



Early Defibrillation

Fact Sheet

- More than 15% of out-of-hospital cardiac arrests occur in a public location; therefore, public-access automated external defibrillators (AEDs) and community training have a large role to play in early defibrillation. However, the number of patients who have an AED applied by a bystander remains low, occurring after only 10.2% of public arrests.
- In 2021, 28.7% of patients in the Cardiac Arrest Registry to Enhance Survival (CARES) were defibrillated in the field. The proportion of patients first defibrillated by a bystander was 4.6%, whereas 19.1% and 76.3% were first defibrillated by a first responder or emergency medical services personnel, respectively.

Functionality

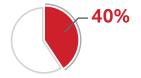
- Inside the AED box are pads and a diagram that shows where to place the pads on bare skin. Once the device is turned on, a voice tells the person using it exactly what to do. Some devices offer this instruction in Spanish, but most are English-speaking.
- The first thing the AED will do is determine whether an electric shock is needed by analyzing the person's heart rhythm. You should only stop cardiopulmonary resuscitation (CPR) while the machine is doing this analysis. If no shock is advised, it will tell you to resume CPR. If there is a shockable rhythm, it will tell you to press the Shock button and then to resume CPR.

More Stats



Your chance of survival while waiting for emergency medical services during a cardiac emergency decrease by **10% every minute** without CPR.





Of the people with cardiac arrest who receive a shock from an AED in the first minute, **9 out of 10 live**. Bystanders administer CPR about **40% of the time** and AEDs even less so.

AEDs at Work

- Are you one of the 50% who can locate an AED at your work? With 10,000 cardiac arrests happening in the workplace annually, you have the potential to save thousands of lives. Immediate CPR and use of an AED can double, or even triple, survival rates.
- The American Heart Association does not recommend one device over another. The AED you choose should be simple and easy to use.

Children and AEDs

Children older than 8 years can be treated with a standard AED. For children 1 to 8 years old, the American Heart Association recommends the pediatric-attenuated pads that are purchased separately. In infants younger than 1 year, a manual defibrillator is preferred. If a manual defibrillator is not available, an AED with a dose attenuator may be used.

CARES 2021 Annual Report. Cardiac Arrest Registry to Enhance Survival; 2021. https://mycares.net/sitepages/uploads/2022/2021_flipbook/index.html

Tsao CW, Aday AW, Almarzooq ZI, et al; for the American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2022 update: a report from the American Heart Association. Circulation. 2022;145(8):e153-e639. doi: 10.1161/CIR.000000000001052



Visit **heart.org/AED** to learn more. #CPRwithHeart #NationOfLifesavers