## ACT

## HEART DISEASE

Although the death rate from coronary heart disease declined more than 28% from 2007 to 2017, thanks to research advances supported in part by NIH, heart disease still kills a devastating 647,000 Americans each year.



Heart disease is the **leading cause of death** among men and women in the United States.



**1 person dies every 37 seconds** in the U.S. from a heart disease-related event.



**1 in every 4 deaths** in the U.S. is caused by heart disease.



Heart disease costs **~\$219 billion each year** in health care services, medication and lost productivity.



About **half of Americans (47%) are at-risk** for heart disease due to factors such as high blood pressure, high LDL cholesterol, and smoking. Research funded by The National Heart, Lung, and Blood Institute (NHLBI) has increased understanding of the causes, prevention, and treatment of heart disease.

Key accomplishments include:

- **Developing ultrasound blood pressure sensors** that can be worn as skin patches to help people detect cardiovascular problems earlier and with greater precision.
- Creating faster, simpler oxygen supply devices which are being used by EMS teams to save lives and reduce the risk of disability.
- Advancing smart technology to detect atrial fibrillation and allow for earlier intervention and prevention.
- Improving cardiac genetic risk factor detection.
- Inventing clips to repair leaky mitral valves which can reduce risks associated with openheart surgery.

Opportunities ahead include:

- The Trans-Omics for Precision Medicine (TOPMed) program which will use data from studies focused on heart, lung, blood and sleep disorders to better predict, prevent, diagnose, and treat diseases based on a patient's unique genes, environment, and molecular signatures.
- The Vascular Interventions/Innovations and Therapeutic Advances (VITA) Program which supports and accelerates early stage development of promising diagnostics and treatments, particularly in underserved medical communities.

Sources: American Heart Association. Heart Disease and Stroke Statistical Update Fact Sheet At-a-Glance (2020) Retrieved from <u>professional heart org/idc/groups/ahamah-public/@wcm/@sop/@smd/documents/downloadable/ucm\_505473.pdf</u>; Centers for Disease Control Heart Disease Fact Sheet. (2019). Retrieved from <u>www.cdc.gov/heartdisease/facts.htm</u>; NHLBI Heart and Vascular Diseases (2019). Retrieved from <u>www.chlbi.nih.gov/science/heart-and-vascular-diseases</u>

NIH-supported research has identified multiple risk factors for heart disease and led to new strategies for prevention and treatment. But it is still the leading cause of death for both men and women in the U.S. To reduce its toll on the American people, sustained funding is needed.