Statistics for Emails:

- Each day the average heart "beats" 100,000 times. In a year, it beats three million times. And in a lifetime the heart beats more than 3 billion times.

- Your resting heart rate is the number of times your heart beats per minute while it's at rest. Best taken after a good night's sleep, before getting out of bed, the average resting heart rate is 60-80 beats per minute, but it's usually lower for physically fit people. It also rises with age. The best places to find your pulse are the wrists, the inside of your elbow, the side of your neck and the top of the foot. To get the most accurate reading, put your finger over your pulse and count the number of beats in 60 seconds.

- The American Heart Association and American Stroke Association estimate that by 2030, the total cost of heart disease and stroke will be nearly $1.5 trillion.

- **New policy recommendations made in obesity report:** Better access to healthy foods and more opportunities to stay active in low-income communities are among the new policy recommendations issued last week by leading health advocacy groups working to reverse the nation's obesity epidemic. The Trust for America's Health report found that 13 states now have adult obesity rates above 30 percent, 41 states have rates of at least 25 percent and every state is above 20 percent. In 1980, no state was above 15 percent; in 1991, no state was above 20 percent.

- **D.C. Judge Didn't Know He Was Having a Stroke**


- **Gwenyth's Life Making Impact:** On July 18th in Stafford County, Virginia, three boys and a mother were honored for saving the life of a girl at a pool party. The boys found her lying on the bottom of the pool. They pulled her out and called 911. A mom performed CPR on her and saved her life. The mom took a CPR class because she was friends with the family behind Gwenyth's Law and the boys were friends with Gwyneth. Gwenyth's Law came about after the death last summer of 12-year-old Gwyneth. Born with a heart defect, she went into cardiac arrest at A.G. Wright Middle School. She got no CPR or first aid until rescue crews arrived nearly 10 minutes later. Not only did the mom (in the striped dress below) save the girl (in the middle below), she also saved a man's life of a firefighter on a hike when he had a heart attack. Gwenyth's law will make CPR certification mandatory for high school graduation beginning in 2016-17. It also requires CPR training for teachers and has already had a huge impact in that community.

**Breaking a sweat while exercising regularly may help reduce stroke risk:** In a study of more than 27,000 Americans, 45 years and older who were followed for an average of 5.7 years, researchers found:
• One-third of participants reported being inactive, exercising less than once a week.
• Inactive people were 20 percent more likely to experience a stroke or mini-stroke than those who exercised at moderate to vigorous intensity (enough to break a sweat) at least four times a week.
• Among men, only those who exercised at moderate or vigorous intensity four or more times a week had a lowered stroke risk.
• Among women, the relationship between stroke and frequency of activity was less clear.

The study - the first to quantify protective effects of physical activity on stroke in a large multiracial group of men and women in the United States - supports previous findings that physical inactivity is second only to high blood pressure as a risk factor for stroke.

❖ Longer time being obese leads to coronary disease: Here's another good reason for young adults to maintain a healthy weight. People who are obese for a longer time in their 20s, 30s and 40s are at an increased risk of developing hardened plaque in their arteries, which increases their risk of having a heart attack or a stroke later in life, a new study shows. This is one of the first studies to show that a longer duration of obesity independently contributes to hardened plaque in the arteries, which is sometimes called silent heart disease because there are no symptoms. For more information check out the USA Today article.

❖ Don't let fear stop you from getting the healthcare you need! Do you avoid going to the doctor because you're worried about what you might find out, you don't like dealing with all those forms or because some of the medical terms can be confusing? If so, you're not alone. But understanding what your healthcare provider tells you and knowing what to do about it is essential for good health. Find tips to increase your health literacy here.

❖ Together to End Stroke Video Library: Check out celebrities, doctors, stroke survivors and caregivers tell their stories to help educate the public about stroke. View these inspirational stories of survival here.

❖ The heart pumps about one million barrels of blood during an average lifetime – enough to fill more than three super tankers.

❖ Morning, midday or midnight - when's the best time to work out? Well, that depends on when's the best time for you. You might have heard that the best time to work out is early in the morning - to get your metabolism revving or to avoid unexpected distractions during the day that could derail your regimen. Are there differences in working out at different times of the day? Maybe. But those differences would be minor compared to the overall effect of doing it consistently.
The chart below shows the approximate calories spent per hour by a 100-, 150- and 200-pound person doing a particular activity. So get moving - at the time that's right for you!

<table>
<thead>
<tr>
<th>Activity</th>
<th>100 lb</th>
<th>150 lb</th>
<th>200 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycling, 6 mph</td>
<td>160</td>
<td>240</td>
<td>312</td>
</tr>
<tr>
<td>Bicycling, 12 mph</td>
<td>270</td>
<td>410</td>
<td>534</td>
</tr>
<tr>
<td>Jogging, 7 mph</td>
<td>610</td>
<td>920</td>
<td>1,230</td>
</tr>
<tr>
<td>Jumping rope</td>
<td>500</td>
<td>750</td>
<td>1,000</td>
</tr>
<tr>
<td>Running 5.5 mph</td>
<td>440</td>
<td>660</td>
<td>962</td>
</tr>
<tr>
<td>Running, 10 mph</td>
<td>850</td>
<td>1,280</td>
<td>1,664</td>
</tr>
<tr>
<td>Swimming, 25 yds/min</td>
<td>185</td>
<td>275</td>
<td>358</td>
</tr>
<tr>
<td>Swimming, 50 yds/min</td>
<td>325</td>
<td>500</td>
<td>650</td>
</tr>
<tr>
<td>Tennis, singles</td>
<td>265</td>
<td>400</td>
<td>535</td>
</tr>
<tr>
<td>Walking, 2 mph</td>
<td>160</td>
<td>240</td>
<td>312</td>
</tr>
<tr>
<td>Walking, 3 mph</td>
<td>210</td>
<td>320</td>
<td>416</td>
</tr>
<tr>
<td>Walking, 4.5 mph</td>
<td>295</td>
<td>440</td>
<td>572</td>
</tr>
</tbody>
</table>

- Think of a healthy heart like a firm biceps muscle. An enlarged heart is just the opposite. When your heart is enlarged, it's like a soft biceps — it's weak and out of shape. Your body starts to retain fluid, your lungs get congested with fluid and your heart begins to beat irregularly. This is a common condition that’s more likely to occur in older patients. It's most strongly related to a history of high blood pressure or a previous heart attack. About one in five adults over age 40 is affected, with African-Americans facing a greater risk. For a person in cardiac arrest, every minute that passes without CPR or defibrillation, the likelihood of survival decreases by 7 to 10 percent.

- Read more: http://www.foxnews.com/health/2013/03/20/cardiac-arrest-or-heart-attack/?intcmp=HPBucket#ixzz2O68Kqum4Together, the financial costs of high blood pressure and stroke are staggering: annual costs of hypertension are $156 billion, with medical costs accounting for nearly $131 billion and lost productivity from illness and premature death of about $25 billion a year. Annual stroke costs to the nation are more than a billion dollars a week. (Source: www.heart.org)

- Heart failure costs are projected to more than double in the next 20 years as the U.S. population ages and the incidence of the condition climbs. By 2030, every U.S. taxpayer could be paying $244 each year for heart failure expenses. The number of people with heart failure could climb 46 percent from 5 million in 2012 to 8 million in 2030. Direct and indirect costs to treat heart failure could more than double from $31 billion in 2012 to $70 billion in 2030.

- Heart Attack Packs a Wallop to Survivors’ Wallets - What you shell out at the hospital is just the beginning.
Study: Wellness plans can cut health costs by 18% per worker. - Employee wellness programs could lower health costs by an average 18.4% per worker and up to 28% for older employees and retirees, according to a study from the American College of Occupational and Environmental Medicine published in the Journal of Occupational and Environmental Medicine. The study said savings will increase as more employees participate in wellness programs and health risks are reversed.

Eating flaxseed may lower blood pressure

Color-coded syringes may treat children with cardiac arrest faster and reduce error

iPhone app may help detect irregular heart rhythm

A new stent is safer and more effective at mending brain aneurysms

An estimated 65,578 people in the Mid-Atlantic Affiliate area (Maryland, District of Columbia, Virginia, North Carolina, South Carolina) die each year from heart disease or stroke – that's an average of 180 each day. Which is a rate of 230.11 per 100,000.

Hazardous combat duty is highly stressful, and it is plausible that the Global War on Terror introduces a unique environment that predisposes vulnerable military personnel to cardiovascular disease. Between October 2001 and May 2006, cardiac disease accounted for most medical diagnoses requiring critical care transports from Iraq and Afghanistan to Germany. The average age of this group was 45 years. In the civilian population, average age at first coronary event is 64.5 years for men and 70.3 years for women. (Source: American Heart Association)

Less than eight percent of people who suffer cardiac arrest outside the hospital survive. Sudden cardiac arrest can happen to anyone at any time. Many victims appear healthy with no known heart disease or other risk factors. Sudden cardiac arrest is not the same as a heart attack. Sudden cardiac arrest occurs when electrical impulses in the heart become rapid or chaotic, which causes the heart to suddenly stop beating. A heart attack occurs when the blood supply to part of the heart muscle is blocked.

Did you know that Congenital Heart Defects account for nearly 30% of all infant deaths due to birth defects? We want to lower that number by supporting a simple, non-invasive screening for all newborns. How does it work? There is a simple test using a pulse-oximeter machine that can detect a heart defect for babies. A small clip is attached to a finger or toe and within minutes the test will measure the amount of oxygen in the blood and the baby's pulse rate. Low readings could indicate a birth defect. What is the solution? All newborn babies already go through a thorough examination after birth to make sure they are healthy enough to go home. However, the most vital organ (the heart!) is not receiving a pulse-oximetry test to detect Congenital Heart Defects. We'd like to see this two-minute test added to the examination that all newborns receive. Take action on the NEW www.yourethecure.org

Can you recognize a heart attack? Take this quiz and find out. The warning signs may save your life, but only if you know them.

Each month, about 10,000 people in the U.S. have a cardioverter defibrillator implanted to restore normal heart rhythm and prevent sudden cardiac death.

The flu can leave most people sick for a few days, but it can be a much more serious ordeal if you have heart disease or have had a stroke. In fact, the flu can cause complications, including bacterial pneumonia, or the worsening of chronic heart
problems. It's more stress on your heart. It has to work harder to pump blood through your lungs.

- **Up to 1.3 million Americans alive today have some form of congenital heart defect.** The word "congenital" means existing at birth. The terms "congenital heart defect" and "congenital heart disease" are often used to mean the same thing, but "defect" is more accurate. The heart ailment is a defect or abnormality, not a disease. A defect results when the heart or blood vessels near the heart don't develop normally before birth. At least 17 distinct types of congenital heart defects are recognized, with many additional anatomic variations.

- **Every day in America there are 2,500 heart attacks and 2,100 strokes.** While over half are survivors, many have a long road to recovery.

- The term "heart failure" makes it sound like the heart is no longer working at all and there's nothing that can be done. Actually, heart failure means that the heart isn't pumping as well as it should be. Heart failure is a chronic, progressive condition in which the heart muscle is unable to pump enough blood through to meet the body's needs for blood and oxygen.

- The American Heart Association funds a wide variety of research projects to fight heart disease and stroke - ranging from mapping the human genome to evaluating exercise trends. Learn more about the American Heart Association's research programs.

- The American Heart Association has funded major medical breakthroughs over the years, including the first artificial heart valve, implantable pacemakers, and techniques and standards for CPR. Learn about these and other research milestones.

- Supporting research for heart disease and stroke is a top priority for the American Heart Association. In addition to funding research, we publish 12 academic journals that help educate medical professionals through the latest peer-reviewed research and scientific developments.

- Women who ate at least three servings of blueberries and strawberries per week had fewer heart attacks. They contain high levels of flavonoids that have cardiovascular benefits. (Source: [www.heart.org](http://www.heart.org))

- **Yoga may help stroke survivors improve balance:** Group yoga can improve balance in stroke survivors who no longer receive rehabilitative care, according to new research in the American Heart Association journal *Stroke*. For people with chronic stroke, something like yoga in a group environment is cost effective and appears to improve motor function and balance. Read more about this innovative study here.

- Your donation to the American Heart Association helps to forward the mission in many ways including: Advocating placing AEDs (automated external defibrillators) in public places such as airports, golf courses and malls. Only an electric shock can restart a stopped heart. For each minute without defibrillation, a cardiac arrest victim's odds of survival decrease by 7-10%. AEDs save lives!

- Your donation to the American Heart Association helps to forward the mission in many ways including: Funding research that led to many medical breakthroughs, including pacemakers, artificial heart valves, CPR, and blood pressure and cholesterol-lowering drugs.
• Your donation to the American Heart Association helps to forward the mission in many ways including: **Leading the fight for clean indoor air in public areas** such as workplaces, bowling alleys, restaurants, pubs, and more. Research shows that heart attack rates drop immediately following implementation of a smoke-free law, reaching a 17% reduction after one year and about a 36% reduction after three years.

• Your donation to the American Heart Association helps to forward the mission in many ways including: **Advocating to ensure food labels include appropriate nutrition information** to promote healthy choices. A healthy diet is a key weapon in the fight against heart disease. Use our nutrition guidelines at [www.americanheart.org](http://www.americanheart.org) to make smart choices to benefit your heart and overall health.

• Your donation to the American Heart Association helps to forward the mission in many ways including: **Establishing CPR guidelines and training people of all ages.** Effective bystander CPR, provided immediately after cardiac arrest, can double a victim’s odds of survival. Our **CPR Anytime** products train people in this lifesaving skill in just 22 minutes!

• In recent studies, **non-alcoholic red wine was more effective at lowering blood pressure** than traditional red wine or gin. Red wine’s polyphenols uninhibited by alcohol seem to be the blood pressure reducing element. Men with high risk for heart disease had lower blood pressure after drinking non-alcoholic **red wine** every day for four weeks, according to a new study in the American Heart Association journal *Circulation Research*.

• **Since 1949** the American Heart Association has spent more than $3.3 billion on research to increase knowledge about cardiovascular disease and stroke. Science discovery serves as the foundation for many of our AHA-developed programs and products which are instrumental in saving lives. Learn more on the [Research website](http://www.heart.org).

• **Thirty-seven percent of Americans think they are in ideal CV health, but fewer than 1 percent actually meet the American Heart Association’s criteria.** The association is teaching people what it really means to be healthy, offering practical solutions to improve their lives and the lives of their families.

• **Statistics show 1 in 2 men and 1 in 3 women are at risk for heart disease, and research shows that poor lifestyle is a major contributor.** Through programs that focus on improving nutrition, physical activity and children’s health, the American Heart Association is working to help individuals and families understand how to make incremental changes for a substantial long-term impact.

• **If people get to the age of 50 with no cardiovascular risk factors, their risk of heart disease and stroke can be as low as 5-8 percent,** and many of these people can expect to live to 90 or older with significantly less disability and disease. We want to help more people have that chance.

• The American Heart Association recommends at least 150 minutes (2 hours and 30 minutes) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) a week of vigorous-intensity aerobic physical activity. **But what if you’re tight on time?** Then, be creative and break up your activity into daily bouts of 3-10-minute increments. (Source: [www.heart.org](http://www.heart.org))
The American Heart Association recommends that heart attack prevention begin by age 20. This means assessing your risk factors and working to keep them low. For those over 40, or those with multiple risk factors, it's important to calculate the risk of developing cardiovascular disease in the next 10 years. Many first-ever heart attacks or strokes are fatal or disabling, so prevention is critical.

If current trends continue, some experts project 75 percent of adults will be overweight by 2015. The American Heart Association’s new healthy behavior change platform focuses on the whole lifestyle picture — including healthy eating and physical activity – to help people understand the connections between lifestyle factors and heart disease and stroke prevention.

African-American women are at greater risk for cardiovascular disease than women of any other ethnic group — yet they’re less likely than white women to know they may have major risk factors. Nearly half (47 percent) of African-American women have some form of heart disease compared to 34 percent of white women.

Percentages of people who are CPR trained in the MAA over this past fiscal year: DC 6.9%, MD 4.2%, NC 3.8%, SC 2.9%, VA 2.9%. The national average is 3.5%

Less than a third of Americans who consume their meals at home make them from scratch.

Fewer than 4 out of 10 adults surveyed scored above average on a basic cooking skills quiz.

Less than a third of Americans eat the recommended daily amounts of fruits, vegetables and whole grains. Even fewer check nutrition labels for saturated fat content.

Fad diets won’t solve the nation’s obesity crisis. For many people, improving health is as simple as getting back to cooking at home. With Americans increasingly relying on fast, convenient, prepared food, caloric intake is up and nutritional value is down. Americans have lost touch with what is in the foods they eat. The American Heart Association is working to change that by helping people find their way back to basics – learning how to prepare quick, simple, affordable, nutritious meals at home.

The American Heart Association recommends a daily sodium consumption limit of less than 1500 mg a day intake for all Americans. A key consideration behind the association’s recommendation on sodium was a report based on the Framingham Heart Study which found that 90 percent of American adults are expected to develop high blood pressure in their lifetime, and over 70 percent either have high blood pressure now or are at high risk for developing it.

A diet that includes natural sources of potassium is important in controlling blood pressure because potassium blunts the effects of sodium. The recommended daily intake of potassium for an average adult is about 4,700 milligrams per day.

The American Heart Association recommends at least 150 minutes every week of moderate physical activity such as brisk walking, but only 15 percent of American adults hit that mark.

Studies show that physical inactivity is an important a risk factor for heart disease as other well-known risk factors such as high cholesterol. Physically active People
who engage in regular, vigorous physical activity can reduce their risk of heart disease by 30 percent.

- More than 20 million Americans have Diabetes. **65% of people with diabetes will die of cardiovascular disease.** (Source: [www.heart.org](http://www.heart.org))

- **It’s simple – just move more.** The American Heart Association’s healthy behavior change platform reminds Americans that to be “fit” we don’t have to run to the gym or purchase fancy equipment. Increasing physical activity to improve your health can be as simple as choosing to be less sedentary. You can walk instead of drive. Or do family activities such as walking, swimming or biking.

- The American Heart Association is removing common barriers to fitness through its walking paths and walking clubs in cities nationwide to help Americans identify free, safe places to walk. Visit [www.startwalkingnow.org](http://www.startwalkingnow.org) or [http://www.mywalkingclub.org](http://www.mywalkingclub.org) to find one near you.

- **About 12 million (16.9%) of U.S. children ages 2 to 19 are obese.**

- **Nearly one in three (31.7%) U.S. children (23,500,000) ages 2 to 19 are overweight or obese.**

- **Over one-third (33.7%) of U.S. adults are obese (nearly 75 million adults).**

- When blood pressure readings rise to 180 or above for the systolic — top — number OR 110 or above for the diastolic — bottom — number, call for emergency medical treatment immediately. Individuals whose blood pressure is higher than 140/90 mm Hg (140 systolic or above OR 90 diastolic or above) often become patients treated for serious cardiovascular problems.

- **Physical activity is proven to improve both mental and physical health.** It tackles anxiety, depression and anger. It enhances your immune system and decreases the risk of developing diseases such as cancer and heart disease. Becoming more physically active can lower your blood pressure by as much as 4 to 9 mm Hg. That's the same reduction in blood pressure delivered by some antihypertensive medications. (Source: heart.org)

- **Most heart attack patients needing angioplasty treated in recommended time -**

  Nearly all heart attack patients who require emergency artery-opening procedures are treated within the recommended 90 minutes from hospital arrival, compared with less than half the patients five years prior, according to research reported in *Circulation: Journal of the American Heart Association*.

  More than 90 percent of heart attack patients who require an emergency artery-opening procedure, known as angioplasty, are treated within the recommended 90 minutes, compared to less than half five years before. From 2005-10, the average time from hospital admission to angioplasty decreased from 96 to 64 minutes. This significant improvement resulted from a concerted nationwide effort to improve care.

- **Since 1949** the American Heart Association has spent more than $3.3 billion on research to increase knowledge about cardiovascular disease and stroke. Science
discovery serves as the foundation for many of our AHA-developed programs and products which are instrumental in saving lives. Learn more on the Research website.

❖ **We’re making your community healthier** by advocating for key issues such as:
  - Smoke-free public places
  - More walkable and bikable streets, roads and parks
  - Better nutrition and high-quality physical education in our schools

❖ **We’re improving the quality of care** for heart and stroke patients by:
  - Training millions of Americans in CPR, advanced life support, AED (defibrillator) use and first aid; promoting AED placement in businesses and public places
  - Improving emergency care for heart attack victims through our Mission: Lifeline community-based initiative
  - Helping hospitals treat cardiac and stroke patients according to proven guidelines using our Get With The Guidelines® program
  - Strengthening stroke systems of care, teaching the public to respond to warning signs, and providing resources for stroke survivors and caregivers

❖ **We’re reaching at-risk populations** through cause initiatives and online tools:
  - Go Red For Women®: fighting heart disease, women’s #1 health threat
  - Alliance for a Healthier Generation: preventing childhood obesity
  - Power To End Stroke®: reducing African Americans’ high risk of stroke
  - Start!: getting America walking!
  - Heart Hub: our patient portal (www.hearthub.org) has information, tools and resources about cardiovascular disease and stroke

❖ Nationwide, we invest over $132 million a year ($3.2 billion since 1949) in heart and stroke research that has led to recent breakthroughs such as clot-busting drugs and drug-eluting stents. Healthcare providers learn about medical advances and new treatment guidelines through our journals, conferences and online courses.

❖ Heart disease causes one in three women’s deaths each year, killing approximately one woman every minute.

❖ An estimated 43 million women in the U.S. are affected by heart disease.

❖ Ninety percent of women have one or more risk factors for developing heart disease.

❖ Hypertension is more prevalent among African Americans. For non-Hispanic blacks 43% of men and 46% of women have high blood pressure, compared to 34% of white males and 31% of white females. Compared to whites, high blood pressure develops earlier in life and average blood pressures are much higher in blacks. African Americans with high blood pressure have an 80% chance of dying from stroke and 20% high chance of developing heart disease.

❖ There are approximately 76 million Americans with hypertension. Of those, 15 million are not aware that they have hypertension. Of the 61 million that are aware, 18 million are untreated. Of the 43 million that are treated, 21 million are uncontrolled. Many
patients lack understanding of blood pressure numbers and are unaware of the increased risk of heart disease and stroke.

- Since 1984, more women than men have died each year from heart disease and the gap between men and women’s survival continues to widen.

- While one in 31 American women dies from breast cancer each year, heart disease causes one in three deaths each year.

- Heart disease strikes more women than men, and is more deadly than all forms of cancer combined.

- The most common cause of stroke from an arrhythmia is **atrial fibrillation**. Atrial fibrillation can cause blood clots to form in the atria (top chamber of the heart) where they can be pumped out of the heart, to the brain, blocking a blood vessel and causing a stroke. (Source: www.heart.org)

- Normally, your heart contracts and relaxes to a regular beat. In atrial fibrillation (AF), the upper chambers of the heart (the atria) beat irregularly (quiver) instead of beating effectively to move blood into the ventricles. About 15–20 percent of people who have strokes have this heart arrhythmia. Anything that allows blood to slow down or pool increases the risk of clotting, and so increases the risk of stroke

- **Few African-Americans call 9-1-1 immediately for stroke symptoms**
  Most African-Americans say they’d call 9-1-1 if stroke symptoms occurred - but few do, according to research reported in Stroke: Journal of the American Heart Association.

  In a survey of 253 African-Americans in Washington, D.C., 89 percent said they’d call 9-1-1 at the first sign of a stroke. Yet, only 12 percent of 100 stroke patients surveyed in the predominantly black District of Columbia called 9-1-1 right away when faced with symptoms.

  African-Americans are at greater risk for stroke and are more likely to die compared to whites due to higher rates of risk factors such as high blood pressure and obesity.  
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- **First patients receive lab-grown blood vessels from donor cells** -
  For the first time, human blood vessels grown in a laboratory from donor skin cells have been successfully implanted into patients, according to new research presented in the American Heart Association’s Emerging Science Series webinar.

  While more testing is needed, such “off-the-shelf” blood vessels could soon be used to improve the process and affordability of kidney dialysis.

  “Our approach could allow hundreds of thousands of patients to be treated from one master cell line,” said study lead author Todd N. McAllister, Ph.D., co-founder and chief executive officer of Cytograft Tissue Engineering Inc., of Novato, Calif. See webcast, related slideshows, abstract and news release.
Congenital heart defects are structural problems with the heart present at birth. Defects range in severity from simple problems, such as "holes" between chambers of the heart, to very severe malformations, such as complete absence of one or more chambers or valves. Out of 1,000 births, nine babies will have some form of congenital heart disorder, most of which are mild. (Source: www.heart.org)

Middle-age blood pressure changes affect lifetime heart disease, stroke risk
An increase or decrease in your blood pressure during middle age can significantly impact your lifetime risk for cardiovascular disease (CVD), according to research in Circulation: Journal of the American Heart Association.

Researchers found people who maintained or reduced their blood pressure to normal levels by age 55 had the lowest lifetime risk for CVD (between 22 percent to 41 percent risk). In contrast, those who had already developed high blood pressure by age 55 had a higher lifetime risk (between 42 percent to 69 percent risk).

Physical fitness trumps body weight in reducing death risks
If you maintain or improve your fitness level - even if your body weight has not changed or increased - you can reduce your risk of death, according to research reported in Circulation: Journal of the American Heart Association.

In a study of 14,345 adult men, mostly white and middle or upper class, researchers found that maintaining or improving fitness was associated with a lower death risk even after controlling for body mass index change.

The study underscores the importance of physical inactivity as a risk factor for death from heart disease and stroke, said researchers. Researchers also found no association between changes in body fat percentage or body weight and death risk.

Young women may reduce heart risk eating fish with omega-3 fatty acids
Young women may reduce their risk of developing cardiovascular disease simply by eating more fish rich in omega-3 fatty acids, researchers reported in Hypertension: Journal of the American Heart Association.

In the first population-based study in women of childbearing age, those who rarely or never ate fish had 50 percent more cardiovascular problems over eight years than those who ate fish regularly. Compared to women who ate fish high in omega-3 weekly, the risk was 90 percent higher for those who rarely or never ate fish.
Citrus fruit, especially oranges and grapefruit, may help women avoid strokes by as much as 19 percent. Key ingredients in these fruits help reduce inflammation and improve blood vessel function. (Source: www.heart.org)

Are Fresh Fruits and Veggies Always Best? When broccoli beckons or carrots call your name, do you head for the cans, the frozen bags or the produce aisle? While it’s always healthiest to go for the fresh stuff, it’s important to remember that everything doesn’t have to be fresh-picked, said Linda Van Horn, Ph.D., a registered dietitian who is professor of preventive medicine at Northwestern University’s Feinberg School of Medicine. “As much as you can, choose fresh fruits and vegetables. When you can’t, because of convenience or budget, choose frozen fruits or vegetables without added ingredients, or, canned ingredients in natural juice or water,” she said. The American Heart Association recommends 4.5 cups of fruits and vegetables a day. No more than one of those servings should be replaced with a processed food.

“Cardiac arrest is the abrupt loss of heart function in a person who may or may not have diagnosed heart disease. The time and mode of death are unexpected. It occurs instantly or shortly after symptoms appear. The term "heart attack" is often mistakenly used to describe sudden cardiac arrest. While a heart attack may cause cardiac arrest and sudden death, the terms don’t mean the same thing. Each year about 295,000 emergency medical services-treated out-of-hospital cardiac arrests occur in the United States.” (source: www.heart.org)

A diet that includes natural sources of potassium is important in controlling blood pressure because potassium blunts the effects of sodium. The recommended daily intake of potassium for an average adult is about 4,700 milligrams per day. Fruits, vegetables, fat-free or lowfat (1 percent) dairy foods and fish --- are good natural sources of potassium. (Source: www.heart.org)

19.8% of boys and 19.1% of girls in grades 9-12 report being current smokers. Among adults 21.1% of men and 17.5% of women over the age of 18 are smokers. www.heart.org

More than 600,000 middle school students smoke cigarettes, More than 3 million high school students smoke cigarettes and Nearly a million and a half kids under age 18 will try their first cigarette this year. (Source: US Surgeon General's office and the American Heart Association)

There were (approximately) 313,680 people trained in CPR last year from our HeartSaver courses. There were (approximately) 8,000 CPR Anytime kits placed in the MAA last year. Applying the national average of 2.5 people trained per kit, the total is an estimated 333,680 people trained in CPR in fiscal year 2011-12 across the Mid-Atlantic Affiliate. (Information provided by Steve Traverso, Community CPR Anytime Manager for the MAA)

Middle-aged men with upper-normal blood pressure at risk for atrial fibrillation
Middle-aged men at the upper end of normal blood pressure had an elevated risk for atrial fibrillation later in life, according to new research in Hypertension: Journal of the American Heart Association.
Atrial fibrillation is a common heart rhythm disorder in which irregular heartbeats can lead to stroke and other heart-related complications; it affects over 2.7 million Americans. While hypertension is a risk factor for atrial fibrillation, the health consequences of upper-normal blood pressure are not yet fully understood.

...more

- How to Eat Healthy on a Budget
- Processed Foods: Where is all the salt coming from?

Rosie O'Donnell discusses her near-fatal heart attack on the Dr. Oz Show (video)

Smoke-free laws led quickly to fewer hospitalizations

Heart Insight is now available for the iPad®

- Stories from the Heart: Glynn Dugan
  Glynn Dugan was the picture of good health. The 24-year-old ate the right things, didn't smoke and was two weeks removed running a half-marathon. Her heart attack was such a surprise that it took more than 12 hours to diagnose - and easily could've killed her.
About 8 million women in the U.S. are living with heart disease, yet only one in six believes heart disease is her greatest health threat. This represents a significant disconnect between women’s beliefs about their heart health status – and reality. (Source: www.heart.org)

Get empowered with the facts, find a community of support, make healthy changes to your diet and exercise. Start with the Heart CheckUp. Then speak up to your doctor about having a lipoprotein blood screening.

- Stents as good as surgery in keeping neck artery open
- Experimental drug might beat aspirin in preventing repeat strokes
- Sleep apnea linked with silent strokes
- Memory loss linked to fatal strokes
- More women die of heart disease than the next four causes of death combined, including all forms of cancer. (Source: www.heart.org)

- **When to call 9-1-1**
- **Find recognized, accredited and certified hospitals near you**
- **Get summer barbecue tips**
- **Stay cool during your summer workout**

- **Stories from the Heart: Olivia Quigley**
  The day before Valentine’s Day, 6-year-old Olivia Quigley munched on pink cupcakes in her classroom, then went to gym class. During warmups, she had her first heart attack. The second came at the hospital and led to her being placed on life support.

- **Stories from the Heart: Amanda Salinas**
  Amanda Salinas had open-heart surgery when she was 2 weeks old. Now a healthy teen, she advocates being heart-healthy to fellow teens - and Texas lawmakers.
STORIES FROM THE HEART: Cheers to the California teen who celebrates his victory over heart disease in vintage style

After undergoing two open-heart surgeries within 10 months, Colby Groom celebrated his success against heart disease by asking his vintner-dad to make a special wine. Sales of 'Colby Red' have raised more than $150,000 for the American Heart Association.

Stories from the Heart: Dr. Kristen Plastino-Arnold

Dr. Kristen Plastino-Arnold recognized the symptoms of a heart attack right away. She just couldn't believe it was happening to her. Now the OB-GYN uses her near-death experience to help others, especially her patients.

Stories from the Heart: Christin Harbison

Christin Harbison was 24, recently divorced, working two jobs and going to school when her mother died of heart disease, leaving Christin to raise her twin sisters. The really sad part? Their mother ignored obvious signs of her illness. Now Christin and the twins honor their mother's memory by urging others to learn from her mistakes.

Stories from the Heart: Dr. Lenna Liu

What can be done to help economically strapped Americans eat healthier foods and become more active? Dr. Lenna Liu is among those trying to make a difference.

Stories from the Heart: Rachel Beall

Things were going great for Rachel Beall; at 34, she was a nurse practitioner and about to move into her dream home. But an undetected heart problem led to her death a week before Christmas. Now her family hopes her story will help warn others.
Stories from the Heart: Beverly Paige
Beverly Paige refused to let a stroke define her. She was determined to be defined by how she responded to that stroke.

Stories from the Heart: Dr. Tom McIntyre
Decades of researching blood vessels hadn't prepared Dr. Tom McIntyre to connect a debilitating headache to the bleeding taking place in his brain. Today, the stroke survivor's perseverance and newfound patience give momentum to his recovery.

Stories from the Heart: Dr. Willie Lawrence
Dr. Willie Lawrence refused to join his cardiology partners when they moved their practice from the inner-city to the suburbs. Driven to serve the underserved, he remained and built a new practice.

Stories from the Heart: Principal-mom using Teaching Gardens to grow healthier Americans
Amy Goodloe knows the best way to get kids interested in fruits and vegetables is by growing them. As both a mom and a school principal, she’s helping raise a healthier generation by overseeing one of the first American Heart Association Teaching Gardens.
STORIES FROM THE HEART: 4 straight generations affected by heart disease have made family devoted AHA fundraisers
Tami Kimet was 35 when she had a massive heart attack - only a month after her 27-day-old baby girl went into cardiac arrest. Their struggles continued a family history and led to a new family tradition of supporting the American Heart Association.

STORIES FROM THE HEART: His-and-her bypass recipients share passion for life and for helping others
Like most husbands and wives, Bert and Brenda Carey have much in common. What sets them apart is that they took turns nursing each other back to health after bypass surgeries.

STORIES FROM THE HEART: First her brother-in-law, and now her mom, are stayin' alive thanks to Hands-Only™ CPR
While singing the Bee Gees' classic "Stayin' Alive," Jessica Maimone used Hands-Only CPR to save her mother. She knew this technique because just a few years earlier, a passerby used it to revive her brother-in-law.

STORIES FROM THE HEART: Mother’s death spurs daughter’s devotion to spread CPR training
Robbi Thomas' mother died of a massive heart attack at 56 because nobody nearby knew CPR. Robbi devoted herself to preventing this from happening to anyone else's loved one. Her goal: to train lifesaving CPR skills to everyone in Georgia.

Umpire Jim Joyce uses CPR to save woman’s life
STORIES FROM THE HEART: Following massive heart attack, Vermont woman delivering news about improving heart health
Since surviving a massive heart attack, Bess Robertson likes to proclaim it on a T-shirt and enjoys warning others that women's symptoms of a heart attack may not always be obvious.

STORIES FROM THE HEART: Mom-news anchor 'basically dropped dead on the sidewalk' last fall; this fall, she ran a 5k
A fit mother of three and television anchorwoman who collapsed while running with friends beat the odds, then went on to share her story and warn about the importance of heart check-ups and emergency response.

STORIES FROM THE HEART: Young woman fell in love with a fellow heart transplant patient; now she’s fighting again
A rare condition causing a heart attack left a young mother in need of a heart transplant, sending her on a journey that included falling in love with another transplant recipient - and, now, anguish as her body rejects her new heart.

STORIES FROM THE HEART: Presence of state's only specialist saved his life; now he advocates for more access to lifesaving care
When medicine to save Tom Kloster's life didn't work, he needed a procedure that could only be done by one doctor in the state. The procedure was a success and Tom has shown his thanks by becoming a You're the Cure advocate for the American Heart Association.

STORIES FROM THE HEART: Heart attack survivor finds new role as AHA online ambassador
Visitors to the AHA Facebook page often get words of wisdom from online ambassador
Joel Robbins. Here is his story of taking control of his health after a heart attack nearly took his life.

Little Leaguer who survived rare heart injury thanks to CPR is pushing for training to become a state law
For Joe Mendrick, a 12-year-old from the upstate New York town of Colonie, "competing in baseball is the most important thing I do." So it seemed a cruel twist last year when his life was threatened as he played the game he loves.

While batting for his Little League team, Joe couldn't dodge an inside pitch. The ball hit him in the chest and he crumpled to the ground. His heart stopped and, for a few horrifying minutes, his parents thought he was dead. In the angst-filled days that followed, Mark and Lauren Mendrick worried that Joe might have suffered brain damage.

As New York Yankees star Derek Jeter - Joe's favorite ballplayer - told him in a letter: "Life can be very challenging." After the baseball struck Joe more ...  

Waiting for 2014: One Family's Story

When Joshua Lemacks takes the field for one of his Little League games, the other team may not be overly impressed with his batting average stats, but those who know him realize that he has beaten extreme odds just to be standing on that field with his teammates. What the other team doesn't know is that if Joshua and his parents hadn't batted 1000 in his early years, he wouldn't be alive today.

Nine years ago, soon after Joshua was born, a fetal cardiologist came into the room with a box of tissues and told his parents that their newborn's heart defect was 100% fatal. Later, the cardiologist offered them somewhat better odds if Joshua underwent three high-risk surgeries, one right after delivery. Joshua's parents, Jodi and Mark, opted for the surgeries because they wanted to give their baby the best chance they could. Even though they were insured, they incurred monumental out-of-pocket costs.
Read more about Joshua and why families like the Lemacks are looking forward to 2014.

Why do we fundraise? We fundraise because of Gina!

Gina Roberts was a 51-year-old middle school teacher in Baltimore, MD when she had her stroke, and her story demonstrates the importance of recognizing warning signs and acting quickly, sometimes even insisting someone else get help. Gina’s symptoms started one day when she starting dropping things and was having trouble walking. Her lips felt twisted and her speech was slurred. After a trip to the hair salon her car tire went flat, so she walked back there to get a ride. A friend at the salon was going to drive Gina home but after noticing that Gina was having trouble with the seatbelt, she insisted on taking her to a walk-in clinic. The health professional there discovered Gina had a dangerous blood pressure reading (267/140) and called an ambulance to take her to the nearest hospital. Gina recovered, but had to retire from teaching due to the side-effects of having a stroke. Instead, Gina is teaching the community about the prevention and warning signs of a stroke.

Why do we fundraise? We fundraise for Andrea.

At 35-years-old and 13 weeks pregnant, having a heart attack was not on Andrea Wongsam’s mind. Her jaw was tightening and she was feeling hot, but she chalked it up to being pregnant. “I thought I was having heartburn associated with my pregnancy. I ignored the pain for awhile, but then it got worse,” she recalled. After unsuccessfully trying to tough it out at work, Andrea went to rest in her car. It was March in Washington D.C. and only 35 degrees outside, but she just couldn’t get cool. By the time she decided to go home, her left arm had stopped functioning. She drove with one hand. The pain grew more intense, so she went to the urgent care center near her home. That’s when the doctor told her she was having a heart attack. Due to the extreme severity of her case, Andrea was airlifted to another hospital where she received an angioplasty and a stent. For ten days, she lay alone in the ICU. The doctors had saved her life, but Andrea lost her baby. Andrea had suffered from a congenital condition that caused her body to produce too many platelets. She had to discontinue use of a regulating medication when she became pregnant. The doctors explained to Andrea that the platelets formed a blood clot and caused her heart attack. After her heart attack, Andrea’s life came to a standstill when her mind flooded with fear and anxiety. Inspired by survivor stories she read at GoRedForWomen.org, Andrea started making dramatic choices and began turning her life and health back around. Exercising and choosing healthier foods became part of her routine, and she began to see herself not as a victim, but as a survivor and an advocate. Andrea now participates in fitness boot camps and organized a team for an American Heart Association Heart Walk. “I Go Red for all the women out there that live with heart disease, including myself,” Andrea said.

Why do we fundraise? We fundraise for Benda.

On February 1, 2009, Brenda Jones celebrated her 10-year anniversary as a heart patient survivor. In 1999, Brenda was diagnosed with ASD, or atrial septal defect – a hole in the wall separating the two upper chambers of the heart. Doctors told Brenda that
she had had this defect at birth, but that it had gone undetected for 40 years. Brenda was shocked—she had always been considered healthy and fit. She ate right, exercised, didn’t smoke, and did all the right things, and here she was, living with a silent killer. According to the American Heart Association, this isn’t unusual. Some patients with ASD have no symptoms. If the opening in the heart is small, it won’t cause symptoms because the additional work done by the heart and lungs is minimal. On physical examination, the only abnormal finding may be a murmur (noise heard with a stethoscope) and other abnormal heart sounds. However, with progressive damage to the lung vessels, the pressures in the lung may rise, and the patient can become severely limited.

The lesson Brenda learned from her experience is this: “All women need to know the importance of listening to their bodies and having yearly routine checkups. And even with all of this, sometimes some things go undetected. That’s how I was. I sensed a problem, but thought the way that I felt was normal. Women must become more educated about heart disease and what warning signs to look out for. Research into various forms of heart disease has progressed significantly since 1999,” added Brenda. “My condition had to be repaired with open heart surgery. Today, doctors can resolve this problem by way of a percutaneous atrial septal defect closure, which is a minimally invasive procedure that closes the hole in the heart without the patient having to undergo open heart surgery. Patients have an overall faster recovery and can return home on the same day. Hats off to the American Heart Association!”

Why do we fundraise? We fundraise for Andrew. We fundraise so we don’t lose more kids like Mary Kate.

Andrew Lovell was born with a hole in his heart. His heart was broken at age 12. It was New Year’s Eve 2009, and Andrew heard his spunky, 6-year-old sister Mary Kate struggling loudly to draw a breath. The heart disease she was born with – and seemed to have been beating – suddenly took her life. “I just couldn’t believe it happened,” Andrew said. “It blew me away.” It was “really, really hard for him to understand,” said his mom, Jill. “But it’s given him a lot of fight and determination. It’s amazing how he’s handled losing her.”

Andrew said he and Mary Kate “fussed a little” like typical siblings. But they were close, teaming up in their battles against heart disease: She had open heart surgery at 11 months and got a pacemaker at age 4; he had surgery at 6 months and had a defibrillator implanted under his left arm at 14 due to arrhythmia, an irregular heartbeat. (A pacemaker and a defibrillator are small devices that help your heart beat regularly.) Despite doctors telling his parents when he was 2 that he’d never play any sport, Andrew’s been active in several since age 4. “It does carry a risk,” Jill said. “The main risk is damage to the device itself. He’s aware of that. But we just feel God has a plan. Sometimes, it’s hard to understand, but we feel he is supposed to play sports. He’s real determined, adamant about playing.” This spring, the 5-foot-6, 200-pound freshman played catcher with what his coaches called the “heart of a lion” on the Aynor (S.C.) High School junior varsity baseball team, getting four hits in five at-bats and driving in two runs while batting cleanup in the season finale. Next fall, he hopes to play offensive line for the varsity football team. He’s waiting for his doctor’s final consent later this month. “I always thought I could do any sport,” said Andrew, who wrestled until giving it up last fall for fear that the pulling in the sport could result in the main wire of his pacemaker coming out of his heart. “I never look at my condition as a big problem, just a little setback. “And I play for Mary Kate.”
“Katie Girl,” as Andrew called his sister, always looked — and acted — healthy. She went to school regularly, took dance and gymnastics, was a cheerleader and played T-ball. “She taught us that heart disease is silent,” Jill said. “If you met her, you would have never, ever known she was sick. “Those who didn’t know our family personally had no clue. Actually, many did not know Andrew’s history until we lost Mary Kate.” For Mary Kate, Andrew is also making folks aware of heart disease in tiny Aynor, throughout rural Horry County and across South Carolina. Though the town’s population was only 647 at last count in September 2011, Andrew’s efforts are a main reason why Aynor Elementary has raised more than $25,000 through Jump Rope For Heart — more than any school in South Carolina. Andrew said it’s important to raise money for American Heart Association education, community and research programs because they help saves lives like his own. “The kids know his battle is not about losing her, but about fighting heart disease,” said Jill, who teaches first grade at Aynor Elementary. “He’s been a role model. When they look at him, they see a lot of hope.” When you look at — or talk to — Andrew, you can’t tell that he has heart disease either. But he still confronts the perils — and always will. Yet he continues to try living like other teenagers. Now 15, Andrew got his driver’s permit a few months ago. He imagines he’d be driving Mary Kate to his games now. She was always at his games. And she still is, for every inning, and in each period. “She’s always with me,” Andrew said.

Why do we fundraise? We fundraise for China!

China Terrell ate well, exercised, and thought that she was in fairly good physical condition - until she started experiencing extreme fatigue and dizziness throughout the day. As a lawyer in her mid-twenties, she worked in a fast-paced environment, was always on the go, and quite simply felt that she didn’t have time to be ill. She ignored her symptoms and chaked them up to stress. Despite fainting inexplicably at work, it was only when she started having severe back pain that she finally went to a doctor. There, she was diagnosed with a giant aneurysm of the right atrium. If left untreated, this rare condition could lead to arrhythmias and pulmonary embolism. Although she had no family history of heart disease, the condition forced China to have open heart surgery at the age of 27. “One open heart surgery was more than enough for me,” said China. Since she was not too interested in going to a gym, she tried several activities before finding ones that she enjoyed doing on a regular basis. China now cycles to work, and depending on the season, goes hiking or cross-country skiing. She has also made a conscious effort to incorporate more vegetables and fruits into her diet. She also tries to stay away from processed foods, especially those high in sodium, sugar, and saturated fats. Now 32 years old, China works for DC City Councilmember Tommy Wells, and makes an effort to raise awareness about the warning signs of heart disease. She is also a firm believer in listening to your body, understanding warning signs, and acting accordingly. Whenever possible, she speaks with others about healthy eating and the connection between women’s health and heart diseases. In return for sharing her story, China finds that she also receives helpful tips on living well through her conversations with others. She has found that “living well and being healthy is a concern for many people. You don’t necessarily need to have a personal story like mine to talk about these issues.”

Why do we fundraise? We fundraise because of Francisco!
47-year old Francisco Tuttle began to see patients as a Radiology Technician in Charleston, SC when he collapsed. Unfortunately, his office did not have an AED, but a co-worker immediately called 911 while another staff member initiated CPR. Within minutes, an EMS unit arrived. With aggressive advanced cardiac life support therapies, along with electrical shocks, Francisco had a spontaneous return of pulse. The paramedics conducted a 12-lead EKG which presented signs of a STEMI (a blocked coronary attack). He was transported to a facility with an interventional catheterization (cath) lab. From the time of his collapse, it took 79 minutes to have a balloon inflated in the blocked artery, which allowed for immediate blood flow to his heart. Thanks to the program Mission:Lifeline and the AHA, Francisco made a full recovery.
The AAP Division of Life Support Programs recorded the **3 millionth** individual trained in the Neonatal Resuscitation Program (NRP) in the United States! This is a tremendous milestone, and one that could only be achieved due to the tireless efforts, good will, support, and dedication of hundreds of volunteers, partners, staff, and instructors.

Advocacy video message: http://www.youtube.com/watch?v=s1xYwLSFS0s&feature=youtu.be or short version http://www.youtube.com/watch?v=Ys0qtNnzaAl&feature=youtu.be

Eighty percent of Americans don't make exercise a regular habit, and, according to a recent American Heart Association website survey, 14 percent say they don't like exercise. So how do you overcome an exercise aversion? Start here.

In the case of **statin-based cholesterol medications**, including those marketed under brands such as Lipitor, Mevacor and Zocor, grapefruit and pomegranate can be a dangerous mix. Other consumables, such as **alcohol**, can also have an impact on cardiovascular disease medications due to the way it can change the liver’s ability to filter medication from the body. Even simple things like salt can increase the amount of fluid retained in the body – rendering a medication dose inadequate. (Source: www.heart.org)

Get moving with the new AHA Pandora playlist! Grab your shoes and hit the nearest walking path with **this upbeat workout mix**. Share with friends and family to help keep them motivated to move.

AHA Scientific Statement: No proof that gum disease causes heart disease or stroke
Stroke survivors who smoke raise risk of more strokes, heart attacks, death

AHA develops program to increase cardiac arrest survival

Go Red For Women: 10 years of fighting heart disease in women (video)

FYI: Heart-Healthy Cooking for the Holidays! Cooking at home can be a daunting task, but a rewarding one for your diet and lifestyle (and your wallet). Making small changes in your diet is important to your heart health. The recipes on our Simple Cooking with Heart page are simple, nutritious and each has a preparation video so you won’t miss a step. Once you’ve mastered the basics, gather your friends and show off your skills. Download our Simple Cooking Home Party Kit and share the recipes and tips you’ve learned with others.
Victor J. Dzau, M.D.

"Researchers have tried various approaches, including the use of stem cells, to regenerate damaged heart muscle tissue. This is the first study to use microRNA, which are small molecules that control gene expression, to reprogram fibroblasts into heart muscle cells. We have not only shown evidence of this tissue regeneration in cell cultures, but also in mice."

Dr. Dzau, James B. Duke Professor of Medicine at Duke University Medical Center in Durham, N.C., was senior author of the first animal study—published in Circulation Research—in which researchers converted scar tissue that forms after a heart attack into regenerated heart muscle using microRNA.

AHA’s Science & Technology Accelerator Program announces first funding recipient

In this video, Gayle R. Whitman, R.N., Ph.D., the AHA's senior vice president of Science Operations, discusses the association’s funding support of CytoVas LLC, a Philadelphia-based company that’s developing a blood test to assess blood vessel health. CytoVas is the first funding recipient of the AHA’s Science & Technology Accelerator Program, a new initiative designed to speed the investigation and development of products or technology with the potential to help people with cardiovascular disease.

Great ideas are the foundation of medical innovation, but ideas alone aren't enough to overcome cardiovascular diseases, stroke and other illnesses. Lifesaving drugs, devices and technologies are designed in the laboratory, but from there they must travel a long road—usually several years—before reaching the patients who need them.

That road includes a series of required clinical trials and approval phases. The journey is not only lengthy, but also demands considerable financial investment. In too many cases, insufficient funding halts great ideas in their tracks before the journey has been completed.

That’s why the American Heart Association is proud to announce our Science & Technology Accelerator Program, which provides critical financial support to speed the development of tomorrow's medical innovations. Funding is provided through specifically designated philanthropic gifts. Any revenue generated is reinvested to support additional innovations.

Thanks to the vision and generosity of the Accelerator’s founding donors, Franck and Katina Gougeon, we achieved a milestone Tuesday when we announced the program's first funding recipient, CytoVas, LLC. CytoVas, a Philadelphia diagnostics company, has created a blood test to assess blood vessel health in people who don't have typical symptoms or signs of heart disease. Development for such a test could
take up to 15 years, but with our investment, CytoVas hopes to significantly shorten that timetable. Researchers hope the test can one day routinely monitor the effectiveness of treatments to prevent heart attack or stroke.

If effective, the test will contribute to the association's 2020 Impact Goal of improving cardiovascular health by 20 percent and reducing deaths from cardiovascular diseases and stroke by 20 percent.

For more on the Science & Technology Accelerator Program, including our process for selecting funding recipients, please visit my.americanheart.org/accelerator and see our related news release.

Report: Lack of Physical Activity as Deadly as Smoking

Physical inactivity kills. Of the approximately 57 million deaths worldwide expected this year, about 5.3 million of them will be premature deaths in which a lack of physical activity was the contributing factor, says I-Min Lee, a professor of medicine at Harvard and lead researcher on the study being published online in The Lancet. Physical inactivity is as serious a risk factor for premature death as the risks from smoking tobacco and being obese, she says. People who exercise and lose weight see the biggest decrease in heart attack risk, while those who do one or the other see less of a benefit.

For the study, Lee and colleagues used a statistical model to calculate how many premature deaths could be prevented if people moved more. Among the findings:

- If the level of physical inactivity in the overall population of the world decreased by 10%, it could reduce the number of premature deaths by 533,000 annually. If the level of inactivity decreased by 25%, about 1.3 million premature deaths would be avoided globally every year.

- If physical inactivity could be eliminated totally, life expectancy for the world's population would rise by 0.68 years.

Please click here to access the report.
CHILDREN WITH HEART DEFECTS NEED EARLY EVALUATION FOR RELATED DISORDERS

"If we identify developmental problems earlier, we're going to help prevent issues from coming up in school that prevent these children from achieving their fullest potential. In the past, we were happy if they survived. Now, we want them to survive and thrive," said Bradley S. Marino, M.D., M.P.P., M.S.C.E., who co-chaired the writing group for an AHA scientific statement that says children born with a heart defect should receive early evaluation, prompt treatment and continued follow-up for related developmental disorders affecting brain function.

Read AHA news release.

In the news

Group yoga can improve balance in stroke survivors who no longer receive rehabilitative care, according to research in the AHA journal Stroke. In a small pilot study, researchers tested the potential benefits of yoga among chronic stroke survivors. Learn more

Meet John Kawie

If you're a Stroke Connection reader, you're familiar with our humor column, Life At The Curb, written by comedian and stroke survivor John Kawie. Read his biographical article or watch a video that tells his story.

News highlights from AHA's 2012 High Blood Pressure Research Scientific Sessions
Extreme temperatures may raise risk of premature cardiovascular death

"Rice bran oil, like sesame oil, is low in saturated fat and appears to improve a patient's cholesterol profile. Additionally, it may reduce heart disease risk in other ways, including being a substitute for less healthy oils and fats in the diet," said Devarajan Sankar, M.D, Ph.D., author of a study presented this week at the American Heart Association's High Blood Pressure Research 2012 Scientific Sessions.

Dr. Sankar is a research scientist in the Department of Cardiovascular Disease at Fukuoka University Chikushi Hospital in Chikushino, Japan.

Read AHA news release.

D.C. panel discussion examines stroke risk in African-Americans

Watch Rules of Hands-Only CPR video featuring cast of CBS's Rules of Engagement

Science: 2012 Scientific Sessions Advertisement (3:35)  
Advocacy: You're the Cure 30th anniversary video (short version: 3:00)
One part of our 2020 Impact Goal deals with a further reduction in death from heart disease by 20%.... Here’s some good news, made even better by the fact that the key evidence has emerged from Get With The Guidelines.

How do you reduce mortality when an individual has a cardiac arrest? Treat it the right way.

News Item: **Hospitals Getting Better at Treating Cardiac Arrest**

Hospitals have gotten better at treating cardiac arrest according to a new AHA-funded study published in the New England Journal of Medicine.

Researchers used the American Heart Association's Get With the Guidelines-Resuscitation registry and identified 84,625 hospitalized patients who had had a cardiac arrest in one of 374 participating hospitals between 2000 and 2009.

They noted that on average, people having a cardiac arrest in a hospital have about a 22% chance of surviving at least long enough to go home. Ten years ago, they had less than a 14% chance of surviving until discharge (THAT’S A 56% IMPROVEMENT). And the rates of neurological disability also dropped, from 32.9% of survival cases in 2000 to 28.1% in 2009.

The American Heart Association's "Get with the Guidelines - Resuscitation" guidelines offer clear benchmarks to use in training staff to respond to cardiac crises. Experts say application of the guidelines may have improved survival numbers in hospitals.

"This study shows that when you follow quality and you benchmark people you can improve performance," said Dr. Ralph Sacco, a past president of the American Heart Association and chairman of neurology at the University of Miami Miller School of Medicine, in Florida.

NOTE: This research received funding support from the American Heart Association.

**SOURCES:**

Patients More Likely to Survive In-Hospital Cardiac Arrest Today: Study


Abstract 11152: Trends in Survival After In-Hospital Cardiac Arrest by Saket Girotra; Brahmajee K Nallamothu; John A Spertus; Yan Li; Harlan M Krumholz; Paul S Chan; American Heart Association Get With the Guidelines—Resuscitation (GWTG-Resuscitation) Investigators
http://circ.ahajournals.org/cgi/content/meeting_abstract/124/21_MeetingAbstracts/A11152


Salty Six – foods that are loaded with excess sodium that can increase your risk for heart disease and stroke.

Learn more

Social media may help fight childhood obesity
Broken Promises to Our Children: Report assesses states' spending on tobacco prevention and cessation

Heart Disease and Stroke Statistics 2013 Update (PDF)

Compression-only CPR improves survival with good brain function

What are the symptoms of high blood pressure? (Don't fall for the symptoms myth.)

Stroke Connection Magazine Subscription Information: Stroke Connection Magazine provides useful information and inspirational stories that support stroke survivors and caregivers in the recovery process. Each issue is packed with practical tips on daily living, reducing the risk of another stroke, news about treatments and much more. Here's the link to subscribe online for free and the link to the flyer on SharePoint that you can download and distribute to survivors, volunteers and donors to get their free subscription: Stroke Connection Flyer
Unclogging heart arteries through wrist becoming more common

AHA supports Teaching Children to Save Lives Act

Advocacy successes in Alaska, Nevada and Oregon

Controlling blood pressure, cholesterol may significantly cut heart disease risk
FYI: If you were a preemie, take heed for your heart. According to a new research study, being born prematurely may be linked to important changes in how your heart forms and works as an adult. Compared to term-born counterparts, preemies in adulthood had smaller, heavier right ventricles with thicker walls and lesser capacity to pump blood. Adults born prematurely should be aware of their potential for increased cardiovascular risks. Check out more information on this study.

FYI: Playing college football linked with high blood pressure risk. College football players may need to play more defense - against high blood pressure. A small study in the journal *Circulation* found that more than half of the first-year football players at a university developed elevated blood pressure by season's end. Researchers noted that the link doesn't mean that playing college football causes hypertension. They suggested that some players may be more susceptible - especially offensive and defensive linemen, and for those who gain weight and those with a family history of high blood pressure. Previous studies show that high blood pressure in young people increases their chances of heart disease later in life. This trend among first-year football players is a reminder of how important it is for athletes to monitor their blood pressure. Get more Simple Science @ Heart here.

FYI: Meditating reduces stress and improves heart health. Taking a few minutes to relax each day could help you lower your risks of cardiovascular disease. Meditation is a practice - often using deep breathing, quiet contemplation or sustained focus on something benign, such as a color, phrase or sound - that helps you let go of stress and feel peaceful and maintain a relaxed state of mind. Think of it as a 20- or 30-minute vacation from the stress in your life. Recent studies have offered promising results about the impact of meditation in reducing blood pressure. A 2012 study showed African-Americans with heart disease who practiced Transcendental Meditation regularly were 48 percent less likely to have a heart attack or stroke or die compared with African-Americans who attended a health education class over more than five years. Learn more here.

Warning Signs Quiz
Concerns of long-term survivors

More younger people are having strokes. Younger survivors means people are going to be living with the consequences of stroke for longer periods. We look at the challenges of long-term survivor through the eyes of a survivor and a health professional. Read the full story