Telecommunicator-CPR
Enhancing the Chain of Survival

OVERVIEW
Annually, over 350,000 people fall victim to sudden, cardiac arrest outside of a hospital environment. Sudden cardiac arrest is the unexpected loss of heart function, breathing, and consciousness and is commonly the result of an electrical disturbance in the heart. Unfortunately, only about 1 in 10 victims survive this dramatic event. Early access to 9-1-1 and early cardiopulmonary resuscitation (CPR) are the first two links in the Chain of Survival for out-of-hospital cardiac arrest (OHCA).

However, while 9-1-1 is frequently accessed, in the majority of cases, OHCA victims do not receive lay rescuer CPR and wait for the arrival of professional emergency rescuers. Moreover, the provision of lay rescuer CPR may vary within a given community based on neighborhood. The disparity across and within communities, especially among minorities, highlights high-yield opportunities to improve lay rescuer CPR and thereby save lives.

OHCA CHAIN OF SURVIVAL
Successful resuscitation of cardiac arrest victims requires the time-sensitive, expert care described by each of the links in the Chain of Survival: 1) early access to emergency medical services (EMS), 2) early lay rescuer CPR, 3) early defibrillation, 4) early advanced care, and 5) post-resuscitation care to facilitate rehabilitation and recovery. The first two links in the chain, early access to EMS and lay rescuer CPR, provide the foundation for subsequent treatment and are critical for successful resuscitation.

T-CPR: WHAT IS IT?
Telecommunicators (including call-takers and dispatchers) are the initial public safety interface with the lay public in a medical emergency. Consequently, telecommunicators have a formative role in the foundational links of early arrest recognition and early CPR. The telecommunicator partners with the caller to quickly identify the arrest victim and, in turn, provide telecommunicator-CPR (T-CPR) instructions and rapidly dispatch the appropriate medical response. Through these actions, the telecommunicator can make the difference between life and death.

T-CPR INCREASES ACCESS TO LAY RESUCER CPR
A program of T-CPR is especially appealing because it offers a safe, cost-efficient, and effective approach to substantially increase community lay rescuer CPR. Near-universal use of 9-1-1 (or equivalent emergency numbers outside the United States) ensures activation of an emergency communication center for virtually all treated cardiac arrest events, providing a far-reaching opportunity to affect care for OHCA. Program implementation of T-CPR can increase lay rescuer CPR, often doubling the proportion of arrest patients receiving early CPR. Even in communities where T-CPR is a standard practice, directed quality improvement efforts involving T-CPR can increase lay rescuer CPR, indicating that T-CPR requires ongoing evaluation and support to achieve optimal lifesaving benefit.

T-CPR IMPROVES OHCA SURVIVAL RATES
- Early lay rescuer CPR is associated, on average, with an approximately two-fold increase in the chances of survival after OHCA.
- T-CPR has the potential to increase incidence of lay rescuer CPR significantly.
- Compared to no lay rescuer CPR, a T-CPR program in King County, WA led to nearly a 50% greater likelihood of survival after OHCA.

American Heart Association • Advocacy Department • 1150 Connecticut Ave, NW • Suite 300 • Washington, D.C. 20036 • policyresearch@heart.org • 202-785-7900 • www.heart.org/policyfactsheets • @AmHeartAdvocacy • #AHAPolicy
THE AHA ADVOCATES

- Ensure T-CPR training is a compulsory requirement for all 911 telecommunicators who provide dispatch for emergency medical conditions.
- Ensure T-CPR training shall follow evidence-based, nationally recognized guidelines for high quality T-CPR which incorporates recognition protocols for out-of-hospital cardiac arrest (OHCA) and continuous education.
- Secure monies to provide for the effective implementation of T-CPR training and ongoing quality improvement requirements.

---