

ACFASP Answers AED Placement

Questions to be addressed:

Where should automated external defibrillators (AED's) be placed in nonmedical facilities?

Answer:

Automated external defibrillators (AED's) should be placed where there are a high concentration of people. When available the exact location of the device should be guided by site specific incidence data on where cardiac arrests are likely to occur. Examples include shopping malls, sporting arenas, casinos, airports, airplanes, and health clubs. A decision to place an AED at a location with a smaller population at risk (e.g. high schools) should not be discouraged.

AEDs must be placed as part of a comprehensive program to respond to cardiac arrests. This includes a reliable method for activating the EMS system and an educational program to ensure that potential rescuers are trained in CPR and the use of the AED. The decision of where to place an AED(s) should include an assessment of the potential for delays in EMS response.

The evidence is mostly empiric and based upon the documented evidence that early defibrillation does save lives. Few studies exist that have looked at placement of the device beyond school athletic events and shopping malls. Using a cost benefit assessment that it is cost efficient to place an AED in an area where you get one cardiac arrest every 5 years. The excess cost is less than \$44,000 / QALY (1). The cost benefit if this modality is rapidly changing however, as the price of the device has fallen by almost one half from \$3,500 to \$1,500. Also, the AED still needs to be considered as a component of a system of care to include linkage to EMS, availability of a telephone or other device to call for help and trained bystanders.

Nichol G, Hallstrom AP, Ornato JP, et al. Potential cost-effectiveness of public access defibrillation in the United States. *Circulation*. 1998;97:1315-1320.