



American Heart Association | American Stroke Association

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## **Education Committee**

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**John Bailey, Government Relations Director**

**American Heart Association**

### **Support for H.B. 5514: An Act Concerning Various Revisions to the Public Health Statutes**

Good morning Senator Gerrata, Representative Ritter, and member of the Public Health Committee.

My name is John Bailey, State Director of Government Relations for the American Heart Association, and I am here today to testify on H.B. 5514 An Act Concerning Various Revisions to the Public Health Statutes. I am testifying in support of Sec.22 and Sec. 23., both sections address the need to increase access to Automated External Defibrillator (AED).

Sudden cardiac arrest (SCA) occurs when the heart's electrical system abruptly malfunctions and the heart suddenly stops beating normally. SCA is often confused with a heart attack, which typically happens when blocked arteries prevent blood from reaching the heart's muscles. SCA is caused by an abnormal heart rhythm called ventricular fibrillation (VF) that prevents the heart from pumping blood. The treatment for VF is defibrillation. Defibrillation is the delivery of an electric shock to the heart that stops VF and allows a normal heart rhythm to resume. There are approximately 295,000 occurrences of out-of-hospital SCA each year in the United States – and most of them are fatal.

SCA cuts a wide swath throughout the U.S population. About 800 people have an out-of hospital SCA each day. Although overall deaths from heart disease have declined over the past 30 years, the mortality rate from SCA has not.

SCA usually occurs in adults and is a leading cause of cardiac-related death. However, children are not without risk. Each year, there are an estimated 1,900 to 14,200 cases of out-of-hospital SCA in children nationwide. Approximately 5-15% are caused by VF. Student athletes who suffer SCA often have an underlying heart abnormality that is undiagnosed.

Treatment of SCA is a race against the clock. The combination of early, immediate CPR and defibrillation can more than double a victim's chance of survival. If the survival rate increased from 5% to 20%, an additional 40,000 lives could be saved annually.

AEDs are simple-to-use device about the size of a laptop computer that is used to shock the heart of a person suffering a SCA to return the heart to a normal rhythm. A recent study sponsored in part by the National Institutes of Health and the American Heart Association, shows that most SCAs that occur in public places are "shockable" arrhythmias, or those that respond to a shock from an AED, making AEDs in public places, highly valuable.

The American Heart Association believes effective placement and use of AEDs in will achieve the goal of minimizing the time between recognition of cardiac arrest and successful defibrillation. Early

defibrillation is the best way to successfully treat most cardiac arrests. Time is critical. If a normal heart rhythm isn't restored in minutes, the person will die. In fact, for every minute without defibrillation, the chances of survival drop 7-10 percent. A cardiac arrest victim who isn't defibrillated within 8-10 minutes has little chance of survival.

Early CPR and use of an AED plays an important role in the chain of survival that includes the following links: 1) early recognition of cardiopulmonary arrest, 2) early CPR, 3) early defibrillation when indicated, and 4) early advanced cardiac life support care. For victims of SCA, the single greatest determinant of survival is the time from collapse to defibrillation. A survival rate, among victims of witnessed VF cardiac arrest, as high as 90% has been reported when defibrillation is achieved within the first minute of collapse.

When Sudden Cardiac Arrest occurs it truly is a race against the clock, minutes determines if a victim of SCA lives or dies. The data is clear, increasing the availability of AEDs significantly increases the chance of survival. Passage of H.B. 5514 will quite simple save lives in our schools and communities. Thank you for supporting this important piece of legislation.