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ABSTRACT

THE CHARACTERISTICS OF FALLOUT MATERIAL AND THE EFFECTS OF FALLOUT RADIATION ON HUMAN BEINGS

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Human beings were accidentally exposed to fallout radiation commencing approximately 5 hours after explosion of a large nuclear device. The fallout material was visible (snow-like). It contaminated skin, clothes and surroundings producing skin lesions, whole-body effects and internal deposition of small amounts of radionuclides. Whole-body exposure occurred at four levels: 175 r, 69 r and 14 r mid-line dose of radiation. Nausea and come vomiting occurred on the day of exposure in the two highest exposure groups. Marked depression of granulocytes and platelets occurred, but agranulocytic infections and hemorrhage did not occur. No prophylactic therapy was administered. It can be concluded that after these levels of exposure prophylactic therapy is not indicated.

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* Now at Brookhaven National Laboratory.