

FACTS

Telephone CPR (T-CPR)

A Race Against the Clock

OVERVIEW

9-1-1 is a number we all know, a number we teach our children at a very young age. It's the gateway to our emergency response system, a system we rely on when our loved ones are in danger. 9-1-1 calls vary in purpose, from car accidents to house fires to heart attacks or cardiac arrest.

The person who answers the phone when you call 9-1-1 is called a telecommunicator or dispatcher. Their job is to confirm location, assess the situation, and dispatch the appropriate response. Some dispatchers are trained in emergency medical dispatch, allowing them to better assess the situation and provide medical instructions, like CPR, to the caller over the phone while they wait for Emergency Medical Services (EMS) to arrive.

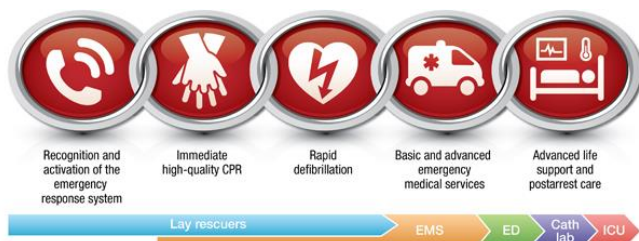
The general public expects instructions for medical conditions when calling 9-1-1,¹ but there are no minimum standards for dispatchers. As such, the information dispatchers provide callers, like CPR instruction, varies from one community to the next.

SUDDEN CARDIAC ARREST (SCA)

SCA is the sudden, unexpected loss of heart function, breathing, and consciousness and is commonly the result of an electrical disturbance in the heart. Each year an estimated 350,000 cardiac arrest events occur in the United States outside of a hospital. Almost all of these events result in a call for help to 9-1-1. Unless CPR and defibrillation are started quickly, death from SCA is certain.

TELEPHONE CPR (T-CPR)

Dispatchers are the true, first responders and a critical link in the cardiac arrest chain of survival. The dispatcher, in partnership with the caller, can identify a patient in cardiac arrest, provide the initial level of care by delivering telephone CPR (T-CPR) instructions to the caller, and quickly dispatch help. Through these actions, the dispatcher can make the difference between life and death.



HF1520

American Heart Association®

You're the Cure

It is important to emphasize that the dispatcher and the caller form a unique team in which the expertise of the dispatcher and the willingness of the caller to provide CPR represents the best opportunity to improve cardiac arrest survival.

T-CPR IN MINNESOTA

Minnesota has 96 Primary and 5 Secondary Public Service Answering Points (PSAPs). This is the place that your call gets routed when you dial 9-1-1. PSAPs can be municipal or county-based.

Training varies from PSAP to PSAP in primary centers, as there are no minimum standards for dispatchers. Some PSAPs train their dispatchers to provide pre-arrival instructions and others do not.

Secondary PSAPs are dispatchers with EMS training who can provide thorough pre-arrival instructions. In communities where there are agreements with secondary PSAPs, urgent medical calls can be transferred for pre-arrival instructions. However, this is not required and does not always happen.

A 2014 American College of Emergency Physicians report card gave Minnesota a D for "Quality and Patient Safety Environment," due in part to the lack of a uniform system for providing pre-arrival instructions. It suggested adopting state-level standards to help ensure patients receive time-sensitive, evidence-based care.²

WAITING FOR EMS

EMS response times vary greatly depending on geography, weather, accurate location details and other factors. Research shows patients may wait 7-14 minutes or longer for responders to arrive. For acute conditions like cardiac arrest, treatment is a race against the clock, and CPR must be initiated within minutes. Immediate bystander CPR can double, even triple a victim's chance of survival.

SAVING LIVES

Dispatchers have the opportunity to provide life-saving instructions to callers while they wait for EMS to arrive, and the general public expects it. The American Heart Association supports state policy that promotes formal training to quickly assess patient needs and provide T-CPR instructions.

1. Billittier AJ, et al. The Lay Public's Expectations of Prearrival Instructions When Dialing 9-1-1. Prehospital Emergency Care. 2000 Jul-Sept; 4(3):234-7. www.ncbi.nlm.nih.gov/pubmed/10895918. Accessed 12/28/14.
2. America's Emergency Care Environment, A State-by-State Report Card, 2014. American College of Emergency Physicians: <https://protectpatientsnow.org/wp-content/uploads/2016/02/ACEP-EMReportCard2014.pdf>.

CPR SAVES LIVES

At two weeks post-partum, Lindsey saved her mom's life ➤



Mary Smith (left) and Lindsey Bomgren (right)

March 20, 2017 – Lindsey Bomgren was just two weeks post-partum from the birth to her first child, a son. Her mom, Mary Smith, was thrilled to have a new grand baby and planned on taking half days at work that week to help Lindsey with the new baby.

The first day, Mary arrived with a Pack 'n Play and carried it up the stairs to the house. Although she was a fit 57-year-old, she was out of breath when she reached the top of the stairs

As Lindsey went to lay her son down for a nap she heard a big thud come from the kitchen. She ran to find her mom laying on the floor. Immediately, she knew something wasn't right.

"She was starting to turn blue and was completely unresponsive," Lindsey recalls. "Her mouth was open, and she wasn't really breathing. My initial response was oh my gosh, she's going to die."

UNSUNG HEROES

Lindsey called 911 and the dispatcher swiftly collected information about the location and the incident before determining it was a cardiac emergency. At one-minute in to the call, he began coaching Lindsey through chest compressions, also known as Hands-Only CPR.

"Okay, listen carefully – I'm going to tell you how to do chest compressions," the dispatcher said.

"Okay," Lindsey responded with growing distress.

The dispatcher instructed Lindsey to place the heels of her hands on the breastbone in the center of her mom's chest. Then, he told her to pump the chest hard and fast at least twice per second and two inches deep.

As a group fitness instructor, Lindsey was CPR trained and certified. However, in this frantic moment, she was thankful to have calm and clear instructions from the dispatcher over the phone.

"I remember feeling really grateful that I had someone on the phone to talk to because you feel so alone in that moment, wondering if you're doing anything right," Lindsey says. "Specifically, I remember feeling like her ribs were cracking and thinking I was really hurting her now. But the dispatcher reassured me that was the right thing to do."

The dispatcher continued to coach Lindsey through CPR – counting with her and encouraging her to keep going at the fast 100 beats per minute. He reminded her to let the chest come up all the way between the pumps and to keep going until help arrived and could take over.

When the police officers and EMS arrived, they took over CPR, delivered shocks from an AED, and transported Mary to the hospital where thankfully, she made a full recovery.

"I'm really grateful that the 911 dispatcher on the other end knew CPR and coached me through it," said Lindsey. "It saved my mom's life and if we can do that for other people, that means a lot."