

Volume 45, 1983, which provides an in-depth look at the 1976 Hanford Am-241 exposure incident.) "But our institution has a full-time Radiation Safety Officer (RSO) who is a professional health physicist—I won't need to get involved since I am in nuclear medicine." In general, the only people who call the RSO during a crisis are the regulatory agencies and the chief hospital administrator. The emergency room physician and the trauma team surgeon are going to think "radiation, therefore, call radiology," and radiology is going to say, "Not just radiation, but radioactive materials, therefore, call nuclear medicine." The RSO will probably find out about the need to respond to an accident from the chief of nuclear medicine. Additionally, the RSO is almost never a physician, and usually he/she has only a bachelor's or master's degree and can't even be introduced as "Dr. RSO." This frequently leads to a lack of acceptance by physicians who don't have contact with the RSO and who haven't had the opportunity to assess the professional competence and credibility of the RSO. On the other hand, practically everyone in the nuclear medicine clinic will be "Dr. Somebody," whether M.D. or Ph.D., and will have instant credibility. The triage teams are going to call on nuclear medicine for medical advice and technical assistance. The RSO and nuclear medicine personnel will find themselves working closely as a team when a radiation accident occurs, whether internal to the facility or as a result of an accident not related to the facility, e.g., reactors and transportation accidents.

This NCDRH Publication (HHS FDA 83-8211) admirably accomplishes its goal of serving as a source book of emergency planning information for regulators, medical personnel, health physicists, and operations personnel at radiation-use facilities. I wish this book had been available the first time I ever had to write an emergency response plan. There are three major discussion areas and ten appendices. (Response to nuclear war is not discussed, because of its vastly different scope and extent.) In Part 1, the author discusses the common characteristics of radiation accidents and describes typical worst-case scenarios for use in developing emergency response plans. For example, one scenario for a transportation accident might be the crash and subsequent burning of a truck or airplane carrying curie quantities of I-131, with the volatilized I-131 carried downwind in a plume headed directly for a residential neighborhood, an elementary school, and a dairy farm, where it is raining. What should be included in an emergency response plan to cope with this and other types of accidents? The author discusses the role of regulatory agencies in

accident response, which is one of primarily technical assistance and coordination among the various regulatory agencies at the federal, state, and local levels.

In Part 2, the reader is provided with examples of organizational structures recommended for grouping the resources available to respond to radiation accidents. Three major "centers" are defined: Central Command Center, Accident Site Center, and Community Emergency Center(s), each with its own structure for leadership and coordination. Unless the accident occurred in the hospital, the hospital is an element of the Community Emergency Centers and will interact with law enforcement, social services, and firefighting personnel.

The medical element of the Accident Site Center may be furnished by the hospital, but it will operate under the guidance of the ASC, not the hospital itself. Part 2 also includes a discussion of appropriate responses to various types of radiation accidents.

Part 3, the largest section of the book, deals with the science and health physics aspects of response to a radiation accident. Much of this material should already be familiar to nuclear medicine personnel, but, nevertheless, it is a nice review and provides a good outline for refresher training of technologists and members of emergency response teams. This part concludes with a discussion of how to communicate information about radiation accidents to the news media. Since most of us are not trained to convey such sensitive information to laymen, experienced public relations personnel should be available.

There is a useful collection of appendices containing suggested SOP for law enforcement and firefighting personnel, ambulance-rescue personnel, physicians, and nurses. Lists of suggested emergency team equipment, along with report forms, instructions on how to set up a "hot line" to control contamination, instructions on conducting and evaluating tests of the emergency response plan, and suggested formats for release of information to the public are included.

Every hospital with a nuclear medicine clinic should have a copy of this book for guidance in evaluating their existing emergency response plan or writing such a plan for the first time. It would be well for the RSO of every hospital to brief administrative personnel on the contents of this book, especially the aspects dealing with the administrative problems associated with radiation accidents. The book is well-written and would have been a bargain at twice the price.

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#### BOOKS RECEIVED

*Proceedings of the International Conference on Applications of Physics to Medicine and Biology.* G. Alberi, Z. Bajzer, P. Baxa. Italy, Yugoslavia, Italy, Heyden & Son, Inc., Philadelphia, PA, 1983, 663 pp, \$67.00

*Radiation Carcinogenesis: Epidemiology and Biological Significance (Progress in Cancer Research and Therapy, Volume 26).* J.D. Boice, Jr., J.F. Fraumeni, Jr. Raven Press, New York, NY, December 1983, 509 pp, \$75.00

*Safety and Efficacy of Radiopharmaceuticals.* K. Kristensen, E. Nørbygaard. Copenhagen, Denmark, Martinus Nijhoff Publishers, The Netherlands, November 1983, 383 pp, \$54.00

*Annals of the ICRP 38: Radionuclide Transformations—Energy and Intensity of Emissions.* F.D. Sowby. Sutton, Surrey, Pergamon Press, Oxford, December 22, 1983, 1250 pp, \$210.00

*Computed Tomography of the Kidneys and Adrenals.* S.S. Siegelman, O.M.B. Gatewood, S.M. Goldman. Churchill Livingstone Inc., NY, January 1984, 287 pp, \$39.50

*The Principles and Practice of Medicine.* A. McGehee Harvey, R.J. Johns, V.A. McKusick, A.H. Owens, Jr., R.S. Ross. Appleton-Century-Crofts, Norwalk, CT, 1984, 425 pp, \$25.00