Cardiac Arrest: An Important Public Health Issue

Cardiac arrest is a public health issue with **widespread incidence** and **severe impact** on human health and well-being. There are several recommended **strategies for prevention** and control.

Incidence

States.



Mortality: 70%-90%

Approximately 70%–90% of individuals with OHCA die before reaching the hospital.



Approximately 209,000 people are treated for inhospital cardiac arrest (IHCA) each year.

In 2015, approximately 357,000 people experienced

out-of-hospital cardiac

arrest (OHCA) in the United



Morbidity: Those who survive cardiac arrest are likely to suffer from injury to the brain and nervous system and other physical ailments. Additionally, nearly half of OHCA survivors suffer psychological distress such as anxiety, post traumatic stress disorder, and depression.

Economic Impact



Societal Cost: The estimated burden to society of death from cardiac arrest is 2 million years of life lost for men and 1.3 million years for women, greater than estimates for all individual cancers and most leading causes of death.

Prevention



Early intervention by CPR and defibrillation: Early, high-quality CPR, including compression only CPR, and use of automated external defibrillators (AEDs) immediately following cardiac arrest can reduce morbidity and save lives.



Clinical prevention: For patients at high risk, implantable cardioverter defibrillators and pharmacologic therapies can prevent cardiac arrest.



Other early interventions: Depending on the cause of the cardiac arrest, other interventions such as cold therapy and administering antidote to toxin-related cardiac arrest can reduce mortality and long-term side effects.



What Is Public Health's Role in Cardiac Arrest?

The public health community can implement strategies to prevent and control cardiac arrest. Making progress will require engagement and collaboration between CDC and key partners, including national partners, state programs, researchers, and many others.

Public Health Strategies:

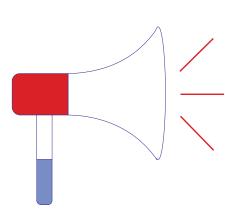


Improved Surveillance

Directing effective cardiac arrest programs requires monitoring of trends over time and across environmental conditions. Improved surveillance could enhance our ability to identify and compare incidence rates, effective treatments, and groups at elevated risk.

Proposed or promising approaches include the following:

- Develop and implement unique diagnostic codes for out-of-hospital cardiac arrest (OHCA) and in-hospital cardiac arrest (IHCA).
- Classify OHCA and its outcomes as reportable events.
- Support a national registry.



Increasing Public Awareness of Cardiac Arrest, CPR, and AED

Advocacy groups have called for a "culture of action" surrounding cardiac arrest that would require widespread public awareness.

Proposed or promising approaches include the following:

- Raise awareness about the difference between cardiac arrest and heart attack.
- Educate the community on CPR and AED use.
- Dispell common myths that cause bystanders to delay intervening in sudden cardiac arrest.



Encouraging Public Access Defibrillation (PAD) Policies that Promote Effective Use of AEDs

Efforts are needed to improve the availability of AEDs, public awareness of their locations, and access to them.

Proposed or promising approaches for AED placement include the following:









