



Standard Practice for Radiological Emergency Response¹

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INTRODUCTION

One of the legacies of the Oklahoma City bombing and the attacks of September 11, 2001 is recognition that terrorists use weapons of mass destruction (WMD). This awareness has changed the philosophy of emergency response across disciplines. Incident response is still based on accepted procedures and safe work practices developed over the years, but the new mission must include concerns that are specific to an intentional release of hazardous materials designed to kill or injure and cause destruction of property. This standard practice provides guidance for responding to incidents where radioactive materials might be used with that intent. The standard also applies guidance for general radiological emergency response. The purpose of the guidance is to save lives, minimize radiation dose, and move members of the public out of perceived danger areas.

This standard practice provides decision making considerations that jurisdictions can use to respond to incidents that involve radioactive materials. The standard practice provides a consistent set of practices that can be incorporated into the development, planning, training, and implementation of guidelines for radiological emergency response. The standard practice does not incorporate long-term recovery or mitigation considerations, nor does it include provisions for improvised nuclear device² (INDs) detonations or nuclear power plant (NPP) accidents. Jurisdictions using the standard practice shall incorporate their own procedures for notification and requests for assistance from specialized radiological response assets.

The following are key concepts associated with this standard practice:

The standard practice applies to the emergency phase of an event (0 to 24 h or until specialized resources arrive on scene if they are requested).

It adheres to a risk-based response; this means the guidance presented is intended to be coupled with the authority having jurisdiction's (AHJ's) understanding of local vulnerability and capability when developing its plans and guidance documents on the subject.

It is compliant with the National Incident Management System (NIMS) and uses Incident Command System (ICS) common terminology. Full compliance with NIMS is recognized as an essential part of emergency response planning. In developing this standard practice, every effort was made to ensure that all communications between organizational elements during an incident are presented in plain language according to NIMS 2007. In keeping with this NIMS requirement, key definitions and terms, using plain English, are incorporated.

It is not intended for large-scale nuclear scenarios (for example, IND), which may quickly exhaust the capabilities of local emergency responders.

The standard practice is not intended to prepare communities for nuclear power plant accidents. The state of preparedness for communities in close proximity to nuclear power plants far exceeds the minimum requirements and capabilities described in this standard practice.

TRACEM (Thermal, Radiological, Asphyxiant, Chemical, Etiological, Mechanical) issues were considered throughout. While response to radiological hazards is the focus of this standard practice, responders must consider all hazards during a response; it is possible that non-radiological hazards may present a greater danger at an incident.

The standard practice does not address airborne contamination levels of radioactive materials exposure. Equipment to determine this potential hazard is not widely available in emergency responder communities. Respiratory protection is required for emergency responders until a complete hazard identification assessment is complete.