

DN:SV

June 21, 1948

President Karl T. Compton
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Dr. Compton:

Admiral Parsons has called my attention, through Dr. Scoville, to your letter of June 7, in which my opinion regarding the Bikini reentry is quoted. I have not seen, as far as I can recall, either the summary of the Bikini report or Dr. Gilfillan's report. I do recall talking with Dr. Gilfillan about general points with regard to radiation dose levels. It is my feeling that the safe level for continued exposure to ionizing radiation is in the range from .05 - .1r per day, with a permissible total of .3r in any one week. We have very little factual data as to the effects of a single exposure or chronic exposures to larger amounts of radiation. We know that as little as 12 or 15r may produce in humans demonstrable changes in the lymphocyte. If I had to, I would be willing to take an exposure of this order and not think much more of it. It is probable that an individual receiving a careful X-ray study of his gastrointestinal tract takes up to 15r over his trunk which is that part of the body where most of the blood forming activity is carried on.

I feel keenly the responsibility for maintaining permissible levels for radiation that we know to be safe. As our knowledge advances, it may be possible to extend these limits somewhat upward.

Yours sincerely,

Shields Warren, Director
Division of Biology
and Medicine

From NMB-2

1231

MEDICINE, HEALTH & SAFETY *B. Warren*

OFFICE ▶	BIOL. & MED.
SURNAME ▶	<i>SW Warren</i>
DATE ▶	6/23/48

5004903
