

# **History of the American Heart Association**

## **Our Lifesaving History**

Before the American Heart Association existed, people with heart disease were thought to be doomed to complete bed rest — or destined to imminent death.

But a handful of pioneering physicians and social workers believed it didn't have to be that way. They conducted studies to learn more about heart disease, America's No. 1 killer. Then, on June 10, 1924, they met in Chicago to form the American Heart Association — believing that scientific research could lead the way to better treatment, prevention and ultimately a cure. The early American Heart Association enlisted help from hundreds, then thousands, of physicians and scientists.

"We were living in a time of almost unbelievable ignorance about heart disease," said Paul Dudley White, one of six cardiologists who founded the organization.

In 1948, the association reorganized, transforming from a professional scientific society to a nationwide voluntary health organization composed of science and lay volunteers and supported by professional staff.

Since then, the AHA has grown rapidly in size and influence — nationally and internationally — into an organization of more than 35 million volunteers and supporters dedicated to improving heart health and reducing deaths from cardiovascular diseases and stroke.

Here is a timeline of American Heart Association milestones in more than 90 years of lifesaving history:

### 1915

**Looking for Answers:** Nearly a decade before the formal creation of the American Heart Association, physicians and social workers convene to find more answers about the mysteries of heart disease.

American Heart Association is Founded: Six cardiologists form the American Heart Association as a professional society for doctors. One of the founders, Dr. Paul Dudley White, described the early years as a time of "almost unbelievable ignorance" about heart disease.

### 1925

**Scientific Sessions Begins:** The AHA holds its first Scientific Sessions meeting where scientists and healthcare professionals learn the latest developments. The meeting, held every year since except for during World War II, grows to become the largest annual cardiovascular meeting in the United States and a leading international destination for the cardiovascular health community.

### 1947

**Heart Week Kicks Off:** First public campaign kicks off in February to celebrate National Heart Week.

### 1948

**The AHA Reorganizes:** The AHA reorganizes, transforming from a scientific society to a voluntary health organization composed of volunteers and supported by professional staff. Support for the AHA's mission becomes much more visible, with fundraising activities taking hold in communities and businesses.

**First Research Grant Awarded:** The association awards its first research grant, to Nobel Prize winner Dr. Albert Szent-Gyorgyi. The grant helped fund studies about the energy that muscles, such as the heart, need to contract. In all, the AHA has funded 13 Nobel Prize winners, including nine whose AHA-funded work led to the Nobel Prize.

### 1950

**AHA Begins Scientific Journal** *Circulation*: The AHA scientific journal *Circulation* begins publication, keeping doctors, researchers and others informed about cardiovascular breakthroughs.

### 1956

**Fat and Cholesterol Linked:** The AHA funds research that links dietary fat and cholesterol, which can contribute to heart disease. This discovery spurs the association to start helping Americans change unhealthy eating habits. The association uses science as the basis for all its recommendations.

The AHA's First Statement on Smoking and Heart Disease: The AHA issues its first statement on smoking and heart disease: "Much greater knowledge is needed before

conclusions can be drawn concerning possible relationships between tobacco smoking and increased death rates from coronary heart disease."

**Steady Hearts:** An external defibrillator successfully returns a quivering heart back to a steady rhythm for the first time in humans. Dr. Paul Zoll leads the study, with funding from the AHA.

### 1957

**First Pacemaker Implanted:** The first battery-operated, wearable pacemaker is implanted in a patient. The research leading to this discovery, pioneered by Dr. William Weirich and funded by the AHA, led to the development of the fully implanted pacemakers used today.

### 1958

**Helping Blood Flow:** Radioactive potassium and rubidium are used to measure regional blood flow in research led by Dr. Lewis Sapirstein and supported by the AHA. The findings help advance knowledge of blood flow throughout the entire circulatory system.

#### 1960

**Implantable Pacemakers Make Way:** The first successful surgeries for completely implantable pacemakers are reported by Dr. William Chardack, who received funding from the AHA. Production of implantable pacemakers quickly gets underway.

The Beginning of Artificial Heart Valve Replacements: The first successful artificial heart valve replacement is performed by Dr. Albert Starr, who received support from the AHA to develop the mechanical heart valve with hydraulic engineer Lowell Edwards. The Starr-Edwards valve is still used today, along with other artificial heart valves, improving countless lives.

#### 1961

AHA-Funded Research and CPR: AHA-funded research from Drs. William Kouwenhoven, James Jude and Guy Knickerbocker show how CPR can save lives after cardiac arrest. Their research is reported in the *Journal of the American Medical Association*. We now know that effective bystander CPR can double or triple chances of survival.

**Pioneering Microsurgery:** Dr. Julius Jacobson performs surgery with the aid of a microscope. He becomes a pioneer in microsurgery with AHA funding. Microsurgery leads to advances in coronary artery surgery, neurosurgery and numerous other procedures.

**First Dietary Guidelines on Saturated Fats:** The AHA issues its first dietary guidelines that recommends replacing saturated fats with unsaturated fats. Saturated fats — found in red meat, cheese, butter and other animal products — are shown to contribute to LDL-cholesterol, which increases risk for heart disease.

#### 1963

**President Proclaims February American Heart Month:** President Lyndon B. Johnson proclaims February American Heart Month, declaring that "over one-half of the 10 million Americans afflicted by the cardiovascular diseases are stricken during their most productive years, thereby causing a staggering physical and economic loss to the nation."

### 1964

**First Female Career Investigator:** The AHA chooses biochemist Mildred Cohn as its first female career investigator, providing funding for the remaining 14 years of her research career. Her work contributed to the development of the MRI, one of the most sophisticated imaging methods used today.

### 1965

**Fighting Heart Disease with Legislation:** The AHA plays a major role in shaping recommendations of the President's Commission on Heart Disease, Cancer and Stroke, leading to landmark legislation that expands efforts to fight these diseases.

### 1966

**New Techniques Correct Newborn Defects:** A project funded by the AHA leads to a technique to correct septal defects in newborns, showing that major heart procedures can be performed with a catheter.

**20-year Study on Blood Pressure Released:** Results of a 20-year study funded by the AHA show that high blood pressure decreases life expectancy. The research also finds that a persistently elevated blood pressure increases the risk of complications, including heart enlargement and eye abnormalities.

#### 1968

The AHA Funds Research Still Used Today: Dr. William Conner uses funds from the AHA to show that cholestyramine, which is still used today, can lower cholesterol in the blood.

**Legislation Bans Cigarette Ads on TV and Radio:** The AHA issues a statement on cigarette labeling and advertising legislation. That same year legislation was passed banning cigarette advertising on television and radio.

### 1970

**First Public Education Campaign:** The AHA runs its first public education campaign on early warning signs of heart attack, spreading lifesaving messages to help people pay attention and take action.

#### 1971

AHA Career Investigator Wins Nobel Prize: Dr. Earl Sutherland is awarded the Nobel Prize in Physiology or Medicine for identifying a molecule called cyclic AMP. The AHA helped fund this research by awarding Sutherland a career investigator position in 1967.

#### 1973

**First AHA Cookbook Published:** The first of many AHA cookbooks publishes, giving consumers across the nation a trusted resource to help them follow a heart-healthy diet. It has been in print for four decades, with millions of copies sold.

### 1975

**Death Toll Falls:** The annual death toll from cardiovascular diseases falls below 1 million people.

**On The Move:** The AHA headquarters moved from New York City to Dallas to be more centrally located. Volunteer-led affiliates formed a national network of local organizations providing research funding, education, community programs and fundraising.

#### 1976

**First International Stroke Conference Held:** The first International Stroke Conference is held in Dallas. Over the years, it develops into the most well-attended cerebrovascular meeting for scientists and healthcare professionals.

### 1978

**Students Start Jumping for Heart Disease:** Jump Rope For Heart begins in Milwaukee, eventually becoming a nationwide program for millions of students to raise money for research and education in the fight against heart disease.

#### 1981

**Cardiovascular Deaths Decline:** For the first time since 1949, deaths caused by cardiovascular diseases fall below 50 percent of deaths from all causes.

**Formal Advocacy Efforts Begin:** The AHA becomes a more visible champion of public health, starting advocacy efforts that remain active today.

### 1985

**Nobel Prize Awarded to AHA-Funded Researchers:** AHA-funded researchers Drs. Joseph Goldstein and Michael Brown are awarded the Nobel Prize in Physiology or Medicine for their research on how cholesterol enters cells, helping us understand how to control cholesterol levels.

AHA Donor Makes History: A grant from the Henrietta B. and Frederick H. Bugher Foundation becomes the largest gift in AHA history. Three AHA-Bugher Foundation Centers for molecular Biology of the Cardiovascular System are established, each receiving up to \$1.12 million over five years. In subsequent years the Bugher Foundation becomes the largest single donor in AHA history.

**Smoking and Heart Disease:** The AHA releases recommendations for policies to work toward a smoke-free generation by 2000.

### 1986

**AHA Influences Food Industry to Make Changes:** A revised AHA diet statement emphasizes a preventive diet that limits saturated fat and total fat. It becomes major health story, generating public health interest and influencing food industry changes.

### 1987

**AHA Contributes to Lowering Cholesterol:** The FDA approves the use of lovastatin, a cholesterol-lowering drug. Scientists with research roots in the AHA made significant contributions to its testing.

### 1988

**Smoking Banned On All Commercial Airlines:** The AHA's advocacy efforts play a role in banning smoking on all commercial airlines.

**Beginnings of Food Certification Program:** A consumer health program launches, prompting the federal government to create, with AHA input, the Nutrition Label that provides nutrition information for consumers. Later the AHA launched a retooled Food Certification Program that continues to this day.

#### 1990

**AHA Reaches More Communities:** The AHA establishes a two-year grant program to fund community-based cardiovascular risk reduction programs for minorities, a focus for the association as it aims to reach all communities.

**AHA Career Investigator Develops New Drug:** The FDA approves Exosurf Neonatal, the first synthetic lung surfactant to treat respiratory distress syndrome, a lifethreatening condition for premature infants with heart and lung defects. The drug is developed by AHA career investigator Dr. John Clements.

#### 1991

**New Centers to Advance Discoveries Launch:** Three new AHA-Bugher Foundation Centers for Molecular Biology in the Cardiovascular System launch to advance scientific discovery: Brigham and Women's Hospital in Boston, Stanford University in California and the University of California at San Diego.

#### 1992

AHA Publishes First Scientific Statement On Tobacco Smoke and Inactivity: The AHA publishes its first scientific statement on harmful effects of environmental tobacco smoke and another statement on how physical inactivity is a major risk factor for heart disease.

**First Nationwide Heart Walks are Held:** The first American Heart Walks are conducted nationwide. Major expansion follows in the years to come, with millions of supporters raising funds to fight heart disease and stroke.

**Nobel Prize Awarded to AHA-Funded Researchers:** AHA-funded researcher Dr. Edwin Krebs, along with Dr. Edmond Fischer, is awarded the Nobel Prize in Physiology or Medicine for discovering how proteins switch on to perform functions within cells. This crucial process helps explain how cells grow, divide, change and die. Defects in this process help explain diabetes, heart disease and other conditions.

### 1994

**Healthy Meals for Healthy Americans Act:** The AHA champions the Healthy Meals for Healthy Americans Act, requiring schools to serve meals that meet dietary guidelines for Americans, including limits on total fat and saturated fats.

**New AHA Call Center Opens:** The AHA opens its first centralized call center to help the public find health information and learn more about the organization.

**Heart-Check Mark Program Launches:** The AHA launches the Heart-Check mark program to help consumers find products at the grocery store with healthy food criteria for saturated fat and cholesterol.

### 1996

**AHA Leads Effort Over Tobacco Products:** The AHA leads the effort to urge the FDA to claim jurisdiction over tobacco products.

#### 1998

American Stroke Association Forms: The association's stroke division forms. The next year, it's renamed the American Stroke Association and begins raising awareness and striving to improve the understanding, diagnosis and treatment of this disease.

**New Act for Women is Signed:** As the result of AHA's work, the Women's Cardiovascular Diseases Research and Prevention Act is signed into law to create a program to advance the fight against heart disease, stroke and other cardiovascular diseases in women.

**Nobel Prize Awarded to AHA-Funded Researcher:** The Nobel Prize in Physiology or Medicine is awarded to AHA-funded researcher Dr. Robert Furchgott, along with two other researchers, for their discovery of the chemical nitric oxide. The colorless gas plays an important role in cardiovascular health because it prevents plaque deposits from sticking to blood vessel walls and improves blood flow.

**First Impact Goal Set:** The AHA establishes its first 10-year Impact Goal for the entire nation: to reduce coronary heart disease, stroke and risk factors by 25 percent by 2008. While the goals for reducing deaths were exceeded, increasing obesity and sedentary lifestyles led to the establishment of more aggressive goals and programs.

### 2000

**New Guidelines Set for Healthcare Professionals:** Get With The Guidelines launches to help healthcare providers consistently treat patients with proven standards and procedures by using quality-improvement measures.

### 2001

**New Research on Mechanical Pump, Heart Failure:** AHA-funded researcher Christine Moravec reports that mechanical pumps called left ventricular assist devices

can reverse diminished heart muscle performance in people with heart failure who are awaiting transplantation. The study is among the first to look at recovery mechanisms that control the heart's ability to contract during stress.

### 2003

**FDA Approves Drug-Coated Stent Developed by AHA-Funded Research:** The FDA approves the first drug-coated stent to keep blocked arteries open while also releasing medications. Dr. Andrew Marks, a researcher funded by the AHA, developed drug-coated stents to prevent the tiny wire tubes from accumulating fatty plaques.

**Nobel Prize Awarded to AHA-Funded Researcher:** AHA-funded researcher Dr. Peter Agre is awarded the Nobel Prize in Chemistry for his discovery of aquaporins, proteins that govern the movement of water in and out of cells. This discovery leads to new research examining brain swelling after a stroke and water retention in heart failure.

**First International Office Opens:** AHA opens its first international office, in Puerto Rico, serving Latin America, the Caribbean, Spain and Portugal. Offices in Belgium, Hong Kong and Dubai soon follow.

### 2004

**Go Red For Women Begins:** Go Red For Women, an educational campaign, begins and raises women's awareness that heart disease is their No. 1 killer and helping them take action to prevent it. National Wear Red Day becomes a way for people everywhere to raise awareness about heart disease. Its outreach later includes Hispanic women, who face an even higher risk of heart disease.

### 2005

Former President and the AHA Found Alliance for a Healthier Generation: The AHA and the William J. Clinton Foundation found the Alliance for a Healthier Generation to fight childhood obesity epidemic by engaging with industry leaders, educators, parents, healthcare professionals and kids.

#### 2006

**Power To End Stroke Begins:** The American Stroke Association launches Power To End Stroke to help African-Americans understand their risk of stroke and take action to prevent it.

#### 2007

**New Mission Statement Approved:** The association approves a new mission statement that emphasizes the importance of helping people live healthier in addition to saving lives: "Building healthier lives, free of cardiovascular diseases and stroke."

**Get With The Guidelines Hits Milestone:** The Get With The Guidelines quality improvement program reaches the million-patient milestone.

**Mission: Lifeline Launched:** Mission: Lifeline launches to improve emergency systems of care for people who suffer STEMI, severe heart attacks that require urgent care.

**Donation Focuses on Healthy Schools:** The Robert Wood Johnson Foundation donates a record \$20 million for the Healthy Schools Program. The program works to reverse the nation's childhood obesity epidemic by ensuring kids have access to healthy foods and beverages, as well as safe opportunities for physical activity.

**Nobel Prize Awarded to Early AHA-Funded Researcher:** Dr. Mario Capecchi is awarded the Nobel Prize in Physiology or Medicine for developing gene targeting. The technology allows researchers to manipulate a gene's DNA sequence. Gene targeting is used in research for heart disease, high blood pressure, cancer and other conditions. Dr. Capecchi received AHA funding early in his research career.

**Funding and Fats:** Funding from the association enables Dr. Stephen Young to identify a new molecule that may help regulate the delivery of fats to cells for energy and storage. The finding could lead to a better understanding of how we use fats from the foods we eat.

### 2008

**Spina Centers Focus on Results:** The American Heart Association-Pharmaceutical Roundtable-David and Stevie Spina Outcomes Research Centers launches. The focus is on the results, or outcomes, of healthcare interventions for people who have or are at risk for heart disease and stroke.

Research Shows Breaths Not Required for CPR: With funding from the AHA, Dr. Gordon Ewy shows uninterrupted, high-quality chest compressions — without mouth-to-mouth respiration — are important for keeping blood circulating to vital organs. As a result, the AHA releases new recommendations that say bystanders can skip mouth-to-mouth and use Hands-Only CPR to help an adult who suddenly collapses.

AHA Issues Statement on Hands-Only CPR: The AHA releases a statement about Hands-Only CPR, saying that bystanders who witness the sudden collapse of an adult should dial 911 and provide high-quality chest compressions by pushing hard and fast in the middle of the victim's chest. This is a departure from traditional CPR that requires rescue breaths.

**Nobel Prize Awarded to Early AHA-Funded Researcher:** Dr. Martin Chalfie wins the 2008 Nobel Prize in Chemistry for developing green fluorescent protein as a genetic tag to see inside living cells, including heart cells, to better understand how the cells are made and how they work. The AHA funded Chalfie earlier in his career.

#### 2009

AHA Advocacy Efforts Help Lead to Tobacco Oversight: The AHA helps lead the way in the passage of the Family Smoking Prevention and Tobacco Control Act. The law lets the FDA regulate tobacco, bans candy-flavored cigarettes and adds large warning labels to tobacco products. Billboard advertising near schools is banned, and tobacco companies can no longer alter their products to make them more addictive or to make misleading health claims.

**New Research Centers Launch:** The American Heart Association-Jon Holden DeHaan Foundation Cardiac Myogenesis Research Centers of Excellence launches. The centers conduct studies to determine how regeneration of those cells can help improve outcomes for heart attack and heart failure patients.

#### 2010

**2020 Impact Goal Announced:** The AHA announces a major goal to improve the cardiovascular health of all Americans by 20 percent while reducing deaths from cardiovascular disease and stroke by 20 percent by 2020. Prevention is a major focus of the 2020 Impact Goal.

### 2011

**Nobel Prize Awarded to early AHA-Funded Researcher:** Dr. Ralph Steinman wins the 2011 Nobel Prize in Physiology or Medicine for his discovery of how the immune system responds to infection. Steinman, whose work led to new approaches in heart transplantation, had previously received funding from the AHA.

The AHA Recommends Mandatory CPR for High School Graduation: The AHA issues a scientific statement recommending making CPR mandatory for high school graduation. Iowa and Alabama are the first two states to require it.

### 2012

AHA-Funded Researcher Co-Awarded Nobel Prize: Duke University researcher Robert Lefkowitz, M.D., is named the co-recipient of the Nobel Prize in Chemistry for work funded in part by the AHA. Lefkowitz and another researcher won for their work on receptors that allow the body's cells to sense and respond to internal and external signals. Studies of this kind have been instrumental in developing more effective drugs to treat heart disease.

**New Scientific Journal Launches:** *Journal of the American Heart Association* launches, giving the AHA 12 scientific journals that help advance cardiovascular thought.

**More States Add CPR Requirements:** Minnesota, Tennessee and Vermont add CPR graduation requirements.

**Government Grants Program Launches:** The AHA receives a \$19.6 five-year grant from the National Institutes of Health and the Food and Drug Administration to support research to inform the manufacture, distribution and marketing of tobacco products, launching the association's government grants program.

AHA Collaborates With Boston University and University of Mississippi: The AHA announces the formation of the Cardiovascular Genome-Phenome Study, an innovative scientific collaborative to accelerate groundbreaking research in partnership with Boston University and the University of Mississippi. The collaboration, called CVGPS, features data from the landmark Framingham and Jackson studies and aims to make groundbreaking innovations in personalized medicine.

**Collaboration Launches to Improve Children's Health:** Voices for Healthy Kids, a collaboration between the Robert Wood Johnson Foundation and the AHA, forms to help reverse the nation's childhood obesity epidemic.

### 2014

**More States Add CPR Requirements:** Texas, Washington, Arkansas, Georgia, North Carolina, Oklahoma, Rhode Island, Virginia and Louisiana add CPR graduation requirements. With the law passed in 17 states, more than 1 million CPR-trained students will graduate every year.

Work Begins on Newest Bugher Project: Work begins on a groundbreaking collaborative stroke research program funded by the Henrietta B. and Frederick H. Bugher Foundation. The University of California at Los Angeles, the University of Colorado at Denver and the University of Miami study a broad range of issues in the research project. They include stroke in children, rehabilitation and recovery, neuropsychology and cognition.

AHA Leads Heart Disease and Stroke Research Funding: After 65 years of funding research, AHA's investment in heart disease and stroke research totals more than \$3.5 billion. The AHA is the leading funder of heart disease and stroke research outside the federal government.

### 2015

**Strategically Focused Research Network Expansion:** Thanks to \$15 million in grants, our network expands to focus on heart disease prevention, high blood pressure, healthcare disparities, heart failure and heart disease in women.

The Conference of the International Liaison Committee on Resuscitation: The AHA hosted the 2015 conference, which led to the release of new resuscitation guidelines.

### 2016

**One Brave Idea:** The AHA establishes One Brave Idea, an unprecedented research initiative awarding \$75 million to one team focused on curing heart disease. It's funded through an alliance of the AHA, Verily and AstracZeneca.

AHA Institute for Precision Cardiovascular Medicine: Through the institute, the AHA provides funding for researchers focused on mining massive volumes of data in their quest to solve a range of heart disease issues. The institute began collecting, linking and leveraging patients' data to help improve heart health.

### 2018

Resuscitation Quality Improvement Partners: The AHA and Laerdal Medical establish RQI Partners as a legal, joint venture — a big step toward realizing our bold vision of a world where no one dies from cardiac arrest. The for-profit subsidiary partnership focuses on the Resuscitation Quality Improvement® program, the HeartCode® portfolio and solutions being co-developed with the Resuscitation Academy Foundation.