

# Critical Moments

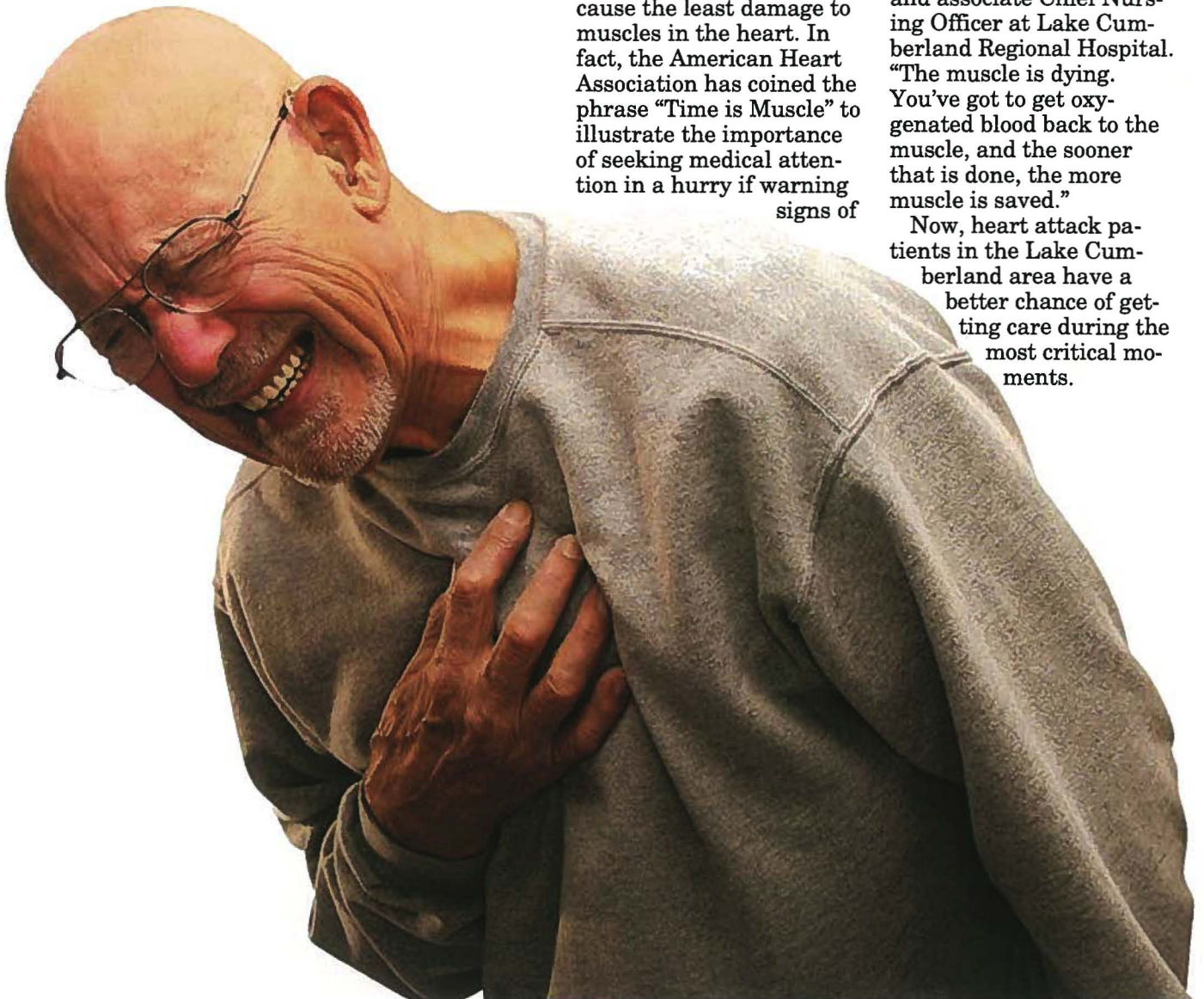
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By TRICIA NEAL

**W**hen you're experiencing a heart attack, every minute matters. Opening a clogged blood vessel within 90 minutes will cause the least damage to muscles in the heart. In fact, the American Heart Association has coined the phrase "Time is Muscle" to illustrate the importance of seeking medical attention in a hurry if warning signs of

a heart attack appear. "If there is a blood clot, no oxygen is getting to part of the heart," explains Tim Brock, cardiovascular services director and associate Chief Nursing Officer at Lake Cumberland Regional Hospital. "The muscle is dying. You've got to get oxygenated blood back to the muscle, and the sooner that is done, the more muscle is saved."

Now, heart attack patients in the Lake Cumberland area have a better chance of getting care during the most critical moments.



# SYMPTOMS OF A HEART ATTACK

- Chest discomfort. Most heart attacks involve discomfort in the center of the chest that lasts more than a few minutes, or that goes away and comes back. It can feel like uncomfortable pressure, squeezing, fullness or pain.
- Discomfort in other areas of the upper body. Symptoms can include pain or discomfort in one or both arms, the back, neck, jaw or stomach.
- Shortness of breath with or without chest discomfort.
- Other signs may include breaking out in a cold sweat, nausea or lightheadedness.

— From the American Heart Association



**At Lake Cumberland Regional Hospital, a cath lab team can be ready to assist a cardiac patient as soon as he or she arrives on an ambulance.**

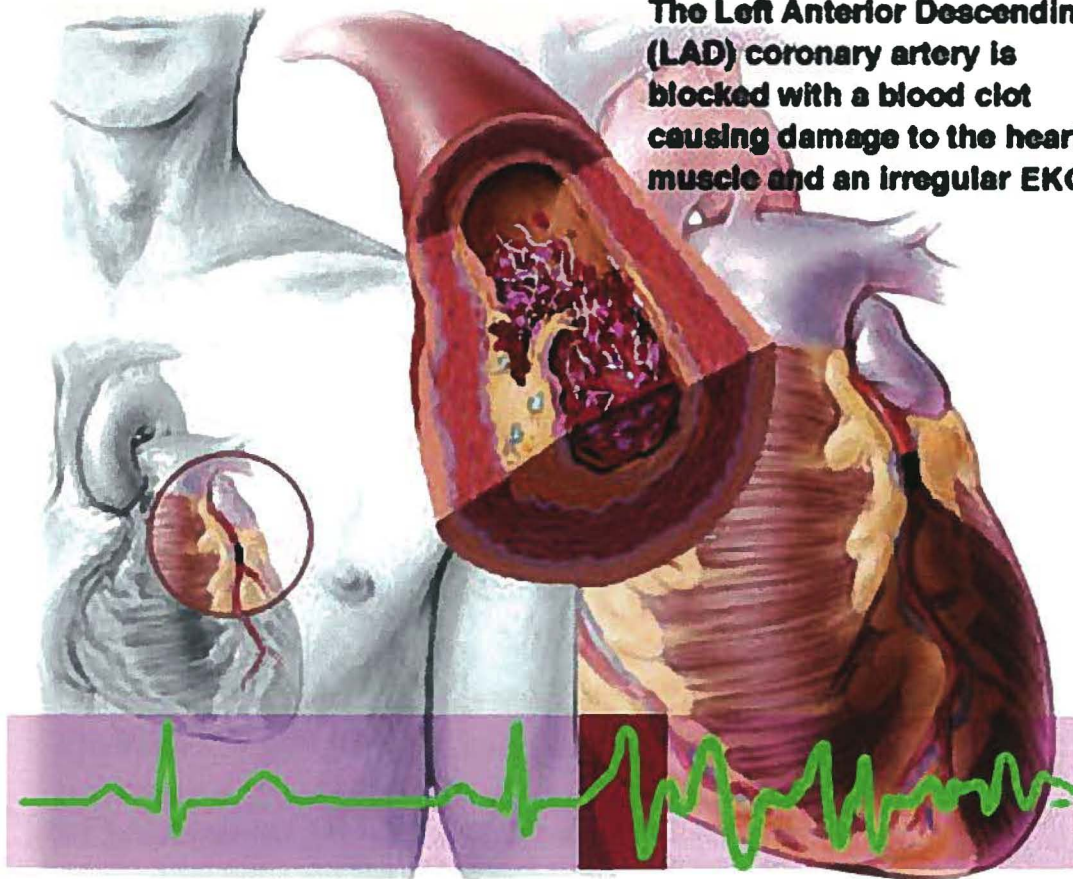
Ambulances in Pulaski and Wayne counties are now equipped with technology which allows emergency medical service workers responding to cardiac emergencies to communicate directly with emergency room physi-

cians from the field.

It works like this: Paramedics respond to a residence where a victim is experiencing symptoms of a heart attack. When the ambulance arrives on the scene, paramedics can get a 12-lead EKG

reading on the patient immediately — and data from that EKG can be transferred to emergency room doctors and an interventional cardiologist immediately, allowing doctors to determine whether the patient will need

**Blood Clot**  
**The Left Anterior Descending**  
**(LAD) coronary artery is**  
**blocked with a blood clot**  
**causing damage to the heart**  
**muscle and an irregular EKG.**



surgery when he or she arrives at the hospital.

Previously, paramedics could determine for themselves whether a patient was having a heart attack, but a final determination could not be made until emergency room doctors monitored the patients upon arrival at the hospital. At that point, if surgery was necessary, the procedure would have to wait until an interventional cardiologist and a cath lab team could arrive at the hospital.

Officials at LCRH believe the new technology could reduce the time from which a patient initially receives medical assistance to when he or she undergoes life-saving surgery by 30 minutes — maybe longer, depending on the distance the ambulance must travel to transport the patient to the hospital.

“With this, we hope to improve the quality of care to the region,” said LCRH’s Chief Operating Officer Robert Parker.

“We can send the EKG to a cardiologist on his smart phone, and that activity takes place concurrently with the patient’s ride in the ambulance.”

“Before you’re even in the ambulance, a doctor is already looking at your EKG,” Brock added.

“When you get to the hospital, a team is going to be ready to work on you.”

Parker said cardiac patients who come to LCRH are able to undergo surgery within 90 minutes nearly 90 percent of the time. With the new technology, Parker hopes that statistic will improve to 100 percent.

Parker said LCRH has been in communication with other nearby counties in an effort to equip their ambulances with the devices as well.

“If it helps one person in the community, what more could you ask for?” Brock said.

Brock hopes individuals who think they may be having a heart attack will not ignore the symptoms.

“If you have chest pain, don’t start out by thinking it’s something else,” Brock said.

“Rule out what’s going to kill you first. We don’t mind if it turns out that you just have indigestion.” ■



**Somerset EMS workers demonstrate the 12-lead EKG which can be transmitted to emergency room workers from an ambulance. Pictured are EMT Scott Burdine, EMS training director Tina Bailey, and, posing as a patient, EMT Joshua Pence.**