
Public Use of Automated External Defibrillators

The New England Journal of Medicine published a report today showing that public access defibrillation programs, in which lay rescuers provide CPR and use automated external defibrillators (AEDs), can increase survival from sudden cardiac arrest. The study documents a 67 percent survival rate for those with witnessed sudden cardiac arrest who received bystander CPR and treatment with an AED within 5 minutes. The study was conducted between June 1, 1999 and May 31, 2001 in three Chicago airports.

"The results of the Chicago airport study fortify the American Heart Association's efforts to encourage bystander CPR and AED programs in high-traffic public locations," said Vinay Nadkarni, M.D., chairman of the American Heart Association's emergency cardiovascular care committee.

The three airports studied—Chicago O'Hare, Midway and Meigs Field—report serving more than 100 million passengers annually. During the study, 18 people had ventricular fibrillation (VF) cardiac arrest and 11 survived. All of the survivors received bystander CPR. Nine survivors were defibrillated within 5 minutes and two were defibrillated within 7 minutes. Survival was highest in the group that received CPR and defibrillation within 5 minutes.

"The combination of effective CPR and rapid defibrillation is a proven formula for success," said Dr. Nadkarni. "These survivors were saved because bystanders acted quickly—in other situations, victims die because no one near them provides CPR and defibrillators cannot be accessed soon enough."

The American Heart Association recommends that effective AED programs include proper training in CPR and AED use, medical oversight in developing a response plan, integration with the emergency medical services (EMS) system and proper quality improvement monitoring, including equipment maintenance.

"The Chicago airport program met all the Association's recommendations and was extremely well-designed," Dr. Nadkarni added.

In six of 11 cases, rescuers had no prior training in the use of automated defibrillators, although all were trained in CPR and three held medical degrees. AEDs were placed no more than a 60-90-second walk apart and retrieval of an AED caused automatic notification and dispatch of EMS.

According to the American Heart Association, approximately 250,000 people die annually from sudden cardiac arrest suffered outside the hospital setting.

Source:

www.americanheart.org

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