MULTIDISCIPLINARY COLLABORATION FOR MEETING RADIATION EMERGENCIES

Carol B. Jankowski, R.N.

During the next three days, you will hear of many agencies and plans already in place to handle radiation emergencies. All of this preparedness, however, depends on the participation of many kinds of professionals in a concerted effort to meet whatever unforeseen situation may arise. This is true even for an injury involving only a single individual, the most common kind of radiation emergency. Each local hospital supporting a nuclear power facility performs at least one medical drill annually to review its ability to manage radiation casualties. Admitting even one injured and contaminated plant employee to the emergency room requires the involvement of many hospital departments, including the nursing, medical, security, housekeeping, radiology, clinical laboratories, and administration groups.

The triage of several injured victims to regional hospitals would demand even more personnel and coordination of their efforts. In an extreme situation, the need for health care personnel could be enormous. According to the Vienna report on the Chernobyl disaster, 84,000 persons were evacuated from the area around the reactor site. In order to help with evaluation and provide assistance, 450 brigades were mobilized, including more than 6,000 health and scientific personnel.

Planning for large-scale radiation emergencies should involve physicians, but there must also be advice from and coordination with nurses, health physicists, emergency management specialists, emergency medical technicians, and state and local police and fire officials. When general disaster plans are already in place, they can be expanded to encompass unique actions required by the presence of radioactive materials. Health physicists are employed by most industries that use radiation sources and by large hospitals; they should be an integral part of emergency planning. They can provide, in advance, essential information regarding the specific radionuclides or radiation sources that might present hazards during an emergency and the testing equipment that will be needed.

While developing and testing plans, it is important to remember that each profession has its own jargon. Medical, nursing, and health physics personnel must be able to communicate in terms understood by all, including those who are not in the health professions. Terms must be defined, but not over the body of an injured casualty.

Associate in Radiology (Nuclear Medicine), Harvard Medical School, and Senior Research Assistant, Brigham & Women's Hospital, Boston, Massachusetts.