In 1899, a pair of physiologists in Geneva, Switzerland discovered that small electrical shocks could be applied across the human heart to induce ventricular fibrillation. In 1947, a defibrillator was used for the first time on a 14-year-old boy undergoing an operation for a congenital heart defect. Since then, there have been many advancements to automated external defibrillators (AEDs) leading to more portable, affordable, and user-friendly options for saving lives. The nature of electrical work means that workers are exposed to electrical hazards, the deadliest being electrical contact incidents that can lead to fibrillation of the heart.

This physiological response to an electrical shock reaching the heart can be deadly. In fact, ventricular fibrillation (VF) is the most common cause of death following an electrical incident according to research published in the National Library of Medicine[1]. This is a concern for electrical contractors who have employees working in high-risk electrical settings. Many contractors have decided that the benefits of having these life saving devices readily available outweigh the cost. When discussing saving lives, it can be uncomfortable to put a price on what you would be willing to pay, but contractors only have so much discretionary funds for new initiatives. Having said that, costs per AED units have been dropping, making it easier than ever to demonstrate a return on investment to decision makers.

Training is another consideration. OSHA does not require AEDs or for your employees to be trained in their use. An emergency response with first aid trained employees on site is the requirement but many contractors choose to send their employees to all inclusive, First Aid, CPR, and AED training classes. This is a best practice since AEDs may be available on jobsites, even if it's not your equipment. Public places, office buildings, and substations are just a few examples. Having your employees trained, familiar and ready to respond regardless of where an AED came from is important. There are many providers of this type of training. The best known are the American Heart Association, the Red Cross, and the National Safety Council.

I encourage your company to take a fresh look at AEDs. Consider their design and functionality, their ease of use, and to what extent they could be deployed into the field. Engage training providers and see what the best options are for upskilling your folks in AED use in addition to other life saving techniques.

NECA has developed an AED use survey that will be sent out to members soon. The survey will evaluate how many members are using AEDs and to what degree. I ask that you please take a few minutes to complete the survey and share information that can help us develop guidance and programs that support AEDs use. Together we can identify best practices and find solutions that make AEDs easier to deploy and manage. Afterall, saving a life is the greatest return on an investment we can hope for.

Thank you,

Mike Starner
NECA Safety

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[1] Risk of cardiac arrhythmias after electrical accident: a single-center study of 480 patients.