

SCA is a leading cause of death in the US, killing more than 250,000 people every year, yet the public does not know enough to protect itself, and even the medical community does not know enough to always identify those at risk.

SCA is a leading cause of death in the U.S.

- More than 250,000 Americans die each year of SCA.
- That's a life every 2 minutes, or over 650 SCA related deaths each day.
- This number is greater than the number of deaths each year from breast cancer, lung cancer, stroke or AIDS.
- Cardiovascular disease (CVD) is the number one cause of death and most deaths from CVD are attributable to SCA.

Americans die from SCA because most do not receive medical treatment within the first 4 – 6 minutes of an attack – when brain and permanent death start to occur.

- 95% of victims of SCA die because they do not receive medical attention in time. Currently, defibrillation delivered within the first 6 minutes of an SCA accounts for the 5% survival statistics.
- Survival can be as high as 90 percent if treatment is initiated within the first 4 – 6 minutes after SCA. The rate decreases by about 10 percent each minute longer.
- Those who receive a life-saving shock from an Automatic External Defibrillator (AED) have a good long-term outlook.

SCA is deadliest among certain segments of the population – particularly women and African Americans.

- According to the American Heart Association, 120,000 women die each year from sudden cardiac arrest--39% more deaths than from breast cancer.
- Medical studies show that women have less chance of recovering from sudden cardiac arrest than men. Furthermore, cardiac arrest deaths among women ages 35 to 44 have increased over the last several years but not for men.
- According to a study in the New England Journal of Medicine, African Americans are more likely to have sudden cardiac arrest than Caucasians and have less than a 1 percent chance of surviving a cardiac arrest.

Many victims of SCA did not know they were at risk, and could not recognize warning signs, if any.

- 2/3rds of SCA deaths occur without any prior indications of heart disease.
- Anyone can experience sudden cardiac arrest, including healthy infants, high school athletes, and people in their 30s and 40s who have no sign of heart disease.

In fact, there is much the medical community still does not know either. Because medical research has not yet developed effective screening tools, it is difficult for doctors to properly identify patients at risk. To save lives, medical research could develop the tools and resources necessary to arm physicians with the information they need, to better understand the causes of SCA and better identify those at risk.

- Unlike colon cancer, for example, where the presence of polyps can be used to predict the possibility of cancer development, there are no early markers to detect SCA – this leaves the medical community only able to react to an SCA, rather than prevent it.
- There is no cost-effective screening tool for the genetic conditions that can cause SCA and even so, many people who have those predispositions are not aware of it until a family member experiences SCA.
- SCA is significantly under-reported.
 - Even medical experts say that fatality rates may be much higher because SCA deaths are often mislabeled as “heart attack.” Frequently, no autopsy is performed.
- Despite knowing young athletes become victims of SCA, there is no reliable test to provide warnings for coaches, parents and victims.

The American public should know their own risk, be able to identify warning signs, and seek medical attention before it is too late.

- If their doctors were armed with better tools and resources, patients could know the questions to ask them, and have better access to treatments and prevention.
- Informed at-risk patients would be more likely to initiate a discussion with their doctors about the efficacy of an ICD to proactively address their risk.
 - ICDs are 98% effective at protecting those at risk for SCA.
 - Over 800,000 people who are at risk for SCA remain unprotected by an ICD.
 - Currently, less than 35% of patients who would be helped by an ICD have one.
- With more knowledge, we could strengthen the “Chain of Survival” – the critical steps that can help prevent death from SCA – including victims receiving early access to CPR and defibrillation from an AED.
 - This strengthened Chain of Survival would enable the public to be better trained on using an AED when someone is experiencing SCA, delivering the lifesaving shock within the first few minutes of an attack, rather than losing precious time waiting for EMTs.

While the federal government has made great strides in research and treatment advances for many of our major health threats - breast cancer, lung cancer, AIDS and stroke - they have not yet done enough on SCA to educate the public or arm the medical community with the resources it needs.

- The NIH's funding program for the past five years does not list "Cardiac Arrest" as a separate item for research. Instead, it includes SCA under the broad umbrella of "Heart Disease".
 - At the same time, the NIH has been decreasing funding for "Heart Disease" over the past four years.
- A CMS brochure on women's heart health, released in March 2007, fails to mention SCA, even though SCA deaths among women are increasing.
- NHLBI has an entire section of their public website devoted to "Heart and Vascular Diseases," listing eight separate issue areas of concern, but does not include a section on SCA.
- Despite its role as providing the public with relevant information about their health, the CDC does not even list SCA as a disease or condition, on its "A to Z Index." SCA seems to only be found underneath information about "Heart Attack," though medically it is a different event.

With increased federal funding for research, education and access to treatment, we could go a long way towards saving lives.

- Increased funding for research would allow us to better understand the underlying causes of sudden cardiac arrest, more easily identify people at high risk, and develop better screening tools, new treatments and therapies.
- Increased funding would raise the public's awareness and knowledge about how to recognize their symptoms, seek medical care ahead of time, and reduce their chances of dying from SCA.
- Increased funding and action would help the segments of the population most threatened by SCA: Alert women to the risks they face and educate them on the measures they can take to prevent a sudden cardiac arrest; and help increase the survival rate among African Americans through more targeted medical research and access to quality healthcare.
- Increased funding would ensure health professionals and the public have the knowledge and tools needed to identify the signs of an oncoming sudden cardiac arrest, and help save the lives of victims.