

# **AORSI-300-FAID Workbook**

## **Overview**

Students learn basic first aid and emergency response tailored to off-road environments where professional medical help may be delayed. This course equips operators with the skills to stabilize patients, manage emergencies, and prepare for evacuations until advanced care arrives.

## **Learning Objectives**

- Provide immediate care for common off-road injuries.
- Perform CPR and use an AED in emergencies.
- Safely manage incidents until professional help arrives.
- Create and carry an effective off-road first aid kit.

# **Module 1: Off-Road Medical Risks (Rollovers, Crush Injuries, Burns, Bites)**

Off-road environments present unique medical risks such as vehicle rollovers, crush injuries from equipment, burns from fires or hot components, and bites from wildlife. Students should learn how to quickly identify life-threatening situations and apply immediate care before conditions worsen. Instructors should use real-world scenarios and case studies to highlight how these injuries occur and how to respond effectively.

Course Design Suggestion: Use mannequins and props to simulate rollover and crush injury scenarios. Encourage hands-on practice with spinal immobilization techniques.

Exercise: Identify three common off-road injury scenarios and list the first aid priorities for each.

Reflection Question: Why is rapid assessment critical in off-road environments with delayed medical response?

## **Module 2: First Aid Basics: Wounds, Fractures, Shock**

Students must master the fundamentals of wound cleaning, bandaging, splinting fractures, and recognizing signs of shock. First aid in the field often involves improvising with limited supplies, making creativity and adaptability essential. This module should also emphasize infection prevention and safe handling of bodily fluids.

Course Design Suggestion: Run skill stations where students rotate through treating wounds, splinting limbs, and practicing patient monitoring.

Exercise: Demonstrate the proper method of splinting a suspected arm fracture using improvised materials found on the trail.

Reflection Question: How does recognizing early signs of shock change the outcome of a patient in the field?

## **Module 3: CPR, AED, and Life-Saving Skills**

Cardiac arrest can occur in remote environments, and immediate CPR combined with AED use greatly increases survival chances. Students should learn proper CPR technique for adults and children, along with AED setup and usage. This module should align with national certification standards (e.g., American Red Cross, AHA) to ensure credibility.

Course Design Suggestion: Provide each student with time on a CPR mannequin. Incorporate AED trainers so students gain comfort using the devices under stress.

Exercise: Perform two minutes of high-quality CPR while switching rescuers to minimize fatigue.

Reflection Question: Why is AED use considered a critical link in the chain of survival?

## **Module 4: Wilderness Emergency Protocols & Evacuation Planning**

Off-road medical incidents often occur far from EMS access. Students should learn protocols for stabilizing patients, calling for help, and planning safe evacuation. This includes understanding signaling methods, satellite communication devices, and coordinating group response. Evacuation decisions must balance patient stability, terrain difficulty, and available resources.

Course Design Suggestion: Develop mock evacuation drills where students plan and execute moving a patient from a remote trail to a safe extraction point.

Exercise: Create a checklist for group leaders to follow in the event of a medical emergency in the wilderness.

Reflection Question: What factors should guide the decision to move an injured patient versus waiting for professional rescue?

## **Final Assessment**

Task: Complete a practical skills check where students demonstrate wound care, splinting, CPR, and AED operation. Additionally, complete a written test with scenario-based questions assessing first aid knowledge and decision-making in off-road emergencies.

**Duration:** 8 hours (hands-on certification recommended)