

The Telluride Watch

Published: 12/01/06

Automated External Defibrillators Arrive in Telluride Region

'Cutting-edge Technology for Emergency Cardiac Care'

By Jonathan Schwab

Medical improvements are arriving rapidly in Telluride and its surrounding communities.

In the past two months, thanks to the efforts of the Telluride Public Access Defibrillator Program (T-PAD), 28 automatic external defibrillators have arrived in Telluride and its neighboring towns, said cardiologist Mark Rosenthal, M.D., the organizer and director of the program.

As described on the website Savingalife.com, an AED “is a portable electronic device that diagnoses and treats cardiac arrest by reestablishing an effective heart rhythm. This treatment is called defibrillation, which applies an electric shock to the entire heart muscle, uniformly clearing the electrical activity of the heart, hopefully allowing it to resynchronize.”

About the size of a laptop, an AED delivers verbal instructions, or voice prompts, to its user, who, after pushing a numbered-button will hear detailed instructions on how to activate the machine. Two sticky electrodes are attached to the victim's chest and, if the victim is in cardiac arrest, the machine will explain how to begin CPR and deliver a potentially life-saving defibrillation shock to the heart. The AED even reminds the rescuer to call 911.

Rosenthal stressed that the machines cannot mistakenly deliver a shock; they can only help. If the victim has simply fainted and the heart is still pumping, the AED will not deliver therapy.

Telluride Chief Marshal James Kolar and Mountain Village Police Department Chief Dale Wood were instrumental in helping Rosenthal successfully implement T-PAD and determine appropriate locations for the AEDs. Both police departments have placed AEDs in official vehicles and will keep AEDs in their offices.

T-PAD was funded through a grant from the Telluride Foundation and budgetary funding from the Mountain Village and Telluride town councils. Each AED unit costs about \$2,000, which includes the AED, a cabinet, a rescue kit, and the cost of management oversight by Colorado-based Life Saving Solutions, Inc. The Telluride Foundation has

also funded five AED trainers, or mockup AEDs used for training sessions. Rosenthal's ultimate goal is to achieve 100 percent community training in CPR and AED use.

The Wilkinson Public Library received its AED last week, in the entry foyer. During the installation, local EMTs and American Heart Association instructors Kevin Dunkak and Trisha VanHeltebrake took the opportunity to train library staff in first aid, adult/child/infant CPR, and adult/child AED use. Five years ago Dunkak and VanHeltebrake started the company CPR World, a business providing medical training in the workplace. Dunkak contacted Rosenthal several months ago about helping out with the community training aspects of T-PAD.

In training sessions, instructors show trainees, with the help of instructional video clips, how to determine if someone needs CPR and how to perform it. (As is the Heimlich maneuver, the CPR technique is different, say, for a baby versus a pregnant woman versus an adult.) For more information and details on community training sessions, which will begin in January, contact CPR World at 728-0989 or email kdunkak@telluridecolorado.net.

AEDs are already in place or will soon be available within Telluride at Hanley Ice Rink, Town Park offices, all four gondola stations, Telluride Post Office lobby, Telluride Medical Center lobby, outside the county courthouse, and, if the budget allows, at other locations along main street. The first AED installations at gondola stations in Telluride and Mountain Village were made possible by separate donations from Telluride Properties and realtor Sally Puff Courtney, respectively. Rosenthal is still looking for private donors to fund additional AED sites. Interested donors can contact him by email at TPAD@savingalife.com.

Another AED is located in the Avalanche Closet in Ophir, where the town's emergency supplies are kept. Rosenthal, who lives in Ophir, said if a town of about 75 households can have an AED, then it can serve as a model for other small towns in the country.

AEDs will be placed in several locations in the Mountain Village, including the Conference Center Plaza, Heritage Plaza, Franz Klammer Lodge, Peaks Hotel, and Meadows Post Office. Additionally, Rosenthal hopes to put AEDs in Lawson Hill, Hillside, Placerville, on Galloping Goose buses, and in a public area at the Telluride Regional Airport. There is already an AED in the airport's rescue truck.

The Telluride school system has five AEDs in place – in the Palm Theatre lobby, the high school gymnasium, the elementary school gym, and two designated for school buses used for fieldtrips and sports events.

Telluride R-1 School District Superintendent Mary Rubadeau said she and school officials thought it would make sense to have three AEDs installed in the schools' most public areas that could be reached from anywhere inside the school within about 30 seconds. School nurse Christine Tschinkel provided a four-hour AED training session to

most school faculty members in early November. There will be a follow-up session in January.

“We need to sit down and create a plan for the kids,” Rubadeau said, adding that the school hopes to train students in sixth grade and higher. Younger students will be made aware of the AEDs and their capabilities.

Rosenthal, who volunteers at the Telluride Medical Center and works full-time as a cardiologist in New Jersey the rest of the year, said it is crucial to have defibrillators accessible to all parts of the community.

“I had somebody collapse in front of me this summer at the Conference Center in Mountain Village,” he said. “It was not a cardiac arrest, but if it had been, there was no AED in sight. Now there is.”

“In the two years that I’ve been here, I can think of at least four cardiac arrests where people were not resuscitated successfully,” Rosenthal added. “The EMS here is excellent. However, one of the challenges for emergency medical care in Telluride is that at times it can just take too long for medics to reach a cardiac arrest victim, particularly when road conditions are poor.

“In a cardiac arrest, there is a four minute window for resuscitation, after which time the likelihood of a meaningful recovery falls off sharply,” he added.

Rosenthal said the AEDs and the training of the community might bring long-term benefits to the community. “I think it would be good for Telluride to be seen as a ‘heart-safe community,’ both for the people who live here now and for the people who might consider moving here one day,” he said. “It even applies to people who are considering coming here on vacation. They may be a little reluctant to come to a place that seems so isolated, particularly if they have a preexisting cardiac condition. It might provide a comfort level to know that you’re vacationing in a town that has cutting-edge technology for emergency cardiac care.

“Even in a community like Telluride, where we all feel very healthy, bad things happen to seemingly healthy people.” Just recently Rosenthal performed the Heimlich maneuver at a restaurant on an otherwise healthy person who had choked and stopped breathing.

Throughout the country, Rosenthal explained, patients are often resuscitated with public access AEDs by bystanders or by police officers with AEDs in their vehicles. Now members of the Telluride community can feel just a bit safer knowing that in the unlikely event of a cardiac arrest, their chances of survival have greatly improved.