## **CPR/AED Fast Facts**

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## Promoting Cardio-Pulmonary Resuscitation & Automated External Defibrillator Awareness

Information presented to complement an established Medical Emergency Response Program

<u>New Title for Publication:</u> Welcome to our sixteenth edition of this quarterly newsletter presented to complement established Medical Emergency Response Programs.

We have included CPR in our title to emphasize that an effective response to a potential sudden cardiac arrest requires all aspects of the **American Heart Association's "Chain of Survival":** 

- 1. Early 911
- 2. Early CPR
- 3. Early Defibrillation
- 4. Advanced Life Support



## Impact of New Resuscitation Guidelines on Cardiac Arrest Survival in Kalamazoo, MI

Last month, Dr. William Fales MD, Kalamazoo County Medical Control Authority Director, presented results from a study of Kalamazoo's County EMS System Out of Hospital Cardiac Arrest Resuscitation at the Michigan Chapter of the American Heart Association's (AHA) Emergency Cardiac Care Conference. The study concluded:

"Implementation of the new AHA guidelines, including a change to the Combitube as primary advanced airway (an advance life support skill), was associated with improved admission and survival to hospital discharge for Out of Hospital Cardiac Arrest Resuscitation."

A few of the details from Dr. Fales presentation and study are the following:

During the study's intervention period March 1, 2006 through April 30, 2007, the **survival rate** to Hospital Admission and Discharge of bystander witnessed out of hospital cardiac arrest (*first arrhythmia ventricular fibrillation (VF) or ventricular tachycardia (VT)*) treated with the **new AHA Resuscitation Guidelines was 45.5%**. The new guidelines emphasize CPR (*30 compressions per 2 breaths*), eliminating stacked defibrillation shocks, immediate resumption of CPR after defibrillation, and minimization of all interruptions in chest compressions. The county's protocol for primary advanced airway (*an advanced life support skill*) was also changed during this period.

During the period January 1, 2005 to February 28, 2006 the **survival rate** to Hospital Admission and Discharge of the same category rescues using the **old AHA Resuscitation Guidelines was 19.4%**.

**Bystander Witnessed Ventricular Fibrillation:** The study also supports the importance of bystander CPR. 78.6% of witnessed cardiac arrest (VF) persons that received bystander CPR survived to hospital discharge. The survival rate for the same category in which no CPR was performed was 30%.

**Public Access Defibrillation:** The study also demonstrates the need to improve organizations medical emergency response procedures that include automated external defibrillators (AEDs). All defibrillation shocks in this study were performed by County EMS responders. In several instances an AED was available but not used.





HAVE A SAFE & HAPPY SUMMER!!

