

## RELATED TERMS

- Incident Site Safety
- Radiological Dispersal Device



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## PRIMARY DISCIPLINES

- Emergency Management
- Hazardous Materials

# PRACTICE NOTE

## Radiological Incident Response: Washington State Department of Health's Recommendations for Staying within Radiation Dose Limits

### PRACTICE

The Washington State Department of Health (DOH) recommends that emergency responders at a radiological dispersal device (RDD) incident site exit the warm and hot zones when their dosimeters measure 80% of the recommended dose limit.

### DESCRIPTION

Dosimeters measure only external exposure to radiation, which depends on the dose rate and the length of time of exposure. Dosimeters cannot measure internal exposure, which is caused by inhaled, ingested, or otherwise internally absorbed radioactive material.

The Washington State DOH issued recommendations for emergency response personnel responding to an RDD event in June 2005. These recommendations include radiation dose limits for responders engaged in various activities in the warm and hot zones at an RDD incident site. The Washington State DOH recommends that responders discontinue operations in the warm and hot zones when their dosimeters measure 80% of the recommended dose limit. This helps ensure that total exposure, including unmeasured internal exposure, does not exceed the limit.

Washington State DOH's recommended dose limits in units of roentgen equivalent man (rem) for responders involved in different activities and the corresponding recommendations for exiting the warm and hot zones are:

Dose Limit	Exit when Dosimeter Reads	Activity Being Performed
5 rem	4 rem	Any
10 rem	8 rem	Protecting valuable property
25 rem	20 rem	Lifesaving or protection of large populations
>25 rem	n/a	Lifesaving or protection of large populations on a volunteer basis

**CITATION**

Washington State Department of Health. *Protective Action Recommendations for a Radiological Dispersal Event Including Improvised Nuclear Devices, Revision 8*. 06 Jun 2005.

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