



AED Placement – Where and How Many?

There are a few things to consider when determining how many AED units are right for you and where you should place them. Use this as a guide to point you in the right direction.

The primary objective for any successful PAD (Public Access Defibrillation) program is to achieve a **3-minute response time** from collapse of a victim to arrival of the AED unit. When making any decisions about placement use this 3-minute response time as a guide to determine where and how many units to place.

Response Time

The less time that passes between the victim dropping to the ground and the shock being delivered, the more likely the victim will survive. The goal is to get the AED to the victim's side in less than 3 minutes. This means that the AED should be stored within 1½ minutes of the victim, in case you need to go from the victim to the AED location and back. Since you don't know exactly where the victim will be, place the AED in an area that is available to the most people.

Rate of Incidence

Another important factor when determining placement is to identify locations at which the rate of card cardiac emergencies is high or higher than normal. A company will want to determine if there are locations at the site where the incident may be higher, and there are two main considerations to keep in mind.

Volume of Employees and Visitors: Important areas that warrant an AED placed in close proximity include those with a high population density. Examples of this would include areas such as cafeterias or a call center with many cubicles.

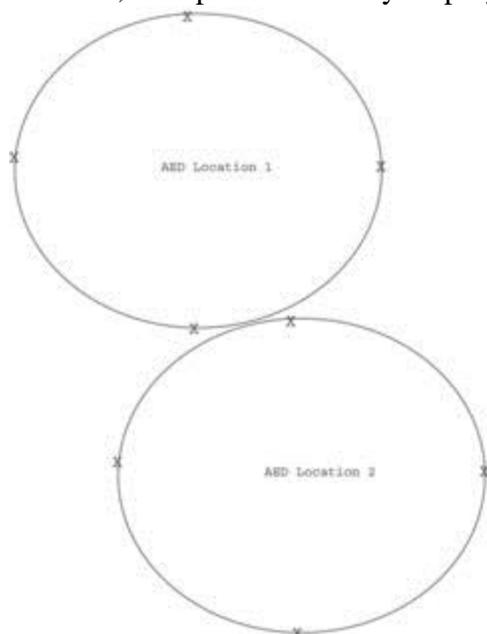
High-Risk Activity: The other important area that warrants placement of an AED in close proximity include those with high-risk activity. A prime example is any area where there is physical activity that will raise the heart rate, such as corporate fitness centers, swimming pools or other recreational areas. Company areas with a higher level of physical labor, such as the warehouse, loading docks or an assembly line are also at a higher risk for a cardiac emergency.

Determining Location

Identify the best locations with the fastest access to the most people using three simple tools: a floor plan, a stop watch, and a clipboard. Using the floor plan, identify accessible areas where the AED can be mounted on a wall, in high traffic areas, visible to a lot of people. When figuring the time it takes to get the AED to a potential victim, consider delays like elevators and stairs, restricted access, and crowded production or stock areas.

Take your stop watch to the proposed AED location and start timing. **Note: Time this exercise while walking at a quick pace but not a run.** Walk north for 1½ minutes, and mark the area you're standing in on the floor plan. Return to your proposed AED location and repeat the exercise south, east and west. You should end up with four marked areas around your proposed AED location.

Draw a circle through the marked areas which indicate a radius of 1½ minutes from your proposed AED location. You can see what areas are covered and what areas are left out. When the highly populated coverage areas have circles that are touching, you've done a good job protecting as many employees as possible. If the budget won't allow enough AEDs to cover all the areas, then protect as many employees as possible.



Remember, once the AED reaches the victim's side, it should take less than 90 seconds to prepare the AED and deliver a shock, if indicated. The 'drop-to-shock' time is critical to successful defibrillation.

Physical Placement

Once you determine how many AED units are needed, it is important to carefully consider the actual location. The location must be accessible to trained rescuers if needed. The AED itself needs to be secure and accessible. The location should have a nearby phone with easy access to an outside line so that the 911 can be dialed. It should also be a location that either all staff knows about or can be advised of. Some examples may be the main receptionist area, cafeteria, main hallway, first aid station, fitness room or security post.

Potential Problems

Vertical Response Time

Remember that response time is determined based on how long it takes to actually reach a potential emergency scene. This means that office complexes, high-rise buildings and multi-

floor locations present obstacles that will affect the response time. Except in the case of a small building, it is usually recommended that a minimum of one AED unit be placed on each floor. It is also recommended that you calculate the response time using a route that includes stairs as opposed to an elevator.

Hard to Access Areas

Any area that is difficult to access should have its own AED unit. For security or work-flow purposes many companies will often have work areas that are sectioned off from the rest of the building. Primary examples include locked areas that require a key, an access card or and access code to enter. Any area that is highly sensitive and off-limits to the majority of staff should have its own defibrillation unit, whether it's a research facility, executive level or a warehouse with inventory that is being safeguarded.

Other Considerations

Not all gatherings of employees take place at the actual business location. Consider all scenarios that require employee attendance, including conferences and off-site business meetings. A scenario where attendance is optional but likely is also very important, such as company special events like social gatherings, holiday parties and company barbeques.

Survival rates decrease 7 – 10 percent every minute that defibrillation is delayed. By having AED units available at your location you will significantly improve the survival odds of your employees in the event of any cardiac emergency.