Testimony for Public Hearing

Children's Committee

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Raised Bill No. 229 (Committee on Children): An Act Concerning Sudden Cardiac Arrest Prevention

Good Afternoon Children's Committee Members. My name is Sherri Hopkins. I am a Registered Nurse with a specialty in cardiac nursing and I am currently employed with Yale New Haven Hospital as a Rapid Response Nurse. I am a CPR Basic Life Support (BLS) Instructor and Advanced Cardiac Life Support (ACLS) Instructor for the American Heart Association. I am also a member of the Sudden Cardiac Arrest Association.

I am not in support of the bill as it is written. You would think that with all of my credentials and involvement in promoting CPR education that I would be in support of this bill. However, I am not convinced that the author of this bill understands what happens during a cardiac arrest event. I am here to offer this insight as a medical professional and as an American Heart Association CPR (BLS) and ACLS Instructor.

Sudden Cardiac Arrest (SCA) is the abrupt cessation of the heart from pumping blood. Instead of the heart beating in a coordinated way, the heart quivers and the victim suddenly collapses. The ONLY treatment for SCA is CPR and energy delivered by a defibrillator or an Automated External Defibrillator (AED) as soon as possible. For every minute a victim goes without CPR or an AED their chances of survival goes down by 10%.

Sudden Cardiac Arrest has many causes. In adults, the most common reason is from a blockage in a heart artery which prevents precious heart muscle from receiving blood. This is called a heart attack. In children and in some adults the most common reason for sudden cardiac arrest is an undiagnosed congenital condition that typically goes undetected until the sudden event. There are most often no warning signs at all. A less common reason is Commotio Cordis. Sudden Cardiac Arrest can occur when a ball or object hits the athlete's chest at an exact millisecond during the heart's electrical cycle. An athlete will suddenly collapse after being hit in the chest and go into SCA. The ONLY treatment for SCA no matter what the cause is listed in the American Heart Association's Chain of Survival: Early recognition, early defibrillation, early bystander CPR, early advanced life support.

As you see, Sudden Cardiac Arrest is exactly what it says: Sudden. The title of this bill: An Act Concerning Sudden Cardiac Arrest Prevention is an oxymoron in how it is used in this bill. There is often no way to see signs of a Sudden Cardiac Event. It is a life and death moment. Without swift treatment, the victim will die or become brain dead in less than 10 minutes. An example of SCA prevention might include educating parents about possible congenital issues that involve heart screening with EKGs and

echocardiograms of athletes. It is currently a controversial topic among heart specialists and is advocated among parents who have lost children to SCA. However, this is not how the title of the bill is being used.

Connecticut coaches are already receiving CPR education. It is required that all coaches in CT receive CPR/AED and First Aid Training certification from either the American Red Cross or the American Heart Association. I teach almost all of the Naugatuck High School Coaches this course every two years. They have invested in an AED that the athletic trainer carries to treat SCA and all have been trained in its use. Did you know that AEDs are not required at every practice, game or sporting event? It is in fact the ONLY treatment for SCA. This is why I believe this bill is misguided and SCA is being misunderstood. There are no warning signs, it can strike any age and the only treatment is the energy or (shock) from an AED.

In Section 1 b Lines 18-24 do not make sense. Please keep in mind that a Sudden Cardiac Event or Arrest has no warning signs, is sudden and the athlete or victim will have become unconscious and would require emergency medical treatment of which coaches are already trained in. " The State Board of Education shall develop or approve a sudden cardiac arrest awareness program for use by local and regional boards of education...and shall include (A) The warning signs and symptoms associated with a sudden cardiac event, (B) the risks associated with continuing to engage in intramural or interscholastic athletics after exhibit such warning signs and symptoms, (C) the means of obtaining proper medical treatment for a person suspected of experiencing a sudden cardiac event, and (D) the proper method of allowing a student who has experienced a sudden cardiac event to return to intramural or interscholastic athletics." To drive my point home, remember, if a sudden cardiac event were to occur the child would not be breathing and their heart will not be pumping.

In Section 2 Lines 56-57 it is recommended that coaches "shall complete an initial training course regarding sudden cardiac events" As stated before, all coaches are required to receive this education. What is NOT in place is the fact that not all athletic departments are required to have an AED; the only effective treatment to stop the quivering motion of the heart when it goes into SCA.

Section 3 Lines 104-111 are particularly concerning to me. "The coach...shall immediately remove a student from participating in intramural or interscholastic athletics who is observed to exhibit signs, symptoms or behaviors consistent with a sudden cardiac event. Not later than twenty-four hours after such removal the coach shall inform the student's parent that the student has exhibited such signs, symptoms or behaviors consistent with a sudden cardiac event." If the athlete demonstrated a sudden cardiac event, the coaches are trained to call 911, do CPR and get an AED. This whole section does not make sense.

In summary, coaches are already being trained in CPR/AED education which includes the treatment for sudden cardiac arrest. It is the whole point of the class. While I believe the author was well intended, I don't believe the term sudden cardiac arrest written in this bill is understood.

My recommendations: The state should be focusing on getting actual AEDs for these athletic departments so that in the event an athlete or observer of an athletic event becomes unresponsive, they would be able to provide the only treatment that can save their life: Early CPR and early defibrillation.

Currently the AHA does not mention the term Commotio Cordis during the CPR/AED First Aid class. This indication for SCA is a fairly rare cause of cardiac arrest. Children wearing chest protectors in sports like lacrosse, hockey, baseball are just as likely to suffer sudden cardiac arrest if the projectile hits the protector or their bare chest at just the right timing of the heart's electrical cycle. I would love for coaches in all states to know that if they see their athlete collapse suddenly after being hit in the chest this might be the cause for the cardiac arrest. I believe if everyone knew about this condition we would push for more AEDs being available. To be clear, coaches are already trained to do CPR and should follow the AHA guidelines to treat an unresponsive, non-breathing person no matter what the cause. If any education might be provided, I might promote coaches and parents to learn about commotio cordis.

Please visit www.LA12.org Louis Acampora was a young athlete who was blocking a routine lacrosse ball with his chest. He collapsed and died because even though coaches did CPR, an AED was not available. The Acampora family pushed for legislation in New York state for AEDs to be available at all schools. 76 lives have been saved in NY because AEDs were required in all schools.

Our current legislation in Connecticut requires that AEDs be available in all schools but only if funding is available. (CGS 10-212d) The passing of that law was a step in the right direction however "if funding available" gave schools the right to not follow through and get AEDs. Would we keep the same conditions for emergency devices such as a fire extinguisher? We all know they save lives. They may never be used but we still make them available just in case. We should do the same with AEDs. 76 lives have been saved with AEDs available in NY alone; we should do the same thing in Connecticut.

To learn more about Sudden Cardiac Arrest and CPR/AED education, please visit the American Heart Association website at www.heart.org What you learn may save a life.