

First Aid and CPR

Effective first aid and CPR (Cardiopulmonary Resuscitation) are vital to saving lives during medical emergencies in NCC T&D's high-risk environments, such as electrical work, construction sites, and remote transmission line projects. Aligning with the American Heart Association (AHA) guidelines, Saudi Red Crescent Authority (SRCA) protocols, and NCC T&D's HSE management system ensures timely, standardized responses to injuries, cardiac arrests, and other health crises.

NCC T&D Project Leaders Key Responsibilities

Project Leaders must ensure:

Training Compliance:

- Provide workers the required first aider training (1:50 employees per project) AHA-certified First Aid/CPR/AED training, renewed every 2 years. The higher the risk of the project i.e. remote area, high risks tasj,etc. the higher numbers of trained first aiders shall be made available.
- Specialized training for high-risk roles (e.g., confined space rescue teams).

Equipment Readiness:

- Provide well-stocked first aid kits, if required, mandated the provision of AEDs (Automated External Defibrillators), and emergency oxygen in vehicles/ambulance at worksites.
- Ensure AEDs are accessible within 3 minutes of the worksite location.

Emergency Response Plans:

- Develop site-specific plans with clear roles, communication protocols, and evacuation routes.
- Coordinate with local hospitals and Saudi Red Crescent for rapid medical transport.

Incident Documentation:

- Report all first aid interventions and near-misses in NCC T&D's HSE portal.
- Review incidents to improve response procedures.

Core AHA CPR/AED Standards

NCC T&D adheres to the AHA 2020 Guidelines:

1. Cardiac Arrest Response (Adult/Child/Infant)

Assess Responsiveness:

- Tap and shout, "Are you okay?"
- Check for breathing (gasps do not count as normal breathing).

Activate Emergency Response:

- Yell for help and send someone to retrieve an AED.
- Call Saudi emergency services (112/911) or site medic.

Begin CPR:

Compressions:

- Adults/Children: 30 chest compressions at 100–120 beats per minute, depth of 5–6 cm (2–2.4 inches).
- Infants: 30 compressions with two fingers, depth of 4 cm (1.5 inches).

Rescue Breaths:

- Tilt head, lift chin, and give 2 breaths (1 second each). Use a pocket mask or barrier device.

AED Use:

- Turn on AED and follow voice prompts.
- Ensure no one touches the victim during analysis/shocks.
- Resume CPR immediately after shock delivery.

2. Choking Response

Conscious Victim (Adult/Child):

- Perform abdominal thrusts (Heimlich maneuver) until obstruction is cleared.

Unconscious Victim:

- Begin CPR (starting with compressions) and check mouth for obstruction.

3. Severe Bleeding Control

- Apply direct pressure with sterile gauze.
- Use tourniquets for life-threatening limb bleeding (train workers in proper placement).

Worker Responsibilities

Workers must:

- Know Emergency Procedures: Locate first aid kits, AEDs, and assembly points.
- Act Immediately:
Provide first aid within your training limits (e.g., stop bleeding, stabilize fractures).
Initiate CPR if the victim is unresponsive and not breathing normally.
- Use PPE: Wear gloves and barrier devices during interventions.
- Report Incidents: Notify supervisors and document care provided.
- Maintain Certification: Attend refresher courses as required.

Additional Considerations for NCC T&D Projects

- Electrical Injuries:
Ensure the power source is OFF before touching a victim of electrical shock.
Treat burns with cool water (avoid ice) and cover with sterile dressings.
- Heat-Related Illnesses:
Recognize signs of heat exhaustion (pale skin, dizziness) and heat stroke (hot skin, confusion).
Move victims to shade, hydrate, and cool with wet cloths.
- Remote Sites:
Equip vehicles with satellite phones and trauma kits for delayed EMS response.
Train workers in prolonged CPR (2-rescuer rotations).
- Multilingual Training: Provide AHA materials in Arabic, English, and Urdu.

First Aid Kit Requirements

- Kits must include (minimum):
- Sterile gauze, bandages, adhesive tape
- Tourniquets, CPR pocket masks
- Burn gel, splints, cold packs
- Scissors, gloves, antiseptic wipes
- Emergency blanket, first aid manual

Key Takeaways

- Training Saves Lives: Only AHA-certified personnel should perform CPR/AED.
- Speed Matters: Begin CPR within 2 minutes of cardiac arrest; use AEDs immediately.
- Document Everything: Record interventions for regulatory compliance and improvement.
- Heat Preparedness: Hydration and shade are critical in Saudi Arabia's climate.
- Client Alignment: Meet SEC/SA requirements for AED placement and drills.

For training schedules, AED maintenance, or emergency protocols, contact NCC T&D's HSE Department or refer to AHA Guidelines, Saudi Red Crescent Protocols, and NCC T&D IMS.