

NCRP REPORT 37, PRECAUTIONS IN THE MANAGEMENT OF PATIENTS WHO HAVE RECEIVED THERAPEUTIC AMOUNTS OF RADIONUCLIDES. National Council on Radiation Protection and Measurements, Washington, D.C., 1 October 1970, 61 pp. Price \$1.50, available from NCRP Publications, P.O. Box 4867, Washington, D.C., 20008.

All persons caring for or associating with patients, who have received therapeutic amounts of radionuclides or millicurie amounts for diagnostic purposes, should give close attention to this well written and important document. Protective procedures are developed for the ten gamma-ray-emitting radionuclides with half-lives of at least several days which are most frequently employed medically in large amounts. The exposure rate in roentgen per 100 mCi-hr at 1 meter, neglecting attenuation of the radiation within the patient, serves as basis for determining the length of time which an attendant or visitor may spend close to a patient. It is also used to govern procedures concerning the release of patients containing radioactive material from the hospital and the release, burial, or cremation of radioactive bodies. Only in case of

surgery or autopsy additional exposure to the hands results from beta-ray emission. Examples are given for ^{198}Au and the pure beta-ray emitters ^{32}P and ^{90}Y .

Each section of the report provides detailed information in descriptive and tabular form concerning specific precautions to be taken in order to minimize the radiation hazard when dealing with patients who have received large amounts of radioactive material. The therapeutic procedures are divided into two classes: (A) treatment with encapsulated sources, permanent or removable, which are mechanically inserted; (B) treatment with solutions, colloidal suspensions or microspheres. For nursing care and visitors the inverse-square law and a short stay in close proximity to the patient still provide the simplest and most effective protection, independent of whether the radionuclides are in a solid state or a solution. However, the specific recommendations of the report are most welcome at a time of increasingly large amounts of radionuclides being used for diagnostic purposes in many hospitals.

GERALD J. HINE
Veterans Administration Central Office
Washington, D.C.