THE STUDY VAULT

Clinical Chaos

AED Use

SKILL SNAPSHOT

Purpose
- Analyzes cardiac rhythm and delivers a shock for ventricular fibrillation or pulseless ventricular tachycardia while supporting high-quality CPR.

When to use
- Unresponsive patient with absent/abnormal breathing and no definite pulse, as part of BLS cardiac-arrest response.

Supplies needed
- AED with adult/pediatric pads; CPR barrier/BVM; razor/towel; gloves; emergency response system.

PREP + PATIENT SETUP
- Ensure scene safety; use PPE.
- Check responsiveness, breathing, and pulse simultaneously for no more than 10 seconds.
- Activate emergency response and send for AED.

VAULT TIP
- The safest shock is fast: charge/analyze with minimal pause, clear visibly, shock, and resume compressions immediately.

STEP-BY-STEP
1. If no pulse and no normal breathing, start high-quality CPR immediately: hard/fast compressions with full recoil and minimal interruption.
2. Turn on AED as soon as it arrives and follow prompts.
3. Expose chest while CPR continues. Dry water/sweat; shave only where pads must adhere.
4. Remove medication patch with gloves and wipe site. Avoid placing pads directly over implanted device bulge.
5. Apply pads to bare chest in anterolateral position shown on pads; use alternate position if needed.
6. Connect pad cable if required while compressions continue.
7. When AED says analyze, loudly state “Clear,” stop CPR, and ensure no one touches patient.
8. If shock advised, visually clear patient/bed/oxygen path, announce “Clear,” and deliver shock.
9. Resume CPR immediately after shock—do not pause for pulse check unless device/algorithm directs.
10. If no shock advised, resume CPR immediately.
11. Continue cycles of CPR and AED analysis about every 2 minutes according to prompts until ROSC or advanced team takes over.
12. With ROSC, support airway/breathing, monitor, prevent hypoxia/hypotension, and prepare transport/post-arrest care.

SAFETY REMINDERS
- No one touches patient during analysis or shock.
- Minimize pauses before/after shock.
- Move free-flowing oxygen away from chest during shock while maintaining patient support.
- Use pediatric pads/attenuator when appropriate.

COMMON MISTAKES
- Delaying CPR for AED setup.
- Checking pulse immediately after shock.
- Pads over patch/device.
- Failure to clear everyone.

DOCUMENTATION
- Collapse/assessment times.
- CPR/AED application time.
- Rhythm advice and shocks.
- ROSC and post-arrest findings.
- Team response and transfer.