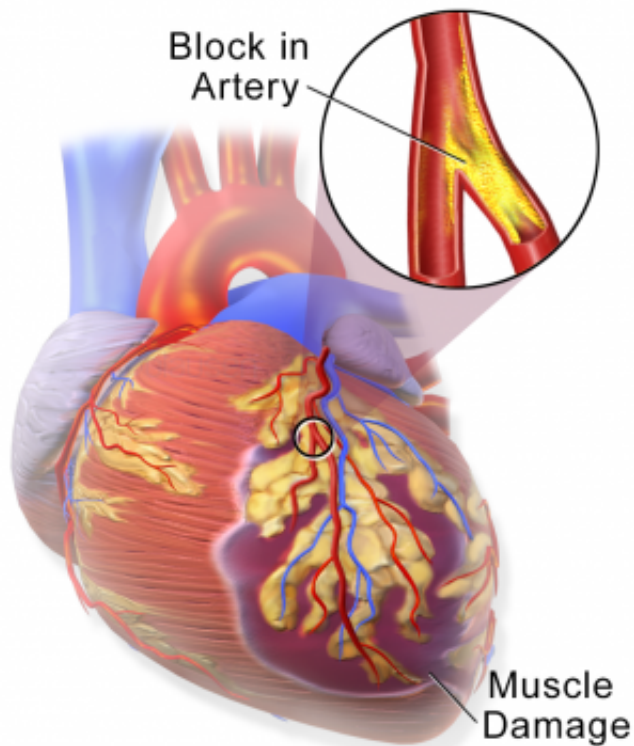


Calling 911 in rural areas leads to faster heart attack care

April 29 2015



Heart Attack

Myocardial Infarction or Heart Attack. Credit: Blausen Medical Communications/Wikipedia/CC-A 3.0

Arriving to the hospital by ambulance speeds up life-saving treatment for heart attack patients in rural areas and confirms the important role paramedics have in expediting care, according to new research presented

at the Quality of Care and Outcomes Research 2015 Scientific Sessions.

Researchers reviewed data on 774 [patients](#) treated in 2013-2014 for a type of heart attack called ST-elevation myocardial infarction (STEMI) who lived in rural Minnesota, North Dakota and South Dakota. Just over half of the STEMI patients—52 percent—arrived in their own vehicles instead of calling 911.

The data included STEMI patients from 19 hospitals participating in Mission: Lifeline, an American Heart Association initiative to improve STEMI systems of care.

All patients in the study received percutaneous coronary intervention (PCI) treatment to restore blood flow. PCI, also referred to as angioplasty, is a common procedure performed to open blocked arteries. Frequently, a tiny metal mesh tube called a stent is used to help keep the artery open.

When comparing arrival times, researchers found:

- Patients brought to the hospital by ambulance took an average of about 26 minutes to get there compared with an average of 38 minutes for patients who drove themselves.
- The average time from hospital arrival to undergoing artery-opening procedures in the cardiac catheterization lab was an average of 42 minutes for those who traveled by ambulance versus 57 minutes for those who drove themselves.

"The biggest implication is raising awareness so the public understands the vital role of EMS in healthcare," said lead study author John M. Gallagher, M.D., EMS Medical Director, Winona Area Ambulance Service in Winona, Minnesota. "EMS continues to be viewed as only a 'ride' but utilizing EMS as part of the healthcare system not only allows

for treatment from the time they arrive at your door, but also has been proven to shorten time to reperfusion treatment faster."

Hospital catheterization labs can be notified by EMS personnel in the field or by emergency physicians after receiving the transmitted ECG (electrocardiogram) indicating a STEMI heart attack from EMS, which reduces time to the PCI procedure.

The study did not investigate why patients chose not to call 911 and instead find their own transportation to the hospital. Gallagher said the public needs to learn to trust EMS providers, who are skilled in responding to a heart attack and can activate care much more quickly than patients seeking care on their own.

"The public needs to start seeing EMS as the first access point to health care," he said. "EMS providers have a plan in place for inclement weather and travel conditions. Their unique capabilities to delivery lifesaving care en-route to the hospital should not be underestimated. The benefits of 20 minutes saved in their heart attack timeline are huge."

Every year, more than 250,000 Americans have a STEMI [heart attack](#). Every minute counts in getting life-saving treatment to these patients, however, many of them do not get the care they need in the time frames they need them. The American Heart Association created Mission: Lifeline to enhance existing STEMI systems of care and integrate out-of-hospital cardiac resuscitation and other life-saving techniques into these systems to improve patients' chances for survival.

Provided by American Heart Association

Citation: Calling 911 in rural areas leads to faster heart attack care (2015, April 29) retrieved 11 May 2024 from <https://medicalxpress.com/news/2015-04-rural-areas-faster-heart.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.