

Early CPR Helps Save Lives As Well As New Strategy From Local EMS

by Natalie Head
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MARYVILLE - Millions saw Damar Hamlin of the Buffalo Bills collapse from cardiac arrest earlier this week. “This was traumatic for everyone, especially Hamlin’s family and teammates but also for so many others involved and witnessing the event.

More than 70% of cardiac arrests that do not happen in the hospital, occur in a home where access to medical professionals and an AED is not as readily available,” said Mariell Jessup, M.D., FAHA, chief science and medical officer of the American Heart

Association. “Recognizing a cardiac arrest, calling 911 immediately, performing CPR and using an AED as soon as it is available are critical for survival. Statistically speaking, it is likely that the person will need to be helped by a family member or a friend in order to survive.”

There are so many timely lessons to be learned after this tragic event, but most importantly, the lesson of timely CPR. “As you can imagine, despite the best efforts of our EMS teams, if no or ineffective CPR happens prior to EMS arrival, good outcomes are difficult,” said Steve Nikolaisen EMT-P,FP-C, Anderson EMS System Coordinator. “As we all know by now, the “chain of survival” begins with what care is delivered at the community level before EMS arrives and also what happens after the patient arrives at the hospital.”

Earlier last year Nikolaisen developed a concept that would provide a means for our EMS providers to achieve a 90% compression fraction while performing CPR. “Compression fraction accounts for the time spent performing chest compressions during cardiac arrest relative to the time spent performing other required tasks (check for unresponsiveness, check for a pulse, apply pads, delivery shock, pause for ventilation, establish an airway, etc.),” explained Nikolaisen. “The concept behind 90% high performance CPR is that all actions outside of performing compressions are done with “pit crew” precision to minimize any off the chest time.” The concept was presented to both Edwardsville FD and Glen Carbon FPD who have implemented the strategy. Teams were trained by utilizing “Apollo” a high fidelity manikin.” “The advantage in utilizing “Apollo” is that we are provided with instant and recorded feedback in reaching the 90% compression fraction goal,” explained Nikolaisen. “We successfully developed an approach and skill set that allowed for us to achieve our goal of 90% or greater compression fraction.” Since July, crews from these departments implement 90% high performance CPR and are seeing unprecedented levels of Return of Spontaneous Circulation (ROSC) being achieved in the pre-hospital setting. “With the improved levels of ROSC we appear to have tripled our neurologically intact to discharge numbers from the previous 6 months.” In non-clinical terms, this strategy is saving lives!

With American Heart Month right around the corner (February), now is a perfect time to get educated on the importance of bystander CPR. Here are some great resources from the American Heart Association:

Bystander CPR <https://cpr.heart.org/en/resources/bystander-cpr>

Hands Only CPR Video <https://www.youtube.com/watch?v=dbw4Whd0bJ0>

Anderson Hospital and its EMS Partners have plans for more education and events in February.