



# Emergency Response and Evacuation Planning: Preparedness and Crisis Response



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**Technical depth:** Practitioner · **Practical mode:** Simulation

### Introduction

Fires, toxic releases, medical emergencies, severe weather and security threats test an organisation's arrangements within minutes, and weak alarms, unclear roles or blocked escape routes then cost lives rather than audit points. Many sites hold emergency plans that have never been exercised against a realistic scenario. This Core Concept course equips those responsible for site emergency arrangements to build, exercise and improve them using ISO 45001, ISO 22320 and NFPA 1660. Participants work through time-pressured scenarios from several sectors and leave with a Site Emergency Response and Evacuation Plan for their own facility.

### Course Objectives

- Assess credible emergency scenarios and existing response capability at a site using structured hazard and vulnerability analysis
- Design an emergency response organisation with clear command, control and communication roles based on ISO 22320 incident management principles
- Plan evacuation, shelter-in-place and accountability arrangements, including provision for people who need assistance to escape
- Coordinate the handover from emergency response to crisis management and to external emergency services
- Design, run and evaluate drills and exercises that test the plan against realistic, time-pressured scenarios
- Produce a Site Emergency Response and Evacuation Plan ready for management approval

### Target Audience

- Facility and site managers accountable for emergency arrangements in their buildings or plants
  - HSE managers and advisers who write and maintain emergency response plans
  - Emergency coordinators and incident controllers leading on-site response teams
  - Security and operations managers responsible for alarm, access and command arrangements
  - Business continuity and risk managers who link emergency response to crisis management
  - Managers of public-access or high-occupancy premises such as hospitals, campuses and shopping centres
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## Course Outline

### Day 1: Emergency Management Foundations and Site Assessment

- Emergency, Incident and Crisis Definitions in ISO 22300 Vocabulary
- ISO 45001 Clause 8.2 Emergency Preparedness and Response Requirements
- Hazard and Vulnerability Analysis for Credible Site Scenarios
- Emergency Capability Gap Assessment Using an NFPA 1660 Checklist
- Major Incident Case Reviews: Fire, Toxic Release and Crowd Crush Events

### Day 2: Incident Management Frameworks and Standards

- ISO 22320 Command, Control and Coordination Principles
- Incident Command System ICS Structure and Span of Control
- NFPA 1660 Programme Elements for Emergency and Mass Evacuation Planning
- ISO 22361 Crisis Management Interface and Escalation Criteria
- Public Warning and Alert Message Design to ISO 22322

### Day 3: Building the Emergency Response and Evacuation Plan

- Emergency Response Plan Structure and Scenario-Specific Procedures
- Evacuation Route Design and ASET/RSET Egress Time Estimation
- Escape Plan Signs to ISO 23601 and Safety Signs to ISO 7010
- Personal Emergency Evacuation Plans PEEPs for People Needing Assistance
- Assembly Point Roll-Call and Shelter-in-Place Protocols

### Day 4: Response Risks, Failures and Complex Cases

- Mass Casualty Triage Using the START Method
- Contingencies for Alarm Failure, Blocked Egress and Communication Breakdown
- Mutual Aid Agreements and External Emergency Services Liaison
- Emergency Equipment Readiness Checklist and Inspection Schedule
- Re-Entry Criteria and Psychological First Aid After an Incident

### Day 5: Emergency Simulation and the Site Plan

- Tabletop Exercise Design to ISO 22398
  - Timed Evacuation Simulation: Fire in a High-Occupancy Building
  - Toxic Release Command Post Simulation with Escalating Injects
  - Hot Debrief and Exercise Evaluation Report Drafting
  - Site Emergency Response and Evacuation Plan Build and Peer Review
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## Skills You Will Gain

- Emergency Scenario Analysis
- Incident Command
- Evacuation Planning
- Emergency Communication
- Exercise Design and Evaluation
- Mass Casualty Triage
- Mutual Aid Coordination
- Crisis Escalation Management

## Why Attend This Course

- Return to work with a Site Emergency Response and Evacuation Plan built around the credible scenarios at your own facility
- Take command decisions under time pressure in simulated incidents before facing a real one
- Identify the weak points in alarms, egress and roles that routine drills tend to hide
- Compare emergency arrangements with peers from manufacturing, healthcare, energy, education and commercial premises

## Conclusion

An emergency plan proves its worth only when people can follow it under pressure, amid smoke, noise and incomplete information. This course moves from scenario and capability assessment, through ISO 22320 command structures and evacuation design, to the failures and complications that derail real responses. The final day tests that material in timed simulations and turns it into a Site Emergency Response and Evacuation Plan that participants take back to their management, together with an exercise design they can run on site.

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