

Heart Safe program boosts CPR and AED use in participating communities

August 22 2017

Allina Health researchers say individuals in Heart Safe Communities who suffer out-of-hospital cardiac arrests (OHCA) are four times more likely to receive chest compressions (CPR) and twice as likely to have automated external defibrillators (AEDs) placed by bystanders and first responders before EMS personnel arrive, according to a Minnesota study published in the August issue of the journal, *Resuscitation*.

The Minnesota Heart Safe Communities program encourages and supports the efforts of individual communities to increase public awareness about cardiac arrest and improve preparedness through activities such as promoting the use of automated [external defibrillators](#) and the timely delivery of CPR by lay citizens and first responders. Communities that meet CPR education and AED placement guidelines receive Heart Safe Community designation. The study examines the early impact of these community-based initiatives on the delivery of CPR and use of AEDs prior to ambulance arrival.

"Chest compressions and AED placement are critical first steps in the chain of survival that can be performed by citizens and first responders, so engaging the public is crucial," said Lori Boland, principal research scientist for Allina Health EMS and lead author of the study. "The American Heart Association provides clear guidelines on how to optimize survival after cardiac arrest, and our results show the Heart Safe program has been effective in helping communities translate those guidelines into practice."

The study looked at 294 OHCA events in 17 communities, 120 that occurred before these communities were Heart Safe (HS) designated and 174 that occurred after. In the 120 instances that occurred before HS designation 83 percent received CPR prior to EMS arrival and 63 percent had an AED applied. But in the 174 OHCA's after HS designation, 95 percent received CPR and 77 percent had an AED applied.

"This paper confirms our belief that training the public results in increased bystander CPR and AED rates," said Dr. Charles Lick, Allina Health Emergency Medical Service medical director and a coauthor of the report. "Programs such as Minnesota Heart Safe Communities can play an important role in providing citizen CPR education and AED placements."

More information: Lori L. Boland et al. Minnesota Heart Safe Communities: Are community-based initiatives increasing pre-ambulance CPR and AED use?, *Resuscitation* (2017). [DOI: 10.1016/j.resuscitation.2017.07.031](https://doi.org/10.1016/j.resuscitation.2017.07.031)

Provided by Allina Health

Citation: Heart Safe program boosts CPR and AED use in participating communities (2017, August 22) retrieved 21 May 2024 from <https://medicalxpress.com/news/2017-08-heart-safe-boosts-cpr-aed.html>

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