

The Radiation Injury Treatment Network: Preparedness and Specialized Care for Victims of Acute Radiation Injury

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The public health and national security threat resulting from the purposeful misuse of nuclear or radiological materials is well recognized. In response to this concern, the National Marrow Donor Program, in collaboration with the American Society of Blood and Marrow Transplantation and the Office of Naval Research, began development of the Radiation Injury Treatment Network (RITN). The purpose of RITN was to organize a network of tertiary care facilities and specialists in hematology/oncology and stem cell transplantation to provide infrastructure and expert care capacity for victims of acute radiation injury in the event of a mass casualty event and to provide education to hematologists/oncologists and stem cell transplant physicians about their probable and important role in the response to a radiation event. Since inception in 2004, RITN has grown to include 36 stem cell transplant centers, 9 donor centers and 7 umbilical cord blood banks, located throughout the United States and representing each of the Federal Emergency Management Response regions. In the aftermath of a radiological or nuclear event, RITN centers would be asked to accept patient transfers to their institution, provide treatment expertise to practitioners caring for radiation victims at other centers, travel to other centers to provide medical expertise and provide data on the treatment of victims at their center. RITN has also developed standard operating procedures (SOPs) for the proper evaluation and treatment of victims of acute radiation exposure, standardized admission and treatment orders, standardized data collection protocol, training in management of radiation victims, coordinated with international organizations and conducted annual tabletop exercises to assess preparedness for a mass casualty event. The SOPs and standardized admission and treatment order forms are accessible at www.ritn.net and are linked at the U.S. Department of Health and Human Services Radiation Event Medical Management website, www.remm.nlm.nih.gov. In an acute radiation event, RITN will coordinate all of its efforts directly with the Office of Assistant Secretary for Preparedness and Response (ASPR) which is responsible for overseeing the medical response to a radiation emergency.