



Highlights of GAO-10-204, a report to congressional committees

Why GAO Did This Study

A terrorist's use of a radiological dispersal device (RDD) or improvised nuclear device (IND) to release radioactive materials into the environment could have devastating consequences. GAO was asked to examine (1) the extent to which the federal government is planning to fulfill its responsibilities to help cities and their states clean up contaminated areas from RDD and IND incidents, (2) what is known about the federal government's capability to effectively clean up these contaminated areas, and (3) suggestions for improving federal preparedness to help cities and states recover from these incidents. The report also discusses recovery activities in the United Kingdom. GAO reviewed federal laws and guidance; interviewed officials from the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), Department of Energy (DOE), and Environmental Protection Agency (EPA); and surveyed emergency management officials from 13 cities at high risk of attack, their 10 states, and FEMA and EPA regional offices.

What GAO Recommends

GAO recommends that, among other things, FEMA prepare a national recovery strategy that clarifies federal roles for cleaning up areas contaminated by attacks using RDDs or INDs, and schedule additional exercises to assess recovery preparedness. DHS and DOE agreed with our recommendations, and EPA did not agree or disagree with them.

[View GAO-10-204 or key components.](#)
For more information, contact Gene Aloise at (202) 512-3841 or aloise@gao.gov.

January 2010

COMBATING NUCLEAR TERRORISM

Actions Needed to Better Prepare to Recover from Possible Attacks Using Radiological or Nuclear Materials

What GAO Found

FEMA, the DHS agency responsible for developing a comprehensive emergency management system, has not developed a national disaster recovery strategy, as required by law, or issued specific guidance to coordinate federal, state, and local government recovery planning for RDD and IND incidents, as directed by executive guidance. To date, most federal attention has been given to developing a response framework, with less attention to recovery. Responding to an attack would involve evacuations and providing treatment to those injured; recovering from an attack would include cleaning up the radioactive contamination to permit people to return to their homes and businesses. Existing federal guidance provides limited direction for federal, state, and local agencies to develop recovery plans and to conduct exercises to test recovery preparedness. Of the over 90 RDD and IND exercises to test response capabilities in the last 6 years, only 3 included a recovery component. GAO's survey found that almost all 13 cities and most states believe they would need to rely heavily on the federal government to conduct and fund analysis and environmental cleanup activities. However, city and state officials were inconsistent in views on which federal agencies to turn to for help, which could hamper the recovery effort.

Although DOE and EPA have experience cleaning up localized radiation-contaminated areas, it is unclear whether this federal capability is sufficient to effectively direct the clean up after RDD or IND incidents, and to efficiently address the magnitude of cleanup that would follow these incidents. According to an expert at DOE's Idaho National Laboratory, experience has shown that not selecting the appropriate decontamination technology can generate waste types that are more difficult to remove than the original material and can create more debris requiring disposal—leading to increased costs. Limitations in laboratory capacity to rapidly test potentially millions of material samples during cleanup, and uncertainty regarding where to dispose of radioactive debris could also slow the recovery process. At least two-thirds of the city, state, and federal respondents expressed concern about federal capability to provide the necessary cleanup actions after these incidents.

Nearly all survey respondents had suggestions to improve federal recovery preparedness for RDD and IND incidents. For example, almost all the cities and states identified the need for a national disaster recovery strategy to address gaps and overlaps in federal guidance. All but three cities wanted additional guidance, for example, on monitoring radioactivity levels, cleanup standards, and management of radioactive waste. Most cities wanted more interaction with federal agencies and joint exercising to test recovery preparedness. Finally, GAO's review of the United Kingdom's preparedness to recover from radiological terrorism showed that it has already taken actions similar to those suggested by GAO's survey respondents, such as issuing national recovery guidance, conducting a full-scale recovery exercise, and publishing national recovery handbooks for radiation incidents.