

# MAFES Dawg Tracks

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MISSISSIPPI STATE UNIVERSITY  
MS AGRICULTURAL AND  
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*Safety Tips: Performing CPR*

Cardiopulmonary Resuscitation (CPR) is a life-saving technique useful in emergencies, including heart attack or near drowning, in which someone's breathing or heartbeat has stopped. The American Heart Association recommends that everyone-untrained bystanders and medical personnel alike – begin CPR with chest compressions.

According to statistics, 400,000 cardiac arrests occur each year. By administering CPR you can give a victim 2 or 3 times better chance of surviving. Within 4 minutes of a cardiac arrest, a person begins to lose oxygen causing permanent brain damage and within 8 to 10 minutes death can occur.

## ADVICE FROM THE AMERICAN HEART ASSOCIATION:

- **Untrained** – If you aren't trained in CPR-then provide hands-on CPR only. That means uninterrupted chest compressions of about 100 per/minute until paramedics arrive, which will be described later in the paper. You don't need to try rescue breathing.
- **Trained** –Ready to go- If you are well-trained and confident in your ability, begin with chest compressions instead of first checking the airway and rescue breathing. Start CPR with 30 chest compressions before checking the airway and giving rescue breaths.
- **Trained but Rusty** – If you've been previously trained, but not so confident in your abilities, then just do chest compressions at the rate of 100 per/min.

This applies to adults, children, and infants-not newborns.

This will keep oxygenated blood flowing to the brain and other vital organs until more definitive medical help can restore the heart to a normal heart rhythm.

## BEFORE YOU BEGIN CPR-

- ✓ Is the person conscious or unconscious?
- ✓ If the person appears unconscious-tap or shake their shoulder and ask, "Are you OK?"
- ✓ If the person doesn't respond and 2 people are present-ask one to call 9-1-1 and the other to start CPR. If you are the only one there-call 9-1-1 and then start CPR.
- ✓ If there is an AED available-deliver 1 shock if instructed by the device, then start CPR.

## REMEMBER TO SPELL -C-A-B-

The American Heart Association recommends using the acronym CAB to help you remember the order to perform the steps of CPR – compressions-airway-breathing.

## COMPRESSIONS:

- Put the victim on their back on a firm surface.
- Kneel next to the victim's neck and shoulders.
- Place the heel of 1 hand over the victim's chest between the nipples. Place your other hand on top of the first hand. Keep your elbows straight and position your shoulders directly above your hands.

- ✓ Use your upper body weight (not just your arms) as you push straight down (compress) the chest at least 2 inches (5 centimeters). Push hard at a rate of about 100 compressions a minute.
- ✓ If you haven't been trained in CPR, continue the chest compressions until you see movement in the chest or until the emergency medical personnel takes over. If you are trained in CPR, continue checking the airway and rescue breathing.

## AIRWAY: Clear the Airway

- If you're trained in CPR and you've performed 30 chest compression, open the person's airway using the head-tilt, chin-lift maneuver. Put your palm on the person's forehead and gently tilt his head back. With your other hand gently lift the chin forward to open the airway.
- Check for normal breathing, taking no more than 5 or 10 seconds. Look for chest motion, listen for normal breath sounds, and feel for the person's breath on your cheek and ear. Gasping isn't considered to be normal breathing. If the person isn't breathing normally and you're trained in CPR, begin mouth-to-mouth breathing. If you believe the person is unconscious from a heart attack and you haven't been trained in emergency procedures, skip mouth-to-mouth breathing and continue chest compressions.

## BREATHING: BREATHE FOR THE PERSON

Rescue breathing can be mouth-to-mouth breathing or nose breathing if the mouth is seriously injured or can't be opened.

- With the airway opened (using the head-tilt, chin-lift maneuver) pinch the nostrils shut for mouth-to-mouth breathing and cover the person's mouth with yours, making a seal.
- Prepare to give 2 rescue breaths. Give the 1<sup>st</sup> rescue breath-lasting 1 second – and watch to see if the chest rises, if it does rise, give the 2<sup>nd</sup> breath. If it doesn't rise, repeat the head-tilt, chin-lift maneuver and give the 2<sup>nd</sup> breath. 30 chest compressions followed by 2 rescue breaths is considered 1 cycle.
- Resume chest compressions to restore circulation.
- If the person hasn't begun to move in 5 cycles (about 2 minutes) and automatic external defibrillator is available, apply it and follow the prompts. Administer 1 shock, then resume CPR-starting with chest compressions-for 2 more minutes before administering a 2<sup>nd</sup> shock. If you're not trained to use an AED, a 911 operator or an EMT operator may be available to assist you by phone. If neither of these is available, continue CPR until there are signs of movement or emergency medical personnel takes over.

The above procedures involves CPR for adults only. CPR for children and babies will be discussed at another time.

**SAFETY RULES ARE THE BEST  
TOOLS**

**SAFE ACTIONS BRING LASTING  
SATISFACTION!**

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Excerpts: [www.mayoclinic.org/first-aid/first-aid-cpr/basics/art](http://www.mayoclinic.org/first-aid/first-aid-cpr/basics/art)