

## DO BROADCAST METEOROLOGISTS HAVE A ROLE DURING A RADIOLOGICAL OR NUCLEAR PUBLIC HEALTH EMERGENCY?\*

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### INTRODUCTION

In recent years, there is an increased awareness of the possibility of terrorism attacks involving radiological or nuclear materials. The U.S. Department of Homeland Security has identified 15 plausible scenarios against which federal agencies are to develop the capabilities to respond. Two of those scenarios involve a terrorist event using an improvised nuclear device (IND) or radiological dispersal device (RDD). In addition, estimates of the likelihood of a nuclear terrorist incident in the U.S. range from 20-29% for the next decade (Lugar 2005 and Bunn 2006). In the case of an IND or RDD or any other technological or natural emergency involving radioactive materials, the responsibility to provide public health support is tasked through the National Response Framework (NRF) to the U.S. Department of Health and Human Services (HHS). HHS has subsequently delegated many responsibilities (particularly education and radiological population monitoring) described in the NRF's Nuclear/Radiological Incident Annex to the Centers for Disease Control and Prevention (CDC). CDC's role is specifically to (1) prepare state and local health departments to respond to a radiological/nuclear event, and (2) assist these agencies during such a response. In a radiological emergency, CDC will assist state and local health departments with radiation exposure/contamination assessments, field

investigations, and advise on protective actions related to indirect and direct human and animal exposures. The types of events that may involve radiation include (1) nuclear incidents such as a targeted attack on a nuclear facility, a nuclear weapon, or an improvised nuclear device; (2) radiological dispersal devices such as a "dirty bomb" or dispersion in air or by liquid; or (3) covert placement of a high-energy radioactive source in an area where people would be exposed without their knowledge ("silent source").

### AUDIENCE RESEARCH

To fulfill its role as a primary federal agency for radiological and nuclear emergency preparedness and response, CDC has been working to assess the needs of its constituencies and audiences, develop training and education for these audiences, and conduct outreach to professional audiences with these materials.

In 2003-2004, CDC, through the Association of Schools of Public Health (ASPH), conducted formative research to guide development of messages and materials related to terrorism emergency preparedness topics, including radiation (Becker 2004). One of the most intriguing findings from the ASPH's focus group research was that individuals, particularly emergency responders, would look to local meteorologists to provide information about how radiation might spread following a radiological emergency event. Although not expressed as directly, in earlier focus group research conducted by another contractor, members of the public also indicated they would be concerned about wind

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