

Being Prepared for a Medical Emergency in the Workplace

Part 2 – AED

(Automatic External Defibrillator)

By

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If you read my previous article (thank you!), it's possible that I actually talked you into installing a first aid kit. Here I come again asking you to be prepared, and again you ask, "*Now what? If there's an emergency, I'll call 9-1-1! I'll just bet this is going to cost me more money!*"

And again, you're right. You have reviewed the Occupational Safety and Health Standards (OSHA) 1910.151 to assure that your shop is in compliance, but suppose, just imagine, someone has a heart attack at your workplace. It could be an employee, a customer, a visitor... it could be ***you!***

Here's what the American Heart Association has to say about it:

“Coronary heart disease is the No. 1 cause of death in the United States.”

In a cardiac arrest, time = muscle. Every moment that the heart circulation is compromised is critical. If the victim receives appropriate medical care ***within the first 'golden hour'*** after the first symptom, there is a good chance of recovery. Sadly, 30% of heart attack victims do not receive appropriate care that quickly.

The keys to providing proper care are early recognition and treatment. That means that someone, a bystander or the victim must recognize that there is an emergency and that the 9-1-1 must be called.

If you suspect a person may be having a heart attack, Call 9-1-1.

Do not drive her to the hospital yourself, even if you are parked in front of a hospital when it happens! The emergency medical system staff at the 9-1-1 center will identify which hospital is prepared to treat the emergency. Because of patient-load or staffing issues at the hospital, or lacking the technology or the proper specialization, it may be more appropriate to air-lift the patient to a hospital many miles away. If you take the victim to the wrong hospital, you are not doing her any favor because precious seconds will be wasted. The lost time may mean that she will never fully recover, or that she will not recover at all.

If you take the victim to the wrong hospital, you waste precious minutes.

The lost time may mean that he will never fully recover, or that he will not recover at all.

You may think you're doing your friend a favor by running all the red lights to get to a nearby hospital, but you may in effect be killing him. I won't even address the foolhardiness of trying to drive yourself to the hospital.

Do I have your full attention now? Do you know the signs and symptoms of a heart attack? Do you know that it's possible to have a heart attack without having **any** of the symptoms on that list?

**If you suspect that someone is having a heart attack,
call 9-1-1, start CPR, and use the AED as soon as possible.**

Uh-oh... did I hear you ask, "What is an AED?" I guess I got a little ahead of myself. The purpose of this article is to convince you to install an Automated External Defibrillator right there on the wall next to your nice new first aid kit.

I knew it!! You want me to spend even more money?!

Well, many of my close acquaintances and family would happily verify that I am certifiable in some ways, but they do respect me as a nurse and health care provider despite that, so hear me out, please.

Every year in the U.S., over 166,000 people experience a sudden cardiac arrest. Only about 6% of them survive. About one in four (between 20 – 38%) of cardiac events begin with an abnormal heart rhythm called ventricular fibrillation (VF). If VF is treated quickly, more than half of these victims will survive. The treatment is a simple non-invasive procedure called defibrillation. The technology has advanced such a degree that specialized training is not needed to administer this life-saving treatment. **You** could do this.

According to the American Heart Association, if you witness a person collapsing from cardiac arrest due to VF, **and you call 9-1-1 and start CPR with an AED within 3-5 minutes, and EMS arrives within 8-12 minutes** the victim has a 50 – 74% chance of survival. However, if CPR is delayed, or EMS is delayed, the chance of surviving VF is only 1 – 2%.

That victim could be you... by the way, how's your blood pressure these days? Sorry, that was a low blow. I just want you to take this very personally. It could be someone that you love very much that could be saved. Can you think of a more precious gift than life?

Many schools, shopping malls, airports, and other buildings have AEDs mounted in conspicuous locations. Automatic external defibrillators (AEDs) have become smaller (about 8 pounds), more affordable, and much simpler to use than the bad old days when we watched Johnny Gage grease up the paddles and yell, "Clear!" on *Emergency 911*. AEDs are now available for between \$1000 and \$2000 and will literally talk you through the emergency. Check with your local emergency service providers – you may be able to purchase the AED at a discount and then you may be able to get the replacement

batteries and disposable supplies for free. You may also be able to get federal or state money to purchase an AED. There are several different models, but all are user-friendly.



Mount the AED on the wall in an easily accessible location, next to the first aid kit. Unless your operation is positively huge, one easily accessible AED is probably enough.

The AED comes with a training video that all of your staff should view once a year. The person responsible for maintaining the first aid kit should now take on the task of keeping the AED ready for use. This is actually a much simpler task than restocking the band-aids. A green indicator light shows that the battery is ready, and an unbroken seal shows that it hasn't been used.

Before purchasing an AED, consult with your local emergency services. Ask about funding as well as regulations. You should also review the current regulations related to AEDs in your state at the National Conference of State Legislatures website <http://www.ncsl.org/programs/health/aed.htm>.

Providing an AED and first aid supplies for your employees and visitors is like the insurance coverage you carry. You hope that you'll never need it, but if you ever do need it you're very happy to have made the investment.

Attachment 1: Occupational Safety and Health Standards 1910.151

References:

OSHA code of federal regulation 29 CFR 1910.151

American Heart Association (AHA): www.americanheart.org
<http://www.americanheart.org/presenter.jhtml?identifier=4483>
<http://www.americanheart.org/downloadable/heart/1200089895981FS27SDCA08.pdf>

American Red Cross (ARC): www.redcross.org
<http://www.redcross.org/services/hss/courses/workplace.html>

Lowes Commercial Services:
<http://www.lowesforpros.com/creating-an-automatic-external-defibrillator-program>

National Conference of State Legislatures: <http://www.ncsl.org/programs/health/aed.htm>

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 - **Part Title:** Occupational Safety and Health Standards
 - **Subpart:** K
 - **Subpart Title:** Medical and First Aid
 - **Standard Number:** 1910.151
 - **Title:** Medical services and first aid.
 - **Appendix:** A
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[1910.151\(a\)](#)

The employer shall ensure the ready availability of medical personnel for advice and consultation on matters of plant health.

[1910.151\(b\)](#)

In the absence of an infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid. Adequate first aid supplies shall be readily available.

[1910.151\(c\)](#)

Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

[63 FR 33450, June 18, 1998]