Automated External Defibrillator (AED) Guidelines

AED PROGRAM

The University of Texas at El Paso (UTEP) administers and manages an Automated External Defibrillator (AED) Program. The program includes stationing mobile AEDs in UTEP Police Department patrol cars and several buildings on campus, specialized training for responders in CPR and AED operation, and inspection and maintenance procedures for AED devices. The program follows the guidelines of the American Heart Association.

WHAT IS AN AED AND HOW DOES IT WORK?

The AED is an electronic device that delivers a lifesaving pulse of electricity to restore the rhythm of a fibrillating heart. Sudden cardiac arrest (SCA) can happen anywhere and anytime to people of all ages. SCA is usually caused by an electrical malfunction that makes the heart twitch ineffectively in an abnormal rhythm, resulting in loss of blood flow throughout the body. This erratic, uncoordinated electrical activity is called fibrillation, and the most common is ventricular fibrillation. The person suffering from SCA loses consciousness very quickly, and unless the condition is reversed, death follows in a matter of minutes. A heart attack sometimes triggers SCA, but it can also happen even without any blockage of blood flow to the heart. An AED contains a microprocessor that will analyze the heart rhythm and advise the operator if a shock-able rhythm is detected. The AED will then charge to the appropriate energy level and advise the operator to deliver a shock. The electrical impulse stuns the heart muscle, which allows it to resume beating effectively. Early defibrillation is a nationally recognized standard of care, and AEDs are a proven method of reducing morbidity and mortality from victims who experience SCA.

The University of Texas at El Paso uses biphasic AEDs from Phillips and Cardiac Science.

HOW COMMON IS SUDDEN CARDIAC ARREST (SCA)?

SCA is one of the leading causes of death in the United States. The American Heart Association estimates that at least 250,000 people suffer and die from SCA each year. The median age of victims is 65, but it can affect individuals of all ages.

WHY ARE AEDS IMPORTANT IN THE UTEP CAMPUS?

Every minute that passes without defibrillation of a heart in ventricular fibrillation, a victim's chance of survival decreases by 7-10%. Therefore, fast response time is important. The City of El Paso EMS responders send an AED on every medical call but given variables such as emergency recognition, 911 call, dispatch, traffic, and travel time to the UTEP campus, it is conceivable that EMS first responders would not get an AED to a victim's side in the ideal time frame. UTEP's AED program enables individuals to respond to a medical emergency on campus that would require defibrillation.

RESPONSIBILITIES

Environmental Health and Safety Office (EH&S) at UTEP:

- Is the UTEP AED Program administrator;
- Coordinates AED/CPR training for UTEP personnel free of charge;
- Coordinates AED equipment and accessory maintenance;
- Reviews and revises this policy as necessary;
- EH&S communicates with the Medical Director on issues related to the AED Program, including post-event reviews.

Medical Director:

- Provides medical direction for the use of AEDs at UTEP;
- Is the liaison between the UTEP AED program and the El Paso EMS System;
- Reviews and approves guidelines for emergency procedures for using AEDs and CPR.

UTEP Police:

- Receives emergency medical calls from the UTEP campus;
- Uses the established 911 procedures to assess the emergency and determine the appropriate level of response;
- Contacts City of El Paso 911 response team, including EMS, as required;
- Deploys UTEP Police personnel to the location of the emergency; and

- Meets the responding City of El Paso EMS aid vehicle and directs EMS personnel to the site of a medical emergency.

AED Users:

- UTEP Police Department personnel who have completed AED and CPR training within the last two years.
- Includes other UTEP personnel who have completed AED and CPR training within the last two years.
- Call 911 and 5611 Campus Police and provide prompt essential life support, including AED and first aid according to CPR/AED training.
- Follow the procedures and guidelines of the AED program.

TRAINING

UTEP Personnel who wish to participate in the AED program must complete training adequate to provide CPR and AED use for adults at least every two years. The Environmental Health and Safety Department will maintain all training records.

LIABILITY ISSUES

Texas HB 580 explicitly extends and broadens Good Samaritan protection for "citizen" AED providers, their medical directors, AED manufacturers, and training providers (aside from negligence). As long as AED providers maintain the necessary training and AEDs are used in accordance with our medical standing orders, UTEP complies. Many states have passed AED laws similar to HB 580. As AEDs are viewed more like necessary safety equipment such as fire extinguishers, we will get closer to the day when not having them will be a greater liability.

MAINTENANCE

All equipment and accessories necessary for support of the medical emergency response team shall be maintained in a state of readiness. Once each calendar month, EH&S shall conduct and document a system check that includes an inspection of emergency kit supplies, AED battery life, and AED operation and status. EH&S shall retain the maintenance records according to the UTEP records retention policy. All equipment maintenance shall be performed according to the AED operating instructions. The EH&S office shall also conduct and document a post-event review whenever UTEP Personnel use an AED in an emergency. All key participants in the emergency event will participate in the review. The review will identify actions taken by UTEP Personnel to identify areas of improvement and provide for incident debriefing. The EH&S department will retain the post-event review summary document according to the UTEP records retention policy.