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Basic First Aid

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Presentation



First Aid Overview

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Disclaimer:

This presentation is for information and background only and is not intended to certify or train anyone in First Aid or CPR skills.

At Home



- In the U.S., about one-third of all injuries and 20 percent of injury deaths occur at home.
- For every home injury death there are about 650 nonfatal home injuries.

Effective First Aid

- Keeps a victim calm and helps them recover faster.



First Aid Provider

- A first aid provider is someone trained in:
 - The delivery of initial emergency procedures.
 - Using limited equipment to perform a primary assessment and intervention until Emergency Medical Services, or EMS personnel arrive.



Provider Responsibilities

The essential responsibilities of a first aid provider are the following:

- Recognizing a medical emergency
- Making the decision to help
- Identifying hazards and ensuring personal safety
- Activating the EMS system
- Providing supportive, basic first aid care

Emergency Medical Services (EMS)



- When you call 911, medical professionals respond quickly to where the injured or ill person is located.

When to Activate?

- Immediate EMS activation is recommended when:

- A person is unresponsive,
- A significant mechanism of injury has occurred,
- A warning sign of serious illness exists, or
- The severity of a person's condition is unclear.

Activating EMS

Ask someone else to call 911; ask them to see if there is a Defibrillator.

IF ALONE, CALL 911
and PUT ON SPEAKER
and GIVE CARE.



EMS Dispatcher



- An EMS dispatcher will answer the call. The dispatcher will ask for basic information:
 - Type of emergency
 - Location
 - The number and conditions of those who are ill or injured
 - What care is being provided
- Answer the questions as clearly as possible.
- Only hang up if directed to.

Control of Bleeding



Take a **CLEAN CLOTH** or clothing and hold against bleeding area.

Do **NOT** take off the first cloth if blood soaks through.

Add more cloth and push hard until bleeding stops.

Call 911 if bleeding doesn't stop.

Early Recognition of Serious Illness



.If you don't know the person, introduce yourself and say if you know some first aid.

- Ask if they would like you to help them. If yes, quickly decide if you need to call 911.

When in Doubt



- If injury seems serious, or you are not sure, activate EMS.

Just a Little Heart Attack

<https://m.youtube.com/watch?v=t7wmPWTnDbE>

National Poison Help Hotline



- Calling **1-800-222-1222** in the U.S. transfers you to your regional poison control center.
- Poison centers can quickly provide information about the immediate treatment of any substance.
- A provider can help the poison center by clearly identifying the substance and providing details about the incident.

Pit Viper Snakes



- Venomous pit vipers, such as Cottonmouths, Copperheads, and Rattlesnakes strike once and leave a characteristic bite with single or double fang marks.
- Pit viper bites can cause an intense, burning pain and local swelling.
- Swelling may involve the entire limb within a few hours.

Dangerous Spiders



- There are certain spiders that can be dangerous to humans.
- This includes:
 - Black Widow
 - Brown Recluse



Tick Bites



- Ticks are blood-feeding insects that are typically found in tall grass and shrubs.
- When a tick bites, it attaches itself firmly to the skin.
- The biggest concern with tick bites is the exposure and transmission of infectious disease.

Human and Animal Bites



- Human and animal bites are **SERIOUS!** Get away from animal.
- Bites from animals such as raccoons, skunks, bats, and foxes can also cause rabies. Left untreated, rabies is fatal.
- Control any bleeding. Wash the bite and flush with large amounts of water.
- Seek professional medical attention.

Heat Exhaustion



Happens quickly for children, older people and those not used to a lot of exercise.

PALE, COOL, SWEATY (moist) SKIN

Can get worse quickly and lead to HEAT STROKE

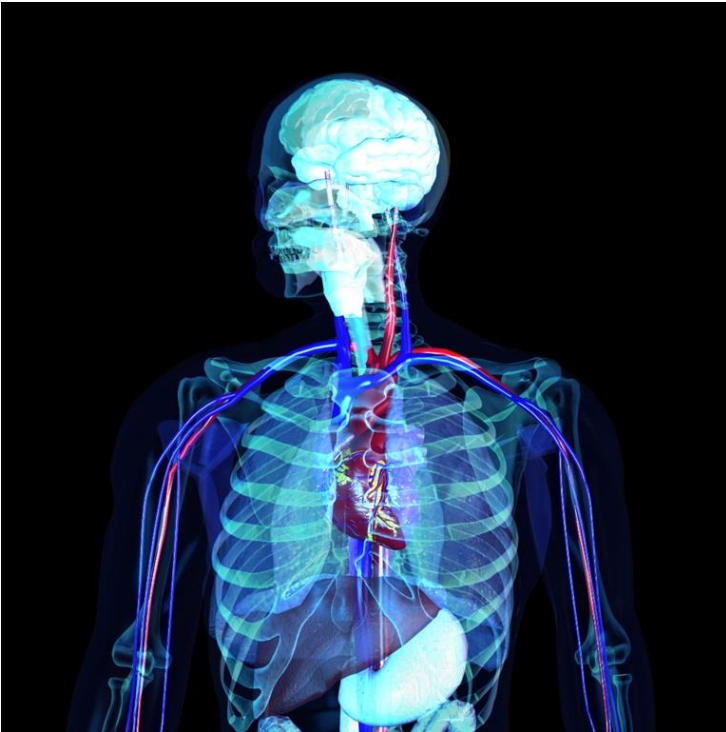
Move to shade/cool area.
Give fluids and allow to rest

Heat Stroke



- More serious than heat exhaustion
- Red, hot, sweaty skin
- If he stops sweating, LIFE THREATENING!
- CALL 911/Get an AED (defibrillator)
- Cool down immediately and put cold packs in groin, neck and under armpits.

Cold-Related Emergencies



- Cold, wet temperatures can result in a lowering of the internal body temperature.
- Hypothermia and frostbite are the most dangerous cold-related conditions.

Most Effective Move



- If you decide it is necessary to move someone, the most effective move to use is a drag.
- When using a drag, pull in the direction of the long axis of the body to keep the spine in line.
- Never pull on a person's head, or pull a person's body sideways.

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CPR and AED

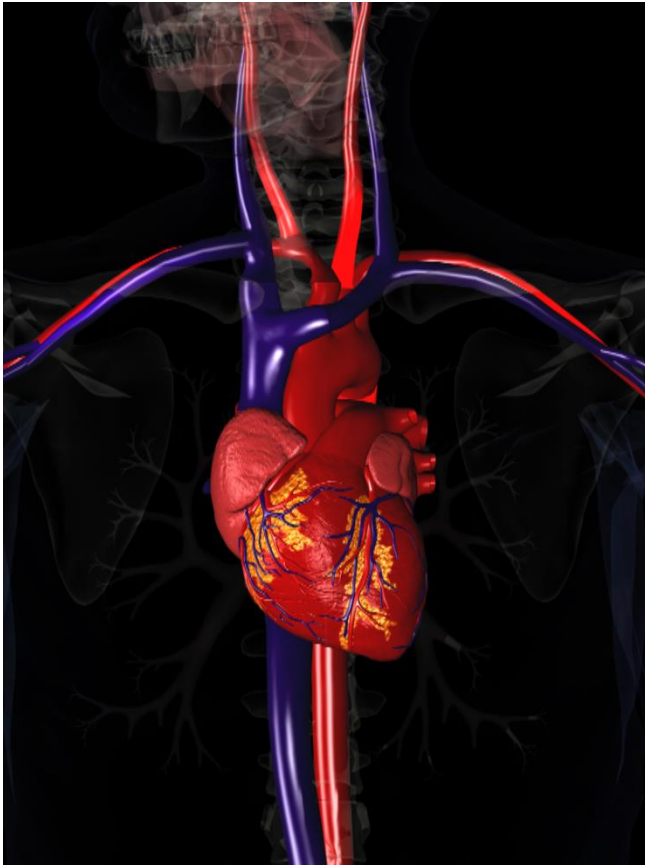
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Respiratory System



Circulatory System



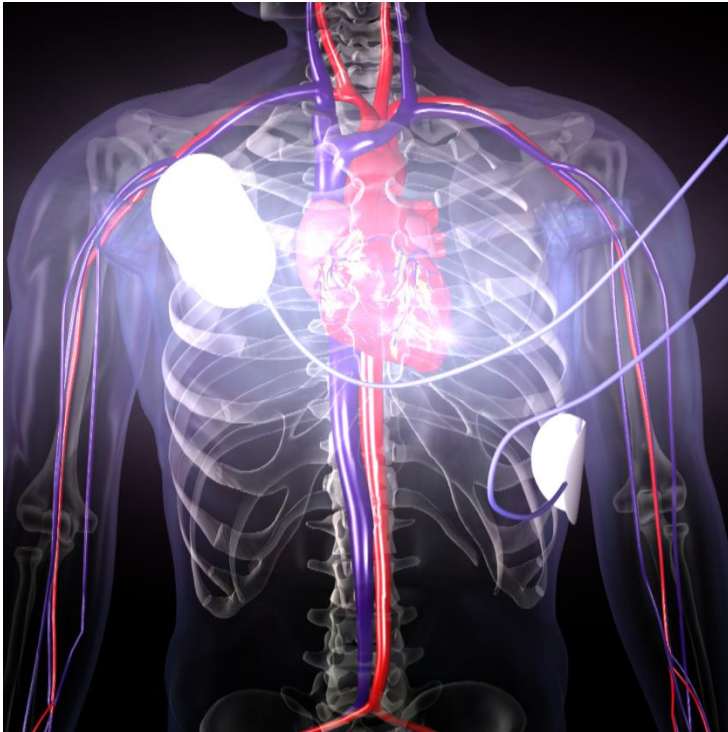
The Heart and How it works!

Cardiopulmonary Resuscitation (CPR)



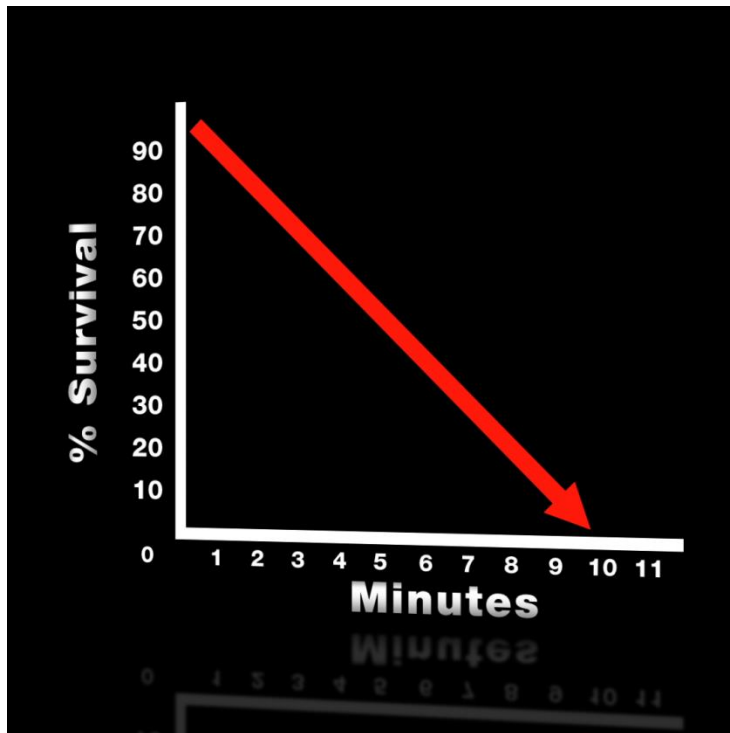
- Cardiopulmonary resuscitation, or CPR, allows a bystander to restore some oxygen to the brain through a combination of chest compressions and rescue breaths.
- By itself, CPR is only a temporary measure that can buy time until more advanced care can be provided.

Defibrillation



- The most effective treatment for ventricular fibrillation is defibrillation.
- To defibrillate, electrode pads are applied to the chest and an electrical shock is sent between the pads through the heart.
- This shock stops ventricular fibrillation so the heart's normal electrical activity can return.

Time is Critical



- For each minute a person is in cardiac arrest, the chance of surviving decreases by about 10 percent. After as little as 10 minutes, defibrillation is rarely successful.
- The amount of time it takes to recognize a problem, activate EMS, and have EMS respond and defibrillate is usually longer than 10 minutes. In most cases, it's too late.

Automated External Defibrillator (AED)



- An AED is a small, portable device that is simple for a minimally-trained person to use.
- Turning on an AED is as simple as opening a lid or pushing a power button. Once on, an AED provides voice instructions to guide you through its use.

Weak or Missing Links



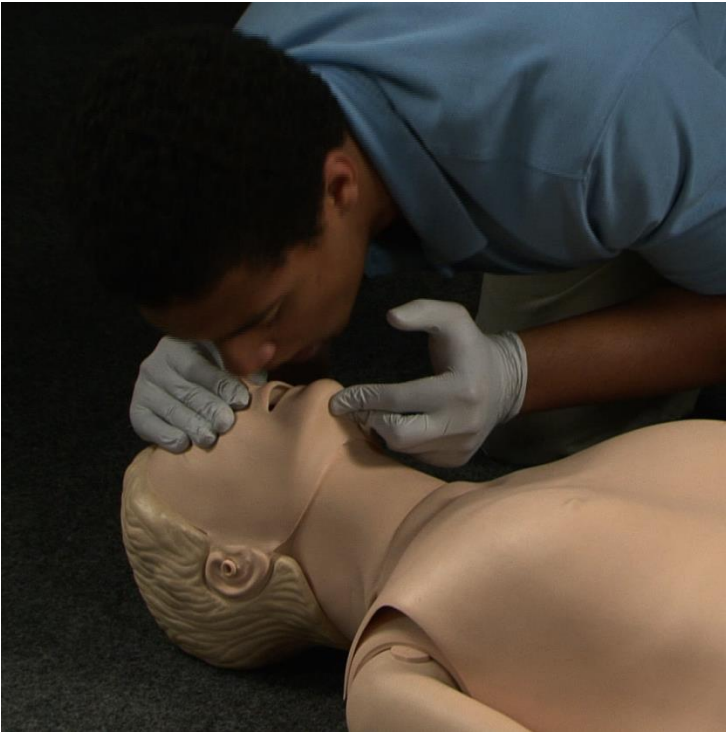
- If any one of the links is weak or missing, the chances for survival are greatly reduced. The greatest chance for survival exists when all links are working together.

Chest Compressions



- If the heart stops, it is possible to restore at least some blood flow by way of external chest compressions.

Rescue Breathing



- A provider may elect to not use barriers, depending on his relationship to the person and knowledge of the person's health status.
- Direct mouth-to-mouth rescue breaths can be performed using the same technique as with a CPR shield.

Unresponsive and Not Breathing – CPR

Skill Steps - Child



Give 30 Chest Compressions

- Place the heel of one hand on the center of the chest.
- Using upper body weight, push hard, at least $\frac{1}{3}$ the diameter of the chest, or about 2 inches.
- Push fast, at least 100 times per minute. Allow the chest to fully rebound.
- Compressions are tiring. If desired, use two hands, as with adults.

Unresponsive and Not Breathing – CPR

Skill Steps - Infant



Give 30 Chest Compressions

- Place two fingertips on the breastbone just below the nipple line.
- Push hard, at least $\frac{1}{3}$ the diameter of the chest, or about 1 $\frac{1}{2}$ inches in depth.
- Push fast, at least 100 times per minute. Allow the chest to fully rebound.

Unresponsive and Not Breathing – CPR

Skill Steps - Infant



Give 2 Rescue Breaths

- Tilt the head; lift the chin to establish an airway.
- Make the chest visibly rise with each breath, but no more.
- Take a fresh breath between breaths.

Automated External Defibrillators (AEDs)

- AEDs are designed to be simple to operate. Voice, lights, and screen instructions guide an operator in using the device.
- There are many different brands of AEDs, but the same basic steps for operation apply to all of them.



Using an AED

Skill Steps - Adult



If Advised, Deliver Shock

- If shock is advised, clear everyone from the person and press the shock button to deliver shock.

Choking



- Choking can occur when a solid foreign object, such as a piece of food or small object, enters a narrowed part of the airway and becomes stuck.
- On inhalation, the object can be drawn tighter into the airway and block air from entering the lungs.
- Your help is required to save the person's life.