High-Risk Industry Emergency First Aid Management Training Course



21 - 25 Dec 2026

Cape town

4600 € (Per Person)

Ref: #HSE5985_276516

Course Introduction / Overview:

This intensive training course is designed to equip professionals in high-risk industries with the advanced skills and knowledge necessary to manage complex medical emergencies effectively. Standard first aid training often falls short of addressing the unique hazards present in sectors like oil and gas, construction, and manufacturing. This program bridges that gap by focusing on advanced trauma care, catastrophic bleeding control, and the management of industry-specific injuries. As emphasized by emergency medicine pioneer Dr. Norman McSwain Jr., a key figure in developing prehospital trauma life support, the "golden hour" is critical, and effective immediate intervention significantly improves survival outcomes. This course operationalizes principles found in texts like "Prehospital Trauma Life Support (PHTLS)" by adapting them for industrial environments. BIG BEN Training Center has developed a curriculum that moves beyond basic procedures to instill a systematic approach to patient assessment, triage, and incident management in high-stress situations. Participants will learn to create and execute a robust medical emergency response plan, ensuring they are not just first aiders, but confident and competent emergency managers capable of leading a response until professional medical services arrive.

Target Audience / This training course is suitable for:

- Emergency Response Team (ERT) Members.
- Health, Safety, and Environment (HSE) Officers and Managers.
- Industrial Paramedics and Medics.
- Site Supervisors and Foremen in high-risk industries.
- Remote Site First Responders.
- Security Personnel with emergency response duties.
- Offshore and Onshore Operations Personnel.
- Anyone designated as an advanced first aid provider in the workplace.

Target Sectors and Industries:

- Oil and Gas (Upstream, Midstream, and Downstream).
- Construction and Heavy Engineering.
- Mining and Quarrying.
- Manufacturing and Industrial Plants.
- Maritime, Shipping, and Port Operations.
- Energy and Utilities (Power Generation, Renewables).
- Aviation and Aerospace.
- Government agencies including civil defense and public works.

Target Organizations Departments:

- Health, Safety, and Environment (HSE).
- Emergency Response and Crisis Management.
- Operations and Site Management.
- Security Services.
- Human Resources and Training.
- Facilities and Maintenance.
- Project Management.

Course Offerings:

By the end of this course, the participants will have able to:

- Master advanced techniques for controlling catastrophic bleeding, including tourniquet application and wound packing.
- Conduct a systematic and rapid patient assessment in complex trauma scenarios.
- Manage airways using advanced, non-invasive techniques and administer emergency oxygen.
- Effectively treat industry-specific injuries such as chemical burns, electrical shocks, and crush injuries.
- Develop and implement a comprehensive medical emergency response plan for their specific workplace.
- Perform triage and manage a multi-casualty incident until professional help arrives.
- Stabilize patients with suspected spinal, head, or musculoskeletal injuries.
- Recognize and manage life-threatening medical emergencies like cardiac arrest and anaphylaxis.
- Integrate psychological first aid principles into their emergency response.

Course Methodology:

The training methodology at BIG BEN Training Center is highly interactive and practical, designed to build both competence and confidence. This course moves beyond traditional classroom lectures to immerse participants in realistic, high-fidelity simulations that mirror the challenges of their specific industrial environments. A significant portion of the training is dedicated to hands-on drills, where participants will practice skills like advanced bleeding control, patient packaging, and airway management on advanced manikins and through role-playing. We utilize a case-study approach, analyzing real-world industrial accidents to extract critical lessons in emergency management and decision-making. Group workshops and team-based scenarios foster collaboration and communication skills, which are vital during a real emergency. Each session is followed by a structured debriefing, providing constructive feedback from experienced instructors to reinforce learning and correct techniques. This blend of theoretical knowledge, practical application, and reflective learning ensures that participants leave not just knowing what to do, but having the muscle memory and critical thinking skills to perform effectively under extreme pressure.

Course Agenda (Course Units):

Unit One: Foundations of Advanced Emergency Response in High-Risk Settings

- Introduction to advanced first aid principles.
- Legal and ethical considerations for industrial responders.
- Scene assessment and hazard control in industrial environments.
- Advanced patient assessment systems (e.g., C-ABCDE approach).
- Pathophysiology of trauma and shock.
- Infection control and personal protective equipment (PPE) protocols.
- Effective communication with emergency medical services.

Unit Two: Advanced Trauma and Catastrophic Bleeding Control

- Managing catastrophic external hemorrhage.
- Commercial tourniquet application and improvisation.
- Wound packing and hemostatic agent use.
- Recognition and management of internal bleeding and shock.
- Head, neck, and spinal injury assessment and immobilization.
- Management of chest injuries, including sucking chest wounds.
- Abdominal and pelvic injury management.

Unit Three: Management of Industry-Specific Injuries

- Assessment and treatment of thermal, chemical, and electrical burns.
- First aid for crush injuries and suspension trauma.
- Managing injuries from machinery and equipment.
- Eye injuries and foreign body removal.
- Fracture and dislocation stabilization and splinting.
- Response to confined space and high-angle rescue medical emergencies.
- Blast injury assessment and management.

Unit Four: Medical Emergencies and Environmental Hazards

- Advanced resuscitation and automated external defibrillator (AED) use.
- Airway management and emergency oxygen administration.
- Recognizing and managing heart attacks, strokes, and seizures.
- Anaphylaxis and emergency epinephrine administration.
- Managing diabetic emergencies.
- First aid for poisoning and substance exposure.
- Recognition and treatment of heat exhaustion, heatstroke, hypothermia, and frostbite.

Unit Five: Incident Management and Integrated Response

- Principles of the Incident Command System (ICS) for medical emergencies.
- Triage in multi-casualty incidents (e.g., START triage).
- Developing a site-specific Medical Emergency Response Plan (MERP).
- Coordination with internal response teams and external agencies.
- Psychological first aid and managing stress in responders and casualties.
- Post-incident procedures, documentation, and reporting.
- Comprehensive final simulation exercise integrating all learned skills.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

Beyond technical skills, how does the psychological resilience of a first responder impact the outcome of a medical emergency in a high-stress industrial environment?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by moving beyond the generic curriculum of standard advanced first aid programs to deliver a highly contextualized learning experience tailored specifically for high-risk industrial environments. While other courses teach procedures, we teach principles and critical decision-making under duress. The core uniqueness lies in our focus on industry-specific scenarios; participants will not just learn to manage a burn, but how to manage a chemical or high-voltage electrical burn in a confined space, considering the unique hazards and logistical challenges. We integrate principles of incident management, teaching participants not just how to treat a patient, but how to manage a scene, perform triage in a multi-casualty event, and communicate effectively within an Incident Command System. This holistic approach transforms a first aider into a first responder and an on-site emergency leader. Furthermore, the curriculum places significant emphasis on the "why" behind each action, drawing from the latest evidence-based practices in prehospital trauma care. This ensures that graduates can adapt their knowledge to unforeseen circumstances, rather than simply relying on rote memorization of steps that may not apply in a complex, dynamic industrial emergency.