# Backgrounder for AB1473 CPR Training in High School

#### Summary

Sudden cardiac arrest (SCA) is a leading cause of death in the U.S. with upwards of 350,000 out-ofhospital deaths reported annually. SCA is also the <u>number one</u> killer of student athletes and a <u>leading</u> <u>cause</u> of death on school campuses. National Emergency Medical Services Information System data estimates <u>23,000</u> youth are lost each year. It is well documented that the average SCA survival rate has been stuck at a mere <u>10%</u> for the last three decades, and that increased survival is directly linked to bystanders starting hands-only cardiopulmonary resuscitation and using an AED.

To date, 41 states require CPR training as part of high school curriculum. California's AB 319 (2015) established the instruction of hands-only CPR training in high schools requiring a health class to graduate. While this was an important step towards addressing SCA as a public health crisis, the majority of the state's school districts do not have a health requirement and so thousands of youth who are the next generation of life savers are being denied critical skills that will impact their future families, workplaces and communities. AB 1473 extends this learning requirement to be included in either health or physical education classes, the latter being a statewide graduation requirement. It also supports health equity across diverse socio-economic school districts, which combats the reality of lower survival rates in low-income and more racially diverse areas due to lower rates of bystander CPR.

### Background

The facts of SCA survival are clear. The average on-scene <u>arrival</u> for EMS is six to 13 minutes from when 911 is called. An SCA victim needs immediate emergency intervention within the first three to five minutes of collapse. Delays in CPR and an AED use <u>decreases</u> the chance of survival by 10% each minute. Immediate bystander hands-only CPR can <u>triple</u> a victim's chance of survival. An AED used in the first minute can increase survival to <u>90%</u>. AEDs are a critical component of cardiac emergency response training, as evidenced by several studies that show vastly increased survival rates when AEDs are utilized. Several observational studies cited by the <u>American College of Cardiology</u> show an average survival rate from 64% to 72% when AEDs are used by bystanders, the results of which are supported by the National Association of <u>School Nurses</u> cardiac emergency preparedness education based on a two-year prospective <u>study</u>.

Alarmingly, <u>70%</u> of Americans feel helpless to act during a cardiac emergency because they do not know how to perform CPR. And a <u>Harris Poll</u> cited that the majority of American's are more confident responding to a natural disaster, fire or choking victim (~75%) then they are using an AED (37%). According to <u>CARES</u>, the Cardiac Arrest Registry to Enhance Survival, 74% of cardiac arrests happen at home, meaning many will be faced with saving a loved one. But in California alone, only ~40% of SCA victims receive bystander CPR and just ~7% a bystander-applied AED.

Further, the neighborhood in which a person suffers SCA may dramatically affect the odds of survival. This is in part due to lower rates of bystander cardiopulmonary resuscitation (CPR) in low income and more racially diverse areas. A witnessed sudden cardiac arrest victim in low-income <u>Black</u> and <u>Hispanic</u> neighborhoods is less likely to receive CPR. <u>Black and Hispanic</u> persons are less likely than White persons to receive bystander CPR regardless of the neighborhood where the arrest occurred. Compared to White children, CPR is 41% <u>less likely</u> for Blacks and 22% less likely among Hispanic children.

As a national agenda through the Department of Health and Human Services, <u>Healthy People 2030 Heart</u> <u>Disease/Emergency Preparedness objectives</u> include increasing the rate of bystander CPR (<u>PREP-01</u>) and use of an AED (<u>PREP-02</u>). The American Academy of Pediatrics has long <u>supported</u> mandating CPR/AED training in all public and private schools. While current state law is to include this instruction in high

# Backgrounder for AB1473 CPR Training in High School

school health classes, an informal survey of the state's largest school districts as well as San Diego County school districts revealed that just 3 in 12 require a health class as a graduation requirement (Los Angeles Unified, San Diego Unified, Fresno Unified, Long Beach Unified, Elk Grove Unified, San Francisco Unified, San Bernardino City Unified, Capistrano Unified, Grossmont Union High School District – no health requirement; Escondido Union High School District, Poway Unified, Sweetwater Union – health required)

According to the CDC's <u>WSCC Model</u>, (Whole School, Whole Community, Whole Child)—the framework for addressing health in schools— schools play a critical role in promoting the health and safety of young people and establishing lifelong behavior, which is why AB 1473 seeks to collaborate more comprehensively with schools to advance this public health initiative and promote health equity in California's diverse communities. A recent study showed just over <u>75%</u> of young adults who did a single, 20-minute CPR training session— either face-to-face or with virtual reality— said they'd be willing to perform CPR on a stranger.

Last year in Sacramento legislators <u>recognized</u> three boys who saved their friend who went into cardiac arrest on a school basketball court. Toby called 911, Mason started chest compressions, which he learned in his high school PE class, and Nate retrieved the AED, which he learned about in a past CPR class. In short, Mikey's life was saved because the boys were taught how.

Similarly, <u>Ryan Chian</u> was practicing with his San Jose Spartans AAU teammates when he went into sudden cardiac arrest. Lifeguards Ian and Molly Hanaray were working a shift nearby at the Campbell Community Center Pool, and had just completed CPR training, came to Ryan's aid by using CPR and an AED, which doctors at Stanford Health say saved Ryan's life.

This is sharp contrast to the Wilson family, who lost their 17-year-old daughter, <u>Morgan</u> in 2014 after she collapsed at tennis practice and no one performed CPR, and to <u>the Los Angeles Unified family</u> who received \$9.5 million from the district after their son died during PE because bystanders did not call 911 nor perform CPR or apply an AED.

We can and should do better to equip all youth with this life-saving training as they have the power to not only save a life now, but to increase the survival rate as they apply these skills in their future families, workplaces and communities.

### **Current Law**

AB 319 (2015) requires high schools where a health course is a graduation requirement to include instruction in performing compression-only cardiopulmonary resuscitation (CPR) as part of the course and encourages those entities to provide pupils instruction on the use and importance of an automated external defibrillator (AED)

#### This Bill

AB 1473 would amend current law to:

- Require the instruction of hands-only CPR and use of an AED in either a health or physical education (PE) class as part of a graduation requirement
- Require student athletes who opt out of PE and have no health class requirement to participate in the above instruction as part of their sports program