

IAEA publishes first HEALTH AND SAFETY MANUAL

The world is warned at regular intervals of the inherent dangers in all work connected with radioactive materials. Although probably no other industry has imposed such strict safety measures, there is nevertheless an urgent need for exchange of information, pooling of knowledge and standardization of practices and regulations on an international scale in the various peaceful applications of atomic energy.

The recent tragic case of six Yugoslav scientists being over-exposed to radiation whilst carrying out experiments with a critical assembly is a new reminder of the need for extreme caution and for well-founded and strictly applied regulations.

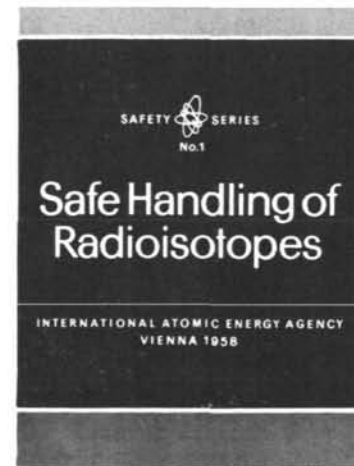
A "Manual on the Safe Handling of Radioisotopes" was published in English on 15 December 1958 by the International Atomic Energy Agency. This is a comprehensive handbook of internationally compiled recommendations for users of radioisotopes. It covers organizational, medical and technical aspects of radiation safety practices. It is also the Agency's first technical publication. French, Russian and Spanish editions will appear shortly.

The expert panel responsible for the recommendations consisted of thirteen scientists from ten countries and was presided over by Professor Gunnar Randers (Norway). The other scientists were Prof. V. V. Bochkarev (USSR), Dr. H. J. Dunster (U.K.) with Mr. A. H. K. Slater as Alternate and Mr. G. J. Appleton as Adviser, Dr. Bernhard Gross (Brazil), Dr. Arne Hedgran (Sweden), Prof. F. Hercik (Czechoslovakia), Dr. H. Jammet (France), Dr. A. S. Rao (India) with Dr. P. N. Krishnamoorthy as Alternate, Dr. Forrest Western (USA), Dr. F. Yamasaki (Japan); Mr. G. W. C. Tait (IAEA) was secretary of the panel, assisted by Dr. J. Y. Servant (IAEA).

The Manual appears as the first in a series under the common title of "Safety Series" and stems from the Agency's statutory function of establishing "standards of safety for protection of health and minimization of danger to life and property" and to provide for the application of such standards to its own projects and to operations related to services and materials supplied by the Agency.

The panel of experts nominated by the Director General met for the first time in May/June 1958. A secretariat draft based on a study of existing international and national manuals and codes submitted to the Agency was used as a starting point for the work. The experts, bringing experience from many different countries and fields of work, prepared a revised version. This in turn was sent for comments to Member Governments, interested institutions

Cover of the Manual which is printed in yellow, grey and red



and international organizations. The panel met again in August and revised its first draft in the light of the comments that had been submitted.

The printed publication will also receive a large distribution and further comments, based on practical experience and new knowledge, will be taken into account in preparing further revised editions.

The process applied in producing this publication is a good example of a method of work in international collaboration.

The Manual should prove useful to all users of radioisotopes in industry, medicine, research, etc., but is directed mainly to small scale users who may not have access to other sources of information.

The authors stress that the recommendations should be interpreted with scientific judgment in any given situation. The wording is precise and users are urged to understand its implications before departing from them.

The recommendations apply only to radioactivity surpassing the limit of 0,002 microcurie concentration per gram of material; or a total activity of more than 0,1 microcuries in the working areas; this limit is based on the most dangerous radioisotopes.

The experts state that the limiting level might be higher for less dangerous isotopes, but recommend that all be treated as potentially dangerous. This would have educational value and avoid accidents caused by misidentification.

The Manual also stressed that good radiation safety practices depend on effective organization and warns that even very competent workers sometimes ignore or forget important health and safety requirements.

Although the present manual cannot be termed regulations or a code, its universal importance is emphasized by the recommendation of the Board of Governors that it be taken into account by all Member States in the drawing up of national health and safety recommendations or regulations. The Board also decided that the manual should provisionally govern Agency operations in the radioisotope field.

(The publication is available from the International Atomic Energy Agency, price US \$1.00, or L. 0.6.0., or Fr. francs 350.)