

Whitewater, WI
Community profile

A rural town prepared for sudden cardiac arrest



When Captain Tom Schopen of the Whitewater, Wisconsin Rescue Squad first learned to use the Heartstream automated external defibrillator (AED), he didn't imagine it would save a loved one's life. However, that's exactly what happened. Just days after Whitewater purchased their first AEDs, a unit was used to save the life of Tom's wife, Judy.

This startling incident emphasizes the truth about Sudden Cardiac Arrest (SCA); it can happen to anyone, at any time, without warning. Fortunately, in this case, the citizens of Whitewater, Wisconsin were prepared. And several months later, Tom and Judy Schopen toasted their good fortune while on a celebratory trip to Hawaii.

Time is precious when sudden cardiac arrest strikes

Doctors, nurses, and emergency rescue personnel know full well that once sudden cardiac arrest strikes, time is precious. And SCA is not an uncommon occurrence. Many

Americans don't realize that a fatality resulting from sudden cardiac arrest occurs every two to three minutes. Unfortunately, in the average community, these victims do not usually survive. Defibrillation therapy, delivered promptly, holds the key to surviving sudden cardiac arrest.

The statistics are clear. More than 90 percent of SCA victims who receive defibrillation therapy within two minutes survive to be discharged from the hospital.¹

However, if more than ten minutes elapse before defibrillation occurs, the chance of a victim's survival is less than 5 percent.² Many members of the general public believe that CPR training is enough. But CPR alone doesn't always save lives; an AED unit is needed to "shock" the heart back into pumping at its normal rhythm.

It's all about saving lives

Without a doubt, to improve the survival rate of a person stricken with SCA, a community needs to ensure that defibrillation therapy can ensue within minutes, regardless of where the event occurs. However, medical professionals often face barriers to reaching the patient in a timely manner. For instance, in an urban setting, responders may encounter traffic jams and high-rise buildings. And rural communities face other challenges, most notably the sheer distance between an SCA event and the medical personnel who can respond. All of these factors add up to precious minutes ticking away, sometimes resulting in the loss of someone's life.

Whitewater, Wisconsin: a prepared rural community

Most medical practitioners are well aware of the sobering statistics regarding SCA, and the medical community of Whitewater, Wisconsin is no exception. Whitewater is a rural community of about 14,000 year-round inhabitants. However, the population swells by an additional 10,000 people when classes are in session at the Whitewater campus of the University of Wisconsin.

What gave this relatively small, rural community the impetus to set up a successful early defibrillation program? It was the strong partnership between thoughtful benefactors and enthusiastic

medical and rescue personnel, who were dedicated to making the program a success.

The process started when a Whitewater citizen passed away, leaving her estate with the intention of building a hospital. Local leaders faced a conundrum; the areas surrounding Whitewater already hosted three hospitals. Clearly, no new hospital facilities were needed. Instead, the estate was redirected to benefit the Whitewater Rescue Squad.

It is no surprise that members of the emergency medical response community often spearhead early defibrillation programs, and the program in Whitewater is no exception. In this case, the

Statistics

Population:

14,000 Permanent residents
and 10,000 students

Program Implementation:

1998

Trained Responders:

EMS, Fire and Rescue, and
citizen responders

Number of AEDs:

30 (approximately)

AED Locations:

Factories, Retirement Homes,
High School, Restaurant,
Church, Squad Cars, and
University Administrative
Building, Auditorium, Fitness
Center, Sports Complex,
and Campus Police Vehicles



participants included Dr. Kenneth Kidd, a family practitioner and Medical Director of the Emergency Medical Service Unit in Whitewater, Captain Tom Schopen of the Whitewater Rescue Squad, and Lieutenant Lisa Otterbacher of the Whitewater Police Department.

Knowing that SCA is a problem that faces every community, this core group didn't question whether AEDs might be a useful addition. In fact, as part of a pilot program sponsored by the state of Wisconsin, Whitewater had already tested the efficacy of having EMTs with basic life-saving skills use a defibrillator. For several years, Captain Schopen and the rescue squad had collected data and logged several successful saves.

Based on this experience, Dr. Kidd's team pondered how to get units even closer to potential victims within their rural community. The team decided to investigate the feasibility of placing units in police cars. After conducting research and studying time management concerns, the team ultimately decided that this plan

made sense, and the Rescue Squad purchased five Heartstream defibrillators for their squad cars, training all police department personnel at this time. Little did Captain Schopen dream that within days, one of these units would be used to save his wife's life.

Good news travels fast

As Judy Schopen recalls, that fateful day began like any other, with breakfast and her usual morning routine. But shortly after lunch, the Schopen's lives dramatically changed, almost irrevocably. Tom Schopen still expresses amazement at how quickly the SCA occurred. As he recalls soberly, "One minute she's sitting talking to you and the next minute, virtually clinically dead."

After Judy collapsed, Tom didn't have time to panic. He began CPR, and then dialed 911 for help. Although the Whitewater Police force had purchased the AEDs and completed their training, no one had installed the units in the squad cars yet. Upon responding to the scene, one officer asked Tom whether he should run to

the station and grab a defibrillator. Fortunately, only four or five blocks separate the station house from the Schopen's home. Within minutes, the officer returned with the AED in hand, and saved Judy's life.

News of Judy Schopen's dramatic save quickly spread throughout the Whitewater area. Now the public's interest was engaged. People were curious about AED units and their role within the community. One local entrepreneur needed no further convincing that AEDs deserved a more prominent place in Whitewater, and decided to purchase additional units.

The core team decided to take this opportunity to inform local business leaders of the benefits of having an AED at their work site. In the letter, Dr. Kidd offered free training classes (courtesy of the Whitewater Rescue Squad) to those companies who purchased their own defibrillators. As Dr. Kidd recalls, thirteen businesses came on board right away.



“Early defibrillation is the key to saving lives when it comes to sudden cardiac arrest. Access to an AED can mean the difference between life and death.”

Captain Tom Schopen

Training potential responders: a vital component

Training medical and citizen rescuers is a vital component to the success of an early defibrillation program. In Whitewater, five members of the Rescue Squad conduct training sessions. Lt. Otterbacher notes that all the trainers enjoy this volunteer effort.

At the beginning of the training session, some people express doubt about operating an AED, believing that it will be too complicated. Other people fear they might make a mistake. However, Tom Weidert, Trainer and Paramedic for Whitewater's Rescue Squad, notes, "people come into the class nervous and we try to keep it comfortable and have a little fun ... the neatest thing about the machine is that it basically walks you right through the situation. The students walk out of there saying 'this is a piece of cake', they had a good time, and had fun and want to come back."

In addition, the passage of federal and state Good Samaritan laws encouraged even more people to seek AED training. These laws

protect well-meaning citizens who, in good faith, attempt but fail to save an SCA victim's life. As more locations install AEDs, this growing pool of citizen rescuers bring their expertise even further into the community.

To become certified, participants need to train, and subsequently retrain, by committing just four hours every other year. As Lt. Otterbacher asserts, "Who can't do that to save a life?"

It's all about saving lives

To date, Lt. Otterbacher lists six "true saves," which she defines as a person who can "lead a normal life" after leaving the hospital. These fortunate people include a diner at the local Pizza Hut restaurant, a University professor who was saved in his kitchen, and an onlooker at the high school basketball game.

More recently, a fifty-year-old judge and graduate student at the University of Wisconsin, Whitewater, was saved when a nurse classmate performed CPR until the University police arrived

with an AED to shock and save him. He arrived at the hospital sitting up and fully alert. Lt. Otterbacher recalls that hospital personnel could not believe he had suffered an SCA and had to see the record of the case to be convinced. In an unfortunate incident, a 16 year-old boy could not be saved; however, the AED kept him stable long enough for his parents to see him, and to arrange for organ donation.

All of these cases point to one unifying fact about SCA victims. As Dr. Kidd notes, "there's no predicting where they'll be." In the rural community of Whitewater, the AED units are not clustered together. Instead, they are randomly scattered throughout the community as business leaders purchase units at will, or donors specify the location of their choice. To date, some AED units are housed in factories, retirement homes, the high school, the banquet hall of a local restaurant, a church, and squad cars. In addition, the local college campus boasts eleven units of its own.

University of Wisconsin at Whitewater: a study in preparedness

Mr. Vay Rodman, Director of Risk Management and Safety at the Whitewater campus of the University of Wisconsin, recognizes that the college campus is fairly well prepared for an occurrence of SCA. Their eleven defibrillators are scattered throughout the campus, in places such as the administration building, the arts building auditorium, the University center, the fitness center (in the basement of a residence hall), the athletic complex, and in three of their squad cars.

Once the generous benefactors donated these AED units, college officials realized their staff and faculty needed training. Several times during the year, the college sponsors training classes for up to six participants each.

Funding the program has been fairly easy; members of the Rescue Squad donate their time to run each training session. The University purchases the instruction books, which are returned at the end of each class and reused. In addition, the physical education department offers to teach AED instruction to interested students as part of curriculum.

Lessons from a successful early defibrillation program

The community of Whitewater, Wisconsin considers itself fortunate. Generous benefactors donated the funds to purchase the AED units, and the local Rescue Squad enthusiastically conducts the training sessions.

Other communities can have similar success, once they develop their own unique strategies. As Dr. Kidd asserts, an early defibrillation program can get off the ground with “five or six enthusiastic believers and about \$10,000.”

The Whitewater story demonstrates that the news of a successful save truly captures the attention of the public, potential benefactors, and local business leaders. This public support helps the program become a success.

The core team agrees that their early defibrillation program has been a gradual progression, but their tenacity has certainly paid off. As Dr. Kidd notes, they must now “keep what we have moving.” To go forward, they intend to focus on training and retraining the public, and to keep publicizing successful saves so that SCA and the potentially life-saving role of AEDs stay in the public's mind. In addition, the more mundane details must be attended to. As Mr. Rodman notes,

“it's not over when you put the AEDs on the wall.” The units must be periodically inspected, and the batteries changed. But, even while bearing all these details in mind, most people would agree that Whitewater, Wisconsin is well prepared to handle SCA.



For more information on HeartStart defibrillators, contact Philips Medical Systems at 1-800-453-6860 or your local Philips regional sales office.

Sources

1 Challenging Sudden Death: A Community Guide to Help Save Lives, Mary May Newman and Jim Christenson, MD, Catalyst Research & Communication, Inc., 1988, p. 2.

2 Ibid, p. 2.

Championing Early Defibrillation in Your Community, National Center for Early Defibrillation, 2001. Video transcript.

Kenneth Kidd, M.D., family practitioner and Medical Director of the Emergency Medical Service Unit in Whitewater, Wisconsin.

Lieutenant Lisa Otterbacher, Whitewater Police Department.

Vay Rodman, Director of Risk Management and Safety, University of Wisconsin, Whitewater campus.

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On the web

www.philips.com/heartstart

Via email

medical@philips.com

By fax

+31 40 27 64 887

By postal service

Philips Medical Systems
3000 Minuteman Road
Andover, MA 01810-1085

Asia

Tel: +852 2821 5888

Europe, Middle East and Africa

Tel: +31 40 27 87246

Latin America

Tel: +1 954 628 1000

North America

Tel: +1 800 934 7372

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