

**Seth Lapuk, M.D.**  
**Public Health Committee**  
**February 23, 2015**

**Senate Bill 684, An Act Concerning Training in Cardiopulmonary Resuscitation.**

Senator Gerratana, Representative Ritter, members of the Public Health Committee, thank you for allowing me the opportunity to testify in support of Senate Bill 684.

My name is Seth Lapuk. I am a Pediatric Cardiologist at Connecticut Children's Medical Center, the Director of the Echocardiography Laboratory, an Associate Clinical Professor of Pediatrics at the University of Connecticut and President of the North Central Connecticut Board of the American Heart Association.

The two paramount reasons CPR and defibrillator training should be promoted in schools are to train our citizenry in simple life saving techniques and to try to positively affect the outcomes not only in the general population but in the school populations specifically.

My colleagues and I are all too familiar with the tragedies of sudden unexpected deaths in students in Connecticut along with the adulation we have for the citizen bystanders that have saved children's lives through appropriate rescue responses.

I can quickly recall three of these great events and one recent terrible one. In January of this year a 16 year old wrestler in New Britain was warming up for practice with a run when he collapsed. His dire condition was quickly recognized by his team mates and coach. Bystander CPR and defibrillation was initiated. He is now back to school without any deficits.

In 2006 a 17 year old varsity basketball player in the bleachers at a local basketball camp slumped over, pulseless. Bystander CPR and defibrillation was quickly initiated. He was diagnosed with hypertrophic cardiomyopathy and now is a vocal advocate for CPR training in schools.

A few years back three boys were playing Frisbee in South Windsor. One collapsed and his friends quickly accessed the situation and with clear thought quickly ran to the nearby police station. Defibrillation was administered in the field. He is alive and well.

Unfortunately this is not always the outcome. Three years ago another high school basketball player from South Windsor was practicing at school, collapsed and died. Autopsy showed him to have a congenital abnormality with his coronary artery. Becoming acquainted with his family while screening his siblings over the next months illuminated the impact that these, although rare, devastating events.

Of course cardiac arrest can and does happen much more frequently outside the pediatric population; nearly 383,000 times per year outside of hospitals. Fewer than one in 3 of these victims receive bystander help. The chance of survival drops by 7% - 10% for every minute of delay. Currently only 10% of those with an out of hospital cardiac arrest survives. The survival rates have been shown, however, to double in areas where cardiac arrest emergency response plans and Automatic External Defibrillators are available. Even CPR without mouth to mouth ventilation has been shown to be effective in improving survival.

Any previous training has been shown to increase bystander CPR by seven fold. By training school children in CPR there will become a million more CPR trained of adults significantly increasing the rate of bystander response to these medical emergencies.

Last year the American Heart Association's released its latest Science Advisory regarding CPR training in Schools. This provides a clear description of how even limited training programs, some as short as just 30 minutes, can result in achieving significant competencies in recognizing emergency situations and CPR and defibrillator use. It stresses the importance of psychomotor hands on skills training. It highlights the effectiveness of the current "hands only" resuscitation guidelines, obviating the need for mouth to mouth training. Such training programs can and have been implemented in communities across the country.

A 2004 American Academy of Pediatric Policy statement suggested that "schools should establish a goal to train... all students in CPR". This goal should be turned into a reality.

Thank you for your time and considerations.

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