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IN EMERGENCY SERVICES

Doing Big Things in Big Sky Country A grassroots effort to improve SCA rates in Montana

By Jenifer Goodwin

Kevin Lauer, an EMT with American Medical Response in Bozeman, Mont., and the assistant fire chief with Gallatin Gateway Rural Fire District, was headed back from a car fire in July 2011 when he received a cardiac arrest page. Lauer heard the description of the location and glanced up.

The 911 call had come from a sport utility vehicle driven by Peggy Lehmann and her 58-year-old husband, Gordon. The vehicle was right in front of Lauer, by the side of the road. "Within 30 seconds, we had the guy on the ground and were doing compressions, shocking him and had attached an airway," he says. "All the planets were aligned for us. Eight days later, he walked out of the hospital with no neurologic deficits."

Three days after Lauer's call, another crew of rescuers from the nearby Central Valley Fire District, assisted by paramedics from AMR, resuscitated a woman whose adult daughter had been coached by dispatchers to provide CPR until they arrived on scene.

These saves led Lauer, a volunteer firefighter for 30 years and an EMT for AMR for 12, to launch Gallatin HeartRescue, an initiative to improve cardiac arrest survival in the region. "I'm a very volunteer, community-minded person," he says. "I went to my boss [at AMR] and said, 'We have to figure out a way we can get this message out to the people of the community. They need to learn CPR so if there are no professionals around, you can save a life.'"

With a service area that spans more than 2,600 mostly rural square miles, the task is daunting. Response times can be a challenge, especially outside Bozeman—all the more reason, Lauer says, to spread awareness about the importance of bystander CPR, and to make sure people know how to do it.

But Lauer and his colleagues at AMR, including paramedic Mike Pasque, knew they couldn't tackle the issue alone. So they enlisted several partners, including local police and fire departments, Bozeman Deaconess Hospital, Michigan State University Nursing School, local businesses and community organizations such as the Rotary Club. Following the lead of the "big guys" such as Seattle-King County, the Bozeman team adapted the lessons learned in more urban areas to create a program that suits them.

Their efforts got a boost recently when Bozeman AMR received a \$25,000 grant from the Medtronic Foundation's HeartRescue Project, a five-year, \$15 million initiative to increase SCA survival rates nationwide. With partners at universities in six states, as well as AMR corporate, one of the tenets of the HeartRescue Project is that improving survival rates requires a collaborative, community effort involving each link in the chain of survival: bystanders, dispatchers, EMS and hospitals, says Lynn White, AMR's national director of resuscitation and accountable care.

That's what impressed AMR about what Lauer and his colleagues are attempting to do; by enlisting fire, police and community organizations, they are giving themselves a real chance at making a difference. "People say they understand that it has to be a community initiative to move the needle, but they often don't really get there," White says. "These people really get it."

Working toward a goal

With the grant money, Bozeman AMR purchased more than 100 mannequins. "We've taught CPR at churches, schools, the Boy Scouts and Girl Scouts, church youth groups, Rotary Club, Kiwanis Club and physical fitness gyms," Lauer says. In fact, a few weeks after teaching CPR to 28 people at a CrossFit gym, a man went into cardiac arrest there and was saved after a bystander started CPR (the bystander had taken the class elsewhere).

Lauer and his colleagues also created a course facilitator's guide, which they share with members of the community who offer to teach the course to others in the community. "I call it a legal pyramid scheme. If we teach 10 people, and then they each teach 10 people, before you know it you have a lot of people trained," Lauer says. Their goal is to train 5,000 people in hands-only in the first year of the project, which kicked off officially in February. So far, they figure they're about halfway to meeting that goal.

Several large businesses have taught all of their employees, while the Rotary Club has taken on CPR instruction as a service project. In Montana, police academy graduates aren't required to learn CPR. So an officer for the Bozeman Police Department, who is also a former volunteer

firefighter, has taken it upon himself to train nearly all Bozeman police officers.

The grant was also used to create three videos featuring Gallatin County survivors, including recordings of their loved ones' 911 calls and interviews with the rescuers. After the videos were produced, Lauer and his team were teaching CPR to the Montana State University football team and coaching staff, who decided they wanted to put on a mass CPR training. During a break in a big game, they played the Lehmanns' survivor video. "You could hear a pin drop," Lauer says. Afterward, they set out the mannequins and the players invited fans down to the field to learn CPR. "That was one of the greatest things I've ever seen in my life," he adds.

A local effort with broad appeal

The Bozeman concept is spreading statewide. Montana State University School of Nursing, for example, requires nursing students to do volunteer work, and they're teaching CPR at the university's five campuses. Murdoch's Ranch & Home Supply, a large employer with locations throughout Montana, Colorado, Nebraska and Wyoming, has pledged to teach CPR to all of its employees.

Bozeman AMR will feed data about cardiac responses into the Cardiac Arrest Registry to Enhance Survival (CARES), which tracks survival rates, community bystander CPR rates and hospital discharge outcomes relative to other EMS systems. Really getting a sense if Gallatin County is seeing improvement will take years, Lauer says, as cardiac arrests just don't happen that frequently. But in working toward their goals, they hope to show that it's not only large, urban departments that have the wherewithal to tackle such a vexing issue.

"We can move the needle here. We have the potential of matching King County's survivability of 52 percent on shockable rhythms," says Lauer, who won an American Ambulance Association Star of Life Award in 2012. "About 70 percent of King County is trained in CPR. There is no reason why we can't do that elsewhere." 

Jenifer Goodwin is Best Practices' associate editor.