

# Want a Nation of Super Heroes? Early CPR Makes Every Second Count!



By Jamie Wells, M.D. — November 16, 2016



Credit: Shutterstock [1]

The arbitrary nature of many school requirements always baffles me. Cancel soft pretzel day out of caloric concern, but permit pie bake sales. Have your doctor independently complete a formal asthma action plan in addition to the entire health form that already covers it; but, not one for other diseases like diabetes, for instance.

Replace vending machine soda, but sell macaroni and cheese and pizza in the cafeteria. Offer alternatives to physical education, but be concerned about health and well-being. Make an entire school nut-free, but don't teach basic emergency services, first aid and CPR.

The world isn't nut free, so arming our communities with essential tools to save lives seems a no-brainer as a requisite component to the formal education system's mission and goals.

But, it isn't. It is not uniform and it is not universal. The evidence is abundantly clear and the calls from worthwhile advocacy organizations are longstanding to a snails' pace avail.

CPR training should be mandatory in schools. Quite frankly, there is no downside to the masses, in general, possessing a basic mastery.

Our public demands organic food in lunchrooms, but echoes of chants for providing the skills necessary to intervene on a choking victim or a parent's or teammate's cardiac arrest empower crickets.

In 2011, the American Heart Association (AHA) published "[Importance and Implementation of Training in Cardiopulmonary Resuscitation and Automated External Defibrillation in Schools](#) [2]" in the journal *Circulation*. This Scientific Advisory was co-endorsed by the American Academy of

Pediatrics, the American College of Emergency Physicians, the National Association of School Nurses and the Society of the State Directors of Health, Physical Education and Recreation. It references the 2003 consensus document recommendation of the International Liaison Committee on Resuscitation that “instruction in CPR (cardiopulmonary resuscitation) be incorporated as a standard part of the school curriculum.”

The following year the AHA urged all teachers and students should be trained in CPR and first aid— as a requirement to graduate from secondary school. Legislative interest perked up then and laws (as of 2009-2010) began to support its inclusion in the curriculum of 36 states. Due to wide variability in language, however, the requirement is framed as a mere suggestion to a definitive certification without any consistent implementation. The AHA document insisted on training in CPR with familiarization of automated external defibrillators (AEDs) for secondary school curricula, provided extensive rationale as well as modes to eliminate barriers to a school’s execution.

Before the naysayers become spirited, yes, it addresses means to minimize cost.

According to the [AHA](#) [3]— in the United States—more than 350,000 out-of-hospital cardiac arrests (OHCA) occur annually. Survival is fundamentally linked to early, rapid intervention of CPR. Nearly 90% of OHCA are fatal. For those who receive immediate (or within the first few minutes) CPR, their chances of survival improve two to threefold. Only 46% of people who experience this get the help needed. 70% take place in the home, so possessing the ability to save a life will tend to be orchestrated on a loved one.

Imagine the emotional ramifications of being helpless in these scenarios?

On November 12, 2016, *JAMA Pediatrics* published “[Association of Bystander Cardiopulmonary Resuscitation with Overall and Neurologically Favorable Survival after Pediatric Out-of-Hospital Cardiac Arrest in the United States](#) [4].” It concluded that bystander CPR improved outcomes in pediatric OHCA—especially when conventional methods as opposed to compression-only CPR were employed— while recommending efforts to better the provision of CPR in minority communities as there is a vital need to reduce health disparities.

In 2015, *JAMA* published “[Association of Bystander and First-Responder Intervention with Survival after Out-of-Hospital Cardiac Arrest in North Carolina, 2010-2013](#) [5].” The findings demonstrated after statewide interventions the amount of OHCA receipt of bystander CPR and first-responder defibrillation increased which prompted improvement in survival. In addition, bystander CPR was associated not only with enhanced chance at survival, but also one with favorable neurological outcome.

The urgency around timely CPR and resuscitation in a cardiac arrest is due to the temporal link with worsening oxygenation to the brain. The longer intervention is delayed, the greater the likelihood of irreversible damage.

These studies were further supported by work in Japan and Denmark, to name a few. The data is out there. The results repeatedly in sync.

Due to recognition of the issue in the United Kingdom, a joint effort between the Resuscitation

Council, British Heart Foundation, St. John Ambulance, British Red Cross, Yorkshire Ambulance Service and the UK NHS ambulance services along with fire and rescue services resulted in a collaborative push to train more than 100,000 people on [Restart a Heart Day by creating a Nation of Lifesavers](#) [6]. Their goal is all children be properly educated. Interest has extended to Australia.

In my lifetime, I have been present for medical emergencies albeit in mid-air to weddings to road side to you-name-it. I would venture to guess we all have at some point or another. CPR training in schools is a wonderful way to get kids interested in a worthy endeavor while even introducing a potential career option. It provides them with the confidence to act in a crisis and it is a proactive measure that can benefit all spheres he/she will encounter throughout life.

#### Notes:

To read my recent piece on the importance of effective, early and experienced resuscitation on in-hospital cardiac arrest, go to this link: [To Survive the Hospital, Make Sure Your Heart Stops on a Weekday](#) [7]

---

COPYRIGHT © 1978-2016 BY THE AMERICAN COUNCIL ON SCIENCE AND HEALTH

---

**Source URL:** <https://www.acsh.org/news/2016/11/16/want-nation-super-heroes-early-cpr-makes-every-second-count-10440>

#### **Links**

[1] <http://www.shutterstock.com>

[2] <http://circ.ahajournals.org/content/123/6/691>

[3] <http://yourethecure.org>

[4] <http://jamanetwork.com/journals/jamapediatrics/article-abstract/2583454>

[5] <http://jamanetwork.com/journals/jama/fullarticle/2397833?linkId=15660656>

[6] <http://medicalxpress.com/news/2016-10-people-cpr-restart-heart-day.html>

[7] <http://acsh.org/news/2016/11/07/survive-hospital-make-sure-your-heart-stops-weekday-10406>