



# City of Austin - Travis County PAD/AED Program Public Access Defibrillation & AED Program

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Last Revised 7.10.2019

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## Overview From the Medical Director

First, I am thankful for your interest in public access defibrillation and more importantly for your interest in improving survival from sudden cardiac arrest within our communities. We know that the combination of early CPR along with early AED use can double or triple the chance of survival for a cardiac arrest victim.

An automated external defibrillator (AED) in combination with high quality CPR treats victims who experience sudden cardiac arrest (SCA) defined as a “sudden, unexpected loss of heart function, breathing and consciousness.” Applied to victims who are not responsive, not breathing normally and not moving, the AED along with quality CPR significantly increases the likelihood of survival in cardiac arrest victims with a shockable heart rhythm. The AED will analyze the heart rhythm and advise the operator if a shockable rhythm is detected. If a shockable rhythm is detected, the AED will charge to the appropriate energy level and advise the operator to deliver a shock. The AED is simple to use and requires very little training to safely operate.

While these devices are safe and easy to use, they do require ongoing attention and familiarization to ensure they are ready for use when needed. The City of Austin-Travis County Public Access Defibrillation (PAD) and AED Program defines the planning and actions needed to improve the chance of survival from sudden cardiac arrest within the City of Austin, Travis County and within other organizations operating under the medical oversight of the City of Austin-Travis County Medical Director (Office of the Medical Director or OMD).

This document defines my requirements for an effective defibrillation program and guides program administrators through processes, procedures and actions that lead to effective and safe use of AEDs within a variety of settings. This document is applicable only to those organizations required to use or wishing to use the City of Austin-Travis County Medical Director as their AED/PAD Program’s medical oversight. My office is available to guide organizations towards ensuring an effective and safe public access defibrillation program.

## Medical Oversight/Consultation

Texas rules (TAC 157.41) require that all AED programs use an FDA approved device, have physician oversight for training, have trained responders in CPR and AED use, and register device locations with local EMS. Dr. Mark E. Escott, Medical Director City of Austin/Travis County EMS System, provides oversight for programs at no additional charge upon request. Dr. Escott provides this service for AEDs located within the greater Austin area or anywhere in Texas provided the overall AED program management is located within Travis County. An organization wishing to request medical oversight for their PAD program must complete a signed Medical Oversight agreement outlining the program requirements and commit to adhering to these requirements. For more information on City of Austin-Travis County AED/PAD program, go to [www.austintexas.gov/omd](http://www.austintexas.gov/omd). The primary contact for the overall AED/PAD program is the AED/PAD Program Coordinator in the Office of the Medical Director (See the References section, Contact Information page).. AED owners (other than City of Austin Departments and Public Safety agencies serving under Dr. Escott’s medical direction) may select their own medical oversight. AED owners using an alternative medical oversight source are not responsible for adhering to the requirements outlined in this document except as defined in State or local laws.

## AED Selection & Purchase

AEDs are classified by the U.S. Food and Drug Administration (FDA) as restricted devices. The FDA requires labeling stating these devices are restricted “to use by or on the order of a physician”. For this reason, those seeking to purchase or acquire most AEDs may be asked for a physician’s prescription or authorization in order to complete the purchase or acquisition. To assist potential AED purchasers, the City of Austin-Travis County Medical Director’s device purchase requirements and limitations are defined in a document titled “Automated External Defibrillation (AED) Selection & Purchasing Requirements (11.20.2017).” This document defines specifications and software configurations for AEDs used by public safety agencies (first-line response apparatus and non-first-line response apparatus) as well as those AEDs used in public access defibrillation (PAD) programs. The document also defines AEDs restricted for purchase or acquisition. This document is found at <http://www.austintexas.gov/department/office-medical-director/approved-medical-devices> and <http://www.austintexas.gov/page/public-access-defibrillation-programs>.

City of Austin departments utilize an AED Independent Consultant with an extensive AED background and years of experience working with AEDs within EMS, Fire and PAD departments. The Independent Consultant operates as a sole point of contact for all City of Austin departments in areas of purchasing, deployment and maintaining AEDs. The independent consultant can speak about specific models, costs, and AED related issues and is well versed in the OMD’s specifications ensuring any AED a department selects meets their needs as well as those of the OMD.

Organizations select an AED based upon the defined requirements (see previous paragraph) as well as the organization’s specific needs. Some organizations require different AEDs for various segments of their business. Public Safety agencies operating under Dr. Escott’s medical direction require his approval of the specific device before purchase or acquisition. This is required due to the higher likelihood of these organizations encountering cardiac arrest victims as compared to a much lower likelihood of use for those in a public access defibrillation setting.

Some organizations may not require AEDs capable of application and treatment of infants and children. In general, when AEDs are located in facilities that prohibit admission of infants and children on a regular basis (e.g., a manufacturing area) the AED does not typically require the capability to treat infants and children.

Organizations that are not part of the City of Austin and are not a public safety agency described above may purchase or acquire any device meeting the defined requirements. City of Austin departments seeking guidance in selection should contact the City of Austin’s AED Independent Consultant. Other Organizations should seek guidance from the City of Austin-Travis County AED/PAD Program Coordinator.

## AED Placement, Deployment & Registration

In general, AEDs should be placed in locations that meet the following characteristics:

- Accessible to all persons occupying the space including employees and the public. AEDs should not be placed in locked rooms or portions of a building unless other AEDs are readily available.
- Clearly marked or designated so that others will recognize the presence of the AED. AED cabinets are highly recommended for indoor locations but not required.

- Areas easily found or commonly frequented by building occupants. Examples include break rooms, near elevators, receptionist desk, security guard post, etc.
- Strategically located to serve areas within an approximately one minute fast walk in all directions.
- Away from activities or environmental factors that could easily damage the AED or its supplies. Examples include near moving machinery or vehicles; areas exposed to extreme heat or cold; areas exposed to extreme dust, dirt or liquid splashes.
- For vehicles, consider locations that minimize the AED's exposure to extreme heat or cold. The passenger compartment is far better than a trunk or exterior compartment.

Contact the City of Austin's Independent Consultant (see References section, Contact Information page) for assistance in determining (required for all City of Austin department PAD programs):

- ideal AED locations,
- recommendations on number of AEDs needed,
- ensuring compliance with OMD requirements,
- AED software configuration meeting OMD requirements, and
- ensuring compliance with City of Austin requirements (if applicable),
- AED deployment planning

Additionally, the City of Austin's Independent AED Consultant provides the following assistance to City departments during the deployment planning and implementation phases of an AED/PAD program:

- Provide a brief AED familiarization for department employees
- Connect the department with additional CPR/AED training resources through the City of Austin's TAKE10 CPR Training Program<sup>®</sup> or other nationally recognized training programs
- Facilitate removal of old devices (Note: if older units retain market value, this amount may be applied at the time of new device purchases)
- Guide departments in completing the Texas requirement for AED registration with the local EMS System

Alternatively, contact the AED/PAD Program Coordinator for guidance with any aspect of the AED/PAD program.

*NOTE: Texas rules require AED owners to register their AEDs with the local EMS System. In the city of Austin and Travis County, this registration adds the AED's specific location to the physical address of the building in which the AED is located within the 9-1-1 dispatch system. When a person calls 9-1-1 from this location, the 9-1-1 dispatcher is made aware of the presence and exact location of the AED and can then pass this information on to the caller. The dispatcher can then ask the caller to get the AED or send someone to get it and return it to the cardiac arrest victim. Within the City of Austin-Travis County EMS System, AED owners are asked to register their AEDs using an on-line process. Follow this link to register each AED at each specific location. <http://www.austintexas.gov/online-form/online-aed-registration-austin-and-travis-county>*

## Training

Each site at which one or more AEDs is located must ensure an adequate number of persons are trained in both CPR and AED use. Certification is NOT required. The combination of early high quality CPR and early AED use can double or triple the chance of survival. For this reason, training is critical to a successful AED/PAD program. Per Texas rules, CPR training must meet approval from a nationally recognized association or the medical director of the local emergency medical services provider. For City of Austin-Travis County AED/PAD programs, Dr. Escott's approval is all that is needed. A number of options are available including a free option offered by the Office of the Medical Director within the greater Austin area (For more info, [www.austintexas.gov/take10](http://www.austintexas.gov/take10)). This program requires Organizations to select a small number of persons to serve as TAKE10 CPR Trainers who in turn train other employees within the Organization. Refresher or repeated training is expected at a frequency recommended by the training program selected by the PAD program. Ideally, some form of refresher training occurs once per year if not more often.

A commonly asked question is "what is an adequate number of persons to be trained?" The answer depends on many factors. The simplest way to determine this number is to have enough persons trained so that it is highly probable that at least one but preferably two trained persons are available any time the facility is occupied particularly when occupied by multiple persons or the general public. It is important to keep in mind that every minute that goes by without CPR or AED defibrillation the chance of a cardiac arrest victim surviving **decreases** 7 – 10%. So, time to CPR and AED use is critical to survival.

## Written Program & General Procedures for Use

In accordance with Texas rules, the AED owner is required to create guidelines and procedures for use of the AED. Each AED/PAD Program must define how it will address AED use, timely replacement of dated supplies, maintenance, recordkeeping, placement, training, registration, and continuous involvement with the program's medical oversight or his/her designee. This is accomplished by creating a written AED/PAD Program reviewed and approved by the AED/PAD program coordinator and medical director. A written and approved PAD program is required to obtain Medical Oversight from the City of Austin-Travis County Office of the Medical Director (OMD). The OMD provides a template program allowing organizations to easily create a tailored written program meeting their needs. A link to the template program is found in the Reference section. The City of Austin-Travis County AED/PAD program coordinator is available to assist organizations in creating their written program and addressing any questions on how to do so.

### AED Use

Each AED/PAD program should ensure through its policies, procedures and training that CPR is begun and an AED is applied (when available) anytime a person appears to be in cardiac arrest, defined as not responsive, not breathing normally and not moving. When in doubt, these policies, procedures and training should encourage initiation of CPR and application of an AED until signs of responsiveness, normal breathing or movement are noted or emergency responders take over CPR. It is understood though that the safety of the individual coming to the aid of a cardiac arrest victim is the number one priority. Policies, procedures and training should not discourage persons from attempting to initiate CPR or apply an AED to a suspected cardiac arrest victim.

## Maintenance & Upkeep

All AEDs must be inspected and maintained in accordance with the manufacturers' recommendations. An organization's written PAD program defines the frequency, scope and recordkeeping for these regular inspections. The AED's User Guide often provides guidance on both the frequency and scope of these inspections. The AED should NOT be powered on as part of a routine inspection as this will prematurely deplete the battery's energy level. Organizations are strongly encouraged to utilize AED Program Management software/services to assist in meeting this requirement. The City of Austin's Independent AED Consultant may be able to provide additional AED Program Management services.

## AED Maintenance Tracking & Program Management Services

AED Program Management is an all-inclusive digital platform that ensures readiness by maintaining: equipment expirations, data management and more. AEDs have accessory parts (batteries and defibrillator pads) that have expiration dates which must be tracked and replaced prior to expiration. The majority of AED malfunctions are due to improper maintenance or battery failure. AEDs, while easy to use, require ongoing maintenance and program management.

The City of Austin's Independent AED Consultant will work with each City of Austin department to establish an AED management system that ensures the ongoing compliance of your AED Program. This web-based, interactive system can be accessed anywhere there is an internet connection. It monitors and tracks routine maintenance inspections and battery expiration. Implementing this system ensures that your AED(s) are always maintained and ready for use should they be needed in an emergency. The AED management system data must be available to the OMD upon request. Access to this data is essential to the OMD's management of FDA warnings and device performance trends across all AED users.

## Notifications

As part of the overall quality assurance and improvement program, PAD programs must notify the Organization's defined PAD program point of contact, the City of Austin's Independent AED Consultant (for City of Austin departments) and the Medical Director's AED/PAD Program Coordinator when any of the following occurs:

- Anytime the AED is applied to a person
- An AED malfunctions while being brought to or applied to a suspected cardiac arrest victim
- A new AED under consideration for purchase is identified as being under a mandatory or voluntary recall or FDA action
- Any aspect of the organization's written PAD program is revised or requires revision
- A new AED is purchased
- An AED location is changed
- When the organization requires guidance for medical aspects or emergency actions related to CPR and/or AED use

## Quality Assurance & Post-Event Plan

Anytime AED pads are applied to a person, the organization's PAD program point of contact should be notified immediately following transfer of care to the EMS responders. The primary purpose of this requirement is to ensure completion of all post event actions and notifications. When available, the organization's PAD program point of contact should download any electronic AED recorded data for quality assurance review by medical oversight. Completed forms and electronic data should be provided to the City of Austin-Travis County AED/PAD Program Coordinator within four (4) business days by email or any other agreed upon method. Following the Medical Oversight review, the organization's PAD program point of contact should communicate any lessons learned or suggestions resulting from the review. Additionally, City of Austin departments must notify the City's Independent Consultant to ensure the AED is ready for use and for assistance in completing the Medical Oversight's requirements for post event reporting.

If an adverse event (something that did not go as planned or possibly went wrong) occurs, the person(s) involved must complete an Adverse Event Form. Completed forms and electronic data are reviewed by the organization's PAD program point of contact and the City of Austin-Travis County AED/PAD program coordinator. The Medical Oversight Physician and the City of Austin-Travis County PAD Program Coordinator will forward any lessons learned and recommendations for improvement to the organization's PAD program point of contact.

## References

**The below reference documents are located on the City of Austin – Travis County Office of the Medical Director’s website at:**

<http://www.austintexas.gov/page/automated-external-defibrillators-aeds>

**A. Automated External Defibrillation (AED) Selection & Purchasing Requirements (11.20.2017)**

*This document describes the specifications an AED must have in order to meet the Medical Oversight’s authorization for purchase.*

**B. City of Austin - Travis County PAD/AED Program (this document)**

*This document describes the requirements an Organization owning/possessing AEDs must meet if they wish to receive Medical Oversight from the OMD. It is also the basis for the program template.*

**C. PAD Program Template**

*This is a template for use in creating your own PAD Program document. The final document is then submitted to Medical Oversight for review and approval.*

**D. AED Post Event Notification Form**

*This form is used EACH time an AED is applied to a person.*

**E. AED Adverse Event Notification Form**

*This form is used anytime the AED operator believes something unusual occurred during AED use or when the AED operator believes the AED failed to function as it was designed.*

**F. City of Austin Amendments to the Fire Code – AEDs in High Rise Buildings (Article 7, Chapter 25-12-173, 408.12)**

*This is for reference only. It applies to buildings within the City of Austin that are classified as High Rise. This code defines specific requirements for AED placement when specific conditions are met.*

## Contact Information

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