

BASIC LEVEL COURSE IN OCCUPATIONAL RISK PREVENTION IN CONSTRUCTION

A comprehensive 60-hour training program designed to equip construction professionals with the knowledge, skills, and awareness needed to work safely and promote a culture of prevention on every worksite.

60 HOURS

6 MODULES

CONSTRUCTION SAFETY

WHY THIS COURSE MATTERS

The construction sector is one of the industries with the highest exposure to occupational risks. The complexity of worksites, use of heavy machinery, work at heights, electrical installations, and constant interaction between different professionals all create environments where proper training is not optional – it is essential.

THE CHALLENGE

Construction sites present a unique combination of hazards that change daily. Without proper training, workers face serious risks of injury, illness, or worse.

THE SOLUTION

Adequate training in Occupational Risk Prevention guarantees safe working conditions, reduces accidents, and promotes a lasting culture of prevention in the workplace.

- Identify occupational hazards before they cause harm
- Apply preventive measures and safe work procedures
- Understand legal rights and obligations
- Act correctly in emergency situations

COURSE OBJECTIVES

By the end of this course, participants will have developed a comprehensive set of competencies for safe construction work.

1

UNDERSTAND PREVENTION FUNDAMENTALS

Grasp the relationship between work, health, and occupational risk prevention as a foundation for all safety practices.

2

IDENTIFY HAZARDS & RISKS

Recognize general and specific hazards associated with construction works and assess their potential impact.

3

APPLY PREVENTIVE MEASURES

Implement safe work procedures, use PPE correctly, and operate machinery and equipment safely.

4

NAVIGATE LEGAL FRAMEWORKS

Understand the legislation governing occupational safety and health, including rights and obligations of all parties.

5

RESPOND TO EMERGENCIES

Act appropriately in emergency situations, follow evacuation procedures, and provide basic first aid.

6

PROMOTE SAFETY CULTURE

Contribute actively to improving health and safety conditions and foster a proactive prevention mindset.

COURSE STRUCTURE AT A GLANCE

Six comprehensive modules covering every dimension of occupational risk prevention in construction environments.



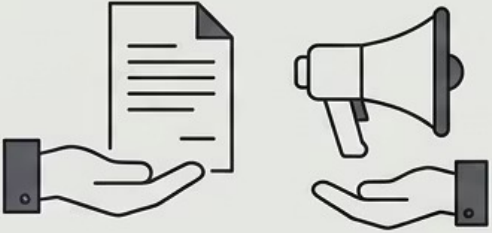
1 - Basic Concepts



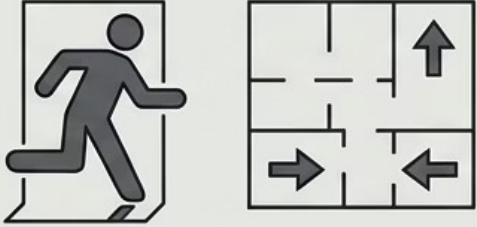
2 - General Risks & Prevention



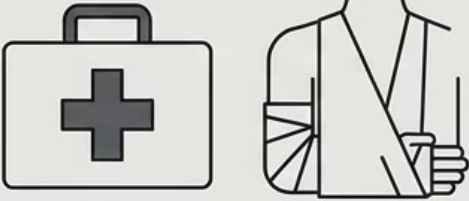
3 - Specific Risks: Construction



4 - Rights & Participation



5 - Emergency Plans



6 - First Aid

Each module builds upon the previous, creating a complete and integrated understanding of occupational risk prevention from foundational theory through to practical emergency response.

MODULE 1: BASIC CONCEPTS OF SAFETY AND HEALTH

FOUNDATION

15 TOPICS

This foundational module establishes the theoretical and legal framework for all occupational risk prevention activities. Students explore the core definitions, historical context, and regulatory environment that shapes safety practice in construction.

CORE CONCEPTS

- Introduction to Occupational Risk Prevention
- Definition of Work and Health
- Historical Evolution of Work
- Relationship Between Work and Health
- Occupational Risks and Their Recognition
- Risk, Danger, and Acceptable Risk
- Factors Determining Occupational Risks
- Preventive Disciplines

LEGAL & ORGANIZATIONAL FRAMEWORK

- Principles of Preventive Action
- Health Surveillance
- Risk Factors and Working Conditions
- Legal Framework of Occupational Risk Prevention
- Royal Decree 1627/1997 on Construction Works
- Rights and Obligations in Prevention Matters
- Prevention Organization and Responsibilities



Royal Decree 1627/1997 is the cornerstone regulation governing minimum safety and health requirements at temporary or mobile construction sites in Spain.

MODULE 2: GENERAL RISKS AND THEIR PREVENTION

RISK MANAGEMENT

15 TOPICS

This module covers the systematic identification, evaluation, and control of general occupational risks present across all construction activities – from electrical hazards to fire prevention and safety signage.



RISK IDENTIFICATION & ASSESSMENT

Hazard identification, risk analysis, evaluation criteria, and preventive planning with control measures and periodic safety inspections.



EQUIPMENT & MACHINERY SAFETY

Safe use of work equipment, manual tools, and preventive maintenance procedures to minimize mechanical hazards.



ELECTRICAL RISKS

Effects of electric current on the human body, types of electrical contact, and protective measures against electrical hazards.



FIRE PREVENTION

Fire detection, alarm, and extinguishing systems. Fire classes, extinguishing agents, and emergency response procedures.



SAFETY SIGNAGE

Interpretation of safety signs and symbols used on construction sites to communicate hazards and required actions.

MODULE 3: SPECIFIC RISKS IN CONSTRUCTION

CONSTRUCTION-SPECIFIC

15 TOPICS

Construction sites present unique hazards not found in other workplaces. This module addresses the specific risks inherent to construction activities and the targeted preventive measures required to control them.

FALLS FROM HEIGHT & FALLING OBJECTS

The leading cause of fatalities in construction. Covers prevention of falls from height, falling objects and materials, scaffolding safety, and ladder and access system risks.

GROUND & STRUCTURAL RISKS

Collapses, cave-ins, excavation and trench risks – understanding soil behavior and implementing shoring and support systems.

MACHINERY, VEHICLES & ELECTRICAL HAZARDS

Safe operation of construction machinery and vehicles on site, plus management of electrical hazards specific to construction environments.

MANUAL HANDLING & ERGONOMIC RISKS

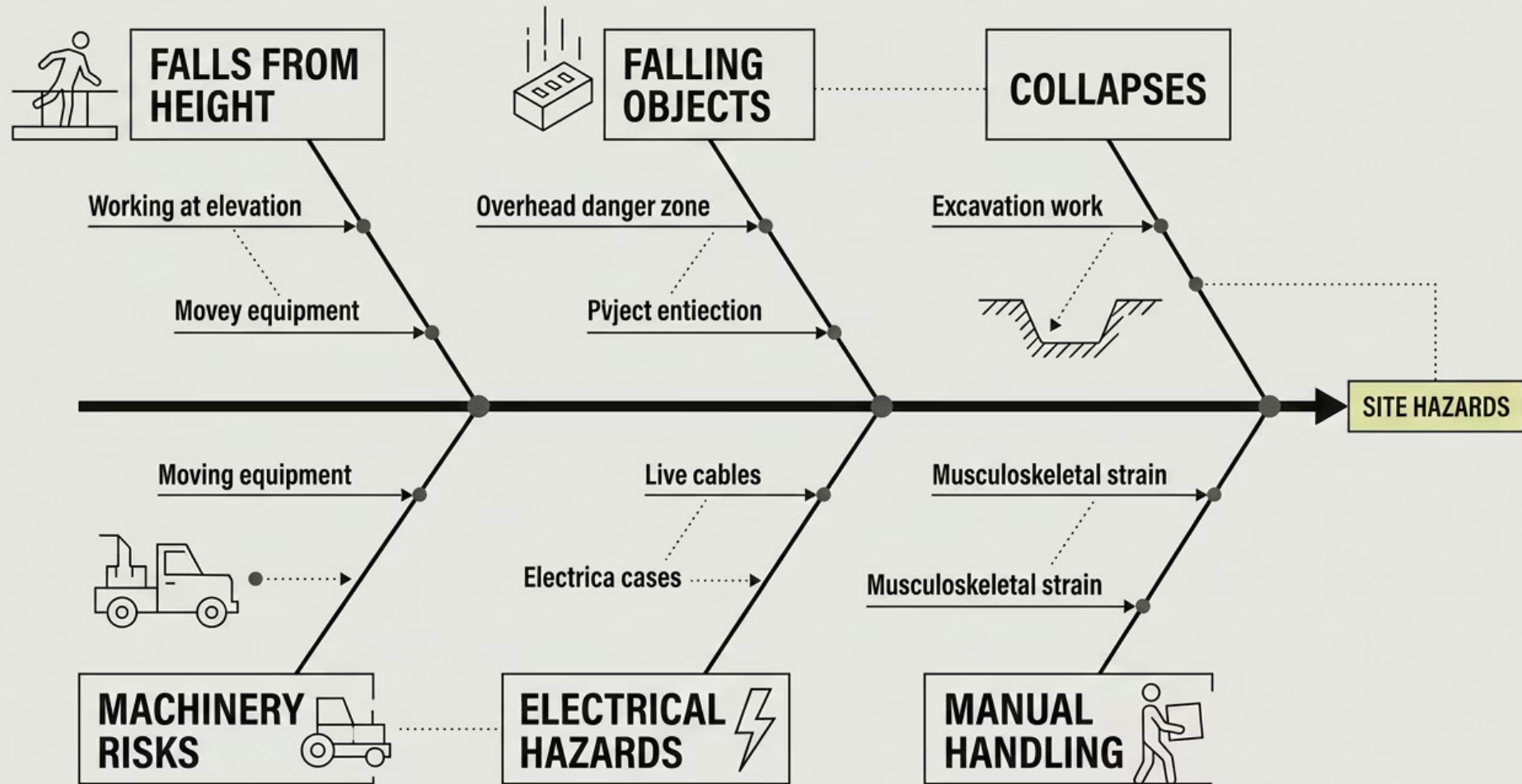
Risks from manual handling of loads, correct lifting techniques, and ergonomic principles to prevent musculoskeletal disorders.

COLLECTIVE PROTECTION & PPE

Collective protection measures, personal protective equipment selection and use, safe work procedures, Health and Safety Plans, and coordination of preventive activities.

KEY HAZARDS IN CONSTRUCTION

Understanding the distribution of risk types helps prioritize preventive efforts on construction sites.



Each hazard category requires dedicated preventive measures, from collective protection systems and PPE to safe work procedures and site coordination protocols.

MODULE 4: RIGHTS, OBLIGATIONS & PARTICIPATION

LEGAL & ORGANIZATIONAL

10 TOPICS

Prevention is a shared responsibility. This module clarifies the legal rights and obligations of all parties involved in construction work, and explains how workers can actively participate in safety management.

EMPLOYER OBLIGATIONS

- Duty to provide effective protection
- Risk assessment and preventive planning
- Information and training provision
- Health surveillance organization
- Documentation and preventive records

WORKERS' RIGHTS & RESPONSIBILITIES

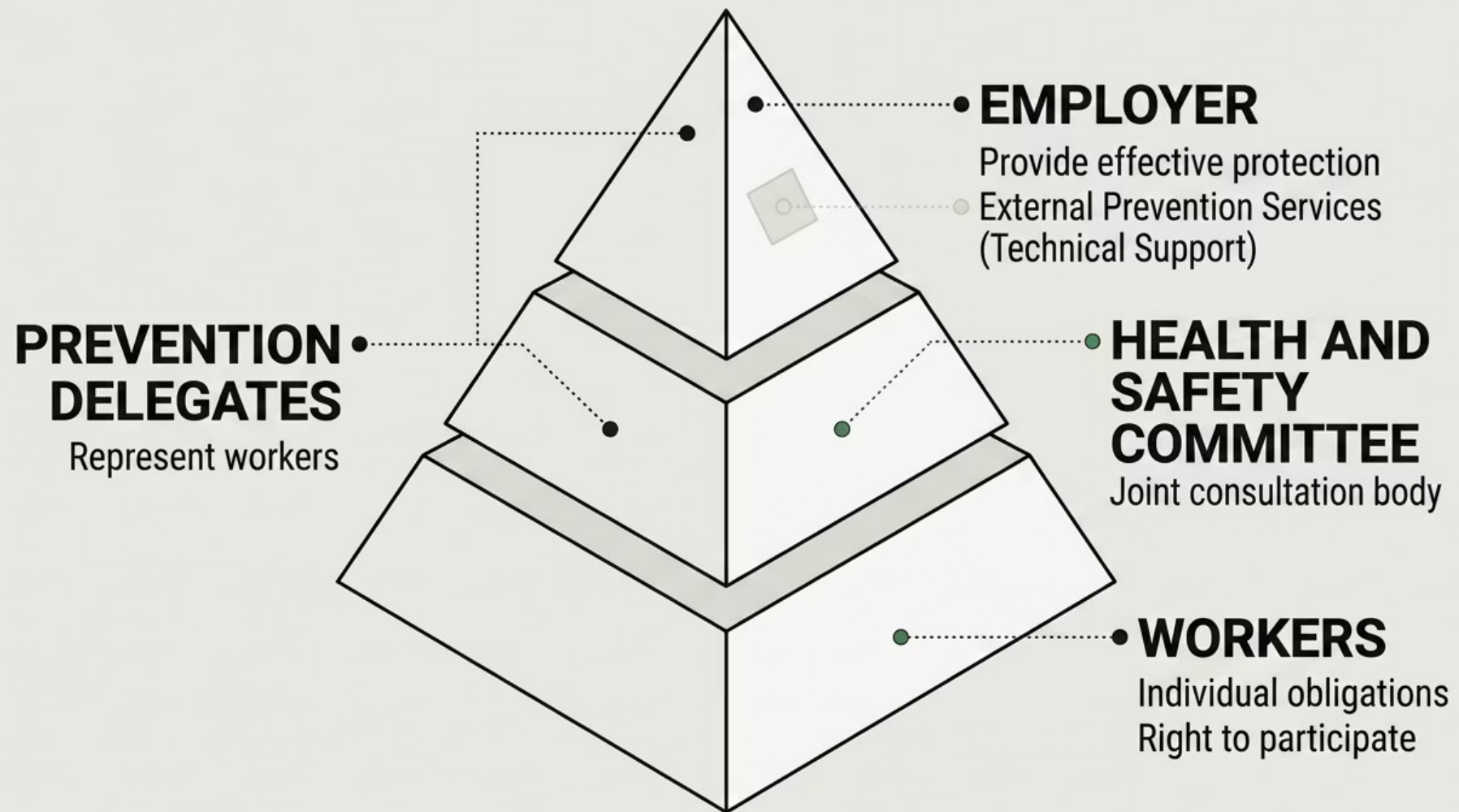
- Right to effective protection from occupational risks
- Obligations and individual responsibilities
- Consultation and participation in prevention
- Prevention Delegates and Safety Committees
- Administrative, civil, and criminal liability



Failure to comply with occupational risk prevention obligations can result in administrative sanctions, civil liability, and in serious cases, criminal prosecution for both employers and workers.

PREVENTION ORGANIZATIONAL STRUCTURE

Effective occupational risk prevention requires a clear organizational structure with defined roles and responsibilities at every level of the construction hierarchy.



The Health and Safety Committee serves as the joint consultative body where employer representatives and Prevention Delegates collaborate to monitor, evaluate, and improve safety conditions on site.

MODULE 5: EMERGENCY AND EVACUATION PLANS

EMERGENCY RESPONSE

10 TOPICS

When prevention fails, a well-prepared emergency response can save lives. This module covers the planning, organization, and execution of emergency procedures on construction sites.

PLANNING PHASE

Concept and objectives of emergency planning.
Development of Self-Protection Plans tailored to the specific site.

1

2

ORGANIZATION PHASE

Emergency organization and teams. Designation of Emergency Chief and Intervention Teams with defined roles.

RESPONSE PHASE

Alarm and evacuation procedures. Fire emergency procedures. Evacuation routes, signage, and assembly points.

3

4

PRACTICE PHASE

Emergency drills and simulations to test preparedness and identify gaps in the emergency response plan.

COORDINATION PHASE

Coordination with external emergency services including fire brigade, medical services, and civil protection authorities.

5

EMERGENCY RESPONSE: KEY ELEMENTS



SELF-PROTECTION PLANS

Site-specific emergency plans that identify risks, resources, and procedures for each unique construction environment.



ALARM PROCEDURES

Clear alarm activation protocols ensuring all workers are notified immediately when an emergency is detected.



EVACUATION ROUTES

Clearly marked and unobstructed evacuation routes with appropriate signage leading to designated assembly points.



ASSEMBLY POINTS

Designated safe areas where all workers must gather after evacuation to enable headcount and accountability.



EXTERNAL COORDINATION

Pre-established communication protocols with fire brigade, medical emergency services, and civil protection.

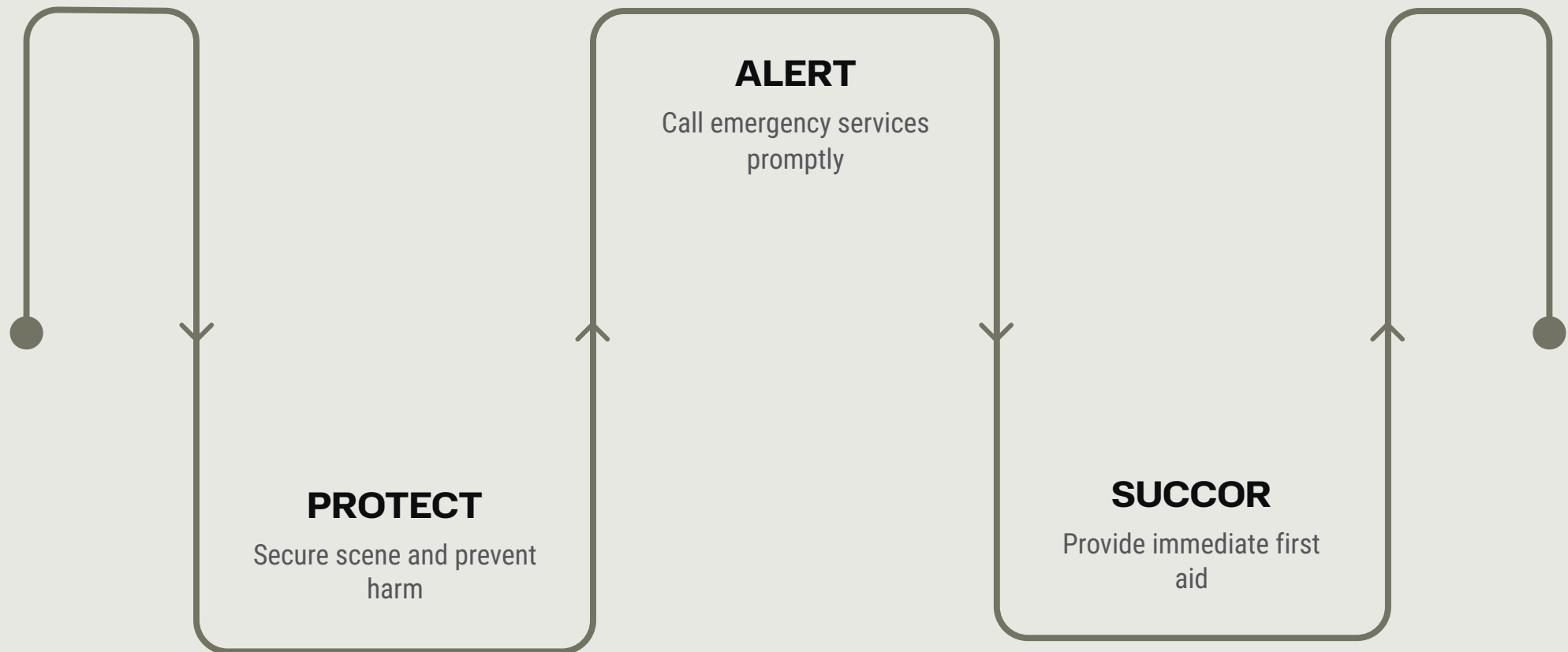
- ☐ Regular emergency drills are mandatory and must be documented. Drills help identify weaknesses in the emergency plan and ensure all workers know exactly what to do when an alarm sounds.

MODULE 6: FIRST AID

LIFE-SAVING SKILLS

12 TOPICS

The final module equips participants with the knowledge and confidence to provide immediate assistance in medical emergencies on construction sites, potentially saving lives before professional help arrives.



The P.A.S. Protocol – Protect, Alert, Succor – is the universal first response framework that ensures the safety of both the rescuer and the injured person while activating the emergency response chain.

FIRST AID TOPICS COVERED



CARDIOPULMONARY RESUSCITATION (CPR)

Assessment of vital signs, recognition of cardiac arrest, and correct CPR technique including chest compressions and rescue breathing.



HEMORRHAGE CONTROL

Treatment of external and internal hemorrhages, application of direct pressure, tourniquets, and wound dressing techniques.



BURNS & ELECTRICAL INJURIES

Classification of burns by degree, immediate treatment protocols, and specific management of electrical injuries common in construction.



FRACTURES, SPRAINS & IMMOBILIZATION

Recognition of fractures and sprains, immobilization techniques, recovery position, and safe transportation of injured persons.

COURSE METHODOLOGY, AUDIENCE & COMPLETION

METHODOLOGY

The course combines theoretical content with practical prevention guidelines, real construction examples, safety procedures, and self-assessment activities. Each module includes:

- Explanatory theoretical material
- Practical prevention guidelines
- Real construction site examples
- Evaluation tests to reinforce learning
- Self-assessment activities

WHO SHOULD ATTEND

- Construction workers
- Self-employed construction professionals
- Site assistants and laborers
- Supervisors and team leaders
- Companies operating in the construction sector
- Workers requiring basic occupational risk prevention training

✓ Upon successful completion of the course and evaluation tests, participants will acquire the essential knowledge required to work safely in construction environments and contribute actively to occupational risk prevention.

60

TRAINING HOURS

Comprehensive program duration

6

MODULES

Covering all prevention dimensions

77

TOPICS

Detailed subject coverage

1

CERTIFICATE

Awarded upon successful completion