

**TAKE HEART AMERICA PROJECT SAVES LIVES**

What if a community implemented a comprehensive system for treatment of sudden cardiac arrest (SCA) that uses all of the treatment modalities currently shown to be effective? Leaders of a new demonstration project, Take Heart America Sudden Cardiac Arrest Survival Initiative, think that systematically applying lessons already learned from science could mean the difference between life and death for hundreds of SCA victims.

"We do not have all the answers, but we are convinced that rates of survival from sudden cardiac arrest can increase significantly by applying what we know today," says Robert Niskanen, co-founder and executive director of the initiative, which received its start-up funding from Medtronic and St. Jude Medical. "The problem is that few victims of sudden cardiac arrest are treated quickly enough with the full range of clinically effective therapies that are available. Take Heart America aims to radically change this paradigm."

Three communities of various sizes—

Austin/Travis County, Texas; Columbus, Ohio; and St. Cloud, Minn. —will participate in the project. Niskanen and colleagues estimate that if survival rates in these locations increase to even 20%, as many as 600 additional lives will be saved during the three-year project.

Rates of overall survival from SCA to hospital discharge in 2005—the baseline for the demonstration project—were 6.5% in Columbus, 8.5% in St. Cloud, and 10.4% in Austin/Travis County. The average survival rate nationally is 6–7%.

To propel survival rates to new heights, the initiative will include:

- » the promotion of self-directed CPR and AED training in homes, schools and businesses;
- » registration of public access and private use AEDs using an advanced software-tracking system coordinated with 9-1-1 agencies;
- » treatment protocols that follow the 2005 AHA Guidelines for CPR and Emergency Cardiovascular Care;
- » use of an impedance threshold device (ITD) by first responders and BLS responders;
- » use of an automated CPR device by EMS personnel; and
- » use of therapeutic hypothermia for unconscious survivors in hospitals—and eventually in the field.

Other planned initiatives within the project will also aid in its success, judged by evaluation of SCA survivors and accurate data collection.

**Take Heart Austin:** Each location will employ creative ways to facilitate various program components. In Austin/Travis County, for example, firefighters will bring CPR self-training kits to each of the 210 homes in the rural community of Creedmoor, providing training assistance and the use of loaner DVD players as needed. "Community interest and support for Take Heart Austin has been tremendous," says Edward Racht, MD, principal investigator of Take Heart Austin.

**Take Heart Columbus:** Once sufficient funding is secured, self-training CPR kits will be used to train approximately 24,000 students in public schools and to promote more wide-

Take Heart America may lead to a new model for community-based care for SCA victims.

spread CPR-AED training at the Ohio State University, which already hosts the Ohio State's CPR Club. "Among other things, we hope to train resident assistants in CPR and AED use, and have them, in turn, train dorm residents," says Lynn White, MS, Take Heart Columbus program coordinator.

**Take Heart St. Cloud:** St. Cloud is focusing initially on CPR-AED training in the schools, using a self-training kit. So far, 2,000 ninth graders in six schools have been trained, says Program Development Specialist Janet Steinkamp, MA. "Each student has trained two to four additional people," she says. "Thanks to student promotion of the program, we know that at least 4,000 people have now been trained. We have started training in the business community, too, and soon we will begin training neighborhood groups."

Take Heart America is off to a good start. In March, a 54-year-old woman suffered an SCA in her St. Cloud home. Her daughter and sister called 9-1-1 and gave her CPR. Fire and police first response units arrived two minutes later and provided ITD-assisted CPR. An EMS unit followed and treated her with a defibrillator, shocking her eight times. She was transported to the hospital and was treated with mild therapeutic hypothermia. After rewarming, she awoke immediately in an alert and cognitively intact state. Three days later, she received an ICD and was soon discharged.

Steinkamp notes that since hypothermia was introduced in St. Cloud, 34 patients have undergone mild therapeutic cooling; of these, 50% have returned to their pre-arrest status.

The Take Heart America team envisions their efforts will lead to a new model for community-based emergency medical care for SCA victims. Team members anticipate that cities that implement this program over the next decade will triple their survival rates. For more on this program, visit [www.takeheartamerica.org](http://www.takeheartamerica.org) and [www.jems.com/jems/32-5/](http://www.jems.com/jems/32-5/). —Mary Newman

**COMPUTER MISUSE PROMPTS DISCIPLINE**

Austin-Travis County (Texas) EMS (ATCEMS) disciplined 10 employees in March for visiting online pornography sites on city computers, a violation of city policy.



ATCEMS gave two paramedics and an EMS instructor the option of resigning or being fired, demoted two commanders and suspended them without pay for two weeks, and suspended two

paramedics for four days and three others for two days. ATCEMS Executive Director Richard Herrington said most of the disciplined EMS employees had been surfing other Web sites and were redirected to illicit sites. "Many immediately got out [of those sites], but a very, very few showed bad judgment," lingering on those sites and sometimes returning to them. All ATCEMS employees sign policies on the appropriate use of the Internet when hired. The computer misuse was discovered during an investigation into why the ATCEMS server was slowing down.