

AbstractID: 7900 Title: Medical Response Planning for Nuclear/Radiological Emergencies: Roles of the Medical Physicist

Medical health physicists working in a clinical setting have a number of key roles in preparing for and responding to a nuclear or radiological emergency, such as a terrorist attack involving a radiological dispersal device or an improvised nuclear device. Their first responsibility, of course, is to assist hospital administrators and facility managers in developing radiological emergency response plans for their facilities and train staff prior to an emergency. During a hospital's response to a nuclear or radiological emergency, medical health physicists may be asked to (1) evaluate the level of radiological contamination in or on incoming victims; (2) help the medical staff evaluate and understand the significance of the levels of radioactivity with which they are dealing; (3) orient responding medical staff with principles of dealing with radioactive contaminants; (4) provide guidance to staff on decontamination of patients and facilities; and (5) assist local public health authorities in monitoring people who are not injured but who have been or are concerned that they may have been exposed to radioactive materials or radiation as a result of the incident. Medical health physicists may also be called upon to communicate with staff, patients, and the media on radiological issues related to the event. The Centers for Disease Control and Prevention (CDC) is developing guidance in the areas of radiological population monitoring, handling contaminated fatalities, and using hospital equipment for emergency monitoring. CDC is also developing training and information materials that may be useful to medical health physicists who are called upon to assist in developing facility response plans or respond to a nuclear or radiological incident.

Educational Objectives:

1. Understand how the medical community will be involved in respond to a nuclear or radiological emergency.
2. Understand key roles that medical health physicists can play in preparing for and responding to such emergencies.
3. Learn what resources are available to assist medical health physicists and how these resources can be used.