

Preface

In the years since the September 11, 2001 terrorism incident, the National Council on Radiation Protection and Measurements (NCRP) has been active in preparing publications that provide guidance in preventing, preparing for, and responding to possible acts of radiological or nuclear terrorism. Major publications on these subjects include Report No. 138, *Management of Terrorist Events Involving Radioactive Material* and Commentary No. 19, *Key Elements of Preparing Emergency Responders for Nuclear and Radiological Terrorism*. In addition, NCRP has published three commentaries (Commentary No. 16, *Screening of Humans for Security Purposes Using Ionizing Radiation Scanning Systems*; No. 17, *Pulsed Fast Neutron Analysis System Used in Security Surveillance*; and No. 20, *Radiation Protection and Measurement Issues Related to Cargo Scanning with Accelerator-Produced High-Energy X Rays*) that discuss measurement and health protection aspects of using radiation-based systems for the detection and interdiction of radiological or nuclear materials and terrorism threats. NCRP has also been preparing new reports related to the treatment and long-term medical management of people affected by deliberate or accidental releases of radiological or nuclear materials including Report No. 161, *Management of Persons Contaminated with Radionuclides*.

The present Report provides guidance for emergency responders and medical centers for the development of radiological response plans that include the efficient screening of a population for internally-deposited radionuclides, decontamination procedures, and treatment by decorporation therapy. While this Report is intended to focus on screening a population for internal contamination, screening is only one aspect of monitoring a population in the aftermath of a radiological or nuclear incident. Thus, this Report also broadly discusses external monitoring and decontamination of the affected population. The social and psychological impacts of a radiological or nuclear incident, and the long-term medical monitoring of the exposed population, are also addressed. A focus is placed on rapid methods for determining the contaminating radionuclides and the screening, decontamination and prompt medical management of contaminated persons.

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