

MEHLVILLE FIRE PROTECTION DISTRICT'S OPTIMIZED CARDIAC ARREST CARE ACHIEVE HIGHER SUCCESS RATE WITH PATIENTS THAN THE NATIONAL AVERAGE

Mehlville Fire Protection District Firefighters and Critical Care Paramedics respond to greater than 17,000 requests for service annually. A majority of those incidents are Emergency Medical Services(EMS) related.

The District has spent considerable time, energy, and financial resources in ensuring the best possible care for District residents and visitors, particularly when it comes to the care of the cardiac arrest patient. In 2014, the late Dr. Christopher Bosche MD introduced an optimized, innovative approach to cardiac arrest care that continues to be improved upon to this day.

Cardiac arrest is defined by the American Heart Association as the abrupt loss of heart function in a person who may or may not have been diagnosed with heart disease. Patients who suffer cardiac arrest require CPR and advanced interventions in order to achieve the best possible outcome. Cardiac arrest is often fatal if steps aren't taken immediately to correct the underlying problem.

The first goal in cardiac arrest care is to optimize chest compressions and provide defibrillation (an electrical shock to the heart). Thereafter, Mehlville Firefighters and Paramedics work together as a team to deliver medications and breathing support to improve the chance of resolving cardiac arrest successfully.

Failure to restore a heart beat quickly will ultimately result in death. Unfortunately, even if the heart beat can be restored, a lack of oxygen to the brain during the period of cardiac arrest can result in a poor neurological outcome. As such, it is essential that responders provide a prompt and optimized system of care so that patients can achieve the best possible outcome.

According to the Cardiac Arrest Registry to Enhance Survival(CARES), a national database for cardiac arrest outcomes, approximately 1 in 12 patients who suffer a cardiac arrest survive with a meaningful neurologic outcome when using the national data set.

At Mehlville Fire Protection District, outcomes are improved significantly when compared with the state and national data set. Residents and visitors of Mehlville Fire Protection District are approximately 40% more likely to achieve a meaningful neurologic outcome after suffering a cardiac arrest event.

The system of care surrounding cardiac arrest is continuously monitored and improved upon. The District's current physician medical director Jeffrey Siegler MD and District leadership staff continue to instruct and educate employees on best practices so as to allow patients to achieve the best possible outcome.