



**MISSISSIPPI STATE UNIVERSITY™**  
MS AGRICULTURAL AND FORESTRY  
EXPERIMENT STATION

# MAFES DAWG TRACKS

AED stands for Automated External Defibrillator. They are to be used, along with CPR (cardiopulmonary resuscitation), if you find someone unconscious and not breathing. AEDs can only help a victim if they have gone into cardiac arrest. However, if you are not sure if the person is in cardiac arrest or not, that is okay. The AED is designed to be easy to use. It audibly tells you what to do and automatically evaluates if a shock is necessary or not.

## What is cardiac arrest?

Cardiac arrest occurs when the heart's electrical system starts to misfire. This gets the heart out of its normal rhythm and it starts quivering where it can no longer pump blood. This is called ventricular fibrillation. This lack of blood flow almost immediately causes the victim to lose consciousness and stop breathing.

## Why is having an AED so important?

The only way to stop ventricular fibrillation is with a controlled shock that causes the heart to restart in a regular rhythm and pump blood again. This is called defibrillation, and is what an AED does. It is most likely to succeed if done in the first 4 minutes after someone collapses. Most emergency medical services (EMS) have at least a 10 minute response time and, of course, much longer for rural locations.



## Steps to take if someone has collapsed:

1. Try to wake them.
2. Check to see if they are breathing normally. Making a gurgling/snoring sound is not considered normal breathing.
3. Call 911 and get the AED (or let someone else do this step; if you are trained in CPR start it immediately).
4. Turn on the AED and follow voice prompts as it guides you through the process.
  - Remove all clothing from chest area.
  - Stick electrode pads to bare chest in location pictured on pads. It may be necessary to shave a hairy chest to make the pads securely stick (razors are in the supply bag with AED).
  - AED will only shock if cardiac arrest is the problem.

Once put on, do not remove the AED pads even if the victim wakes up. They could go back into cardiac arrest again. Continue with CPR or as AED voice prompt tell you until the EMS arrives and takes over.

- ✓ **Know the location of the nearest AED and tell you co-workers.**
- ✓ **Get hands-on training in CPR and AED use to help quickly and act without panic.**
- ✓ **Ensure the AED is inspected monthly for a good battery and pads within use date.**

For more info contact:  
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## Sources:

<https://www.heart.org>  
Physio-Control instructional dvd