

# ADULT CHILD INFANT CPR • AED • FIRST AID



# TRAINING MANUAL

Follows the latest American Heart Association® Guidelines



# **Course Descriptions**

Course Type:	Approximate	Topics Covered:
	Length:	
1) Adult CPR	1.0 hours – 1.5 hours	Prevention of cardiovascular disease, heart attack recognition and treatment, adult CPR, and conscious/unconscious choking emergencies.
2) Adult CPR/AED	2.0 hours – 2.5 hours	Prevention of cardiovascular disease, heart attack recognition and treatment, adult CPR/AED, conscious/unconscious choking emergencies.
3) Adult CPR/AED + First Aid	3.0 hours – 3.5 hours	Prevention of cardiovascular disease, heart attack recognition and treatment, adult CPR/AED, conscious/unconscious choking emergencies, stroke, seizures, shock management, allergic reactions, diabetic emergencies, poisoning and overdoses, bleeding control and burns, traumatic emergencies, environmental emergencies, and heat and cold emergencies.
4) Adult, Child, Infant CPR/AED	2.5 hours – 3.0 hours	Prevention of cardiovascular disease, heart attack recognition and treatment, adult, child and infant CPR/AED, and conscious/unconscious choking emergencies.
5) Adult, Child, Infant CPR/AED + First Aid	3.5 hours – 4.0 hours	Prevention of cardiovascular disease, heart attack recognition and treatment, adult, child, and infant CPR/AED, conscious/unconscious choking emergencies, stroke, seizures, shock management, allergic reactions, diabetic emergencies, poisoning and overdoses, bleeding control and burns, traumatic emergencies, environmental emergencies, and heat and cold emergencies.

## Please note:

Unconscious/conscious choking emergencies must be covered in every course. However, the child and infant choking topics are only required in those respective courses (i.e. 4 or 5).

Topics in red represent the First Aid curriculum – every student should receive a kit with gloves, gauze pad, and roller bandage.

**CLASS CHECKLIST**:

✓ CPR MANIKINS
✓ AEDS (IF REQUIRED)

- **V**ONLINE PRESENTATION
- ✓ TRAINING MANUALS
- **✓** REMOTE CLICKER

**PROJECTOR** (IF REQUIRED)

✓ LAPTOP (IF REQUIRED)

✓ WIFI ACCESS (IF NEEDED)

This CPR Society® training program follows and is consistent with the most current 2010 American Heart Association scientific guidelines and treatment recommendations from the International Liaison Committee on Resuscitation (ILCOR) and OF THIS MANUAL TO Emergency Cardiac Care (ECC).

The course meets or exceeds national standards and federal regulation guidelines for providing pre-hospital first aid and emergency care.

For more information, visit www.CPRSociety.org.



Daniel Kipnis

Our training curriculum was specifically developed with **YOU** in mind!

This includes program colorful pictures, engaging videos. and straight-to-the point instructions to give you the knowledge and skills necessary to respond to a variety of emergencies with confidence.

Congratulations on taking the first step to become a true lifesaver!

To Great Health,

**Daniel Kipnis**, NREMT Founder & CEO

## ICEBREAKER: START THE CLASS BY INTRODUCING YOURSELF AS THE INSTRUCTOR AND THEN GO AROUND THE ROOM AND ASK EVERYONE TO INTRODUCE THEMSELVES BY STATING THEIR NAME, ETC.

AUR CLASSES

This table of	TABLE OF CONTENTS		<b>ABBREVIATED TERMS</b>
	Concerns of Providing Emergency Care	1	IN THIS MANUAL:
contents shows	Emergency Action Steps, Scene Assessment, Glove Removal	2	
all of the course	Checking Unconscious Adult	3	CPR:
topics that	Recovery Position	4	CARDIOPULMONARY
topics that	Checking Unconscious Child or Infant	5	RESUSCITATION
are covered for	Removing Victims from Unsafe Scenes	5	HEOGOGITATION
the full course	Anatomy & Physiology Fundamentals	6	AED:
the full course.	Cardiovascular Disease & Heart Attack Overview	7	AUTOMATED
	Heart Attack Recognition & Treatment	8	
As CPR Society		8-9	EXTERNAL
	Adult CPR	10	DEFIBRILLATOR
offers 5 different		11	EA.
types of courses,		12	FA:
	CPR Summary	13	FIRST AID
you may be	Alternative CPR Method (Hands-Only CPR)	13	
teaching an	Automated External Defibriliator (AED)	14	CPR course topics
abbroviated	Adult & Child AED (>8 years old or >55 lbs)	15	
appreviated	Child & Infant AED (<8 years old or <55 lbs)	16	AED course topics
version of the	Medical Emergencies		[First Aid
program	Chaking Emergencies	17 21	
program.	Choking Emergencies	17-21	course topics
COUDCE TYDEC.	Stroko	22	
	Subre Solzuros & Shock	23	
- AVULI GPK	Diabetic/Sugar Emergencies	24	
- ADULT CPR/AED	Diabelic/Sugar Energencies	25	
- ADULT CPR/AED/FA	Poisoning & Overdoses	20	
- ADULT/PEDIATRIC	Traumatic Emergencies		
	External Bleeding and Nosebleeds	27	
	Eviscerations, and Amputations	27	
- AUULI/PEUIATRIC	Head, Neck and Spinal Injuries	28	
CPR/AED/FA	Eye Injuries	29	
	Burns and Electrical Injuries	29	
	Broken Bones/Musculoskeletal Injuries	30	
	Bites & Stings	31	
	Heat-Related Emergencies	32	
	Cold-Related Emergencies	32	

Г

## **CONCERNS OF PROVIDING EMERGENCY CARE**

IN THIS SECTION. **EMPHASIZE SOME OF** THE CONCERNS THAT MANY PEOPLE HAVE THAT PREVENT THEM FROM PROVIDING **EMERGENCY CARE** TO VICTIMS WHO **APPEAR TO BE INJURED OR HURT** (I.E. BLEEDING, NOT BREATHING, **BROKEN BONES, ETC.**)

THIS COURSE WAS

TO-THE-POINT.

THIS IS A FUN. **ENGAGING, AND** 

WITH COLORFUL



#### **EMERGENCY ACTIONS STEPS & SCENE ASSESSMENT**



7	CHECKING A	N UNCONSCIOUS ADULT	
Emphasize to students that it is important to always follow these steps when checking a victim who is unconscious.		Check the scene for safety and apply personal protective equipment. Remember: "Look up, Look down, Look all around." Do not enter an unsafe scene!	Establish
INSTRUCTOR NOTE: HAVE STUDENTS TAKE TURNS AND		Approach the victim and check for <b>responsiveness</b> . <b>Tap</b> and <b>shout</b> , "Are you okay?"	responsiveness of a victim by tapping and shouting at them.
READ EACH OF THESE STEPS OUT-LOUD. AFTER THEY READ EACH STEP, FMPHASIZE THE POINT		If there is <b>no response</b> , quickly check for <b>breathing</b> for no more than <b>10 seconds</b> . <i>Look to see if the chest rises and falls.</i> AGONAL GASPS ARE NOT NORMAL BREATHING!	Emphasis to check for breathing is to look to see if the chest <u>rises</u> and <u>falls</u> . <b>Do not</b> rely on listening or feeling for breath sounds alone.
AGAIN FOR REASSURANCE AND UNDERSTANDING OF THE CONCEPT.		If breathing is <b>not present</b> , immediately <b>call</b> <b>911</b> or tell someone to go get help. Note the <b>location</b> of the call, the <b>type</b> of help needed, the <b>number</b> of victims involved and any other relevant information.	
AFTER READING THROUGH ALL THE STEPS AND PLAYING THE VIDEO, HAVE STUDENTS PRACTICE	If the victim is unresponsive	Immediately begin CPR (chest compressions). CPR will be covered in the next section (starting on page 9).	CPR is not emphasized in this section yet. It will be covered later on in the course.
THE SKILLS ON THE	the <u>recovery position</u> . Car	efully roll the victim on his or her side and angle	

the head and mouth towards the ground to prevent aspiration (next page).

3

MANIKINS.

## **RECOVERY POSITION**

If a victim is <u>unconscious</u> but is <u>breathing normally</u> and has no other lifethreatening conditions, he or she should be placed in the <u>recovery position</u>. This will ensure that the airway remains clear and open in the case the victim vomits.

The recovery position should also be used if you need to leave the victim **alone** to go call for or get additional help.

#### **PROPER STEPS:**



- Bring the victim's arm closest to you upwards.
- Lift the victim's leg farthest from you straight up.
- Place one hand on the victim's shoulder and the other hand at the waist.
- Gently roll the victim towards you and try to keep the head stabilized if possible.
- Adjust the body to keep it stable.
- Position the victim's head and mouth towards the ground to prevent him or her from aspirating.

Emphasize the importance of having the head and mouth angled towards the ground to prevent aspiration (or vomiting).

AFTER DISCUSSING THE STEPS AND SHOWING THE RECOVERY POSITION VIDEO, HAVE STUDENTS PRACTICE PUTTING EACH OTHER IN THE RECOVERY POSITION.





Ask students to give examples of people who could be unconscious but still breathing normally. **Possible** answers include:

- drunks
- seizure victims
- low blood sugar
- dehydration, etc.

## **CHECKING AN UNCONSCIOUS CHILD OR INFANT**

When checking an **unconscious child** or **infant**, follow the same emergency action steps as you would for checking an unconscious adult.

However, if the child or infant is <u>found</u> **not breathing**, give **2 rescue breaths** *before* starting CPR. If the chest does not rise with the rescue breaths, **re-tilt** the head and try again.

For a child or infant whose collapse was <u>witnessed</u>, immediately proceed to CPR (starting with chest compressions using ratio 30:2).

## **REMOVING VICTIMS FROM UNSAFE SCENES**

If a victim is found in an unsafe environment or is in imminent danger, it may be necessary to move him or her out of that environment as soon as possible. Below are a few common types of emergency moves.

Be sure to take extra precaution if you suspect the victim is suffering from a spinal cord injury! (See page 28 for more information)



**Blanket Drag** 

This material will be covered in the Child/Infant section later on in the course.

**Ankle Drag** 

## ANATOMY & PHYSIOLOGY FUNDAMENTALS

HAVE STUDENTS READ EACH SECTION OUT-LOUD. EMPHASIZE THE IMPORTANCE OF OXYGEN IN THE BODY.	Superior ena cava Right atrium Right ventricle Inferior ena cava Heart	The <b>heart</b> consists of two upper chambers ( <b>atria</b> ) and two lower chambers ( <b>ventricles</b> ). Its function is to pump blood (containing <b>oxygen</b> ) to the rest of the body.	
	Lungs	The <b>lungs</b> function by transporting <b>oxygen</b> (O <sub>2</sub> ) from the atmosphere into the bloodstream, and releasing <b>carbon dioxide</b> (CO <sub>2</sub> ) from the bloodstream back into the atmosphere as a waste product.	We breathe in oxygen and breathe out <u>carbon</u> dioxide. We still breathe out a little oxygen as well. That's why giving
	Medulla Oblongata Brain	The <b>brain</b> is the control center of the body and regulates senses such as vision, hearing, balance, taste and smell. It requires a constant supply of <b>oxygen</b> to carry out all of its functions. The <b>medulla oblongata</b> controls breathing, heart rate, swallowing, vomiting, blood pressure and coughing.	An injury to the medulla oblongata may stop breathing.
the red blood cells and they transport oxygen through the blood vessels to all the vital organs of the body.	Cells	Cells require oxygen to carry out their daily activities. Red blood cells (RBCs) are rich in hemoglobin, which binds to and transports oxygen throughout the body.	6

## **CARDIOVASCULAR DISEASE**

EMPHASIZE TO STUDENTS THAT SOME PEOPLE WILL DENY HAVING A HEART ATTACK OR WILL DENY THEIR SYMPTOMS FOR HEART BURN OR INDIGESTION UNTIL IT'S TOO LATE.

WOMEN NOTE: Some Women Will Not Display Similar Symptoms As Men For A Heart Attack. Women Symptoms Include:

- SHORTNESS OF Breath
- NAUSEA/VOMITING
- STOMACH, BACK, Jaw Pain

**Cardiovascular (heart) disease** is the **number one** killer in the United States. Almost 800,000 people die each year from heart disease and over an estimated 80 million people suffer from other cardiac problems.



## **HEART ATTACK RECOGNITION & TREATMENT**



### CARDIAC ARREST CHAIN OF SURVIVAL



# **ADULT CPR**

Check the scene for safety and apply personal protective equipment.

Remember: "Look up, Look down, Look all around."

Approach the victim and check for **responsiveness**.

Tap and shout, "Are you okay?"

If there is **no response**, quickly check for **breathing** for no more than **10 seconds**.

Look to see if the chest rises and falls.

If breathing is **not present**, immediately **call 911** or tell someone to go get help.

Note the **location** of the call, the **type** of help needed, the **number** of victims involved and any other relevant information.

## **SKILL CHECK**:

Make sure students are using proper posture, have both hands locked in the center of the chest and are compressing hard and deep enough at the correct rate.

Make sure students perform the head-tilt/ chin-lift technique and pinch the nose shut before giving breaths.



Give 30 compressions using 2 hands.

Push hard and fast on the center of the chest at least <u>2 inches deep</u> at a rate of 100 compressions/minute.

After giving compressions, open the **airway** using the **head-tilt/chin-lift technique**, pinch the nose shut and give <u>2 breaths</u>, one second each. Make sure the chest fully rises.

Repeat cycles: 30 compressions: 2 breaths

10



11

For a child, students may choose to use either 1 or 2 hands for compressions.

# **INFANT CPR**

Check the scene for safety and apply personal protective equipment.

Remember: "Look up, Look down, Look all around."

Approach the infant and check for **responsiveness**.

Tap shoulders or flick feet of infant and shout, "Are you okay?"

responsiveness on an infant, flick the feet. A responsive infant will jerk the feet when touched.

To check for

If there is **no response**, quickly check for **breathing** for no more than **10 seconds**.

Look to see if the chest rises and falls.

If breathing is not present, immediately **call 911** or tell someone to go get help.

Note the **location** of the call, the **type** of help needed, the **number** of victims involved and any other relevant information.

Give 30 compressions using 2 fingers.

Push hard and fast on the center of the chest about  $1\frac{1}{2}$  inches deep at a rate of 100 compressions/minute.

deep enough with 2 fingers (~1.5 in).

Make sure students are compression

To give breaths to an infant, you can put your mouth over the entire nose and mouth.



After compressions open the **airway** using the **head-tilt/chin-lift technique** and give <u>**2 breaths**</u>, one second each. Make sure to **seal** both the infant's **mouth** and **nose**.

Repeat cycles: 30 compressions: 2 breaths

An infant's airway is much smaller, and thus the headtild/chin-lift should not be as wide.

V

## **ADULT, CHILD & INFANT CPR SUMMARY**



method.

# AUTOMATED EXTERNAL DEFIBRILLATOR (AED)

	An <b>automated external defibrillator</b> (or <b>AED</b> ) is used to shock the heart back into its normal rhythm. Typically, CPR alone will not revive a victim. A shock is necessary <i>in addition</i> to high-quality CPR in order to give someone a chance of survival.	AED	BASICALLY THE PURPOSE OF DOING CPR IS TO HOPEFULLY GET A
The AED can only shock 2 life- threatening heart rhythms (V-Tach or V-Fib)	An AED is designed to detect two life- threatening heart rhythms (ventricular fibrillation or ventricular tachycardia). If either one of these two rhythms is present, the AED will advise to shock the heart.	Every minute that defibrillation is delayed, the victim's chance of survival is reduced by 10%! Early	RHYTHM THAT THE AED CAN SHOCK BACK TO NORMAL (NORMAL SINUS
AN AED CANNOT SHOCK A FLATLINE (OR ASYSTOLE) AS THEY SHOW IN THE	If an <b>AED</b> is <b>available</b> , it should be used <b>immediately</b> when a person collapses and goes into cardiac arrest. One rescuer should perform high-quality <b>chest compressions</b> (ratio 30:2) while another rescuer brings and sets up the <b>AED</b> machine on the victim.	AEDs are found everywhere: airports & on planes libraries, movie theaters gyms, recreation centers hotels, schools and more!	RHYTHM). IF NO NORMAL RHYTHM IS IDENTIFIED, THE AED WILL ADVISE TO CONTINUE CPR OR
EXPLAIN THAT	AED PRECAU	TIONS	SHOCK IF ONE OF
	Remove the victim from any wet areas su		
STUDENTS DO NOT NEED TO KNOW ANY OF THE RHYTHMS - IT IS JUST	<ul> <li>before applying the AED. If the victim is s</li> <li>dry with a piece of clothing or paper towe</li> <li>Try to remove the victim from metal surfa</li> <li>Remove any medication patches on the</li> <li>Do not take off any pieces of jewelry or bo obstructing the chest area from firmly attached</li> </ul>	uch as puddles or standing water weating or is wet, <b>wipe</b> the chest el. aces if possible. e victim's chest with gloves. ody piercings unless they are aching the pads.	RHYTHMS IS DETECTED.
STUDENTS DO NOT NEED TO KNOW ANY OF THE RHYTHMS - IT IS JUST SO THAT THEY CAN UNDERSTAND HOW	<ul> <li>Nemove the victim normany wet areas stubefore applying the AED. If the victim is s dry with a piece of clothing or paper towe</li> <li>Try to remove the victim from metal surfa</li> <li>Remove any medication patches on the</li> <li>Do not take off any pieces of jewelry or boostructing the chest area from firmly attached</li> </ul>	ach as puddles or standing water weating or is wet, <b>wipe</b> the chest el. aces if possible. e victim's chest with gloves. ody piercings unless they are aching the pads.	RHYTHMS IS DETECTED.
STUDENTS DO NOT NEED TO KNOW ANY OF THE RHYTHMS - IT IS JUST SO THAT THEY CAN UNDERSTAND HOW THE MACHINE WORKS.	<ul> <li>A remove the victim normany wet areas stubefore applying the AED. If the victim is s dry with a piece of clothing or paper towe</li> <li>Try to remove the victim from metal surfa</li> <li>Remove any medication patches on the</li> <li>Do not take off any pieces of jewelry or boostructing the chest area from firmly attaced</li> <li>1 Turn on the AED</li> <li>2 Bare &amp; Wipe the Chest</li> </ul>	Access if possible. e victim's chest with gloves. ody piercings unless they are acching the pads. Placement	RHYTHMS IS DETECTED. Emphasize the importance of
STUDENTS DO NOT NEED TO KNOW ANY OF THE RHYTHMS - IT IS JUST SO THAT THEY CAN UNDERSTAND HOW THE MACHINE WORKS. THE AED DOES	<ul> <li>Remove the victim normany wet areas stubefore applying the AED. If the victim is s dry with a piece of clothing or paper towe</li> <li>Try to remove the victim from metal surfa</li> <li>Remove any medication patches on the</li> <li>Do not take off any pieces of jewelry or boostructing the chest area from firmly atta</li> <li>1 Turn on the AED</li> <li>2 Bare &amp; Wipe the Chest</li> <li>3 Apply Pads &amp; Plug in Connector</li> </ul>	Access if possible. e victim's chest with gloves. ody piercings unless they are aching the pads. Placement Upper Right	RHYTHMS IS DETECTED. Emphasize the importance of having the pads in the correct
STUDENTS DO NOT NEED TO KNOW ANY OF THE RHYTHMS - IT IS JUST SO THAT THEY CAN UNDERSTAND HOW THE MACHINE WORKS. THE AED DOES EVERYTHING AUTOMATICALLY AND	<ul> <li>Remove the victim normany wet areas stubefore applying the AED. If the victim is s dry with a piece of clothing or paper towe</li> <li>Try to remove the victim from metal surfation patches on the</li> <li>Do not take off any pieces of jewelry or boostructing the chest area from firmly attained</li> <li>Turn on the AED</li> <li>Bare &amp; Wipe the Chest</li> <li>Apply Pads &amp; Plug in Connector</li> <li>Stand Clear &amp; Push Shock Button</li> </ul>	Access if possible. access if possible. a victim's chest with gloves. ody piercings unless they are aching the pads. Pad Placement Upper Right Lower Left	RHYTHMS IS DETECTED. Emphasize the importance of having the pads in the correct placement (upper right, lower left) of the victim.

# ADULT & CHILD AED (>8 years old or >55 lbs)



YOU CAN HAVE 2 STUDENTS PAIR UP TO ONE MANIKIN. ONE STUDENT CAN START WITH CPR WHILE THE OTHER STUDENT GETS THE AED AND ATTACHES IT ON THE VICTIM'S CHEST.

HAVE STUDENTS Rotate Roles After Each Scenario.

# CHILD & INFANT AED (<8 years old or <55 lbs)

SOME AEDS HAVE INFANT/PEDIATRIC PADS INSIDE OF THEM. IF THESE PADS ARE	Turn the AED <u>on</u> . Be sure the scene is safe and the victim is not surrounded in a wet environment, metal surface, or flammable gas.	
AVAILABLE, THEY SHOULD BE USED ON A SMALL CHILD OR INFANT AS THEY WILL	Bare the chest and dry it off. Use scissors to cut the shirt or take it off quickly. Wipe the chest with a towel or piece of clothing.	
DELIVER A SMALLER VOLTAGE OF SHOCK. HOWEVER, IF ONLY ADULT AED PADS ARE AVAILABLE, THEY	Attach infant/pediatric pads if available. For an infant, place one pediatric pad in the front of the chest and the other pad in the back. For a smaller child, place one pediatric pad in the upper right and the other pad in the lower left as long as they do not touch each other.	Emphasize that for a small child or infant, the pads should be placed one in the front of the chest and the other in the back.
SHOULD STILL BE USED ON THE SMALL CHILD OR INFANT.	Plug in the connector and stand clear. Be sure no one is touching the child or infant while the AED analyzes the heart rhythm.	
NOTE THAT IF THERE IS NOT ENOUGH ROOM TO PLACE BOTH PADS ON THE CHEST FOR A CHILD,	Push the shock button.If a shock is advised, raise your hands up and shout, "Everyone Stand Clear!"Make sure no one is touching the victim and then push the shock button.	
RESORT TO PLACING ONE IN THE FRONT AND THE OTHER IN THE BACK AS SHOWN.	Continue CPR. After a shock is delivered or no shock is advised, immediately resume CPR cycles of 30 compressions: 2 breaths. The AED will re-analyze every 2 minutes.	

	СНО		
	Choking emergencies of freely and easily into the lu Normally, air goes through into the lungs. Food goes i is directly behind the tr swallows, the epiglottis co food to only enter the esi does not completely close obstruct the trachea, causi	cur when air cannot travel ings. In the <b>trachea</b> ( <b>windpipe</b> ) into the <b>esophagus</b> which rachea. When a person overs the trachea, enabling ophagus. If the epiglottis se, food can enter and ng a person to <b>choke</b> .	
	Breathing and heart circul If breathing stops, the heat cannot work without the oth	Ilation are directly related. In will soon stop too. One her!	
	Mild Choking	<ul> <li>Victim can <b>cough</b> and make <b>sounds</b></li> <li>The airway is <b>partially</b> obstructed</li> </ul>	
	Severe Choking	<ul> <li>Victim cannot speak or make any noises</li> <li>The airway is fully obstructed</li> </ul>	
HAVE STUDENTS	ADULT CHOKING – CONSCIOUS		ALWAYS ENCOURAGE
DEMONSTRATE PROPER CHOKING CARE ON EACH OTHER (IF THEY FEEL		Approach victim and ask, "Are you choking?" A choking person will usually have two hands over his or her throat. Acknowledge that you are trained and are going to help him or her.	TO CONTINUE Coughing to try to Remove the object!
COMFORTABLE), OR HAVE THEM PRACTICE PERFORMING		Call 911 & Position Hands. Immediately call 911 or have someone call for help. Then quickly get behind the victim and make a fist slightly above the belly button with the thumb pointing inward.	Abdominal thrusts should not be stopped unless the object dislodges and the victim starts breathing pormally again
ABDOMINAL THRUSTS On the CPR Manikins.		Give Abdominal Thrusts. Using an upward "J"-motion, perform abdominal thrusts until the object comes out. Push inwards and upwards.	OR if the victim passes out, then start CPR.

# **CHILD CHOKING – CONSCIOUS**



If the child's parents are present, be sure to ask for their consent before providing care.

#### Call 911 & Position Hands.

Immediately call **911** or have someone call for help. Then quickly get behind the child and make a **fist** right above the belly button with the thumb pointing inward. You may need to **kneel down**.

# 5

#### **Give Abdominal Thrusts.**

Using an upward "J"-motion, perform abdominal thrusts until the object comes out. **Push inwards and upwards**. You may need to kneel down for a

kneel down for a choking child to provide adequate abdominal thrusts.

# **INFANT CHOKING – CONSCIOUS**



#### Check infant & call 911.

If an infant chokes on something, cannot breathe, cough, or cry, or is turning blue, immediately call 911.



Carefully turn the infant onto its belly and place it on your leg. Angle the head downwards and give 5 strong back blows.

#### Give 5 chest thrusts.

Carefully turn the infant onto your other leg while supporting its body and give 5 strong upward chest thrusts.

Continue repeating sets of **5 back blows** and **5 chest thrusts** until the object comes out or until help arrives and takes over.

Make sure students properly perform this technique after watching the video. Have them practice the skill with the video if necessary.

## **CHOKING — SPECIAL CIRCUMSTANCES**

In the event that you cannot completely reach around a person's body to perform abdominal thrusts (i.e. the person is too **large**, in a **wheel chair** or is **pregnant**), get behind the person and perform continuous <u>**chest thrusts**</u> in an **inward** and **upward** "J"-motion until the object comes out.



If you are **home alone** and are choking, perform <u>abdominal thrusts</u> to yourself until the object comes out or you can press your abdomen against a firm object such as a **chair** or **table**. This will require you to use excessive force and almost "free fall" onto the chair or table in order to remove the obstruction. **Chest thrusts** should be performed on a pregnant or large person rather than abdominal thrusts.



# ADULT & CHILD CHOKING – UNCONSCIOUS

Lay the victim down and call 911. If the victim goes unconscious after choking, gently lay him or her down on a flat surface and be sure 911 is called.	
Give 30 chest compressions. Immediately begin CPR on the unconscious choking victim.	Immediately begin by giving 30 compressions even before checking for the
Open airway and check for object. Quickly open the victim's mouth using the head-tilt/chin-lift technique and scan for any obstructions. If you see anything, sweep it out with your finger.	object in the mouth.
<b>Give 2 rescue breaths.</b> After removing the object or not seeing one, immediately give 2 rescue breaths.	Giving breaths is still advised if the object did not come out. This may try disloquing
Continue cycles of 30 compressions: 2 breaths. If the chest does not rise with breaths, continue cycles of 30 compressions: 2 breaths.	it from the trachea.
Check for object again. Continue checking for any obstruction when opening up the airway. If the victim begins breathing, monitor the airway and keep him or her comfortable until help arrives.	

# **INFANT CHOKING – UNCONSCIOUS**



## **BREATHING EMERGENCIES**

**Breathing emergencies** can occur for many reasons. They can be caused by choking, chronic conditions (such as asthma), heart attacks, injuries to the head, spinal cord, chest, lungs or abdomen, allergic reactions, poisonings, drug overdoses, emotional distresses (such as anxiety) and more.



## Signs & Symptoms:

Gasping for air, difficulty catching breath, breathing too fast, *not* breathing, wheezing, high-pitched noises, cool skin, dizziness, sweating, chest pain, etc.

EMPHASIZE THE IMPORTANCE OF Always Calling 911 When Any Type of Emergency	Asthma	<ul> <li>Caused by inflammation of air passages, thus reducing the amount of oxygen that can enter the lungs. It can be triggered from exercise, cold air, allergens, mold, pollen, smoke and stress.</li> <li>Symptoms: wheezing, difficulty breathing, chest tightness, distress and anxiety.</li> <li>Treatment: call 911 if asthma is severe and assist person with his or her inhaler.</li> </ul>	An inhaler should be given if it is prescribed to the victim. You can have someone
ARISES. AN INHALER OR EPIPEN MAY NOT ALWAYS BE AVAILABLE. THAT'S WHY IT IS CRITICAL	Allergic Reactions (Anaphylaxis)	<ul> <li>Allergic reactions occur when the body is exposed to certain allergens. Some can be life-threatening.</li> <li>Allergens include: pet dander, bee stings or other bites, foods (such as peanuts or shellfish), medications (such as penicillin or aspirin) and certain plants (poison ivy, poison oak, and sumac).</li> <li>Signs: difficulty breathing, wheezing, chest and throat tightness, rash or hives, severe sweating, facial swelling and weakeness.</li> <li>Treatment: Call 911 and assit victim with Epipen if prescribed (remove cap, press into thigh and hold).</li> </ul>	assist giving it. ALLERGIES CAN DEVELOP AT ANY AGI An epipen must be prescribed to the victim. To use it, unscrew the cap and stick the
TO CALL FOR HELP AS SOON AS Possible.	Oxygen Deprivation	<ul> <li>Signs: shortness of breath or wheezing, difficulty speaking, blue or pale lips and fingernails, moist skin.</li> <li>Treatment: call 911, keep victim calm and in a position of comfort, find out about any medical conditions such as allergies, asthma, etc.</li> <li>Assist with Epipen if allergic reaction is present and medication is prescribed to victim.</li> <li>Prepare to begin CPR if victim goes unconcious.</li> </ul>	needle directly into the thigh and hold for about 10 seconds. Blue lips indicate lack of oxygen.



## SEIZURES

A **seizure** happens when abnormal electrical activity occurs in the brain. The most common visible sign is **uncontrollable shaking** (convulsions).

Seizures can be caused by epilepsy, a chronic condition, as from other medical well as problems including low blood sugar, head injuries, heat emergencies and poisons.

**Febrile seizures** occur in small children and infants, which are caused by rapid increases in body temperature due to ear, throat and digestive infections. REGARDLESS OF HOW LONG A SEIZURES LASTS, IT IS ALWAYS RECOMMENDED TO CALL 911 TO MAKE SURE THE VICTIM IS MEDICALLY EVALUATED.

#### Signs & Symptoms:

Sudden jerking and twitching of arms and legs, clenched jaw, abnormal eye and facial movements, loss of consciousness or awareness, and possible loss of bladder or bowel control.









# **HEAD, NECK & SPINAL INJURIES**

Most head, neck and spinal injuries are caused from **motor vehicle** accidents, falls (from large heights or diving), **sports-related trauma** and assaults.



# **EYE INJURIES**

Any dry chemical burns should be brushed off clothes and then washed with water for 20 mins. If a chemical gets into the eyes, flush the affected eye with water for 20 minutes or until advanced medical care takes over.
Be sure to tilt the head with the affected eye toward the sink so that chemicals do not flush into the unaffected eye.

Thermal Burns

Chemical

Burns

• For thermal eye burns, **remove** the victim from the burning source and wash the affected eye(s) with copious amounts of water for at least **20 minutes** and call **911**.

Impaled Objects If an object gets stuck in the eye, do not try to remove it. That may cause more harm. Instead, stabilize the object by putting a cup over it and wrapping it with gauze around the head.
Be sure to also cover the unaffected eye so that both eyes remain closed and stabilized.

• Call **911** and wait for advanced help to arrive.



Never remove any type of object that is impaled in the body. Only **STABILIZE** it to prevent further movement or injury.

Notice that the

prevent

injury to the

injured eye is tilted

towards the sink to

contamination or

unaffected eve.

# **BURNS & ELECTRICAL INJURIES**

ICE OR ICE WATER IS NOT ADVISED TO TREAT ANY KIND OF BURN INJURY. ONLY USE COOL RUNNING WATER TO TREAT A BURN INJURY AND CALL 911 IF THE INJURY IS SEVERE OR REQUIRES MEDICAL ATTENTION. **Burns** are caused by **heat** (such as flames, hot objects and liquids), **chemicals** (such as acids, alkalis or other corrosive materials), and **electricity** (such as electrocution and shock).



**Superficial Burn**: Only top (outer) layer of skin is burned. Skin is red and dry and can be painful. Will usually heel in a couple of days.

• Treatment: cool the burn with cold running water and bandage to protect.

**Partial-Thickness Burn**: Both the outer layer of the skin as well as the second layer (dermis) is burned. Blisters form and the skin is severely reddened and splotchy in appearance. Swelling and severe pain are present.

• Treatment: cool the burn with cold running water, bandage, and call 911.

Full-Thickness Burn: The most serious burn where all layers of the skin are damaged (fat, muscle, bone). Skin will appear charred black or grayish/white.
Treatment: remove victim from burn site and call 911 immediately.

**Electrical Injury:** Look for **entry** and **exit** wounds. **Do not touch** victim if danger is still present (i.e. electrical wires, etc.). Call **911** and monitor victim's condition.

THERE IS NO SCIENTIFIC EVIDENCE THAT SUGGESTS THAT BUTTER HELPS TREAT BURNS. IT SHOULD NOT BE ADVISED!

Safely turn off the power source if possible for an electrical injury.

 $\epsilon$ 





# **HEAT-RELATED EMERGENCIES**



32

# **USEFUL INFORMATION:**

Website: www.CPRSociety.org

Email: support@cprsociety.org

Facebook: www.Facebook.com/CPRSociety

Daniel J. Kipnis - Chief Executive Officer Email: Daniel@CPRSociety.org Cell: (702) 545-7133

Always end the class with a group photo of the students with their CPR Manikins. Please email the photo to Support@CPRSociety.org so we can include it on our Facebook page and other social media outlets. :)



All **CPR Society**® course materials, videos and content reserved and copyrighted by Daniel Kipnis. © 2013. All rights reserved. www.CPRSociety.org.

/CPRSociety