

WHO course:

Mass Casualty Management in Emergency Units

BACKGROUND

Mass casualty incidents (MCIs) are characterized by a sudden surge in patients that overwhelms the capacity of local medical resources, often resulting in preventable mortality and morbidity. Whether caused by natural disasters, conflict, or transportation, MCIs pose significant challenges to health systems, particularly in resource-limited settings.

Hospital-based Emergency Units play a critical frontline role in managing these events, ensuring timely recognition, triage, and stabilization of patients. Recognizing this, WHO has developed the Mass Casualty Management in Emergency Units (MCM) course to strengthen the capacity of healthcare workers and institutions to plan, prepare, and respond effectively to MCIs.

PURPOSE AND SCOPE

The MCM course aims to provide healthcare professionals with the knowledge, skills, and tools required to manage MCIs effectively at the emergency unit level. It emphasizes preparedness activities, operational efficiency, and safety while promoting a standardized, globally recognized approach to MCM.

This course is grounded in the 25 core principles of Mass Casualty Management outlined in the WHO Academy's comprehensive MCM guide. It leverages these principles to address all phases of MCM, from preparedness to recovery, and is adaptable to various resource settings.

AIM AND OBJECTIVES

The central aim of the MCM course is to enhance the capacity of emergency unit teams to respond to MCIs effectively while maintaining the safety of both patients and staff. The specific objectives are to:

1. Equip participants with the needed knowledge and skills to apply the 25 MCM principles.
2. Provide practical tools for the development, implementation, and activation of MCM plans.
3. Enable participants to conduct efficient triage and ensure safe patient flow during MCIs.
4. Foster skills in crowd control, resource management, and effective communication.
5. Promote ethical decision-making and psychological well-being of staff during MCIs.

COURSE CONTENT

The key components of the MCM course structure are:

1. Introduction to MCM Principles: Understanding the core concepts of mass casualty preparedness and response.
2. Triage and Zones: Training on effective triage, unidirectional patient flow, and designated zones (Red, Green, and beyond).
3. Plan Development and Activation: Guidance on creating scalable MCM plans, including triggers for activation.
4. Operational Efficiency: Focus on resource optimization, staff roles, and patient movement.
5. Simulation and Practical Exercises: Utilizing tabletop exercises to simulate real-world scenarios.

COURSE DETAILS

- The **target audience** for the course is multidisciplinary emergency unit teams, including doctors, nurses, logistics support staff, administrators, and emergency medical teams (EMTs). It is suitable for participants from a range of resource settings.
- **Duration and delivery modes:** The implementation approach may be adapted to meet local needs.
 - **In-person:** A 4-day course with active learning strategies and a strong emphasis on MCM plan development.
 - **Hybrid:** The MCM course is available online through the WHO Academy as a self-paced online programme. Participants who have completed the WHO Academy course will be able to complete a 2-day in-person workshop, centred around tabletop exercises.
 - **Training of Trainers:** A 2-day in-person course can be taught to develop trainers.
- **Agenda Overview:** The agenda ensures hands-on engagement and collaborative learning.
 - Day 1: Introductions, MCM principles, and tabletop exercises on current practices and kits.
 - Day 2: Simulation of activation protocols, refinement of MCM plans, and group presentations.
- **Teaching Strategies:** This course uses the following main teaching strategies:
 - Interactive lectures to provide theoretical knowledge.
 - Tabletop exercises to simulate real-life scenarios and foster problem-solving skills.
 - Group discussions and practical planning sessions to promote collaboration and critical thinking.
- **Implementation Support:** WHO provides detailed guides, action cards, checklists, and templates to support training delivery and local adaptation. WHO offers a Training of Trainers (ToT) program to ensure consistent and high-quality implementation.
- **Impact & Accreditation:** The MCM Course aims to build a global network of healthcare professionals trained to manage MCIs effectively, reducing preventable mortality and morbidity. Participants who participate in the in-person course or complete both the online and the 2-day in-person workshop receive a certificate of completion through the WHO Academy, with accreditation supported by local professional societies or health authorities.
- **Languages:** The MCM materials are currently available online in English, Arabic, and French.
- **Course materials and implementation support:** Available by contacting emergencycare@who.int.
The WHO Academy course is available at https://whoacademy.org/coursewares/course-v1:WHO+0002_MCM_EN+2025?source=edX