



Advanced Medical and First Aid Requirements in Construction: OSHA and USACE Standards

Student Field Guide



Course Introduction

Construction sites are inherently risky environments, and every worker on site is potentially exposed to serious hazards. This course dives into the essential safety requirements for medical and first aid readiness as outlined by both the Occupational Safety and Health Administration (OSHA) and the U.S. Army Corps of Engineers (USACE).

Rather than just listing regulations, we explore the reasons behind them, the real-world implications of readiness, and how construction professionals can build an effective response system to protect their workforce. Through practical insights and true stories from the field, this guide aims to equip you with knowledge that not only ensures compliance but saves lives.

Course Objectives

By the end of this course, you will have a strong grasp of the medical and first aid expectations in construction. You will be able to identify key requirements, understand why these rules exist, and apply them effectively in your work environment.

Objectives include:

- Understand OSHA and USACE regulations regarding medical and first aid requirements.
- Recognize the importance of compliance for ensuring worker safety.
- Identify the components of an effective first aid program.
- Apply best practices by learning from real incidents.

Lesson 1: Why Readiness Matters

Construction consistently ranks among the most dangerous industries. From falls and crush injuries to heatstroke and electric shock, serious incidents are far too common—and many are preventable. But when prevention fails, how you respond in the first minutes can change everything.

Think about what happens when someone collapses in the heat or suffers a major injury. A fast, informed response can mean the difference between life and death. That's why emergency readiness must be more than a checklist—it's a culture.

Lesson 2: OSHA Requirements – The Legal Minimum

OSHA regulations form the foundation of workplace safety. They mandate that every site must be prepared for medical emergencies, especially when professional medical services aren't immediately available.

Construction employers are legally responsible for ensuring trained responders and properly stocked, accessible first aid kits are available at all times. While OSHA references ANSI standards



as guidelines for kit contents, it's up to employers to assess their unique risks and stock accordingly.

Lesson 3: USACE Requirements – A Higher Standard

USACE projects often take place in remote, high-risk settings, which is why their expectations are more demanding than OSHA's. The EM 385-1-1 manual requires contractors to have detailed safety planning, certified responders onsite, and robust communication systems.

An Accident Prevention Plan is mandatory and must include medical response strategies, evacuation plans, and contact procedures—all of which must be practiced regularly. Noncompliance can lead to project shutdowns and endanger lives.

Lesson 4: First Aid Equipment and Response Tools

First aid kits are critical, but they must be more than symbolic. They need to be strategically placed, customized for the site, and maintained weekly. Beyond the basics, sites may need AEDs, trauma supplies, eyewash stations, or burn kits depending on job-specific hazards.

The difference between a close call and a catastrophe often comes down to whether the team had what they needed—and knew where to find it.

Lesson 5: Training and Certification

Knowing how to respond is as important as having the right gear. OSHA and USACE both require formal training in first aid and CPR. USACE goes further, requiring one certified person per shift, always present and documented.

Training must be current and relevant. It's not about checking a box—it's about readiness. When emergencies happen, your team must know what to do without hesitation.

Lesson 6: Real Case Studies – The Cost of Being Unprepared

Real-world stories reveal the consequences of neglecting readiness. In one instance, a worker died after cardiac arrest because no AED was available. In another, a chemical exposure turned critical because no one followed proper procedures.

But there are also success stories—where quick, trained responses saved lives. These examples underline the importance of planning, training, and equipping your site properly.



Closing Thoughts: Building a Site-Specific Emergency Plan

Every construction site is different, which means your emergency response plan must be unique too. From emergency contacts and evacuation routes to assigning roles and documenting drills, your plan needs to be detailed, practical, and constantly reviewed.

This isn't about paperwork—it's about ensuring that when something goes wrong, your team knows exactly what to do. That kind of clarity saves time, prevents panic, and ultimately, saves lives.