

WMD/HAZARDOUS MATERIALS RESPONSE AND DECONTAMINATION

Capability Definition

Weapons of Mass Destruction (WMD)/Hazardous Materials Response and Decontamination is the capability to assess and manage the consequences of a hazardous materials release, either accidental or as part of a terrorist attack. It includes testing and identifying all likely hazardous substances onsite; ensuring that responders have protective clothing and equipment; conducting rescue operations to remove affected victims from the hazardous environment; conducting geographical survey searches of suspected sources or contamination spreads and establishing isolation perimeters; mitigating the effects of hazardous materials, decontaminating on-site victims, responders, and equipment; coordinating off-site decontamination with relevant agencies, and notifying environmental, health, and law enforcement agencies having jurisdiction for the incident to begin implementation of their standard evidence collection and investigation procedures.

Outcome

Hazardous materials release is rapidly identified and mitigated; victims exposed to the hazard are rescued, decontaminated, and treated; the impact of the release is limited; and responders and at-risk populations are effectively protected.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports Emergency Support Function (ESF) #10: Oil and Hazardous Materials Response.

Preparedness Tasks and Measures/Metrics

Activity: Develop and Maintain Plans, Procedures, Programs and Systems	
Critical Tasks	
Res.B2b 1.1	Develop plans, programs, agreements and requirements for responding to hazardous material incidents
Res.B2b 1.2	Develop plans, programs, criteria, and protocols for conducting decontamination
Res.B2b 1.3.1	Pre-identify resources (personnel and equipment) to provide rapid initial size up of hazardous materials incident
Res.B2b 1.5	Ensure plans are in place for self-presenting contaminated victims off-site (e.g., hospitals)
Preparedness Measures	
Risk analysis completed for potential hazmat vulnerabilities, including fixed facilities and transportation-related emergencies	Metrics Yes/No

Activity: Develop and Maintain Plans, Procedures, Programs and Systems	
Frequency with which Emergency Response Plan is updated	Annually
Local Emergency Planning Commission functional	Yes/No
Frequency with which pre-planned hazards and targets are updated	Annually
Plans are in place for pre-identified and equipped hazmat personnel to respond to hazmat incident and provide initial rapid hazmat incident size up within 30 minutes of notification (<2hrs if regional resource)	Yes/No
Hazmat personnel equipped and trained for weather prediction and hazard pluming	Yes/No
Redundant hazmat response teams and equipment are available (or accessible through mutual aid agreements) to provide resiliency in the event of a large-scale incident	Yes/No
Jurisdiction's hazmat team(s) has current protocol to coordinate with emergency medical services (EMS) on victim care post-decontamination (identification of substance, administration of antidotes, etc.)	Yes/No
Jurisdiction's hazmat team(s) has current protocol to coordinate with law enforcement for evidence collection and crime scene control	Yes/No
Emergency response and command vehicles and Incident Command Posts equipped with Emergency Response Guidebook, NIOSH pocket guidebook, and discipline-related references relevant to the region	Yes/No

Activity: Develop and Maintain Training and Exercise Programs	
Critical Tasks	
Res.B2b 2.1.1	Develop and implement training related to detection and reporting of hazardous material
Res.B2b 2.1.2	Provide appropriate hazardous materials response training to field staff and managers of State/local programs having involvement in hazardous materials response
Preparedness Measures	Metric
Police, fire, emergency medical services (EMS) first responders (other than those assigned to hazmat responses) that are trained to hazmat awareness level	100%
First responders assigned to hazmat operations that are trained to hazardous materials operations level (in accordance with 1910.120 (g) or NFPA 472)	100%
Personnel assigned to hazmat technician responsibilities who are trained to the hazmat technician level (in accordance with 1910.120 (g) or NFPA 472)	100%
Personnel assigned to hazmat specialist responsibilities who are trained to the hazmat specialist level (in accordance with 1910.120 (g) or NFPA 472)	100%
Personnel assigned to manage hazardous materials who are trained to hazardous materials management level (in accordance with 1910.120 (g), NFPA 471 and NFPA 472) for detection equipment, including flammability, toxicity, radiations, chemical warfare agents (CWAs) and biologicals	100%
Personnel assigned to manage hazardous materials who are trained to hazardous materials management level (in accordance with 1910.120 (g), NFPA 471 and NFPA 472) for substance identification equipment, for bases and vapors, liquids, solids and biologicals (white powder)	100%

Activity: Develop and Maintain Plans, Procedures, Programs and Systems

Hazmat personnel equipped and trained for weather prediction and hazard plumbing	Yes/No
Jurisdiction's hazardous materials team(s) trains regularly with emergency medical services (EMS) to ensure proper coordination of victim care post-decontamination (identification of substance, administration of antidotes, etc.)	Yes/No
Jurisdiction's hazardous materials team(s) trains regularly with law enforcement to ensure proper coordination for evidence collection and crime scene control	Yes/No

Performance Tasks and Measures/Metrics

Activity: Direct WMD/Hazardous Material Response and Decontamination Tactical Operations

Definition: In response to notification of WMD/hazmat event or contamination, provide management and coordination of hazmat response and decontamination operations through demobilization and/or transition to recovery operations.

Critical Tasks

Res.B2b 3.1	Receive alert/activation order for WMD/Hazardous Materials Response and Decontamination
Res.B2b 3.2	Establish and implement on-scene management for hazmat material response
Res.B2b 3.2.4	Provide a hazardous materials technical expertise team for emergency operations for both industry and public
Res.B2b 3.4	Implement a hazardous materials response (e.g., implement plans, programs, agreements, and requirements)
Res.B2b 3.2.7	Coordinate technical, administrative support, personnel, facilities, communications and information
Res.B2b 3.2.6.2	Provide required Personal Protection Equipment to WMD/HazMat responders in coordination with safety officer
Res.B2b 3.2.5.1	Assess hazardous material situation and assist incident command (IC) and planning section in developing an incident action plan (IAP)
Res.B2b 3.2.5.5	Recommend protective action guidelines based on updated hazard assessments to on-site incident management
Res.B2b 3.2.5.4	Develop a site safety plan
Res.B2b 3.2.6.1	Observe the scene and review/evaluate hazard and response information as it pertains to the safety of all persons on the scene and responding
Res.B2b 3.2.6	Coordinate with safety officer to ensure the safety of on-scene WMD/HazMat responders
Res.B2b 3.4.7	Coordinate and support decontamination activities on-site
Res.B2b 3.4.7.4	Coordinate with and provide technical guidance to entities performing off-site decontamination
Res.B2b 3.4.7.5	Coordinate with hospitals to develop plans for managing/decontaminating self-presenting contaminated victims
Res.B2b 3.2.8	Coordinate resource management of hazardous materials equipment, supplies, and personnel
Res.B2b 4.3.7.6	Request decontamination technical assistance resources

Res.B2b 3.2.6.3	Coordinate with safety officer to brief hazardous materials branch/group personnel on site-specific occupational safety and health issues involving hazardous materials/WMD releases	
Res.B2b 3.4.7.7	Issue instructions for self-decontamination, where appropriate, expedient and possible	
Performance Measures		Metric
WMD/Hazardous Materials Response and Decontamination personnel injured during rescue efforts		Less than one loss-time injury per deployment
Develop tactical plan, based on the incident action plan (IAP), and for implementation by the State, region, and/or local WMD/Hazardous Materials Response and Decontamination		Within 2 hours of arrival on-scene

Activity: *Activate WMD/Hazardous Material Response and Decontamination*

Definition: In response to activation, mobilize and arrive at the incident scene to begin operations.

Critical Tasks

Res.B2b 4.1	Initiate WMD/HazMat procedures
Res.B2b 4.2	Assemble personnel and equipment at designated location
Res.B2b 4.3	Transport team (personnel and equipment) to scene

Performance Measures		Metric
Coordinate/incorporate into ICS		On arrival
Initial hazmat size up is completed		Within 30 minutes of notification of incident
Regional assets (e.g., Type I hazmat Team or Type III or IV Incident Management team) arrive on-scene, if requested by IC		Within 2 hours of asset request
State assets (e.g., Type I hazmat Team or Type II or III Incident Management team) arrive on-scene, if requested by IC		Within 12 hours of asset request
Federal assets (e.g., Type I hazmat Team or Type I or II Incident Management team) arrive on-scene, if requested by IC		Within 24 hours of asset request
Radiological Emergency Preparedness Program (REPP) Response Teams appropriate for the incident size involving a radiological hazard are deployed		Within 24 hours of asset request
Radiological Assistance Program (RAP) Teams are deployed		Within 2 hours of asset request

Activity: *Identify and Evaluate Scene*

Definition: Upon arriving on scene, begin to assess site, sample, identify, and characterize WMD/hazmat and contamination situation, conduct hazard analysis to determine potential consequence and risk, develop plans for safety and hazmat/decontamination operations and set up hazmat zones.

Critical Tasks

Res.B2b 5.1.1	Notify law enforcement for guidance on collection and management of evidence from potential crime scenes
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Res.B2b 5.1	Initiate hazmat response	
Res.B2b 5.2	Assess the incident site for hazardous materials and other conditions	
Res.B2b 5.2.1	Identify hazardous materials and the extent/scope of the incident	
Res.B2b 5.5.1	Collect data for hazard analysis	
Res.B2b 5.5.3	Analyze weather forecast to conduct hazard zone prediction	
Res.B2b 5.2.2	Conduct contamination surveys	
Res.B2b 5.2.3	Assess hazmat release situation	
Res.B2b 5.2.3.1	Conduct oil and hazmat assessment	
Res.B2b 5.5.2	Monitor movement of hazardous releases and formulate predictions on dispersion and characteristics over time	
Res.B2b 5.5	Characterize consequences and risk	
Res.B2b 5.3	Identify and establish perimeter and hazardous materials zones (hot, warm, cold)	
Res.B2b 5.4	Conduct ongoing assessments and predictions	
Performance Measures		Metric
Isolate area and control public access		Less than 15 minutes of arrival on scene
Identify hazardous materials or category involved		Less than 30 minutes of arrival on scene
Obtain preliminary estimate of number of victims exposed to toxic/hazardous material and source identification		Less than 2 hours of arrival on-scene
Identify the at risk population and make protective action recommendations		Less than 1 hour

Activity: *Conduct Rescue Operations*

Definition: Once on scene and equipped with protective and response equipment, implement rescue operations.

Critical Tasks

Res.B2b 6.1	Extricate and rescue victims within the hot zone	
Res.B2b 6.2	Coordinate rescue efforts with law enforcement to ensure safety of rescuers while law enforcement secure the incident site	
Performance Measures		Metric
Rescue contaminated victims		Less than 2 hours after arrival on scene

Activity: *Conduct Mitigation Activities*

Definition: Once on scene and equipped with protective and response equipment, implement operations plan to minimize contamination.

Critical Tasks

Res.B2b 7.1.3	Identify appropriate PPE based on suspected hazardous material	
Res.B2b 7.1.1	Coordinate with safety officer to monitor responders for exposure to hazardous materials	
Res.B2b 7.1.2	Coordinate with safety officer to monitor and control the operating time of rescuers assigned to the hot zone to minimize rescuer exposure	
Res.B2b 7.1	Secure the contamination source and affected areas	
Res.B2b 7.2	Monitor and track compliance with containment requirements	
Performance Measures		Metric
Begin to implement initial action plan and objectives		Less than 4 hours after arrival on scene
Contain hazardous materials/WMD contamination		Less than 12 hours after arrival on scene

Activity: *Conduct On-Site Gross Decontamination*

Definition: Once on scene and equipped with decontamination equipment, decontaminate affected persons and animals, and also monitor contamination flow.

Critical Tasks

Res.B2b 8.1	Identify assets required for decontamination activities	
Res.B2b 8.2	Determine which agent-specific decontamination procedures are appropriate	
Res.B2b 8.4.5	Implement plans, procedures, and protocols to ensure on-site individual gross decontamination of persons and household pets affected by the incident	
Res.B2b 8.4.6	Provide a means to allow medical treatment facilities and shelter managers to readily identify people who have received gross decontamination	
Res.B2b 8.3.1	Establish decontamination sites for victims and household pets	
Res.B2b 8.4.1	Screen affected persons and household pets	
Res.B2b 8.4.2	Decontaminate victims exposed to chemical, biological, radiological, nuclear, or explosive (CBRNE) materials	
Res.B2b 8.5.1	Coordinate livestock decontamination	
Res.B2b 9.2.3	Monitor clean areas within the contamination control line	
Res.B2b 9.2.2	Monitor the exit points for hazmat contaminate movement outside the isolation zone	
Performance Measures		Metric
Perform emergency gross decontamination of victims on-scene after decontamination team arrives		Less than 2 hours depending on substance
Perform emergency gross decontamination of household pets on-scene after decontamination team arrives		Less than 4 hours depending on substance

Activity: *Conduct On-Site Technical Decontamination*

Definition: For on-scene first responders, provide thorough decontamination.

Critical Tasks

Res.B2b 9.1	Conduct first responders technical decontamination	
Res.B2b 9.2.2	Monitor the exit points for hazmat contaminate movement outside the isolation zone	
Res.B2b 9.2	Decontaminate affected facilities and equipment used for technical decontamination	
Res.B2b 9.4.1	Perform cleanup operations	
Res.B2b 9.4.2	Implement hazardous materials disposal plan	
Performance Measures		Metric
Perform technical decontamination of first responders on-site		Less than 2 hours from end of work period depending on substance
Perform technical decontamination of off-site victims (e.g., at hospitals and designated decontamination stations)		Less than 2 hours depending on substance
Perform technical decontamination of household pets off-site (e.g., at designated decontamination stations)		Less than 2 hours depending on substance
Perform technical decontamination of human remains		Less than 24 hours from end of work period

Activity: Demobilize WMD/Hazardous Materials Response and Decontamination

Definition: Upon completion of response phase transition to recovery operations, inventory equipment, complete paperwork, pursue rehabilitation, and conduct post event analysis (e.g., lessons learned) in accordance with incident demobilization plan.

Critical Tasks

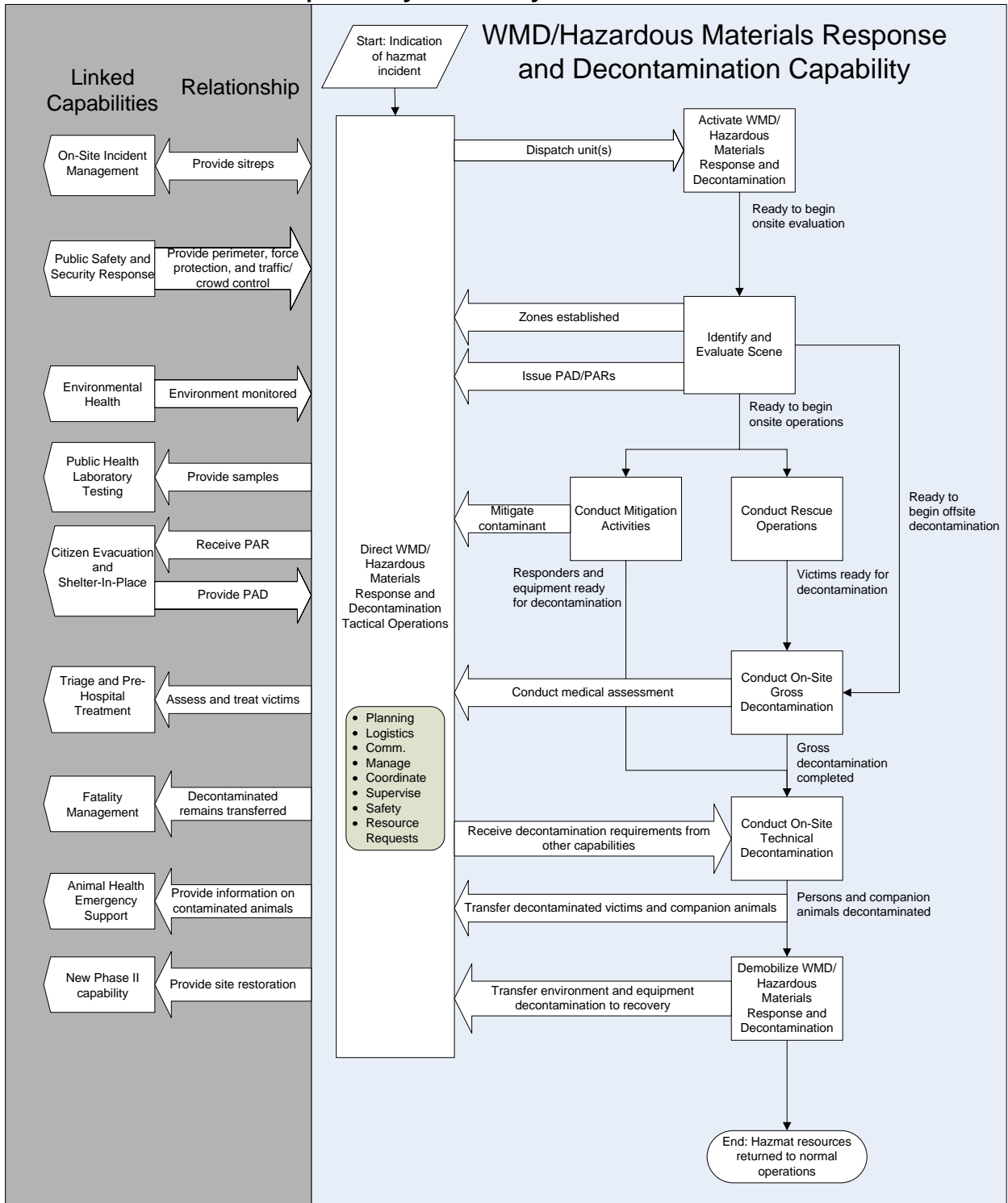
Res.B2b 10.1	Repackage WMD/HazMat equipment cache	
Res.B2b 10.2	Demobilize WMD/HazMat base of operations	
Res.B2b 10.3	Arrange transportation for demobilized WMD/HazMat personnel and equipment	
Res.B2b 10.4	Debrief WMD/hazmat capability personnel	
Performance Measures		Metric
Re-inventory and package equipment cache for transport		Less than 12 hours from start of demobilization process
Return base of operations to original conditions		Less than 12 hours from start of demobilization process
WMD/Hazardous Materials Response and Decontamination task force debriefed		Yes/No

Linked Capabilities

Linked Capability	Relationship
Onsite Incident Management	WMD/Hazmat and Decontamination capability management integrates itself into the local Incident Command/Unified Command system.

Public Safety and Security Response	WMD/Hazmat and Decontamination capability relies upon Public Safety and Security Response assistance to secure WMD/hazmat and decontamination sites, safely divert public from the area, and to provide security support for the WMD/hazmat and decontamination base of operations.
Firefighting	WMD/Hazmat and Decontamination coordinates with Firefighting to decontaminate on-site victims and coordinates with hazmat on tactics to monitor and minimize release of hazardous materials during firefighting operations.
Environmental Health	WMD/Hazmat and Decontamination capability relies upon Environmental Health to monitor environmental public safety from decontamination and other hazmat response operations.
Citizen Protection: Evacuation and Shelter-in-Place	WMD/Hazmat and Decontamination capability relies upon Citizen Evacuation assistance to help plan for and implement the protective actions recommended by the IC in consultation with the WMD/hazmat team to both protect and decontaminate evacuees.
Triage and Pre-Hospital Treatment	WMD/Hazmat and Decontamination capability relies upon Triage and Pre-Hospital Treatment to transfer care of victims that have been decontaminated from WMD/hazmat.
Fatality Management	WMD/Hazmat and Decontamination capability notifies Fatality Management of location of decontaminated remains encountered from WMD/hazmat exposure.
Public Health Laboratory Testing	WMD/Hazmat and Decontamination capability provides Public Health Laboratory and Testing with samples for testing.
Debris and Hazardous Waste Management	WMD/Hazmat and Decontamination capability relies upon the New Phase II capability for debris removal, hazardous waste management, and site restoration of the environment.

Capability Activity Process Flow



Capability Element Description Details

Capability Elements	Components and Description
Type III Hazmat Entry Team	Per NIMS
Type II Hazmat Entry Team	Per NIMS
Type I Hazmat Entry Team	Per NIMS
EPA Radiological Emergency Response Team	The Radiological Emergency Response Team (RERT), based in EPA's Office of Radiation and Indoor Air and regional offices, responds to emergencies involving releases of radioactive materials by providing environmental measurement and guidance activities: monitoring, sampling, and laboratory activities and providing State and local authorities with advice on protecting local residents from exposure to harmful radiation levels..
Federal Radiological Monitoring and Assessment Center (FRMAC)	The Department of Energy (DOE) Federal Radiological Monitoring and Assessment Center (FRMAC) coordinates Federal radiological monitoring and assessment activities with those of State and local agencies.
Hazmat Information/Research Function	Reference/research function performs the compiling and interpretation of technical information related to products, agents, containers, excreta and provide relevant information to the Hazardous Materials Branch Director or Group Supervisor.
Medical Function	Part of the logistics section for the provision of medical services for response personnel.
Hazmat Resources Function	The "resources group" technically would be within the planning section and be termed the resources unit and would reside outside of the hazmat structure. Resources on the scene would be assigned to the staging area manager.
Hazmat Technical Specialists	Single resources that will be assigned as needed and defined in 29CFR1910.120

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the Toxic Industrial Chemical scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- This capability applies to a wide range of incidents and emergencies, including those caused by an improvised nuclear device, aerosol anthrax, a blister agent, a nerve agent, and a radiological dispersal device.
- If decontamination is ongoing during the early stages of a catastrophic incident, persons undergoing decontamination will have logistical, medical, and mental health needs that will need to be addressed quickly.
- All victims are rescued within 4 hours
- Decontamination priorities will be set up using the following priorities, in order of importance: life safety, incident stabilization, and property conservation.
- All fires are extinguished in 4-day response phase.

- Water-based oil release may extend beyond the 96-hour limit. Assets will be on scene, but containment operations may not be able to begin immediately on arrival.
- Three operational response areas: port, refinery, and downwind
- The response phase is 96 hours.
- Local response time: 0–2 hours
- Regional response time: 2–12 hours
- State response time: 12–24 hours
- Federal response time: 24+ hours
- “Zero hour” (incident clock) = time incident occurred
- Unconstrained need: consider all assets required for response, do not factor response time or asset availability into planning.
- Planning factors are based on scenario and planning assumptions for a level III hazardous materials (hazmat) incident, where there are 1,000 injuries and 350 deaths, 25,000 sheltered, 10,000 evacuated, and 100,000 self-evacuated. About half of equipment and facilities are damaged (of three refineries). Two ships sank and the port was damaged near improvised explosive device (IED) sites and property was damaged in the downwind area.
- A significant number of individuals exposed to a plume cloud or contaminant agent will flee the scene before first responders arrive. It may prove difficult to determine which of those individuals require decontamination, and to ensure such individuals present themselves for decontamination.
- The absolute effectiveness of decontamination techniques

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Toxic Industrial Chemical)

Resource Organization	Estimated Capacity	Scenario Requirement Values	Quantity of Resources Needed
Type 1 Hazmat Entry Team (focused on extrication)	3 victim extrications per hour per team 12 victim extrications over a 4-hour period per team	1,000 injuries (downwind area) 350 deaths 2 response areas port and downwind. <i>Note: cannot respond in level A in a fire environment (this excludes refinery response area).</i> 4-hour rescue phase	Type 1 Hazmat Entry Team (focused on extrication)
Type 1 Hazmat Entry Team (focused on decontamination)	10 victims decontaminated/hour per team (5-man team) 40 victims decontaminated per team in a 4-hour rescue phase	1,000 injuries (downwind area) 350 deaths Two response areas: port and downwind. <i>Note: cannot respond in level A in a fire environment (excludes refinery response area)</i> 4-hour rescue phase	Type 1 Hazmat Entry Team (focused on decontamination)
Hazmat Information/Research	1 team per 12-hour shift for all response	96-hour response phase (8 shifts)	Hazmat Information/Research

Resource Organization	Estimated Capacity	Scenario Requirement Values	Quantity of Resources Needed
Group/Team	areas		Group/Team
Hazmat Medical Group/Team	1 team per 12-hour shift per response area	96-hour response phase (8 shifts) 2 response areas (port and downwind)	Hazmat Medical Group/Team
Hazmat Resources Group/Team	1 team per 12-hour shift per response area	96-hour response phase (8 shifts) Two response areas (port and downwind)	Hazmat Resources Group/Team
Hazmat Liaison Officer	1 officer per 12-hour shift per response area	96-hour response phase (8 shifts) 2 response areas (port and downwind)	Hazmat Liaison Officer
Hazmat Specialists	1 specialist per response area per 12-hour shift	96-hour response phase (8 shifts) 2 response areas (port and downwind)	Hazmat Specialists
EPA Radiological Emergency Response Team	Phase I CMRT: Phase II CMRT:	4-hour readiness posture (6-10 hour response time) Up to 500 members, round-the-clock operations capacity, 24-36 hour response time	
Federal Radiological Monitoring and Assessment Center (FRMAC)		2-hour call-up (working hours), 4-hour call-up (non-working hours)	27 teams in 8 DOE regions

Approach for Large-Scale Events

- Just-in-time training is the only innovation to reduce number of teams required; however, the 4-hour rescue phase makes training counterproductive
- The United States has approximately 64 nuclear stations supported by the Radiological Emergency Preparedness Program (REPP). No less than 30 REPP response teams should be able to respond to an “improvised nuclear device” scenario within 24 hours
- Quantity of resources is achievable through mutual aid
- Each jurisdiction is expected to sponsor and support community emergency response teams (CERTs)
- The projected effects of contamination resulting from a catastrophic incident are generally based on an estimated population density of 2,000 people per square mile, but may increase for major urban areas
- Large-gathering situations (e.g. National Security special events, sporting events, conventions, etc.) create higher localized population densities
- Biological agents typically have delayed symptoms. As such there will rarely be an on-site incident requiring response when a biological agent is released

- Health care facilities are the most likely locations for managing a biological incident
- Secondary contamination will be a major concern. Hospital emergency rooms may close if patients are admitted without proper decontamination. Other secondary contamination issues include control of runoff of fluids used in decontamination, and the handling of contaminated clothing and personal effects. In addition, the secondary contamination of first responders, even those wearing personal protective equipment, can occur during the removal of patients from a hazardous area, during the performance of basic life support functions, or when initial responders are unaware that a hazardous material is involved.
- The psychological dimensions of being exposed to a contaminant, and subsequent decontamination, may present social management challenges and concerns. Of greatest concern are the short- and long-term psychological consequences resulting from actual exposure to chemical, biological and radiological substances, and which subsequently produce negative health effects. Short-term stress symptoms may be a prelude to long-term, debilitating, post-traumatic stress disorder.

National Targets and Assigned Levels

Responsible	Element Resource Unit	Type of Element	Number of Units	Unit Measure (number per x)	Capability Activity supported by Element
City	Type I Hazmat Entry Team (extrication)	NIMS-Typed Resource Organization	20	Per UASI Area ¹	Identify and Evaluate On-Scene Conduct Rescue Operations
County	Type I Hazmat Entry Team (extrication)	NIMS-Typed Resource Organization	1	Per county	Identify and Evaluate On-Scene Conduct Rescue Operations
City	Type I Hazmat Entry Team (decontamination)	NIMS-Typed Resource Organization	20	Per UASI Area	Identify and Evaluate On-Scene Conduct On-site Gross Decontamination Conduct On-site Technical Decontamination
County	Type I Hazmat Entry Team (decontamination)	NIMS-Typed Resource Organization	1	Per county	Identify and Evaluate On-Scene Conduct On-site Gross Decontamination Conduct On-site Technical Decontamination
City	Hazmat information/research group/team	Non-NIMS Resource Organization	2	Per UASI Area	Direct Tactical Operations

¹ Actual numbers based on risk/threat-based assessment.

Responsible	Element Resource Unit	Type of Element	Number of Units	Unit Measure (number per x)	Capability Activity supported by Element
City	Hazmat medical group/team	Non-NIMS Resource Organization	2	Per UASI Area	Conduct Rescue Operations
City	Hazmat resources group/team	Non-NIMS Resource Organization	2	Per UASI Area	Direct Tactical Operations
City	Hazmat liaison officer	Personnel	2	Per UASI Area	Direct Tactical Operations
County	Hazmat specialist	Personnel	1	Per county	Identify and Evaluate On-Scene Conduct Mitigation Activities
EPA	EPA Radiological Emergency Response Team	Federal Team			Identify and Evaluate On-Scene Conduct Mitigation Activities
DOE	Federal Radiological Monitoring and Assessment Center (FRMAC)	Federal Organization			Identify and Evaluate On-Scene Conduct Mitigation Activities

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