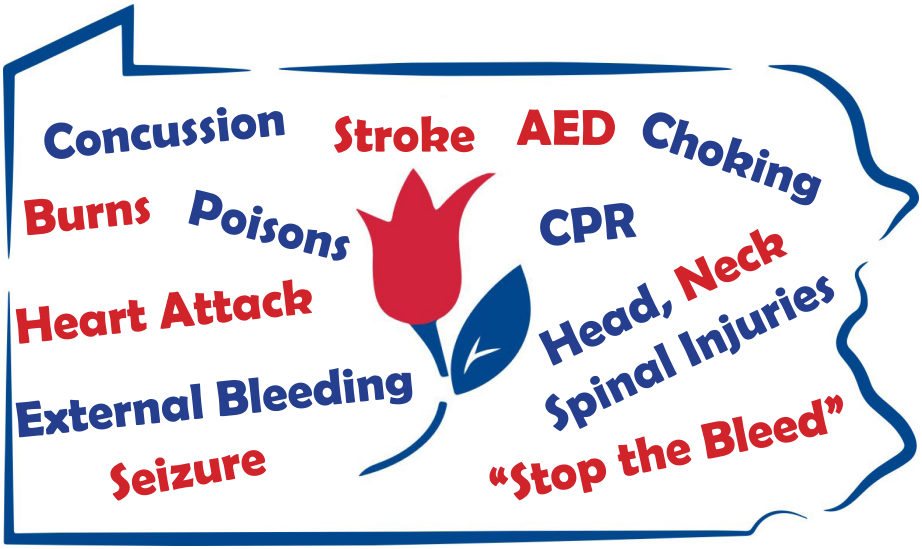
Emergencies: Are You Ready?



A program of the American Trauma Society,
Pennsylvania Division

What's Inside:

References:

American Association of Neurological Surgeons: www.aans.org
American Heart Association: www.heart.org
American Red Cross: www.redcross.org
Centers for Disease Control and Prevention: www.cdc.gov
Epilepsy Foundation: www.epilepsy.com
National Stroke Association: www.stroke.org

Being Prepared:

Emergencies can happen in an instant. Use this educational booklet to ensure you're prepared in case of an emergency.

Emergency Telephone Numbers:
9-1-1
Poison Control: 1-800-222-1222
Local Hospital: _____
Physician: _____
Emergency Contact: _____
Other: _____

When calling for help:
- Speak clearly and slowly.
- Give the exact location of the emergency.
- Describe the situation.
- Give the phone number from which you are calling.
- Don't hang up until told to do so.

This information is not a substitute for first aid and CPR training. These courses are frequently offered by your local chapter of the American Red Cross or American Heart Association.

ATS PA
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CPR:

Cardiopulmonary resuscitation (CPR) can help save a life during a cardiac or breathing emergency.

Before Giving CPR:

1 - Check the scene and the person. Make sure the scene is safe, then tap the person on the shoulder and shout "Are you OK?" to ensure that the person needs help.

2 - Call 9-1-1 for assistance. If it's evident that the person needs help, call (or ask a bystander to call) 9-1-1. Then, send someone for an AED.

3 - Open the airway. With the person lying on his or her back, tilt the head back slightly to lift the chin.

4 - Check for breathing. Listen carefully, for no more than 10 seconds, for sounds of breathing. (Occasional gasping sounds do not equate to breathing.) ***If there is no breathing, begin CPR.***

American Red Cross CPR Steps:

1 - Give 30 Chest Compressions.

Push hard, push fast. Place your hands, one on top of the other, in the middle of the chest. Use your body weight to help you administer compressions that are at least 2 inches deep and delivered at a rate of at least 100 compressions per minute.
Tip: Person must be on a firm, flat surface.

2 - With the person's head tilted back slightly and the chin lifted, pinch the nose shut and place your mouth over the person's mouth to make a complete seal. Blow into the person's mouth for about one second to make the chest rise. **Deliver two rescue breaths, then continue compressions.**

Note: If the chest does not rise with the initial rescue breath, re-tilt the head before delivering the second breath. If the chest doesn't rise with the second breath, the person may be choking. After each subsequent set of 30 chest compressions, and before attempting breaths, look for an object and, if seen, remove it.

Images courtesy of the American Red Cross

3 - Continue CPR steps. Keep performing cycles of chest compressions and breathing until the person exhibits signs of life, such as breathing, an AED becomes available, or EMS or a trained medical responder arrives on scene.

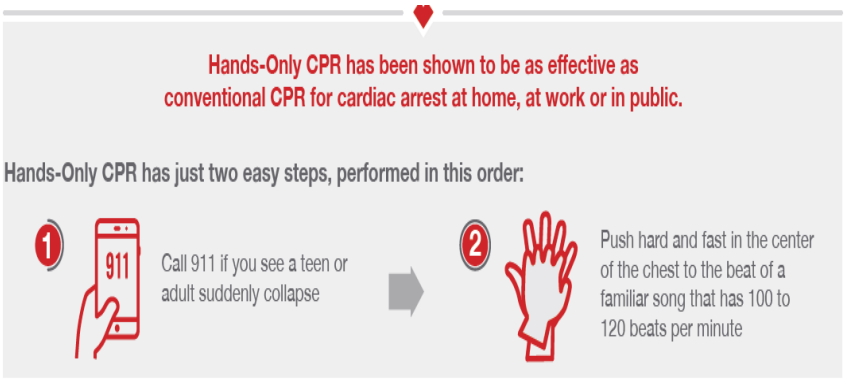
Note: End the cycles if the scene becomes unsafe or you cannot continue performing CPR due to exhaustion.

Child and Infant CPR:

For children, place the heel of one hand on the center of the chest, then place the heel of the other hand on top of the first hand, and lace your fingers together. Deliver 30 quick compressions that are each about 2 inches deep.

For infants, use 2 fingers to deliver 30 quick compressions that are each about 1.5 inches deep.

Hands-Only CPR:



Music Can Save Lives:

Song examples include “Stayin’ Alive” by the Bee Gees, “Crazy in Love” by Beyoncé featuring Jay-Z, “Hips Don’t Lie” by Shakira” or “Walk the Line” by Johnny Cash. Some feel more confident performing Hands-Only CPR and are more likely to remember the correct rate when trained to the beat of a familiar song.

When performing CPR, you should push on the chest at a rate of 100 to 120 compressions per minute, which corresponds to the beat of the song examples above.

Image courtesy of the American Heart Association

AED:

TIP: Do not use pediatric AED pads or equipment on an adult or child older than 8 years or weighing more than 55 pounds. Pediatric AED pads are meant for infants and children weighing less than the 55 lbs.

What To Do:

After checking the scene and the injured or ill person:

1 - Turn on AED and follow the voice and/or visual prompts.

2 - Wipe Bare Chest Dry

TIP: *Remove any medication patches with a gloved hand.*

3 - Attach Pads

4 - Plug In Connector, If Necessary

5 - Stand Clear

Make sure no one, including you, is touching the person.
Say "EVERYONE, STAND CLEAR."

6 - Analyze Heart Rhythm

Push the "analyze" button, if necessary.
Let AED analyze the heart rhythm.

7 - Deliver Shock

If shock is advised:

- Make sure no one, including you, is touching the person.
- Say, "EVERYONE, STAND CLEAR."
- Push the "shock" button, if necessary.

8 - Perform CPR

After delivering the shock, or if no shock is advised:

- Perform about 2 minutes (or 5 cycles) of CPR.
- Continue to follow the prompts of the AED.

Tips:

- If at any time you notice an obvious sign of life, stop CPR and monitor breathing for any changes in condition.
- If two trained responders are present, one should perform CPR while the second responder operates the AED.

Images courtesy of the American Red Cross

Choking:

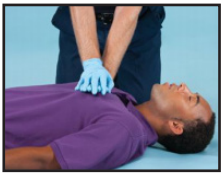
Conscious Choking: Individual can not cough, speak or breathe.
After checking the scene and the injured/ill person, have someone call 9-1-1 and get consent.

1 - Give 5 Abdominal Thrusts
Place a fist with the thumb side against the middle of the person's abdomen, just above the navel. Cover your fist with your other hand. Give 5 quick, upward abdominal thrusts.

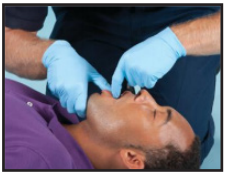
2 - Continue Care
Continue abdominal thrusts until the object is forced out, person can cough forcefully or breathe, or person becomes unconscious. If the person becomes unconscious call 9-1-1 and give care for an unconscious choking adult, beginning with looking for an object.

Unconscious Choking: Chest does not rise with rescue breaths.
After checking the scene and the injured/ill person:

1 - Give Rescue Breaths
Re-tilt the head and give another rescue breath.



2 - Give 30 Chest Compressions
If the chest still does not rise, give 30 chest compressions.
TIP: Person must be on firm, flat surface.
Remove CPR breathing barrier when giving chest compressions.



3 - Look For And Remove Object If Seen

4 - Give 2 Rescue Breaths
Next Steps:
If breaths do not make the chest rise, repeat steps 2 through 4. If the chest clearly rises - check for breathing. Give CARE based on conditions found.

Stroke:

Stroke is the **fifth leading cause of death in the United States**, and **is the leading cause of adult disability in the U.S.** However, up to **80 percent of strokes can be prevented.**

A stroke is a *"brain attack"* that occurs when blood flow to an area of the brain is cut off. When this happens, brain cells are deprived of oxygen and begin to die. When brain cells die during a stroke, abilities controlled by the specific area of the brain, such as memory and muscle control are lost. How an individual is affected by a stroke depends on where the stroke occurs in the brain and how much of the brain is damaged.

Signs and Symptoms:

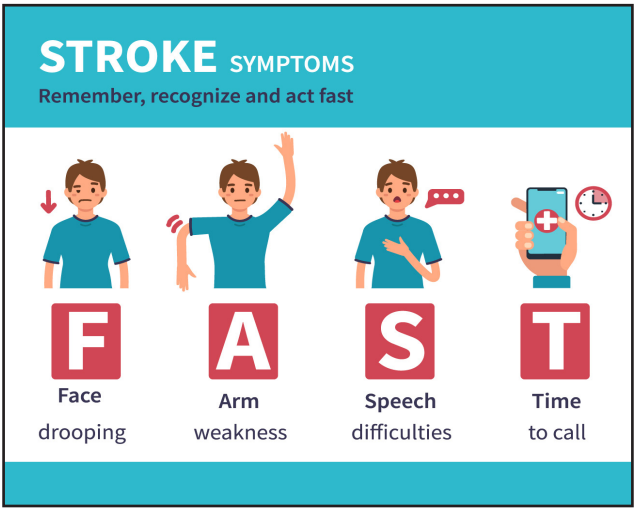
Act FAST:

F – Face: Ask the person to smile. Does one side of the face droop?

A – Arms: Ask the person to raise both arms. Does one arm drift downward?

S – Speech: Ask the person to repeat a simple phrase. Is their speech slurred or strange?

T – Time: If you observe any of these signs, call 9-1-1 immediately.



What To Do:

For each minute a stroke goes untreated and blood flow to the brain continues to be blocked, a person loses about 1.9 million neurons. **Recognition of a stroke and calling 9-1-1 will determine how quickly someone will receive help and treatment.**

Stroke Prevention:

Certain risk factors can increase your chances of having a stroke. If you have identified risk factors, work with your doctor to reduce your risk.

Uncontrollable Risk Factors: Age, gender, race and ethnicity, family history and previous stroke.

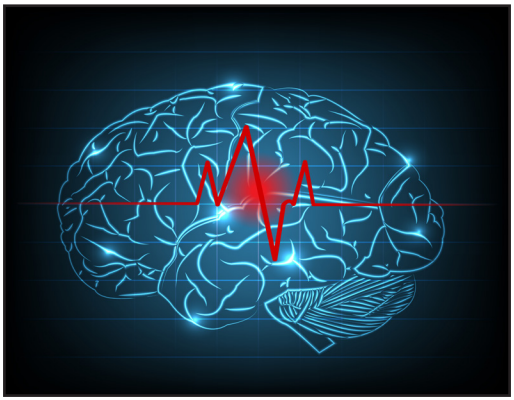
Lifestyle Risk Factors: Unhealthy diet, lack of physical activity, smoking and alcohol use.

Medical Risk Factors: High blood pressure, atrial fibrillation (AFib), high cholesterol, diabetes and circulation problems.

Identify – Review the risk factors and identify your personal risk.

Reduce your risk factors – Work to reduce your stroke risk through lifestyle changes and medication, if necessary.

Recognize and Respond- Memorize FAST. Learn to recognize signs and symptoms and respond to the first sight of stroke to save lives.



Seizure:

Epilepsy is the fourth most common neurological disease and affects people of all ages.

If you have two seizures, there's about an 80 percent chance that you'll have more.

A seizure is a sudden surge of electrical activity in the brain. The electrical activity is caused by complex chemical changes that occur in nerve cells. Brain cells either excite or inhibit (stop) other brain cells from sending messages. **However, when a seizure occurs, there may be too much or too little activity, causing an imbalance between exciting and stopping activity.** The chemical changes can lead to surges of electrical activity that causes seizures.

Seizures are not a disease in themselves. Instead, they are a symptom of many different disorders that can affect the brain.

What To Do:

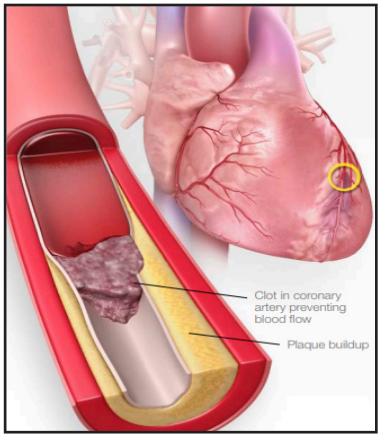
- Always stay with the person until the seizure is over.
- Pay attention to the length of the seizure. *Time how long it takes for the person to recover and return to their usual activity.*
- Prevent injury by moving nearby objects out of the way.
- Do not forcibly hold the person down or put anything in their mouth.

Call for emergency medical help when:

- A seizure lasts 5 minutes or longer.
- One seizure occurs right after another without the person regaining consciousness or coming to between seizures.
- Seizures occur closer together than usual for that person.
- Breathing becomes difficult or the person appears to be choking.
- The seizure occurs in water.
- Injury may have occurred.
- The person asks for medical help.

Heart Attack:

A heart attack occurs when blood flow to part of the heart is blocked (often by a blood clot). This happens because coronary arteries that supply the heart with blood slowly become thicker and harder from a buildup of fat, cholesterol and other substances, called plaque. If the plaque breaks open and a blood clot forms that blocks the blood flow, a heart attack occurs.



Each year, about 635,000 people in the United States have a new heart attack and about 300,000 have a repeat attack.

Signs and Symptoms:

Chest discomfort: Most heart attacks involve discomfort in the center of the chest that lasts more than a few minutes, or that goes away and comes back. It can feel like uncomfortable pressure, squeezing, fullness or pain.

Discomfort in other areas of the upper body: Pain or discomfort in one or both arms, back, neck, jaw or stomach.

Shortness of breath: May occur with or without chest discomfort.

Other signs: Breaking out in a cold sweat, nausea or lightheadedness.

What To Do:

Even if you are not sure it's a heart attack, immediately call 9-1-1 or your local emergency medical services (EMS).

Before the emergency, find out which hospitals in your area have 24-hour emergency cardiac care.

Image courtesy of the American Heart Association

External Bleeding:

Victims can die quickly from uncontrolled bleeding, within five to ten minutes.

What To Do:

After checking the scene and the injured/ill person:

1 - Cover the wound
Cover the wound with a sterile dressing.

2 - Apply direct pressure until bleeding stops

3 - Cover the dressing with bandage
Check for circulation beyond the injury
(check for feeling, warmth and color)

4 - Apply more pressure and call 9-1-1

If the bleeding does not stop:
- Apply more dressings and bandages.
- Continue to apply additional pressure.
- Take steps to minimize shock.
- Call 9-1-1 or the local emergency number.

TIP: Wash hands with soap and water after giving care.

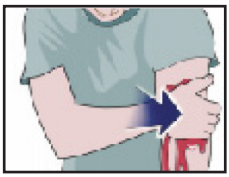
Images courtesy of the American Red Cross

“Stop the Bleed”

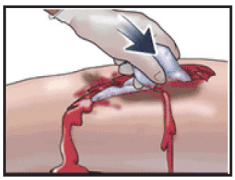
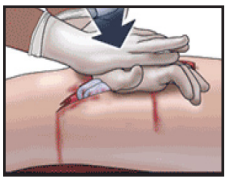
STOP THE BLEED®

The **“Stop the Bleed” campaign** was initiated to build national resilience by better preparing the public to save lives by raising awareness of basic actions to stop life threatening bleeding following everyday emergencies and man-made and natural disasters.

1 - Apply Pressure With Hands



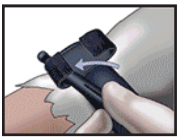

2 - Apply Dressing And Press

3 - Apply Tourniquet


Wrap


Wind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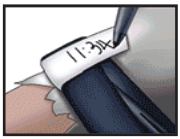

Time

The only thing more tragic than a death from bleeding...
is a death that could have been prevented.

Images courtesy of the American College of Surgeons

Burns:

First-Degree Burn: involves the outer most layer of skin and is usually associated with a sun burn. The skin is usually still intact, but may appear to be red, very warm or hot to touch and painful. There may also be small blisters, and swelling in and around the area of injury.

What To Do:

• **Stop the burning process:** cool the burn with running cool (not cold) water for at least 5 minutes.

Do not use ice, as this may cause further skin damage.

• Administer an over-the-counter pain reliever (ibuprofen or acetaminophen) for pain control.

• Cover the burn with a sterile gauze bandage or clean cloth. Wrap the burned area loosely to avoid putting too much pressure on the burn tissue.

• Minor burns will usually heal without further treatment.

Seek medical attention if there is a persistent fever not relieved by medication or redness that may extend beyond the border of the burn or pain that is not controlled by ibuprofen or acetaminophen.

Second-Degree Burn: occurs when the second layer of skin (dermis) is burned. This burn is usually very red, has blister formation, is extremely painful and has a fair amount of swelling.

What To Do:

• If the burn is smaller than 2-3 inches it may be treated as a minor burn.

• If the area is larger, or involves functional parts of the body (feet, face, eye, ears, groin or located over major joints) more in-depth medical attention is needed.

• Take the person to the nearest emergency department, family doctor or minor emergency clinic to have the burn evaluated.

Third-Degree Burn: involves all layers of the skin and can cause permanent tissue damage. The skin may appear to be charred, blackened, or white. Skin texture may be very dry or leathery.

What To Do:

Third-Degree burns are NOT minor burns and should be evaluated and treated by a healthcare provider. They are very serious no matter what the size or area of the body that may be involved.

Poisons:

Poisons can be found everywhere in the home - such as the bathroom, kitchen, laundry room and garage. Medications are the leading cause of child poisoning.

What To Do:

After checking the scene and the injured or ill person:

1 - For life-threatening conditions (if the person is unconscious, not breathing, or if a change in the level of consciousness occurs), **call 9-1-1**. If the person is conscious and alert, **call the National Poison Control Center (PCC) hotline at 1-800-222-1222** and follow advice given.

2 - Provide CARE based on the conditions found.

Prevention:

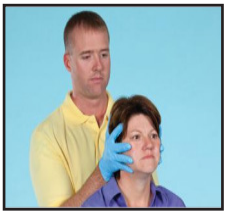
- Store medicines and household cleaning products in locked cabinets, out of the reach and sight of children.
- Install a carbon monoxide alarm in every sleeping area of your home.
- Keep button batteries out of the reach of children.
- Never carry something that can be poisonous in a purse or coat where a child may find it.

Poison Control Hotline: 1-800-222-1222

Head, Neck or Spinal Injuries:

What To Do:

After checking the scene and the injured/ill person:



1 - Call 9-1-1 or the local emergency number

2 - Minimize Movement
Minimize movement of the head, neck and spine.

3 - Stabilize Head
Manually stabilize the head in the position in which it was found.
• Provide support by placing your hands on both sides of the person's head.
• **If head is sharply turned to one side, DO NOT move it.**

Traumatic Brain Injury (TBI):

A traumatic brain injury is defined as a blow to the head or a penetrating head injury that disrupts normal function of the brain. TBI can result when the head suddenly and violently hits an object or when an object pierces the skull and enters brain tissue.

There are about 235,000 hospitalizations for TBI every year, which is more than 20x the number of hospitalizations for spinal cord injury.

Symptoms:

Symptoms vary greatly depending on the severity of the head injury, but may include any of the following:

- Vomiting
- Lethargy
- Headache
- Confusion
- Paralysis
- Coma
- Loss of consciousness
- Dilated pupils
- Vision changes
- Slow pulse
- Breathing problems
- Cognitive difficulties
- Difficulty swallowing
- Speech difficulties
- Cerebrospinal fluid (CSF) coming out of the ears or nose

If a TBI is suspected, call 9-1-1 immediately or take the person to an emergency department.

Images courtesy of the American Red Cross

Concussion:

A concussion is a type of traumatic brain injury (TBI) caused by a bump, blow, or jolt to the head or by a hit to the body that causes the head and brain to move quickly back and forth inside the skull.

Signs and Symptoms:

Signs observed by parents or coaches:

- Appears dazed or stunned
- Forgets instruction, is confused about an assignment or position, or is unsure of the game, score, or opponent
- Moves clumsily
- Answers questions slowly
- Loses consciousness (even briefly)
- Shows mood, behavior, or personality changes
- Can't recall events prior to or after a hit or fall

Symptoms reported by children and teens:

- Headache or "pressure" in head
- Nausea or vomiting
- Balance problems or dizziness, or double or blurry vision
- Bothered by light or noise
- Feeling sluggish, hazy, foggy, or groggy
- Confusion, or concentration or memory problems
- Just not "feeling right," or "feeling down"

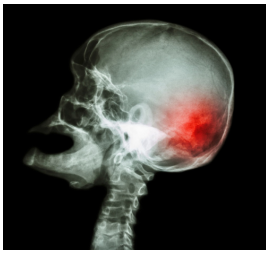
What To Do:

As a parent, if you think your child or teen may have a concussion, you should:

1 - Remove your child or teen from play.

2 - Keep your child out of play the day of the injury. Your child or teen should be seen by a health care provider. Only return to play when permission from a health care provider who is experienced in evaluating for concussion is given.

3 - Ask your child's or teen's health care provider for written instructions on helping your child or teen return to school.



Do not try to judge the severity of the injury yourself. Only a health care provider should assess a child or teen for a possible concussion.

Notes:

The American Trauma Society, Pennsylvania Division is a non-profit organization committed to preventing traumatic injury and death through education.

Our work includes providing presentations and educational materials on many trauma prevention topics, including concussions, water safety, senior falls, bike safety and traffic safety.

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