

Community Safety and First Aid

Things that you need to know for a safe environment

Presented by



Guardian Flight, Inc
Fairbanks, Ketchikan, Sitka

Your House is Your Castle

Community Safety and First Aid

Table of Contents

FAMILY PREPAREDNESS CHECKLIST	3
SAFETY CHECK LIST	5
FREQUENTLY ASKED QUESTIONS ABOUT FIRST AID	8
INTRODUCTION.....	11
FIRST AID TRAINING	11
LEGAL ISSUES	11
911 AND THE EMERGENCY MEDICAL SYSTEM	12
COMMUNICABLE DISEASES	12
ASSESSING THE ILL OR INJURED	13
TYPES OF WOUNDS	16
MEDICAL EMERGENCIES	20
ENVIRONMENTAL EMERGENCIES.....	24
TEMPERATURE RELATED EMERGENCIES	25

Family Preparedness Checklist

Protect your family from emergencies by developing a home emergency response plan. The following check list may help you in developing an emergency plan for your family to follow in any disaster. If your responses to the majority of the questions asked in the checklist are "yes," then you are well on your way to developing a plan. If your answers are "no" to all or most of these questions, then develop and implement a home plan as soon as possible.

Top of Form

- ☐ **Yes** ☐ **No** Do you have a home emergency plan? Does it cover all emergencies like fire, weather, etc.? Does your family practice this home emergency plan?
- ☐ **Yes** ☐ **No** Does your plan include smoke, gas and carbon monoxide detectors?
- ☐ **Yes** ☐ **No** Do you have a weather radio and do all members of your family know what the signals mean?
- ☐ **Yes** ☐ **No** Can each member of your family tell you two ways out of your home? If your second way out of a two-story home is a window, do you need a safety ladder? If you live in a high-rise, does your family know and practice two ways out of the building? (Remember that an elevator is never a way out during a fire.)
- ☐ **Yes** ☐ **No** Can all members of your family operate the locks, windows and doors for escape?
- ☐ **Yes** ☐ **No** Does your family understand to leave or seek shelter when an alarm sounds?
- ☐ **Yes** ☐ **No** Does each member of your family know where to go after evacuating your home?
- ☐ **Yes** ☐ **No** Does each member of your family know who to call for help and are the telephone numbers posted?
- ☐ **Yes** ☐ **No** In a weather-related emergency, does your family know where to seek shelter?
- ☐ **Yes** ☐ **No** Escape planning and smoke detectors are essential for getting everyone out safely. Are the batteries routinely replaced?
- ☐ **Yes** ☐ **No** Does your family understand that once they are outside, they should stay outside?
- ☐ **Yes** ☐ **No** Do you have a first-aid kit and is it fully stocked?
- ☐ **Yes** ☐ **No** Do you have a fire extinguisher and is it serviced?
- ☐ **Yes** ☐ **No** Do you encourage family members to take first-aid and CPR classes?
- ☐ **Yes** ☐ **No** If needed, do members of your family know how to shut off the water, gas and electricity to your home?
- ☐ **Yes** ☐ **No** Does your plan cover whom to call in case of a utility problem?
- ☐ **Yes** ☐ **No** Do you maintain a supply of tarps or plywood to cover openings created by a storm or fire?

Your House is Your Castle

Community Safety and First Aid

☐ **Yes** ☐ **No** Do you have flashlights, radios, etc., and more importantly, batteries located in a central area known to all family members?

☐ **Yes** ☐ **No** Do you have a written inventory and photographs of all valuable items in your home? Do you have more than one copy located outside of your home?

☐ **Yes** ☐ **No** If you have pets, have you provided for them in your home emergency plan?

Bottom of Form

Safety Check List

Your home is your castle, but that doesn't mean you can pull the drawbridge and all will be safe. Plenty of dangers have already invaded your home. According to the National Safety Council, there were 29,500 deaths associated with the home in the year 2000. Take an inventory of your home safety items so that you can be prepared to battle any emergency. You'll find that these are all essential to your family's safety. And, of course, feel free to add items to this list depending on your family's needs.

1. Smoke Detectors

According to the National Safety Council, fire kills more than 2,900 people and injures 16,000 others each year. Most fires that claim lives occur at night. Install smoke detectors on every floor and outside each bedroom. Test detectors once a month, and change batteries when you adjust your clocks in the spring and fall.

2. Carbon Monoxide Detectors

Carbon monoxide - an odorless, colorless, and tasteless gas - killed 300 people last year and sent thousands more to the hospital. For between \$40 and \$170, a CO detector will alert you that deadly poison has begun to invade your home. Place a CO detector outside of your bedrooms.

3. Radon-Detector Kit

The Environmental Protection Association says radon might be responsible for up to 30,000 lung cancer deaths each year. Hardware stores carry do-it-yourself radon-detector kits for less than \$40. Follow directions carefully, especially regarding the placement and preparation of the room.

4. Night Lights

Babababobooooom. That's the sound your family hears when you topple down the stairs on your way to sneak a midnight snack. Simple, inexpensive night lights can prevent late-night falls. Place night lights away from flammable fabrics like bedspreads. Also, look for new night lights with cooler mini-neon bulbs. Most stores also carry state-of-the-art plug-ins that glow in the dark and then fade as day breaks. Be sure you have adequate lighting in all of your rooms.

5. Sensor Lights

Outdoor motion-sensor lights can help you see your way at night and scare off intruders. Usually, you can replace existing light fixtures with sensor lights without additional wiring.

6. Sturdy One-Step Stool

Can't reach Aunt Minnie's purple crocheted pillow covers in the back of the closet? And she's on her way over? You look around the room and your eyes settle on ... the rocking chair. Instead of doing a circus act, invest in a sturdy one-step stool to keep on hand when your arms need a boost.

7. Rubber Suction Bath Mats/Slip-Resistant Throw Rugs

You're wet. And so is the floor. A suction-type rubber mat or adhesive-backed appliqués will

Community Safety and First Aid

keep you steady in the stall and tub. A nonskid rug outside the tub will prevent slips when you step out. Use slip-resistant rugs throughout your home.

8. Grab Bars

Hold on to a wall grab bar when you get in and out of the tub. If your bathroom doesn't have grab bars, you can purchase them at most hardware stores. Fasten them with long screws securely into the wall studding - not merely into the plaster, tile or wallboard.

9. Handrails

Every set of stairs, whether inside or outside your home, should have sturdy handrails securely mounted on both sides. Stairs and steps account for nearly half of all fatal falls in the home.

10. Deadbolt Locks

Put a deadbolt lock on every entrance to your home. Ask the locksmith for a deadbolt lock that's pick- and drill-proof. Such locks start at \$150. Invest in sturdy doors; a good lock doesn't serve its purpose on a flimsy door.

Another lock that's important is one for your gun cabinet. Always lock your gun, if you have one, and lock up your ammunition separately from your gun.

11. Ground-Fault Circuit Interrupters

GFCIs stop the "juice" before electricity can leak out and hurt you. Although most new homes come with GFCIs, older homes may not have them. You can replace outlets for \$9-\$13 each, or you can purchase plug-in or portable GFCIs for about \$12-\$30 each. Use them throughout your home, especially in the kitchen, bathroom and laundry room.

12. Fire Extinguishers

Fire extinguishers have categories for different types of fires. For the home, experts recommend a "BC" or an "ABC" extinguisher. Never purchase or use an "A" extinguisher in your home. These water-based extinguishers can cause flames to splatter or cause shocks in an electrical fire, says Julie Reynolds of the National Fire Protection Association.

13. First-Aid Kit

The kit should include, among other items, antiseptic ointment, bandages and gauze pads in assorted sizes, adhesive tape, cold packs, disposable gloves, hand cleaner, scissors and tweezers, syrup of ipecac and eyewash. Check expiration dates and periodically restock. And educate yourself on how to treat injuries.

14. Flashlights

Keep flashlights where you can easily get to them in case of power outages and severe weather. Test them regularly. Keep extra batteries close by so that you don't have to fumble blindly in an emergency.

15. Fire-Safe Window Guards/Safety Glazing

Falls from windows cause death and serious injury to children each year. Don't rely on screens to prevent falls; they're only designed to keep bugs out. Never place furniture or beds next to windows where children can climb. Keep windows locked when not in use. If you use window guards, they must have a release mechanism so they can be opened in an emergency. Consult your fire department for proper placement. Children should also practice opening the

Your House is Your Castle

Community Safety and First Aid

window in their bedroom so that they know how to escape out of a window. You also may need to purchase an emergency escape ladder.

Safety glazing prevents windows from shattering into shards of glass. Instead, if broken, the glass forms safe pellets. Look for a permanent mark in the lower corner showing the manufacturer's name, type of safety glass, and the thickness.

16. Written Family Evacuation Plan

Preparation and practice for all emergencies is vital for all families. Know the fastest way out of your home and how not to become trapped. Your home should include two exits from each room. Practice an evacuation plan with your family before real emergency hits.

17. Family Disaster Kit

When disaster occurs, grab this kit to take with you. Such a kit would include such essential supplies as nonperishable food, water, cash, flashlights, tools, a battery-operated NOAA all-hazard alert radio, and a first-aid kit. To save time when evacuating, you can store this kit in a car or in an unattached garage.

18. NOAA All-Hazard Alert Radio

This radio will help you in a weather emergency, such as a tornado, hurricane, earthquake or other emergency. You'll pick up the frequency of the National Oceanic and Atmospheric Administration, which will include instructions on whether to stay in your home, when to evacuate, and the status of the emergency event. You can purchase such a radio at a local electronics store.

19. Posted Emergency Phone Numbers

Your posted list should include the local police and fire departments and your physician. Also include the numbers of friends or relatives as well as your local poison control number. The American Association of Poison Control Centers has established a nationwide number for people to use to reach their local poison control center. It's 800-222-1222. Post your list by every phone in the house.

20. Tested Appliances

Appliances using gas or electricity should bear the certification mark from a qualified testing organization, such as Underwriters Laboratories, the Canadian Standards Association or the American Gas Association.

21. Personal Protective Equipment

Safety goggles; work gloves, face masks, and hard hats are all must-haves for do-it-yourselfers. Protect yourself when tackling that next home project.

22. Tagged Shutoffs

Know how to shut off valves for gas, oil, water, and your home's main electrical supply. Tag each valve so you can easily identify the switch in an emergency.

Frequently Asked Questions About First Aid

Michael Nolan knows he's lucky to be alive. A father of five young children and investigator with the Chicago Police Department, Nolan collapsed from a heart attack one day while playing basketball. "I just crumpled to the floor," he recalls.

Quick action by his brother and a friend saved his life. While Nolan lay on the gym floor turning an ashen gray, they began cardiopulmonary resuscitation (CPR). Another bystander called 9-1-1.

His rescuers kept Nolan alive until an ambulance arrived. "So many things could have gone wrong, but everything went right -- right down the line," Nolan says.

Most people know how to provide first aid for a minor injury or illness. But do you know what to do in a life-threatening emergency? Here are some answers to frequently asked questions about first aid.

When do you call an ambulance?

"When in doubt, call 9-1-1 or your local emergency number," says David Cleland, a firefighter/paramedic from Evanston, Illinois. "If you're unsure whether the victim has a serious problem or if he or she is in severe pain, then there's enough doubt in your mind to call for emergency help."

Until help arrives, stay calm and reassure the victim. "If the victim has not had a neck or back injury or a broken bone, reposition him to keep an open airway for breathing and protect him from further harm," says Cleland.

Warning signs of a heart attack (such as sudden pain or pressure in the chest) and breathing distress require emergency care. "Also get help for symptoms of a stroke, such as weakness, numbness in an arm or leg, or changes in speech and vision," says Dr. David Vukich of the department of emergency medicine at the University of Florida, Jacksonville. "Timing is critical for treating victims of stroke with the newest medication."

How do you save someone who is choking?

When people are unable to speak, cough or breathe, they need immediate first aid to dislodge the object in their throat and restore normal breathing.

"First aid differs for choking victims, depending on their age," says Anne Marie Lewis, the nursing instructor for emergency and ambulatory services at Sturdy Memorial Hospital in Attleboro, Massachusetts.

For a conscious adult or child over 1 year of age, experts recommend the Heimlich maneuver. Stand behind the victim, make a fist, place it above her navel, and put your other hand on top of your fist, and give quick, upward thrusts.

Give conscious infants five back blows followed by five chest thrusts, recommends the American Academy of Pediatrics. Finger sweep the mouth only if you can see the object.

Call for emergency help and start CPR to clear the airway of a choking victim whose breathing or heartbeat has stopped.

How do you treat a poisoning?

"Poisonings can be a serious situation and are more common when small children become independent and curious," says Lewis. If a poisoning occurs, parents should not decide alone whether

Your House is Your Castle

Community Safety and First Aid

their child is okay, she says. Call the local Poison Control Center and describe the product and amount that was swallowed. The center may tell you to call 9-1-1 or take the victim to the closest emergency department.

"Use syrup of ipecac to induce vomiting only if instructed to do so by a poison control expert," says Larry Newell, a paramedic and educational consultant to the National Safety Council. "Vomiting certain products, such as strong abrasive cleaners, actually may cause more harm to the victim."

What about cuts and bruises?

When someone is badly cut, apply pressure to the wound with a clean, thick cloth, and elevate it above the victim's heart. Wash minor cuts with soap and water. Apply an antibiotic ointment, and cover the area with a bandage. Keep the wound clean and dry.

For deep cuts, seek medical care immediately if you can't control the bleeding in 10 minutes, if you think stitches are necessary or if the wound is very dirty.

Bruises from a blow to the skin can be painful. Apply a cold pack to relieve the pain and swelling. For a serious blow to the head, seek medical help. Look for signs of a concussion, such as confusion, dizziness or nausea.

What's the best way to treat a burn?

Immediately run cool water over the injured skin until the area is pain-free both in and out of water. Wash minor first- and second-degree burns with mild soap, and apply an antibiotic ointment. Cover a second-degree burn with a clean bandage and keep it dry.

It's also important to get immediate treatment for third-degree burns, second-degree burns that cover a large area of the body, or burns on the face, neck, hands, feet or genitals, Vukich advises.

What special precautions are important when providing first aid?

"It's vital to check out the scene and make sure it's safe to provide first aid," says Newell. "Otherwise, you may become another victim."

Turn off any electrical power if someone has been electrically shocked, and look for other hazards, such as downed power lines, smoke, or dangerous swimming conditions in a near-drowning emergency.

Coming into contact with another person's blood or other bodily fluid may increase your risk of infectious disease. But experts say this fear is overblown. "Research shows the actual risk of disease transmission from providing first aid is very small," says Dr. Vinay Nadkarni, director of pediatric intensive care at A.I. Dupont Hospital for Children in Wilmington, Delaware.

A rescuer may use barrier devices, such as a face shield, facemask or medical exam gloves. If these gloves are not available, create a barrier with a plastic bag or clean cloth. Wash your hands thoroughly after you provide first aid.

What supplies should you keep in a first aid kit?

The National Safety Council recommends that you include these items in your home and car:

- **First aid manual**
- **Emergency telephone numbers**
- **List of allergies and medications for each family member**
- **Antibiotic ointment**
- **Acetaminophen, ibuprofen and aspirin**
- **Syrup of ipecac**

Your House is Your Castle

Community Safety and First Aid

- **Bandages and gauze of assorted sizes and roller gauze bandages**
- **CPR barrier devices**
- **Medical exam gloves**
- **Elastic wraps**
- **Adhesive tape**
- **Antiseptic wipes**
- **Cold packs for icing injuries**
- **Thermometer, tweezers and small scissors**

"Be sure to restock items after you use them, and keep the kit out of reach of young children," says Lewis.

Also keep a list of emergency numbers near the telephone for police, fire and ambulance service (9-1-1), the regional poison control center, and family physicians and pediatricians. "Prevention is the single most important aspect of first aid," says Cleland. Being prepared is also important. Take a first aid class and learn CPR. Someday, you may be the one to save a person's life.

Your House is Your Castle

Community Safety and First Aid

INTRODUCTION

Welcome to Mobile Medical Education and Training Specialists' (M.M.E.T.S.) First Aid Seminar. This particular series is designed to give the participant with limited first aid knowledge, a basic understanding of the principles of Emergency Care. Hopefully, you are either familiar with or are taking the CPR portion of the course along with this segment. This is a non certificate seminar- there is no first aid testing. Obviously, we can not make you an expert in first aid in this short segment- but rather give you the basic knowledge to recognize the do's and don'ts when dealing with the ill or injured. We believe in keeping emergency medical treatment simple at this level rather than confuse you with medical terminology and a lot of numbers. We use what we call a Recognize/ React principle in order to simply and effectively assist without doing further harm, until medical help can be summoned, should they be needed.

FIRST AID TRAINING

Sudden illness and injuries are common among the American population at all levels. Each year over 140,000 people die from injuries, most are under 44 years old. One in five of us will require some type of emergency care for an injury this year. Heart attacks will claim over 550,000 lives and two to three times that many will require emergency treatment for other cardiac related problems. These are only two of the categories and the numbers of Americans affected is astronomical. Every one of us will be in the position to provide assistance to an ill or injured victim at some time.

LEGAL ISSUES

Unless specifically required as a part of your job, no person in the state of Florida is required to provide aid. The Good Samaritan Legislation in this State, protects any individual who in good faith, acting prudently and within the realm of their training, from legal obligation. It should be stressed that a competent, sane adult can refuse medical treatment from the first aide provider or any medical professional, thus, patients must consent to treatment. A person who is unconscious, incompetent or a child falls under "implied consent" whereas we assume that they would want treatment. Any time there is any question as to whether or not a patient should be able to refuse aid, the Emergency Medical Services or law enforcement should be summoned.

911 and the EMERGENCY MEDICAL SYSTEM

Most Florida areas have an emergency 911 system for the public to access all services. This system is answered by operators who are specially trained to quickly obtain vital information from the caller in an emergency situation. Some areas use dispatchers who are trained to give emergency instructions over the telephone. Ambulances are staffed by either Emergency Medical Technicians, (EMT) who can provide basic emergency care and oxygen, or by Paramedics who provide advanced specialized care, including advanced airway and breathing procedures, EKG's, IV's and various necessary medications for most medical or traumatic situations. DO NOT hesitate to summon the Emergency Medical teams for any situation.

COMMUNICABLE DISEASES

The 1980's have brought about many fears, concerns and rumors concerning AIDS and other diseases. The two diseases that first aid providers need to be most familiar with are Hepatitis B and the HIV virus.

Hepatitis B is carried in blood and affects the liver. It may cause the patients eyes and skin to turn yellow and can be fatal. It is quite contagious through blood contact. AIDS is the disease that develops after being exposed to the Human Immune Deficiency Virus (HIV). The body becomes unable to fight off diseases, thus, at some point this disease is fatal. The virus is carried in blood, semen and vaginal fluids. It is not as contagious as Hepatitis.

Generally speaking, in the first aid setting, contracting one of these diseases is extremely rare and unlikely. First of all, the patient would have to be carrying one of these diseases, and then you would have to get his or her blood directly into your blood stream, either through open wounds or through your mouth. Even with this type of exposure, your chance of contracting the disease is very unlikely; however there is that slight possibility so we must take the following precautions, whenever possible:

1. Wash your hands with soap and water immediately following treatment
2. Wear latex gloves to handle any body fluids or soaked materials
3. Keep open wounds on your body covered at all times
4. Learn to use a CPR safety mask for breathing

ASSESSING THE ILL OR INJURED

The assessment is the most important portion of first aid. If you do not assess the severity of an injury or illness it is impossible to provide or call for adequate medical care.

The first portion of the assessment is the scene assessment: Is it safe for the first aid provider to be in this area. (I.e. fire, accidents, toxic fumes, etc.). Next, as you make your way to the victim, quickly notice your surroundings for any clues that may help you to determine the cause of the emergency (i.e. wrecked vehicles, knocked over furniture, empty bottles, medications, etc.) Often the patient will be able to tell you exactly what happened. Sometimes you may have to obtain information from bystanders or family members.

Once reaching the victim, the assessment should be done systematically to avoid skipping vital areas. A patient who is awake may be able to tell you exactly what is wrong and lead you to the specific injury or illness. Patients who are unconscious or in shock may not be able to help you. Proper evaluation consists of the primary and secondary assessment.

PRIMARY ASSESSMENT

A rapid search for immediately life threatening conditions:

LOC= Level of consciousness. Awake? Alert? Respond to voice or pain?

A= Airway. Is it opened or blocked by the tongue or other object.

B= Breathing. Is the patient breathing easily once every 3-5 seconds?

C= Circulation. Does the patient have a pulse in the neck? A pulse in the wrist.

H= Hemorrhage. Is there severe bleeding.

The primary survey is done in the first minute and any problems are corrected to the best of your ability.

Note: A conscious, talking patient has adequate Airway, Breathing and Circulation initially. Though he may still need advanced medical care.

SECONDARY ASSESSMENT

A more thorough full assessment to note any other injuries or symptoms the patient has. It consists of the interview, vital signs and head to toe exam.

The Interview

Used to gain pertinent information about the patient.

S= Symptoms. What is the patient's main complaint, (may be "unconscious")

A= Allergies, especially to medicines or the environment if applicable.

M= Medications. Did he take them?

P= Previous illnesses. Medical conditions

Your House is Your Castle

Community Safety and First Aid

L== Last meal. How long ago did the patient eat?

E= Events that led up to this incident.

Vital signs

We use the patients breathing rate, heart (pulse) rate and skin temperature and color to help determine if he is potentially in shock. These vital signs can be affected by fear, stress, and other factors. When found to be abnormal in the emergency situation always consider it to be serious until more advanced help can assess the patient. The norms are:

BREATHING- Adult 12-20/minute.

Child 20-30/minute

PULSE- Adult 60- 100/minute.

Child 80-110/minute

SKIN- Warm and Dry with some color.

The head to toe exam is done from top to bottom. We look and feel for injuries and painful areas. Injuries include deformity, bruising, or bleeding.

NEVER TRY TO MOVE A SERIOUSLY INJURED PATIENT, ESPECIALLY THE HEAD, NECK OR BACK UNLESS THERE IS IMMEDIATE DANGER OR THE PATIENT NEEDS CPR OR LIFE SAVING PROCEDURES. A SPINE OR BACK INJURY CAN EASILY PARALYZE OR KILL A VICTIM IF MOVED IMPROPERLY

Head and neck

Look for injuries Check for blood or fluid coming from the ears or nose. Check the pupils in the eyes for equality, dilation or constriction. (Bright light may constrict. Darkness may dilate)

Chest/Abdomen/Back (if possible). Check for injuries or pain when touched Extremities- Check for injuries, movement and feeling on both sides

Circulatory shock

Shock can be life threatening and may occur in any trauma or medical related emergency. Shock is defined as the body's inability to supply oxygenated blood to the vital organs (brain, heart, kidneys).

In general, there are 3 things that will cause shock:

1. Loss of body fluid (blood, vomit, etc.)
2. Increase in blood vessel size.
3. Irregular beating of the heart.

Recognizing shock

- Altered consciousness (ranging from restlessness to unconsciousness).
- Rapid, weak pulse. Rapid, shallow breathing.
- Pale, cool, clammy skin (may be slightly blue).
- Thirst. Nausea and vomiting.

Community Safety and First Aid

- Dull appearing eyes with dilated pupils.
- Pulse in the neck but no wrist pulse
- (late sign).

Reacting to a patient with shock

- Maintain A,B,C's and control bleeding.
- Keep patient calm.
- Cover with patient to keep warm.
- Lay patient flat on back with legs elevated 12 inches.

NOTE- Conscious Patients with breathing difficulty or chest pain should be semi- seated if there is no probability of neck or back injury.

Vomiting patients should be rolled as a unit onto their side.

Fainting is a form of shock (increase in vessel size). Treat for shock and assess for further injuries.

ALWAYS SUSPECT SHOCK IN A PATIENT WHO PRESENTS WITH ANY OF THE SIGNS FOLLOWING AN INJURY OR ILLNESS. SHOCK CAN KILL RAPIDLY.

This section will primarily deal with injuries. Injuries are classified as either BLUNT or PENETRATING. Injuries are the leading cause of death and disability of children and young adults.

WOUNDS AND BLEEDING

The adult body contains about six quarts of blood. The body can slowly lose about one pint of blood with little effects. A child's blood volume and safe loss is a little less than half of the adults.

Sterile gauze should be used to cover wounds whenever possible. If unavailable, any clean absorbent material may be used in an emergency.

Always try to have some protective barrier between the first aide provider and the patients' blood to avoid direct contact.

Recognition of bleeding

External Bleeding- visible bleeding outside the body.

- Arteries- bleed rapidly and spurt blood.
- Veins- bleed steady.
- Capillaries- ooze blood.

Reaction to bleeding

Bleeding is controlled in the following order:

- Direct Pressure. Uniform pressure directly over and around the site.
- Elevation. Helps to slow blood flow to the site.
- Pressure Points. Apply pressure over the artery in the upper arm or the upper leg in the groin region.

NOTE- A nose bleed that is not caused by a blow to the head should be managed by having the patient sit up and pinching the nostrils together for 5-10 minutes non stop. If bleeding is severe into the back of the throat or does not stop in the 5-10 minutes- seek medical attention.

- If bleeding soaks through, add bulky gauze without removing the first.
- Never remove impaled objects. Bandage them in place.
- Use only light pressure to head, neck or eye bleeding.
- Amputated parts should be cleanly wrapped, placed in plastic and cooled.
- Minor wounds can be cleaned with soap and water. Any wound to be treated by medical personnel should be bandaged dry.

Internal bleeding may be seen as dark bruising, bleeding from orifices, coughing or vomiting of blood. It may occur with or without injury. The bleeding can not be stopped by the first aide provider.

TREATMENT FOR SHOCK AND MEDICAL ATTENTION IS ALL THAT THE FIRST AIDER CAN PROVIDE.

TYPES OF WOUNDS

Open wounds require bleeding control and should be left dry if they require medical attention. Gently wash with soap and water if minor.

A= Abrasion. A scraping of the skin from a rough surface. Usually have minor bleeding but may become infected.

P= Puncture. Caused by a sharp object. May have severe internal bleeding

A= Amputation. Any portion of body tissue being cut off, fully or partially.

Control bleeding first. Keep the part cleanly wrapped, put in a plastic bag, then keep the part cool.

L= Laceration. Any break in the skin, smooth or jagged. Control bleeding and keep the wound as clean as possible.

CLOSED WOUNDS

Bruising and Hematoma ("goose egg") indicate bleeding under the skin. Large areas may actually cause shock. The sequence to manage a closed tissue injury is as follows:

I= Ice. Apply ice 15 minutes per hour to reduce swelling.

C= Compress. Apply a snug (not tight) bandage around extremity wounds.

E= Elevate. Raise the area above the level of the heart.

EYE INJURIES

The eyes are susceptible to all of the previously discussed injuries. Obviously, the severity of injuries is increased because of the possibility of loss of vision. ***ALWAYS SEEK MEDICAL ATTENTION FOR EYE INJURIES.***

Cuts to the eyes

Apply a light dressing to control bleeding. Never apply pressure to the eyes. Always bandage both eyes to minimize movement.

Impaled objects

Stabilize in place. Do not remove. Cover both eyes.

Chemicals in the eyes

Flush with low pressure water for 15 minutes.

MOUTH INJURIES

The mouth has many blood vessels, thus is quite susceptible to bleeding and swelling when injured. These injuries are controlled in the usual manner with an emphasis on keeping the airway clear of blood.

Knocked out teeth

Teeth may be replaced by a dentist if seen within the first hour following the injury. Contact a Dentist immediately.

- A partially knocked out or loose tooth should be left in the socket.
- A fully knocked out tooth should be placed in a cup of milk.

Bleeding from the tongue

Control tongue bleeding with pressure to the wound. If the patient is awake, small ice chips in the mouth may slow bleeding down.

CHEST INJURIES

Injuries to the chest can be serious because of the major organs housed within the chest cavity. Always suspect injury to the lungs or heart for any patient who has shock or breathing difficulty following chest injury. This includes the front or back of the chest.

Opened chest injuries

May puncture the lung and cause shock. A wound that bubbles or makes a sucking sound should have an airtight bandage applied to control bleeding and keep air from leaking in. Shock should be treated if suspected.

Closed chest injuries

May include broken ribs, bruised or punctured lungs or heart. SIGNS include pain, breathing difficulty, coughing up blood, visible bruising to the chest, or shock. Patients with chest injury who have breathing difficulty should be treated for shock, and kept in the most comfortable position- usually holding their arm or a pillow against the injured area.

THE GENERAL MANAGEMENT FOR CHEST INJURIES IS TO KEEP THE PATIENT COMFORTABLE, MAINTAIN BREATHING AND TREAT FOR SHOCK.

ABDOMINAL INJURIES

The abdomen is susceptible to the same injuries as the rest of the body. There is an increased possibility for internal bleeding and shock because of the unprotected internal organs. Blunt or penetrating injuries can rupture abdominal organs.

Recognizing internal abdominal bleeding

- Abdominal pain, tenderness or rigidity.
- Nausea or vomiting
- Shock with no external bleeding
- Bruising of the abdomen.

Reacting to abdominal injuries

- Maintain Airway, Breathing, and Circulation. Control external bleeding.
- Bandage any impaled objects in place
- If organs are protruding- cover with sterile bandage; do not replace them into the body.

SPINAL INJURIES

The brain and spinal cord control all functions of the body. Injuries may produce symptoms ranging from nothing to paralysis or death. Without an X-ray it is impossible to determine if a spinal injury took place. ***TREAT ALL SERIOUSLY INJURED OR UNCONSCIOUS TRAUMA PATIENTS AS THOUGH THEY HAVE A SPINAL INJURY-*** from falls, to vehicle accidents; any patient can have a life threatening spinal injury.

Community Safety and First Aid

Recognizing spinal injuries

- The scene- injury possibility may be the only sign
- Pain along the spinal column
- Tingling, numbness, or paralysis of extremities
- Inability to move the chest muscles when breathing

Reacting to spinal injuries

- Maintain Airway (JAW THRUST- NO HEAD TILT), Breathing, Circulation
- Do not move patient unless necessary for safety
- Gently hold the patients' head to keep it from moving
- Cover the patient to keep warm.
- If patient is lying flat- do not elevate the feet (this moves the spine)

HEAD INJURIES

As previously mentioned, external head injuries are managed the same as injuries to any part of the body though we never apply strong direct pressure to the head/This segment will deal with injuries inside of the head- effecting the brain.

Concussions

A jarring of the brain causing temporary symptoms-no actual injury to the brain itself.

Contusions

Actual bleeding of the brain following an injury. May cause permanent complications.

Recognizing brain injuries

Note: (difficult to distinguish for the first aide provider)

- Loss of consciousness- brief or prolonged. May be confused.
- Nausea and vomiting
- Unequal pupils
- Seizures

Reacting to brain injuries

- Suspect a spinal injury and treat the same
- Maintain Airway (Jaw thrust- no head tilt), Breathing, Circulation.
- May be kept with head elevated if found that way or seated already
- Be prepared for patient to vomit!

SKELETAL INJURIES

Fractures

A break in the bone. Straight or angulated. Open or closed.

Dislocations

Joint pushed out of its normal socket.

Sprains

Tearing of the tissues that hold joints together (ligaments).

Without an X-ray all of these may look the same to the emergency provider. For our purposes, we will treat them all the same.

Recognizing skeletal injuries

All may or may not show the following:

- Pain and tenderness
- May or may not move
- Swelling and bruising
- Straight or deformed
- Opened or closed skin.
- May or may not have feeling

Reacting to skeletal injuries

Seek medical attention.

- Maintain Airway, Breathing, and Circulation, Stop bleeding, Treat Shock.
- Keep the site from moving.
- Splint from joint above to below.
- Use pillow, cardboard, books, etc. to splint. Move as little as possible.

MEDICAL EMERGENCIES

Medical emergencies are brought on by conditions within the body. These emergencies may have a sudden onset or a slow gradual progression. There may or may not be any early warning signs. Remembering the interview portion of the assessment is very important during evaluation. The general treatment is geared towards maintaining the Airway, Breathing, Circulation and treating for Shock if present. We will discuss the signs and management of a number of common medical conditions.

HEART DISEASE

Affecting millions of Americans, heart disease will kill 574,000 this year. Heart disease may actually begin while the patient is in their twenties and may manifest itself as early as thirty. There are 2 forms of emergencies:

Angina

A narrowing of the arteries that supply the heart with oxygen.

The patient will experience chest pain or pressure when stressed. The symptoms will subside within 2 minutes with rest.

Heart attack

A complete blockage of the arteries that supply the heart with oxygen.

The heart muscle will be damaged. The symptoms will usually not stop with rest.

Recognizing cardiac emergencies

- Chest pressure; Mild or severe. May or may not radiate.
- Shortness of breath. Rapid breathing rate.
- Cool, pale, clammy skin. Rapid, slow, or irregular pulse.
- Nausea, vomiting, weakness
- Fainting, respiratory or cardiac arrest

Reacting to cardiac emergencies

- Keep patient calm. They may ignore the signs.
- Keep the patient in a comfortable position- usually sitting.
- Call the Emergency Medical Services.
- Be prepared to perform CPR.

Patients may take their own Nitroglycerine tablets to relieve pain. They should take only one per 5 minutes. Do not let anyone who is passed out receive Nitroglycerine.

STROKE

A stroke is an occlusion or rupture of one of the arteries that feeds the brain. Since the brain controls all functions of the body, a stroke may effect any body function; voluntary or involuntary.

Recognizing stroke

- Headache and dizziness (often precipitate a stroke). Full bounding pulse
- Paralysis or weakness to one side of the body or one sided facial droop
- Unequal pupils
- Difficulty or unable to speak
- Irregularities in memory, personality, and actions

Community Safety and First Aid

Reacting to stroke

- Maintain Airway, Breathing and Circulation (shock is rare in strokes)
- Lay patient on the side with head slightly elevated (if uninjured)
- Call the Emergency Medical Services
- Be prepared to perform CPR

BREATHING DIFFICULTY

A number of diseases and sudden illnesses can cause respiratory distress. The first aide provider is limited in the treatment he can provide to the patient having breathing difficulty. The Emergency Medical Services are needed.

Asthma

A condition where the lower airways (in the lungs) become irritated and constrict causing obstruction in air flow and wheezing. The patient may have medication to correct this.

Allergic reactions

May occur as a result of an exposure or something eaten. Signs include a rash, hives, facial swelling, and life threatening constriction of the airways (similar to asthma). These patients may carry an injectable medication to correct this.

Breathing diseases

Pneumonia, Emphysema, and Bronchitis cause mucus to congest the lungs and restrict air flow.

The general management for all breathing difficulties is aimed at maintaining A,B,C's, assisting the patient with their medication and keeping them comfortable until the Emergency Medical Services arrives.

SEIZURES

A seizure or convulsion is the result of irregular messages being sent throughout the body by the brain. It may be the result of a number of causes, including: Epilepsy, Diabetes, Head injury, Medications, and Fever. Seizures generally stop on their own within 5 minutes. A patient with a regular seizure disorder who has a short seizure then wakes up may not require medical attention. If unsure always call The Emergency Medical Services.

Recognizing seizures

Seizures have 3 distinct phases:

- Patient becomes unconscious. The body becomes rigid. Eyes roll back.
- The entire body begins to shake. May foam or drool from mouth.
- The patient is confused and may want to sleep.

Reacting to seizures

- Initial treatment is aimed at keeping the patient from injuring himself. DO NOT try to restrain the patient. Move objects away from the patient.
- Whenever possible, roll the patient onto their side to maintain the airway and keep them from choking on saliva or blood, if present.
- If seizure is due to fever- place wet towels over patient to reduce temp
- Never place anything in the mouth of a seizure victim.
- Prolonged seizures may cause respiratory arrest. Be prepared.

DIABETES

Diabetes is a condition where the body is unable to use sugars as its normal energy source because the body stops producing insulin. Insulin is a hormone in the body which allows sugar to enter the cells properly. The cells of the entire body require a constant flow of sugar. Diabetics must take insulin injections daily or pills to make them produce more insulin. The diabetic must then balance the amount of medication taken with the amount of food taken in and the amount of energy expended daily. There are two types of diabetic emergencies: Diabetic Coma and Insulin Shock.

Recognizing diabetic emergencies

Diabetic Coma

Occurs in the diabetic who has taken no insulin for days

- Slow onset. Sick for several days. Later becoming unconscious.
- Dehydrated (dry skin and mouth). Frequent urination
- Fruity odor on breath (from body producing acids)

Insulin Shock

occurs when the diabetic takes too much insulin or does not eat. The brain is rapidly deprived of sugar and damage may occur within minutes. These patients often appear to be drunk.

- Confused, restless, or aggressive behavior.
- Cool, pale, clammy skin.
- Rapid pulse.
- Hunger pangs
- May have a seizure. Will become unconscious rapidly!

Reacting to diabetic emergencies

- Maintain Airway .Breathing, Circulation, treat for Shock if applicable.
- Administer something with sugar in it to Conscious patients only. (only insulin shock requires sugar, but it will not harm the coma patient)
- Call the Emergency Medical Services for all unconscious or patients who do not rapidly return to normal, following giving sugar.

Community Safety and First Aid
ENVIRONMENTAL EMERGENCIES

Conditions which are brought about because of environmental factors are placed in their own category. The basic rule of maintaining Airway, Breathing, Circulation and Shock treatment still are the main concern.

POISONING

Poisons may come in the form of medications, chemicals, food, plants or any other substance ingested or absorbed into the body. The symptoms will vary depending upon what the poison is and how sensitive the body is to it. Symptoms may range from a minor rash to death.

Reacting to poisonings

- Identify the substance, if known.
- When and how much was taken or absorbed.
- Maintain Airway, Breathing, Circulation, and treat Shock if needed.
- Watch for vomiting or allergic type reactions
- Seek medical attention
- Poison control (1-800-282-3171) will give specific advice.

The poison control center may advise you to dilute the poison or to induce vomiting. Dilution is generally done with water or milk. Vomiting is induced with Syrup of Ipecac, which can be purchased at any drug store. The correct dosages are 2 tablespoons for adults and 1 tablespoon for children. Always follow Syrup of Ipecac with several glasses of water.

NEVER ADMINISTER ANYTHING BY MOUTH TO ANY PATIENT WHO IS NOT FULLY AWAKE AND ABLE TO DRINK.

NEVER INDUCE VOMITING IN ANY VICTIM WHO IS NOT FULLY AWAKE, HAS HAD A SEIZURE, OR HAS INGESTED CAUSTIC POISONS.

STINGS AND BITES

Stings and bites may cause symptoms ranging from a mild skin reaction to severe allergic reaction and death.

Recognizing stings and bites

- Reddened painful area.
- Generalized rash.
- Swelling to the site or entire body, especially the face.
- Severe allergic reaction with breathing difficulty and wheezing.

Community Safety and First Aid

Reacting to stings and bites

- Maintain Airway, Breathing, Circulation, and treat Shock if needed.
- Attempt to identify what bit the patient, (bee, spider, snake, etc.).
- If stinger is still in the patient, scrape it off.
- Wash the area. Baking soda or ammonia may relieve pain.
- Keep the patient calm and avoid excess movement in the area.
- Watch for signs of allergic reaction, especially breathing difficulty.

NOTE: Patients may carry a sting antidote kit which contains an injection of adrenalin to correct wheezing and breathing difficulty.

BURNS

Burns from heat exposure may damage various areas of the skin. Burns can easily become infected and may cause the patient to be unable to control his body temperature. The seriousness of a burn is determined by the degree (depth), amount of body area and the age (very old or very young) of the patient. Burns kill over 6,000 people per year.

Recognizing burns

- 1st degree- reddened outer layer of skin. (i.e. sunburn)
- 2nd degree- blistered outer layer, burns into the inner skin layer
- 3rd degree- charred outer layer, burns through the skin

Reacting to burns

- Stop the burning process, Put out fire, Carefully remove burning clothes
- Maintain Airway, Breathing, Circulation, and treat Shock if needed.
- Keep the burn area dry. Apply dry sterile covering to prevent infection (small areas of 1st degree burns may be treated with water for pain)
- Do not pop blisters
- Treat any associated injuries
- Seek medical attention for all large 2nd degree, any 3rd degree, chest, face or throat burns, palm, feet or genital burns.

TEMPERATURE RELATED EMERGENCIES

The body must maintain a normal temperature of about 98.6 degrees in order to function properly. Changes from internal or external causes may create emergencies.

HEAT EMERGENCIES

Heat cramps

Occur when the body sweats out necessary fluids.

- Cramping in the legs and abdomen are common

Reacting to heat cramps

Move to cool area, rest, give water to drink. Do not massage

Heat exhaustion

Fluid loss from sweating causing reactions throughout the entire body similar to shock.

- profuse sweating
- feels warm or cool touch (normal body temp)
- weak and dizzy
- nausea and vomiting
- rapid, weak pulse

Reacting to heat exhaustion

- Maintain Airway, Breathing, Circulation
- Move to a cool area
- Treat for shock
- Cool the patient with wet towels
- May give small sips of cool water if fully awake and able to drink
- Seek medical attention if not rapidly improving.

Heat stroke

Internal and external heating of the body to a point where the sweating mechanism is blocked. The temperature rapidly rises to life threatening levels.

Recognizing heat stroke

- Hot, red, dry skin
- Weakness and dizziness
- Diminishing level of consciousness
- Rapid pulse and breathing
- Seizures, respiratory, or cardiac arrest

Reacting to heat stroke

Community Safety and First Aid

- Maintain Airway, Breathing, and Circulation
- Move to a cool area, remove clothes and cool immediately with water
- Ice may be applied to the armpits, groin and behind the neck
- Contact the emergency medical services

COLD RELATED EMERGENCIES

Hypothermia

Cooling of the body to a dangerously low temperature. The outside temperature does not have to be "freezing", remember the normal body temperature is 98.6 degrees. Body temperatures below 95 degrees can be very serious. When the body temperature drops below 80 degrees, death occurs quite frequently. The healthy body can create heat adequately in most situations. The very young and the very old are most susceptible as is the patient submerged in water for long periods of time.

Recognizing hypothermia

Initial Signs:

- Shivering
 - Difficulty speaking
 - Lack of coordination
 - Patient will feel cold
- Late Signs:
- Stops shivering
 - Unconscious or glassy stare with no response
 - Skin may appear waxy or blue
 - The patient may be stiff "frozen"
 - Breathing and pulse may be diminished or absent

Reacting to hypothermia

- Maintain Airway, Breathing, Circulation (take extra time when assessing as these may be depressed and difficult to note)
- Move to a warm area, remove wet clothing, and cover with blankets.
- Contact emergency medical services immediately
- If medical treatment is several hours away- the first aide provider can lay next to the patient under a blanket to use his own body heat to help 'raise the victims.
- In general, warming should be done in the hospital

Patients who appear dead may respond to CPR after they are re-warmed in the hospital- Do not give up.

Your House is Your Castle

Community Safety and First Aid

The information contained throughout this manual follows all current appropriate standards of care for first aide providers. Anytime there is any question or discrepancy in the management of a patient- do not hesitate to contact the emergency medical services. The general principle of first aid is to assist the ill or injured and do no further harm. Successful first aid occurs when the provider combines first aid knowledge with the most important factor- common sense.