

Hazardous Materials and Terrorist Incident Planning Curriculum Guidelines

Planning for Protective Actions

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Introduction

Planning for protective actions addresses policy and procedures for providing personal protection to the public, including protection in place and evacuation. Considerations include public education, alert and warning systems, the availability of appropriate shelter, the nature and duration of hazardous materials releases, traffic flow and control, reception and care facilities, health and medical services, protection of water and sewage systems, ongoing incident assessment, and other emergency response functions and capabilities.

Training should provide a working knowledge of the benefits and limitations of various protection strategies, including evacuation, in-place protection, and a combination thereof. Participants should gain an understanding of the need for protective action planning and important planning considerations. They should develop the ability to implement a decision-making process for any given hazardous materials emergency or terrorist incident situation and respective protective action options, and learn strategies and techniques for communicating the desired protection action to the general public to elicit the best possible response.

Plans for protective actions must address roles, strategies, and procedures for a broad range of emergency preparedness and response activities. Depending on the jurisdiction's or facility's needs, planning may involve very complex analyses, decisions, and negotiations that must be addressed before incidents occur. Therefore, the goal of training is to give participants the knowledge and skills they need to assess existing capabilities in this area, identify needed resources, and establish systems for promoting effective response in any realistic hazardous materials incident scenario.

Training Audience

The training audience includes decision makers, planning team members, SOP writers, and agency and organization representatives with responsibilities related to mass care and protective actions in hazardous materials emergencies. Possible audience members include:

- Community planning team members
- Local Emergency Planning Committees
- Government and response agency representatives
- Facility planners and managers
- Community support services and volunteer group representatives
- Incident Commanders
- Public Information Officers
- Warning Officers
- Emergency Management Officials

Prerequisites or Presumed Knowledge/Skills of Students

Students should have mastered basic skills in hazardous materials and terrorism incident response planning, and have assigned responsibilities for hazardous materials and terrorist

incident response planning for a jurisdiction or facility. They should understand basic concepts of the Incident Command System, public relations and education, and emergency information and warning.

Typical Program Format

An instructor-facilitated one to two day program with lecture/discussion, student and/or tabletop exercises, and case study reviews. Longer programs may be appropriate where more complex studies, student activities, and field work are planned.

Methodology Recommendations

Planning for protective actions requires knowledge and skills in a broad range of disciplines and emergency response functions. Typically, many different government agencies, community organizations, and private sector groups are assigned related responsibilities under the emergency plan. For these reasons, the use of planning teams is particularly suited for this type of planning. Whenever possible, planning teams should be trained together to promote information sharing, inter-organizational understanding, and cooperation. Other considerations include:

- The training competencies identified for this curriculum area assume that a comprehensive hazards and threat analysis and capability assessment have been completed for the jurisdiction or facility. If this assumption is incorrect, training managers may wish to incorporate additional competencies from other planning specialty areas in the instruction.
- Instructional content should stress the interrelationships among planning processes, preparedness activities, response actions, and the public information and education components of emergency management.
- Training methodologies should emphasize small group interactions among various participants in the planning process. Hazardous materials and terrorist incident case examples should be incorporated into the course, using student activities or tabletop exercises to promote and evaluate skill/learning objectives.
- An instructional cadre concept, emphasizing diverse organizational interests and expertise, is particularly appropriate for this type of training.

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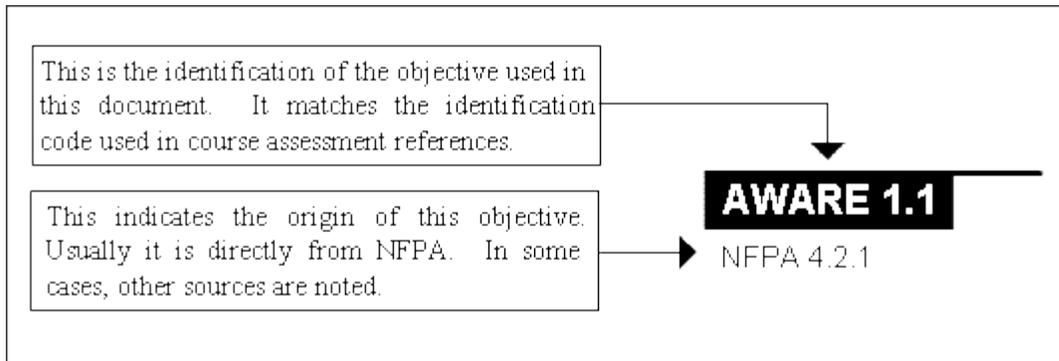
Facility Planning

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Appendix: Additional Planning Resources

Recommended Training Objectives

Objective Identification Legend



Planning for Protective Actions 1.

EVAC - 1.1.

Given a hazards and threat analysis and capability assessment for a jurisdiction or facility, demonstrate the ability to develop decision-making criteria for implementing protective actions.

EVAC - 1.1.1.

Describe the purpose and benefits of various protective action strategies, including evacuation, in-place sheltering, water supply protection, sewage system protection, and relocation.

EVAC - 1.1.2.

Compare the advantages and disadvantages of evacuation and in-place protection options for mass care in hazardous materials emergencies.

EVAC - 1.1.3.

Identify factors to consider in selecting a protective action strategy in a hazardous materials or terrorist incident situation, including:

- The nature of the threat
- The population at risk
- Time factors involved
- Weather conditions
- Communications
- Response capabilities

EVAC - 1.1.4.

Identify and assess resources available for implementing various protective actions, including capabilities of organizations assigned related responsibilities under the plan.

EVAC - 1.1.5.

Develop decision-making criteria for implementing protective actions that address evacuation (precautionary, general, and selective), in-place sheltering, and other options in emergency situations identified in the hazards analysis.

EVAC - 1.2.	Given the assignment to plan for protective actions for a jurisdiction or facility, demonstrate the ability to assess existing systems, strategies, and procedures for notifying, warning, and informing the public about protective action decisions.
EVAC - 1.2.1.	Identify factors that influence the public's understanding of and response to protective actions in hazardous materials emergencies.
EVAC - 1.2.2.	Assess existing public education programs for informing the public about protective actions in the event of a hazardous materials emergency, including citizen roles and responsibilities.
EVAC - 1.2.3.	Assess existing warning and emergency public notification systems for implementing protective actions in a hazardous materials emergency.
EVAC - 1.3.	Given a hazards and threat analysis and capability assessment for a jurisdiction or facility, demonstrate the ability to assess existing systems, strategies, and procedures for evacuating populations at risk in a hazardous material or terrorist incident.
EVAC - 1.3.1.	Identify eight considerations when planning an evacuation, as follows: <ul style="list-style-type: none"> • Emergency scene access and evacuation routes • Areas of responsibility • Geographical area, size and type • Evacuation area • Weather conditions • Transportation • Resisters • Mass care centers and shelters
EVAC - 1.3.2.	Identify four constraints to an effective evacuation, as denoted in the Hans and Sells Study conducted for the U.S. Environmental Protection Agency, as follows: <ul style="list-style-type: none"> • Time delay • Notification time • Mobilization time • Travel time
EVAC - 1.3.3.	Identify six steps for implementing the evacuation process, as follows: <ul style="list-style-type: none"> • Form work groups • Track personnel assignments • Use map coordinates for making assignments • Issue evacuation warnings • Identify relocation shelters • Use the three-phase notification process

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EVAC - 1.3.4.

Assess systems, strategies, and procedures for moving people out of risk areas (availability of vehicles, evacuation routes and alternatives, controlling traffic, special populations, etc.)

EVAC - 1.3.5.

Assess preparedness for reception and care of evacuees (shelter locations, supplies, notifying family members, health and medical care, mutual aid agreements, etc.)

EVAC - 1.3.6.

Assess decision-making criteria and procedures for re-entry after an evacuation.

EVAC - 1.4.

Given a hazards and threat analysis and capability assessment for a jurisdiction or facility, demonstrate the ability to assess existing systems, strategies, and procedures for implementing in-place sheltering and other protective actions in a hazardous materials or terrorist incident.

EVAC - 1.4.1.

Assess systems, strategies, and procedures for initiating and implementing in-place protection.

EVAC - 1.4.2.

Assess systems, strategies, and procedures for initiating and implementing water supply protection.

EVAC - 1.4.3.

Assess systems, strategies, and procedures for initiating and implementing sewage system protection.

EVAC - 1.4.4.

Assess systems, strategies, and procedures for monitoring toxic releases, continually assessing the potential for injury and damage, notifying the public as necessary, and terminating response activities.

EVAC - 1.5.

Given an assessment of the jurisdiction's or facility's capabilities to implement protective action options in hazardous materials or terrorist incidents, demonstrate the ability to develop related emergency plans and procedures.

EVAC - 1.5.1.

Describe potential problems and capability shortfalls for implementing protective actions in worst-case hazardous materials or terrorist incidents.

EVAC - 1.5.2.

Identify additional resources that may be needed to prepare for and implement protective actions in worst-case hazardous materials incidents.

EVAC - 1.5.3.	Identify recommended changes to hazardous materials and terrorist incident response plans (addressing, for example, sections on the concept of operations, roles and responsibilities, direction and control, warning systems and emergency public notification, resource management, health and medical, personal protection of citizens, ongoing incident assessment, and human services).
EVAC - 1.5.4.	Describe modifications to jurisdiction and/or facility policies and procedures that are required to facilitate the recommended plan changes.

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