



# American Heart Association International **CARDIAC ARREST**

Cardiovascular disease (CVD) is the leading cause of death worldwide. In 2020, approximately

**19.1 million** deaths were attributed to CVD

**32 %** of global deaths.<sup>1,2</sup>

For nearly 100 years, the American Heart Association has been leading the fight against heart disease and stroke.

In the last 10 years, we've expanded our reach to over **100 countries**, working with organizations around the world to help change policies, implement programs, and strengthen healthcare systems to help improve and save lives.

We believe that where you live should not limit your health or the quality of your life.

## The difference between life and death

Globally, the incidence of **OUT-OF-HOSPITAL CARDIAC ARREST** affects more than **3.8 million people**, with a **SURVIVAL RANGE** of **8 to 12%**<sup>3</sup>

CPR can **DOUBLE** or **TRIPLE** a person's **chance of survival**.<sup>4</sup>

A study of **10 countries** showed a **119% increase** **IN OUT-OF-HOSPITAL CARDIAC ARREST** during the pandemic compared with earlier periods. **85%** of events **RESULTED IN DEATH**, compared to **62%** in previous years.

The American Heart Association has been at the **forefront of advances in resuscitation science** since the 1960s when we first funded research showing the efficacy of cardiopulmonary resuscitation (CPR) in saving people from cardiac arrest.

As the science of CPR evolves, we have a tremendous opportunity to **improve CPR performance** during resuscitation events both inside and outside the hospital.



Through better measurement, training, and systems-improvement processes of CPR quality, **we can have a significant impact on survival from cardiac arrest** and eliminate the gap between current and optimal outcomes.

## Our Approach

Through groundbreaking science and programs focused on governments, healthcare providers, hospital and pre-hospital systems, workplaces and communities, the AHA's approach — in coordination with local heart health advocates, societies and government leaders — **strives to improve survival from cardiac arrest around the world.**

### TREATMENT STANDARDS/QUALITY

Healthcare quality standards and training programs to improve patient care, like Healthcare Certification, Get With The Guidelines®, Emergency Cardiovascular Care, Helping Children Survive, and Professional Education.

### REIMAGINING OUR SCIENCE

With an even greater emphasis on discovery, data and dissemination of breakthrough information through clinical guidelines, collaborative science sessions, and best practice knowledge sharing and treatment.

### KNOWLEDGE SHARING

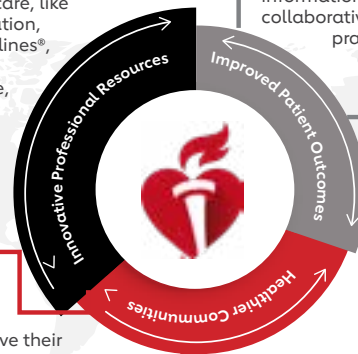
Guidelines, science sessions and best practice programs share knowledge and standardize treatment recommendations for governments, and healthcare systems.

### PREVENTION

Messaging and programs that help workplaces and communities improve their health and prevent death and disability from cardiovascular disease, like Go Red for Women®, and Life's Simple 7.

### ADVOCACY

Global advocacy for healthier hearts and brains among governments, civil society, and intergovernmental and public health organizations like the United Nations, World Economic Forum and World Health Organization





## Reimagining our Science

Together with Laerdal Medical, we established Resuscitation Quality Improvement Partners (RQIP), which uses an **innovative CPR training approach** with low-dose, high frequency quarterly simulation training sessions to improve skills retention.



We helped fund **THE DISCOVERY OF THE FIRST EXTERNAL DEFIBRILLATOR** used in 1956 to successfully return a quivering heart back to a steady rhythm for the first time in humans.



**IN 1961,** AHA-funded researchers show how **CPR CAN SAVE LIVES AFTER CARDIAC ARREST.**



We're one of **LARGEST FUNDERS** for **CVD RESEARCH**

We've dedicated more than **\$5B** to **CVD AND RESEARCH** since 1949.

**17%** of **EVERY DOLLAR** contributed **GOES TO RESEARCH.**

## Who We Work With

- All Institute for Medical Sciences
- Australian and New Zealand Committee on Resuscitation
- European Resuscitation Council
- Heart and Stroke Foundation of Canada
- Inter American Heart Foundation
- International Liaison Committee on Resuscitation (ILCOR)
- Irish Heart Foundation
- Resuscitation Council of Asia
- Resuscitation Councils of Southern Africa
- World Health Organization



## Knowledge sharing

As a founding member of **International Liaison Committee on Resuscitation**, we convene with leading healthcare professionals and scientists around the world to **promote, share and advocate for the international implementation of evidence-based resuscitation and first aid.**

Held in conjunction with our annual Scientific Sessions Conference, **Resuscitation Science Symposium** showcases new resuscitation research and advances.



## Treatment, Standards and Quality

Our science-based **CPR & First Aid Guidelines** are the **standard** used by healthcare and emergency professionals around the world.

Since 2015, we've **trained nearly**

**22 MILLION** **PEOPLE IN CPR, FIRST AID AND EMERGENCY CARDIOVASCULAR CARE.**

Our network of more than **69 thousand instructors** helps save lives through resuscitation and First Aid training at more than **4,000 centers and sites** around the world.



## Advocacy

We work with city and national government agencies around the world to **ensure students are trained in CPR** and we **advocate for public placement of automated external defibrillators.**



## Prevention

In **2008** we updated our **CPR guidelines** and released a scientific statement supporting the use of **chest compressions only** (without rescue breaths) for bystander CPR; we named this updated technique **"HANDS-ONLY CPR."**

2019	2021
<b>Guinness World Record</b> for training the most people in CPR in 8 hours	<b>World Book of Records</b> for training the highest number of students in a single day, more than
<b>28.5 THOUSAND</b>	<b>28.8 THOUSAND</b>

<sup>1</sup>Tsao CW, Aday AW, Almarzooq ZI, Alonso A, Beaton AZ, Bittencourt MS, Boehme AK, Buxton AE, Carson AP, Commodore-Mensah Y, Elkind MSV, Evenson KR, Eze-Nliam C, Ferguson JF, Generoso G, Ho JE, Kalani R, Khan SS, Kissela BM, Knutson KL, Levine DA, Lewis TT, Liu J, Loop MS, Ma J, Mussolino ME, Navaneethan SD, Perak AM, Poudel R, Rezk-Hanna M, Roth GA, Schroeder EB, Shah SH, Thacker EL, VanWagner LB, Virani SS, Voecks JH, Wang N-Y, Yaffe K, Martin SS; on behalf of the American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2022 update: a report from the American Heart Association [published online ahead of print January 26, 2022]. Circulation. doi: 10.1161/CIR.0000000000001052

<sup>2</sup>Fact Sheet on Cardiovascular Disease World Health Organization, [https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-\(cvds\)](https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds)). Accessed 28 Feb. 2022.

<sup>3</sup>Brooks S, Clegg G, Bray J, Deakin C, Perkins G, Ringh M, Smith C, Link M, Merchant R, Pezo-M, Parr M, Morrison L, Wang T, Koster R, Ong M Optimizing Outcomes After Out-of-Hospital Cardiac Arrest With Innovative Approaches to Public-Access Defibrillation: A Scientific Statement From the International Liaison Committee on Resuscitation. doi: 10.1161/CIR.0000000000001013

<sup>4</sup>Ritter G, Wolfe RA, Goldstein S, Landis R, Vasu M, Acheson A, Leighton R, Vander Brug Medendorp S The effect of bystander CPR on survival of out-of-hospital cardiac arrest victims American Heart Journal 110:5 November 1985, Pages 932-937