# **FACT SHEET**





## **Telecommunicator-CPR (T-CPR)**

# Enhancing the Chain of Survival



#### **OVERVIEW**

Each year, over 350,000 people experience sudden cardiac arrest (unexpected loss of heart function, breathing, and consciousness - commonly the result of an electrical disturbance in the heart) outside of a hospital environment.<sup>1</sup>
Unfortunately, only about 1 in 10 people survive sudden cardiac arrest.<sup>1</sup>

Lay rescuer cardiopulmonary resuscitation (CPR) is a critical link in the chain of survival while emergency vehicles are in transit to the scene. Less than half those experiencing an out-of-hospital cardiac arrest (OHCA) receive lay rescuer CPR

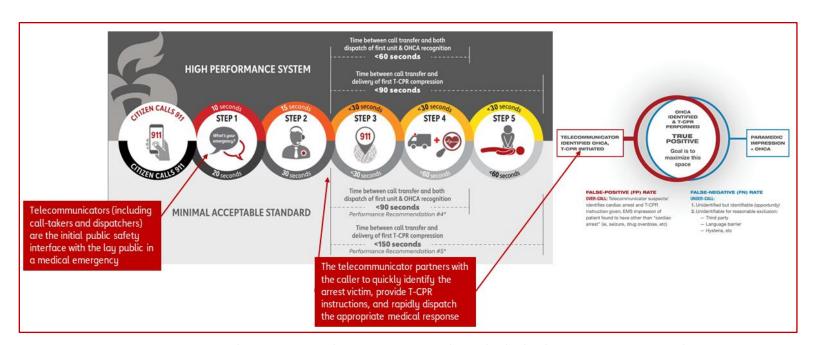
before emergency professionals arrive.<sup>2</sup> Moreover, the provision of lay rescuer CPR may vary based on community characteristics highlighting the high-yield opportunities for targeted interventions to improve lay rescuer CPR and save lives.<sup>1</sup>

#### **OHCA CHAIN OF SURVIVAL**

Successful resuscitation of cardiac arrest victims requires time-sensitive, expert care described by each of the links in the Chain of Survival.<sup>1</sup>



#### T-CPR: WHAT IS IT?



T-CPR is CPR instructions given by emergency telecommunicators to lay individuals who witness an OHCA and respond. This includes coaching on appropriate compression depth, rate of compressions, and chest recoil, American Heart Association = Advocacy Department = 1150 Connecticut Ave, NW = Suite 300 = Washington, D.C. 20036 = policyresearch@heart.org = www.heart.org/policyfactsheets = @AmHeartAdvocacy = #AHAPolicy

improving the quality of CPR delivered.<sup>3</sup> T-CPR offers a safe, cost-efficient, and effective approach to substantially increase community lay rescuer CPR.<sup>1</sup> 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.<sup>1</sup>

### T-CPR INCREASES ACCESS TO LAY RESCUER CPR & IMPROVES OHCA SURVIVAL RATES

- In 2023, 41.2% of out-of-hospital care arrests (OHCA) received lay rescuer CPR before the arrival of
  professional emergency rescuers. Those experiencing OHCA had better survival rates and sustained return of
  spontaneous circulation when they received bystander CPR.<sup>4</sup>
- Early lay rescuer CPR is associated, on average, with an approximately two-fold increase in the chances of survival after OHCA, with or without T-CPR instruction<sup>5, 6</sup>
- CARES data demonstrated that 73% of OHCA events received lay rescuer CPR after receiving T-CPR instruction.<sup>7</sup>
- CARES data also demonstrated equitable delivery of T-CPR instruction regardless of race or socioeconomic status but did find reduced lay rescuer initiation of CPR after T-CPR instruction based on older age and lower median household income. Researchers have suggested this difference is because younger people and those with higher household incomes may have been exposed to CPR earlier in life and thus have more confidence to initiate CPR upon receiving T-CPR instruction.<sup>7</sup>
- Even in communities where T-CPR is a standard practice, directed quality improvement efforts involving T-CPR & community education may increase lay rescuer CPR<sup>7-10</sup>

### THE AHA ADVOCATES<sup>1</sup>

- Ensure T-CPR training is a compulsory requirement for all 9-1-1 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 OHCA and continuous education.
- Secure funding to provide for the effective implementation of T-CPR training and ongoing quality improvement requirements to empower lay individuals with the knowledge and confidence to provide CPR for OHCA

<sup>1.</sup>Kurz MC, Bobrow BJ, Buckingham J, Cabanas JG, Eisenberg M, Fromm P, Panczyk MJ, Rea T, Seaman K, Vaillancourt C and Committee ObotAHAAC. Telecommunicator Cardiopulmonary Resuscitation: A Policy Statement From the American Heart Association. *Circulation*. 2020;141.

<sup>2.</sup> Dainty KN, Colquitt B, Bhanji F, Hunt EA, Jefkins T, Leary M, ... & Science Subcommittee of the American Heart Association Emergency Cardiovascular Care Committee. Understanding the importance of the lay responder experience in out-of-hospital cardiac arrest: a scientific statement from the American Heart Association. *Circulation*, 2022;145(17), e852-e867.

<sup>3.</sup> Dowker SR, Smith G, O'Leary M, Missel AL, Trumpower B, Hunt N, ... & Emergent Health Partners Collaborators. Assessment of telecommunicator cardiopulmonary resuscitation performance during out-of-hospital cardiac arrest using a standardized tool for audio review. *Resuscitation*, 2022;178, 102-108.

<sup>4.</sup> The CARES Group. CARES 2023 Annual Report. 2024: https://mycares.net/sitepages/uploads/2024/2023\_flipbook/index.html 5. Hasselqvist-Ax I, Riva G, Herlitz J, Rosenqvist M, Hollenberg J, Nordberg P, Ringh M, Jonsson M, Axelsson C, Lindqvist J, Karlsson T and Svensson L. Early cardiopulmonary resuscitation in out-of-hospital cardiac arrest. *N Engl J Med*. 2015;372:2307-15.

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