



The American Heart Association and Pediatric Research

Scientific Discovery

The American Heart Association committed to supporting innovative science and building research careers that impact disease prevention and treatment, including pediatrics.

- As the largest non-profit, non-governmental funder of cardiovascular disease and brain health research, the Association invested \$184 million to fund 1,015 new awards in 2024-25, and we funded over \$6.1 billion in research since 1949. Many awards fund research on how the heart develops before birth, how congenital heart defects form, and maintaining heart health in children.
- Additional basic science, clinical, and population research funded by the American Heart can be applied to congenital and acquired heart and blood vessel diseases that affect children.

Scientific Councils, Statements and Guidelines, and Lifelong Learning

The Association's 16 scientific councils are made up of science and research professionals who actively support our mission through research, education, and advocacy. The councils help develop statements and guidelines and organize scientific conferences. The [Council on Lifelong Congenital Heart Disease and Heart Health in the Young \(Young Hearts Council\)](#) focuses on pediatric scientific issues.

The American Heart Association and American Stroke Association publish medical guidelines and scientific statements on cardiovascular disease and stroke topics. Volunteer scientists and healthcare professionals write the statements, which are supported by scientific studies published in recognized journals with a rigorous review and approval process. Scientific statements include a review of data available on a specific subject, an evaluation on its relationship to overall cardiovascular disease science, and often an Association position based on that evaluation.

The Young Hearts Council initiates and publishes pediatric related scientific statements. Topics in 2025 included:

- Cardiovascular Health in the Transition From Adolescence to Emerging Adulthood;
- Cardiopulmonary Exercise Test Interpretation Across the Lifespan in Congenital Heart Disease, and
- Cardiovascular Quality and Outcomes Cardiovascular Toxicity in Patients Treated for Childhood Cancer

Congenital Heart Defects Tools and Resources

The Heart Association maintains a [web page](#) that of English and Spanish language information on these topics: About Congenital Heart Defects; The Impact of Congenital Heart Defects; Understand Your Risk; Symptoms and Diagnosis; Care and Treatment; Tools and Resources; Commonly Asked Questions About Children and Heart Disease, and Personal Stories.

Heart-healthy Tools for Kids and Families

We are helping create [healthier futures](#) for America's youth by improving nutrition security, increasing engagement in regular physical activity, ending tobacco use and supporting resiliency.

[Saving Lives at School](#) - Through the Kids Heart Challenge and American Heart Challenge, schools develop happy and healthy students prepared to physically and emotionally conquer the world.

[Cardiac Emergency Response Planning in schools](#) - Preparing schools and school districts to respond to cardiac emergencies.

[CPR in Schools](#) teaches students and staff what to do in an emergency. Anyone can help save a life.

[Teaching Gardens](#)[®] address healthy eating challenges by supporting school and community gardens. Kids learn to grow crops and understand and enjoy the benefits of eating healthy foods.

[NFL PLAY 60](#) encourages kids to be active for at least 60 minutes a day to build lifelong healthy habits. Since 2006, the NFL and American Heart have inspired physical activity through fun and engaging experiences.

[Heart Club](#) is a volunteer leadership initiative for high school and college students that equips them to become leaders, gain career insights and shape the future of health in their schools and beyond.

[Voices for Healthy Kids](#) - AHA-awarded policy campaign for nonprofit organizations advocating to improve health through food security, high-quality early childhood development, and family-friendly places for physical activity.



[Mom Life](#) - Simple, science-based tips and tools made for the busy lives of moms with kids of all ages.

Pediatric Research Milestones



1944 – Dr. Helen B. Taussig establishes the field of pediatric cardiology. She developed the concept for a procedure that would extend the lives of children born with Tetralogy of Fallot (blue baby syndrome). This concept led to the Blalock-Taussig shunt procedure developed by Dr.

Alfred Blalock and Vivien Thomas, Taussig's colleagues at The Johns Hopkins Hospital. The Association supported Taussig with a 1973 Grant-in-Aid, *Follow-Up Patients with Tetralogy Of Fallot*.

1966 – Pediatric cardiologist Dr. William Rashkind at the Children's Hospital of Philadelphia, along with Dr. William Miller, develops balloon atrial septostomy, a lifesaving technique and device for neonates with transposition of the great arteries. A father of interventional catheterization, Rashkind also created devices to close atrial septal defects and persistent patent ductus arteriosus. A longtime Heart volunteer, he received a 1983 Grant-in-Aid titled, *Transcatheter Treatment of Congenital Heart Disease*.

1986 – Dr. Craig Lillehei receives a Midwest Affiliate Fellowship, *Ventricular Function During Cardiac Allograft Rejection*. As an attending surgeon, he later worked with technology pioneer Redmond Burke to perform the first three pediatric heart-lung transplantations in New England with the help of colleagues from Brigham and Women's Hospital, including Malcolm Decamp and Sari Aranki.

1990 – The FDA approves Exosurf Neonatal to treat respiratory distress syndrome, a life-threatening condition for premature infants with heart and lung defects. The drug is developed by Dr. John Clements, an American Heart Career Investigator.

2010 – Dr. Donna M. Ferriero at the University of California, San Francisco receives The Thomas Willis Award, the American Stroke Association's highest honor, for groundbreaking work detailing the molecular and cellular mechanisms of hypoxic-ischemic injury in the developing brain. Her work translating those advances to the clinical realm include key roles in the first trial of hypothermia for neonatal brain injury, the first multicenter randomized clinical trial of a neuroprotective intervention in childhood ischemic brain injury, and major contributions in neuroimaging and clinical pathophysiology of neonatal brain injury.

2014 – The Association partners with the Children's Heart Foundation to co-fund the [AHA/CHF Congenital Heart Defect Research Awards](#). A total of \$22.5 million will be awarded through 2028 to support research related to congenital heart defects.

2017 – Heart establishes Strategically Focused Research Network on Children, awarding nearly \$15 million to teams from Children's National Health System, University of Utah, Northwestern

University, and Duke University Medical School. They collaborate to [study](#) childhood obesity, ideal heart health, congenital heart disease and rheumatic heart disease.

2019 – The Association and Enduring Hearts establish a [research award](#) specific to pediatric heart transplantation.

2020 – The Association awards \$20 million to End Nicotine Addiction in Children and Teens (ENACT) network of research projects on health impacts of nicotine and nicotine delivery products. Among the results is [Cardiopulmonary Consequences of Vaping in Adolescents](#): A Scientific Statement from the American Heart Association.



2022 – The Heart Association commits \$20 million to fund the Health Equity Research Network on Disparities in Maternal-Infant Health Outcomes to significantly advance our understanding of the factors underlying the disproportionate impact of maternal mortality and morbidity on Black women, Native American women, and those living in rural areas.

2023 – The Second Century of Science Clinical Fellow Research Education Program fosters research and related opportunities and optimal implementation of practice guidelines for clinical fellows. Of the 36 cardiology fellow programs selected, 12 are focused on pediatrics.

2024 – Two new Translational Research Awards in Pediatric Heart Transplantation are [awarded](#). The collaboration of the American Heart Association and Enduring Hearts represents a shared research commitment of \$5.5 million since 2021. The relationship puts a crucial spotlight on pediatric heart transplant research.

2024 – The American Heart Association and Additional Ventures commit \$13 million to five teams of scientists to conduct [innovative research](#) to learn more about single ventricle heart disease, a rare congenital heart defect caused when one of the heart's lower chambers doesn't fully develop.

2025 – Building on the program founded in 2014, the Association and Children's Heart Foundation award [five new grants](#) related to congenital heart defects.