous correspondence, the following additional information has been received from the Department of the Army. The pertinent portions of that memorandum are quoted for your consideration:

"2. Exposure of individuals to nuclear radiation during atomic weapons test series has been very carefully controlled. Criteria for maximum permissible exposure have been established by the Department of Defense and the Atomic Energy Commission acting in close coordination. These permissible exposures are based upon the civilian peacetime industrial standards of 0.3 roentgens per week with a maximum of 3.9 roentgens during any thirteen week period. This latter dosage may be received in one or more exposures. A minimum number of personnel at the Nevada Test Site have exceeded this dosage figure but none of these individuals has received an amount of radiation which was considered harmful or which was sufficient to produce symptoms, physical findings, or laboratory findings consistent with radiation injury.

"3. Records available in the Office of The Adjutant General, Department of the Army, indicate that [redacted] was assigned to Company B 167th Infantry, Fort Jackson, South Carolina, which unit participated in tactical exercises at Camp Desert Rock at the Nevada Test Site during the period of 14 April 1952, through 24 April 1952. During that period, atomic devices number two and three of the Tumbler Snapper series were fired. These were air bursts, resulting in little contamination from radiation. There was no residual radioactivity on the ground resulting from the shots in this series prior to the third shot on 22 April 1952. The intensity of radiation at ground zero from the third shot was ninety milliroentgens (.090 roentgens) per hour one hour after detonation as determined by monitors from both the Atomic Energy Commission and Camp Desert Rock. Following this reading, the troops maneuvered through the area, examined equipment, and withdrew. At this distance, prompt radiation was not detectable by sensitive instruments, and there was no damage from heat or blast. There was no troop participation on shot two.

"4. The residual radioactivity in this area was due to neutron-induced activity in the soil. The two isotopes primarily responsible for this radiation have half lives of three hours and thirty-five hours, respectively. Computation of dose based upon these data for an individual

being at ground zero one hour after the shot (the earliest time anyone arrived in the area) and remaining at ground zero through 24 April indicates that a total dose of less than four roentgens would have been received. Based upon the length of time troops were actually in the area, the dose received by any individual was probably less than one roentgen.

"5. \_\_\_\_\_ name does not appear on any available roster of individuals receiving more than allowable radiation in either this test series or the preceding one in 1951.

"6. It is the opinion of The Surgeon General, Department of the Army, that \_\_\_\_\_, while at the Nevada Test Site, did not receive an amount of radiation equal to the civilian industrial permissible dose and that, according to present medical opinion, any malignant condition he may have developed subsequent to April 1952, was unrelated to this radiation exposure."

I will keep you advised of future developments in this field.

Sincerely yours,

SIGNED

Frank B. Berry, M. D.

Honorable Thomas Ludlow Ashley

House of Representatives

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