

FACTS

Every Second Counts

Rural and Community Access to Emergency Devices Program

OVERVIEW

AED
 Automated External Defibrillator



Each year in the U.S., there are approximately 326,200 cardiac arrests outside of a hospital setting and on average, not even 11% of victims survive.¹ Cardiac arrest affects people of all ages, but occurs most commonly in adults with coronary artery disease. It will only become more common as Americans age.²

Immediate cardiopulmonary resuscitation (CPR) and early defibrillation, with an automated external defibrillator (AED), can more than double a victim's chance of survival.³ In fact, early defibrillation, along with CPR, is the only way to restore the victim's heart rhythm to normal in a lot of cases of cardiac arrest.³ Survival rate for individuals with ventricular fibrillation (the most serious heart rhythm disturbance) treated by AEDs have been reported to be up to five times higher compared with CPR alone.⁴ For every minute that passes without CPR and defibrillation, however, the chances of survival decrease by 7-10%.⁵ A recent study sponsored in part by the National Institutes of Health and the American Heart Association shows that most cardiac arrests that occur in public places are "shockable" arrhythmias, or those that respond to a shock from an AED, making AEDs in public places highly valuable.⁶ Yet, there are not enough AEDs or people trained in using them to provide this life-saving treatment; resulting in lost opportunities to save more lives. Tragically, 64% of Americans have never even seen an AED.⁷

AED PROGRAMS IMPROVE SURVIVAL

Communities with comprehensive AED programs that include CPR and AED training for rescuers have achieved survival rates of nearly 40% for cardiac arrest victims.³ Making AEDs more available to lay responders who are trained in their use could save even more lives.

Distribution of AEDs – FY 2002-2004	
Location	Percentage
EMS, Police, and Fire	59%
Schools and Government	17%
Faith-Based and Recreation	12%
Nursing Homes & Sr Centers	4%
Hospitals, Clinics, and Other	8%

Source: HH'S Report to Congress: Rural Access to Emergency Devices Grant Program (FY 2002-2004)

MORE SUPPORT IS NEEDED

Congress created the *Rural and Community Access to Emergency Devices Program*,⁸ which is administered by the Health Resources and Services Administration (HRSA). This competitively awarded community grant program allows rural communities to buy AEDs, train lay rescuers and first responders in their use, and place them in public areas where cardiac arrest is likely to occur. The program has been successful, but underfunded.

- From March 2010 to February 2011, 3,928 AEDs were placed and 28,776 individuals were trained in their use.⁹
- In FY 2014, HRSA could fund only 19%, equal to just six, of the approved applicants for the rural program within the *Rural and Community Access to Emergency Devices Program*.¹⁰

TESTIMONIALS

HRSA's program has had widespread impact. Below are the stories of just a few of those saved by the program.

- **Butch Gibbs**, of rural Humeston, Iowa suffered cardiac arrest after performing in a play at the local elementary school. His wife, a trained community volunteer, brought him back to life by providing CPR and shocking his heart 22 times with an AED. The closest ambulance was nearly 30 miles away, so Butch knows the AED in the school saved his life. He was familiar with the

device before his cardiac arrest because it was an AED that he and fellow EMS volunteers received through a grant from the *Rural and Community Emergency Access to Devices Program*. Butch, a strong AED advocate, visits his lawmakers in Washington, D.C. to show how easy it is to use an AED and urge them to keep this life-saving program alive.

- Police lieutenant **R.J. Thibodeaux** of Abbeville, Louisiana suffered cardiac arrest while attending a movie with his sons. The CPR administered on the scene was not enough to revive him. Luckily, his police department had just received an AED through the *Rural and Community Access to Emergency Devices Program*, and Lt. Thibodeaux was the first person to be treated with the device. Thanks to the AED he survived and returned to the police force. He and his children urge Members of Congress to provide adequate funding for this life-saving program.
- Former state legislator **Ron Nichols** of Palermo, North Dakota went to the local emergency room complaining that he felt tired and achy. Doctors decided to send Ron to a larger hospital 55 miles away, but during the ambulance ride, he suffered cardiac arrest. The ambulance nurse used an AED several times to shock his heart back to a normal rhythm. Ron credits the AED, purchased through the *Rural and Community Access to Emergency Devices Program* for the Stanley, North Dakota ambulance service, with saving his life. He hopes that federal lawmakers will fund this critical program adequately, so others can have a second chance at life.
- **Mari Ann Wearda** of Hampton, Iowa suffered cardiac arrest as a result of ventricular fibrillation while stopped at an intersection light. Drivers noticed her slump over as her car drifted across the highway and called 911. Within two minutes, an officer arrived and immediately began to administer a combination of CPR and defibrillation. Mari Ann firmly believes that, in rural areas such as hers, it is so important for law enforcement to carry these life-saving devices since they are often the first to respond to an emergency call. She credits the *Rural and Community Access to Emergency Devices Program* for awarding funds that allowed the police to purchase 10 AEDs, one of which saved her life.
- **Richard O'Connor** of Groton, New Hampshire, suffered cardiac arrest from a potassium imbalance while undergoing a routine examination in his doctor's office. An office nurse administered CPR and used an AED to shock him back to life. That very nurse had

purchased the AED for the Plymouth Family Practice Center through a grant from the *Rural and Community Access to Emergency Devices Program*. Richard is extremely grateful that the AED was readily available in the doctor's office and urges all Members of Congress to restore funds to the program that saved his life.

THE ASSOCIATION ADVOCATES

Funding for the *Rural and Community Access to Emergency Devices Program* decreased by \$7.4 million, or 83%, between 2005 and 2007. Cuts made in FY 2006, specifically, reduced rural grants from 47 to four states. More recently, for FY 2015, Congress and the President approved an appropriation of \$3.364 million. Currently, rural communities in only 12 states receive funding under this life-saving program.¹¹ Additional resources are needed to save the lives of more victims of out-of-hospital cardiac arrest. Americans deserve better. The American Heart Association urges Congress to restore funding for the *Rural and Community Access to Emergency Devices Program* (Section 413 - - rural program - - and Section 313 - - community access demonstration - - authorized in the Public Health Service Act) to the FY 2005 level of \$8.927 million when nearly all states were funded for this live-saving initiative.

¹ Mozaffarian D, Benjamin EJ, Go AS, Arnett DK, Blaha MJ, Cushman M, ... & Turner MB; on behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. (2014). Heart disease and stroke statistics—2015 update: A report from the American Heart Association. *Circulation* 2015, 131, e01–e294

² Myerburg, RJ, Quinones, MA, Roden, DM, Silvia, G, Jean-Jacques Blanc, MD, France, AB, & Poland, A. (2006). ACC/AHA/ESC 2006 guidelines for management of patients with ventricular arrhythmias and the prevention of sudden cardiac death. *Europace*, 8, 746-837.

³ Hazinski, MF, Idris, AH, Kerber, RE, Epstein, A, Atkins, D, Tang, W, & Lurie, K. (2005). Lay rescuer automated external defibrillator ("public access defibrillation") programs lessons learned from an international multicenter trial: advisory statement from the American Heart Association Emergency Cardiovascular Committee; the Council on Cardiopulmonary, Perioperative, and Critical Care; and the Council on Clinical Cardiology. *Circulation*, 111(24), 3336-3340.

⁴ Bocka, JJ, Bessman, E, Talavera, F, Kaxxi, A, Halamka, JD, & Brown, D. (2012). *Automatic External Defibrillation*. Retrieved from <http://emedicine.medscape.com/article/780533-overview>.

⁵ Go, AS, Mozaffarian, D, Roger, VL, Benjamin, E J., Berry, JD, Borden, WB, ... & Stroke, SS. (2013). Heart disease and stroke statistics--2013 update: A report from the American Heart Association. *Circulation*, 127(1), e6.

⁶ Weisfeldt, ML, Everson-Stewart, S, Sitlani, C, Rea, T, Aufderheide, TP, Atkins, DL, ... & Morrison, LJ. (2011). Ventricular tachyarrhythmias after cardiac arrest in public versus at home. *New England Journal of Medicine*, 364(4), 313-321.

⁷ The PARADE/Research!America Health Poll. (2005). *Charlton Research Company*.

⁸ PL 106-505 (Public Health Improvement Act) and PL 107-188 (Public Health Security and Bioterrorism Response Act).

⁹ U.S. Department of Health and Human Services. *Report to Congress: Rural Access to Emergency Devices Grant Program for FY2012*.

¹⁰ Health Resources and Services Administration. *Personal Communication*.

¹¹ Wakefield, MK. (2014). *Department of Health and Human Resources, fiscal year 2014 – Justification of estimates for appropriates committees*.