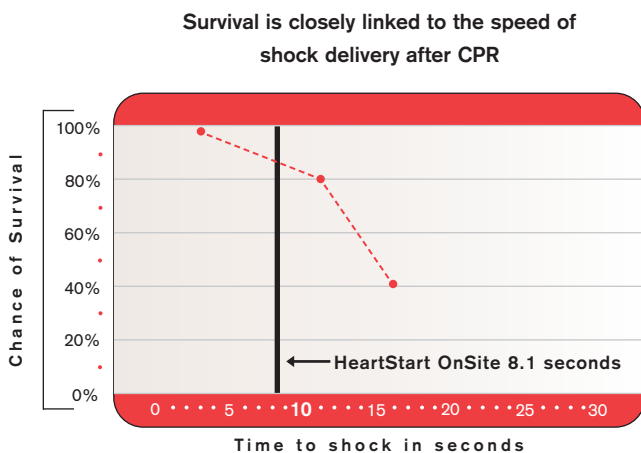


# QUICK SHOCK THE HEARTSTART ADVANTAGE

## QUICK SHOCK

Quick Shock is a unique new feature offered only by Philips on its HeartStart OnSite Defibrillator. The HeartStart OnSite is able to deliver a shock in less than 10 seconds after the end of a CPR pause. No other automated external defibrillator is able to do this as quickly.



Survival data: 7 minute ventricular fibrillation model from Yu et.al.<sup>3</sup>

## CPR HELPS

For longer down time patients, e.g. longer than 5 minutes, good CPR prior to defibrillation shock can help restore a normal heart-beat in more patients.<sup>1,2</sup>

## QUICK SHOCK MAXIMIZES THE BENEFITS OF CPR

The beneficial effect of CPR disappears very rapidly once it is stopped, so time to shock is very important.<sup>3,4</sup> Quick Shock helps by minimizing the interruption of CPR chest compressions and increasing the chance that a shock will result in a successful return to spontaneous circulation.

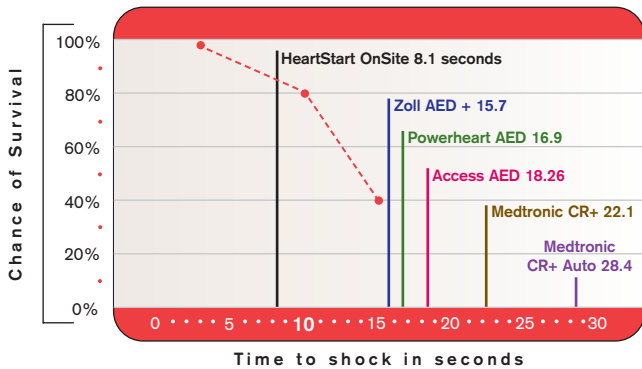
## PEER-REVIEWED RESEARCH SUPPORTS QUICK SHOCK

Two independent Circulation-published articles support Quick Shock. In one article, Dr. Yu et al, concluded, "Interruptions of precordial compression for rhythm analyses that exceed 15 seconds before each shock compromise the outcome of CPR and increase the severity of post resuscitation myocardial dysfunction."<sup>3</sup> A second study by Dr. Eftestol et al, similarly concluded "The interval between discontinuation of chest compressions and delivery of a shock should be kept as short as possible."<sup>4</sup> Simply put, getting a shock to the heart as soon as possible after CPR can save more lives.

## THE BENEFITS OF GOOD CPR CAN BE SQUANDERED

All automated external defibrillators can deliver a shock after CPR; but they cannot do it in less than 10 seconds. This means that the chances of a return of spontaneous circulation may be dramatically reduced.

### Survival is closely linked to the speed of shock delivery after CPR



Survival data: 7 minute ventricular fibrillation model from Yu et.al.<sup>3</sup>

### HOW DOES HEARTSTART'S QUICK SHOCK COMPARE AGAINST OTHER DEVICES?

The Philips Quick Shock feature — less than 10 seconds to deliver a shock following a CPR pause — is the fastest automated external defibrillator with respect to this critical measure, as indicated in the graph to the left. The HeartStart OnSite is able to deliver a shock in as little as 8 seconds. Other technologies fall farther out on this curve, wasting the benefits of CPR. No other manufacturer's device is even close to the HeartStart Onsite Defibrillator.

### WHAT ABOUT DEFIBRILLATORS EQUIPPED WITH MANUAL OVERRIDE?

The advantage the HeartStart OnSite with Quick Shock provides can be accomplished with manual defibrillators in the hands of users trained in advanced cardiac life support. Those highly trained users can manually deliver a shock immediately after they assess a victim's heart rhythm as shockable.

### WHAT ABOUT THE OTHER PHILIPS HEARTSTART PRODUCTS?

The other HeartStart defibrillators enable a shock to get to the patient's heart very quickly after CPR. However, this feature is optimized in the HeartStart OnSite. Your Philips representative can provide specific times for each product.

### PHILIPS HEARTSTART DEFIBRILLATORS – AN EXCELLENT CHOICE

Quick Shock is one of the innovative capabilities that set Philips HeartStart Defibrillators apart. HeartStart defibrillators are backed by more peer-reviewed research than any other defibrillator.<sup>5</sup> HeartStart Defibrillators have provided more than 1.3 billion hours of operational service to customers. Philips Medical Systems is an \$8 billion organization with over 120,000 automated external defibrillators in service, making it the market leader in the corporate, community, airport and airline market segments.<sup>6</sup>

**TO LEARN MORE ABOUT QUICK SHOCK OR PHILIPS HEARTSTART DEFIBRILLATORS  
CALL 1.800.453.6860 OR VISIT [WWW.MEDICAL.PHILIPS.COM/GOTO/HEARTSTART](http://WWW.MEDICAL.PHILIPS.COM/GOTO/HEARTSTART)**

<sup>1</sup> Cobb LA, Fahrenbruch CE, Walsh TR, et al. Influence of cardiopulmonary resuscitation prior to defibrillation in patients with out-of-hospital ventricular fibrillation. JAMA. 1999 Apr 7; 281(13):1182-8.

<sup>2</sup> Wik L, Hansen TB, Fylling F, et al. Delaying Defibrillation to Give Basic Cardiopulmonary Resuscitation to Patients With Out-of-Hospital Ventricular Fibrillation: A Randomized Trial. JAMA. 2003 Mar 19; 289(11):1389-95

<sup>3</sup> Yu T, Weil MH, Tang W. Adverse Outcomes of Interrupted Precordial Compression During Automated Defibrillation. Circulation. 2002; 106:368-372.

<sup>4</sup> Eftestol T, Sunde K, Steen PA. Effects of Interrupting Precordial Compressions in the Calculated Probability of Defibrillation Success During Out-of-Hospital Cardiac Arrest. Circulation. 2002;105:2270-2273.

<sup>5</sup> Philips Researchers have published eighteen peer reviewed medical journal manuscripts to prove the safety and effectiveness of the core technology of the Philips HeartStart Defibrillators.

<sup>6</sup> Frost and Sullivan