

## What Saved His Life: How the Immediate Actions of an Athletic Trainer Made a Difference

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High school student-athlete deaths have scarred the nation's landscape this year, particularly those related to football. Thus far, there have been 19 reported cases for the fall of 2015.<sup>1,10,11</sup> These cases resulted from in-season and out-of-season activities, to direct and indirect causes, to on-field and off-field scenarios.<sup>1</sup> Football related activities include not only practices and games, but also conditioning drills, resistance training, and individual workouts to prepare players for competition.

To give you some perspective of football related deaths in this population, a study by the National Center for Catastrophic Sport Injury Research documented 16 football related deaths in 2014.<sup>5</sup> From 1931-2014, fatalities directly related to football activities were most prevalent in the high school setting, with an astounding 66.4%, compared to the 8.6% at the collegiate level.<sup>5</sup> Furthermore, when it comes to cardiac-related deaths, only 1 out of 10 student-athletes who suffer from sudden cardiac arrest survives.<sup>12</sup>

As much as we hear about cases with tragic endings, there are encouraging stories to share. This one illustrates how the right person was in the right place at the right time, helping to save a young man's life. The incident that almost claimed Andrew Parks' life on November 17<sup>th</sup>, 2015 was set in motion through a series of events that occurred well before that day, helping him beat the odds (see statistics above). This involved more than just coincidence, or maybe faith if that is what you believe in. The fact that Hurricane High School had an athletic trainer (AT), Brian Sigman, and that he was accessible on that fateful afternoon was a crucial factor.

Brian was notified via phone call around 5:00PM that a student-athlete was unresponsive in the school's weight room. Within 3 minutes of the call, Brian arrived on-scene. He assessed the situation and executed his emergency action plan – having an individual call EMS, another retrieved the automated defibrillator (AED), and he performed cardiopulmonary resuscitation (CPR). The ambulance took approximately 10 minutes to reach the high school campus. Medical procedures continued when EMS arrived. In all, the victim was without a pulse for over 20 minutes, the AED was used several times to attempt to restart the heart. According to information from the American Heart Association, for every minute that passes without CPR and use of an AED, the chances of survival decrease by 7-10%.<sup>7</sup> Once initial care was given at Teays Valley Memorial, Andrew had to be flown to Cincinnati for further evaluation. The physician in Cincinnati who oversaw his case applauded Brian for his immediate



*Picture: This is recent photo of Andrew Parks (left) and Brian Sigman (right), reuniting in the high school's weight room where the incident occurred.*

response, and credited his actions to saving Andrew's life. An athletic trainer, like Brian, is trained to prepare and execute an emergency action plan in situations such as this. It was later identified that Andrew had a heart condition called long QT syndrome.<sup>2-4</sup> This condition resulted in an erratic heart rhythm that caused it to suddenly stop beating.<sup>13</sup> The best chance of restarting the heart in this situation is to apply an AED, as soon as possible. The availability of the AED on-site was a large contributor to the victim's prognosis. Andrew is currently making progress towards his recovery and has since returned to school.

To fully appreciate this story, there is information you need to know to set the scene. Firstly, the incident occurred during an off-season football workout, which does not mandate that an AT be present. In addition to that, since there was no football practice or in-season game/match of any other sports, there was not a guarantee that an AT would be on campus. West Virginia state law only requires that an AT be present during high school football practices and games.<sup>9</sup> For example, in Kanawha County high schools, the AT coverage is only part-time; meaning that an AT would not have been available. Hurricane High School is fortunate to be in Putnam County where they hire full time ATs, not part-time. Hurricane has about 500 student-athletes with a student body that is approximately 1,600 strong.<sup>6</sup> Since the 2010-2011 school year, Putnam County School District has hired one full-time AT for each of their four high schools.<sup>8</sup>

Many of the instances reported this past football season resulted in heartbreaking endings, but where there is darkness, there is also light. In this story, because an athletic trainer (AT) was present and able to intervene in time, it made the difference in the life or death. In efforts to provide the appropriate medical care for high school student-athletes, including those outside of football, school districts should consider hiring ATs to serve this population. A study<sup>14</sup> through the Korey Stringer Institute indicated that approximately 40% of secondary schools have access to a part-time or full-time AT. Are you, or is your daughter, your son, your grandchild a part of the 60% that does NOT have the appropriate medical care? How safe would you feel knowing that a certified healthcare professional, such as an AT, is there to protect the well-being of student-athletes? Encourage your school board and state legislators to consider employing ATs so that more positive stories like Andrew's will be heard.

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