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University of California
Los Alamos, New Mexico

OFFICE MEMORANDUM

403349

To: Jack Clark, J-DO

Date: March 7, 1952

From: T. L. Shipman, M. D.

RG 326 US ATOMIC ENERGY
COMMISSION

Subject: Routine Physical Examinations for Test Personnel

Location LAB
Records Clark J-DO (Jack)
Collection Clark C-20-83
Folder Red-Safe TR 306

Symbol: H

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A certain amount of confusion and some misunderstanding has recently arisen over what appears to be a change in policy concerning physical exam requirements for those members of the Laboratory staff participating in test operations either at NFG or Eniwetok. This memo is to explain the position adopted by H Division and to outline the procedure which we propose to follow.

It is obvious that physical examination requirements for military personnel, civilian participants, and construction workers who are to participate actively in test operations and who will enter contaminated areas should, in so far as it is reasonable and proper, be uniform. The military has already stated its requirements which will be found in the Handbook of Atomic Weapons for Medical Officers which was published in June, 1951, and which applies to the Army, the Navy, and the Air Force. In addition to the ordinary physical examination procedures, which are designed to assure that the individual is in average good health and without obvious physical disability, the following procedures are also required: (1) urinalysis; (2) complete blood count; (3) chest X-ray. It is stated in this handbook that "if a similar examination has been conducted during the past three months, a repeat examination will not be necessary, provided a record of such examination is maintained on file." The handbook goes on to list certain physical requirements, deviation from which would disqualify a person from work involving exposure to radiation. With only one of these requirements can we arbitrarily disagree: it is stated that a total red blood cell count above 6.5 million would disqualify; such a blood count is fairly common at Los Alamos because of the altitude.

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BY AUTHORITY OF DOE/OC

W. L. ...
DATE 6/15/83
BY *W. L. ...*

As far as Los Alamos personnel is concerned, we will also disagree with the stipulation that chest X-rays as often as every three months might be necessary. For Laboratory workers under 45 years of age we do not propose to do routine chest X-rays oftener than once a year, and for those over 45, oftener than once in six months. We shall also use our discretion in the frequency of blood counts and the completeness of physical examinations, but in general we will not depart from the spirit of the law; we must be able to assure the test director and a task force commander that those being sent to the test area are presumably and to the best of our knowledge in good health and in adequate physical condition to withstand the rigors of the work.

It might be well at this time to digress momentarily to consider the question of chest X-rays. The usual chest X-ray taken with standard equipment using the small sized film, delivers to the individual's chest a dose that averages from 250 to 300 mr. The exposure with the full sized 14" x 17" film is slightly less. In both cases the equipment is shielded so that the exposure to other parts of the body is minimal and insignificant. It is generally held by the best authorities in the country that such exposures

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Los Alamos, New Mexico

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0120833

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Date: March 7, 1952

From: T. L. Shipman, M. D.

RG 326 US ATOMIC ENERGY
COMMISSION

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John G. ...
Paul ...

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once or twice a year are of absolutely no consequence, even to individuals whose lifetime work involves exposure to ionizing radiation. Obviously we still do not wish to require any more of this on a routine basis than is necessary. Furthermore it is felt that X-ray which are taken to establish a diagnosis necessary to explain symptoms will help the individual more than avoidance of the exposure, even though the total exposure may go as high as 50 r or more. In general it can be stated that requiring routine periodic chest X-rays no oftener than seems reasonable is a justifiable requirement.

Group H-2 maintains careful records of all Laboratory personnel. It is our desire to put those individuals who are to participate in test operations to a minimum of inconvenience. Laboratory workers who will go to NFG but who will not enter the contaminated areas require no examinations at all. Those who do expect to enter the contaminated areas should contact Dr. Grier to ascertain whether or not their records are up to date and whether an appointment for re-examination is necessary. Those who have not undergone this formality may be denied access to the contaminated areas. All workers going to Eniwetok must be approved by H-2 and must, in addition, receive whatever immunizations are called for by Government regulations (so far this has called for immunization against small pox, typhoid-paratyphoid, and tetanus). Those failing to undergo these formalities may find themselves unable to leave the country, and if they do get out, might encounter difficulty in getting back in.

All of the above remarks refer only to LASL personnel. It is certainly our opinion that other civilians, as well as construction workers, should conform to requirements no less rigid.

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Shrag 9/13/83
DATE

Thomas L. Shipman
THOMAS L. SHIPMAN, M. D.
Health Division Leader

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