



**FACT:** According to American Heart Association figures, 90% of people who suffer out-of-hospital cardiac arrests die. But if CPR is performed immediately, it can double or triple a cardiac arrest victim's chance of survival.<sup>1,2</sup>

**FACT:** Although out-of-hospital cardiac arrest survival varies significantly across US counties, a substantial proportion of the variation is attributable to differences in bystander response across communities.<sup>3</sup>



**Tom Aufderheide, MD, Professor of Emergency Medicine, Medical College of Wisconsin**

We all talk about the chain of survival. We all know what the chain of survival is. Well the hard, cold reality is that optimal outcome from sudden cardiac arrest requires every single length in that chain to happen quickly, happen well, and be coordinated in sequence for an optimal outcome. It is a system of care.



**Bentley J. Bobrow, MD, Medical Director, Bureau of Emergency Medicine and Trauma Services, Arizona Department of Health Services**

**Benjamin Abella, MD, MPhil, Vice Chair for Research, Department of Emergency Medicine, University of Pennsylvania**

**[Dr. Abella]:** The science is only as good as the people doing it and the actions that are taken, so how do we make the people in the public understand it? When someone calls 911, in that panicked moment when their spouse collapses, they assume the care will be delivered at a certain level, no matter where they are; 'I called 911, professionals arrived, and care was delivered!' They don't realize how variable the care will be. For cardiac arrest, level of care absolutely matters – and I think it would surprise members of the public if they fully understood how variable the care that is delivered can be."

**[Dr. Bobrow]:** "It's staggering. In one city you could have a 5 times higher or lower chance of survival compared to another city, and you think about that and put it in perspective. Say you had a five times higher chance of violent crime, like a murder, in one city compared to another. The public would never tolerate that. But this is common – and it's interesting. Unfortunately, not many are that worked up about it."



*Audrey Blewer, MPH, Assistant Director, Educational Programs, Center for Resuscitation Science, University of Pennsylvania*

Recent guidelines encourage innovative ways to train individuals in CPR. Our group has adapted that concept to develop a CPR training program targeting caregivers and family members of those who have suffered cardiac arrest and those at-risk before hospital discharge.



*Edward Stapleton, EMT-P, Associate Professor of Emergency Medicine, Stony Brook School of Medicine*

It's important to have the guidance of dispatch-assisted CPR, which at least assures us that we have something going on in terms of bystander CPR. And then train as many people in CPR as possible. I like the school setting, because you get a captive audience, you can train a lot of people, but I also think mass events can be very powerful in terms of training a lot of people at once.



*Marion Leary, MPH, MSN, Assistant Director, Clinical Research Center for Resuscitation Science, University of Pennsylvania*

My passion is to get the community to respond to cardiac arrest events - activating the public and bystanders to take action during cardiac arrest. Using innovation and technology, social media, to get the public to act and to take action. To use social media, for good! To enhance how we get people to respond, when we get people to respond, encouraging them to respond and making it easier to save a life.

## Want to continue the conversation with the “Experts”?

Attend the Emergency Cardiovascular Care Update Conference (ECCU) 2017,

December 5 – 8, 2017 at the Hyatt Regency New Orleans.

Don't miss out on the dynamic pre-conference workshops December 4-5!

Visit [www.eccu2017.com](http://www.eccu2017.com) to register or for program information.

### References

- 1) Wissenberg MI, Lippert FK, Folke F, Weeke P, Hansen CM, Christensen EF, Jans H, Hansen PA, Lang-Jensen T, Olesen JB, Lindhardtsen J, Fosbol EL, Nielsen SL, Gislason GH, Kober L, Torp-Pedersen C. Association of national initiatives to improve cardiac arrest management with rates of bystander intervention and patient survival after out-of-hospital cardiac arrest. *JAMA*. 2013 Oct 2;310(13):1377-84. doi: 10.1001/jama.2013.278483.
- 2) Hasselqvist-Ax I, Riva G, Herlitz J, Rosenqvist M, Hollenberg J, Nordberg P, Ringh M, Jonsson M, Axelsson C, Lindqvist J, Karlsson T, Svensson L. Early cardiopulmonary resuscitation in out-of-hospital cardiac arrest. *N Engl J Med*. 2015 Jun 11;372(24):2307-15. doi: 10.1056/NEJMoa1405796.
- 3) Girotra S, van Diepen S, Nallamothu BK, Carrel M, Vellano K, Anderson ML, McNally B, Abella BS, Sasson C, Chan PS; CARES Surveillance Group and the HeartRescue Project. Regional Variation in Out-of-Hospital Cardiac Arrest Survival in the United States. *Circulation*. 2016 May 31;133(22):2159-68. doi: 10.1161/CIRCULATIONAHA.115.018175. Epub 2016 Apr 14