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**ACKNOWLEDGMENTS**

# FIRST AID GUIDE FOR CHILD CARE AND SCHOOL EMERGENCIES

This flipchart is a quick reference guide for administering emergency care to an injured or ill individual. It contains practical, step-by-step instructions that describe what to do when caring for an injured or ill person. It replaces a previous edition published in 2003.

## **Who Should Use this Flipchart**

This flipchart is designed for use by teachers, school nurses, clinic aides, early care and education and other staff members responsible for the health and safety of students and others in a school or community setting. Do not use treatment methods beyond your skill level or your scope of practice. When in doubt, call 911 or your local emergency services.

## **How to Use This Flipchart**

This flipchart should be posted in a place that is easily accessible to all staff members. It is recommended that **all** staff become familiar with the contents of this flipchart **prior** to the necessity for handling an emergency situation.

This flipchart serves as a guide to help the user handle emergency situations.

SECTION	DESCRIPTION
TOPICAL INDEX	ALPHABETICAL LISTING OF ALL TOPICS CONTAINED IN THIS FLIPCHART.
GENERAL EMERGENCY GUIDELINES	PROVIDES GENERAL GUIDANCE AND INFORMATION ON THE ADMINISTRATION OF EMERGENCY ASSISTANCE TO INDIVIDUALS WHO ARE ILL OR INJURED PRIOR TO THE ARRIVAL OF EMERGENCY MEDICAL PERSONNEL.
STANDARD PRECAUTIONS	PROVIDES AN OVERVIEW OF HANDLING BLOOD AND BODY FLUIDS IN THE SCHOOL SETTING.
FIRST AID PROCEDURES	DESCRIBES SPECIFIC PROCEDURES FOR TREATING AN ILL OR INJURED INDIVIDUAL IN ALPHABETICAL ORDER.
POISONINGS	GIVES DETAILED INSTRUCTIONS FOR HANDLING AN INDIVIDUAL WHO HAS INGESTED OR, IN SOME WAY, COME INTO CONTACT WITH A POISON OR OTHER HAZARDOUS SUBSTANCE.
CHEMICAL, BIOLOGICAL, RADIOLOGIC, NUCLEAR, EXPLOSIVE EVENTS OR BOMB THREAT	GIVES INSTRUCTIONS FOR WHOM TO CONTACT IN THESE EMERGENCIES.
BEHAVIORAL AND MENTAL HEALTH EMERGENCIES	PSYCHOLOGICAL FIRST AID. GIVES INSTRUCTIONS FOR MANAGING SUICIDE RISK AND ACTIVE SHOOTER SITUATIONS.
EMERGENCY CARE PROCEDURES	DESCRIBES PROCEDURES FOR HANDLING EMERGENCY AND LIFE-THREATENING CRISIS, MEDICAL SITUATIONS INCLUDING CPR, CHOKING, AND AED USE.

# TOPICAL INDEX

## GENERAL EMERGENCY GUIDELINES

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Risk of Suicide  
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## EMERGENCY CARE PROCEDURES

Cardiopulmonary Resuscitation (CPR)  
Adult, Children and Infants

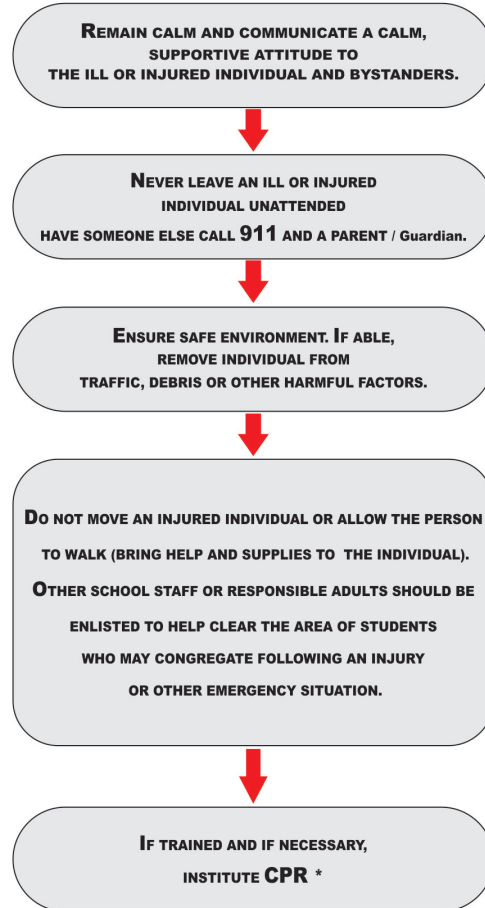
## Choking

Responsive Child or Adult / Unresponsive Child or  
Adult / Responsive Infant / Unresponsive Infant

Automatic External Defibrillation (AED)



# GENERAL EMERGENCY GUIDELINES



## CALL **911** IMMEDIATELY FOR:

- Anaphylactic Reaction (Breathing difficulty, wheezing, shortness of breath)
- Amputation
- Bleeding (severe)
- Breathing Difficulty (persistent)
- Broken Bone
- Burn (severe Thermal, Chemical, Electrical)
- Chest Pain (severe)
- Choking
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- Seizure (if No History Of Seizure)
- Shock
- Threats To Harm Self or Others
- Unconsciousness
- Wound (Deep/Extensive)

DO NOT USE TREATMENT METHODS BEYOND YOUR SKILL LEVEL OR YOUR SCOPE OF PRACTICE. WHEN IN DOUBT, CALL 911. ALL PERSONS WORKING WITH STUDENTS ARE ENCOURAGED TO OBTAIN TRAINING IN CPR/FIRST AID THROUGH AN AUTHORIZED COMMUNITY AGENCY.

\*PRESENCE OF A DO NOT RESUSCITATE (DNR) ORDER IS A PERMISSIBLE REASON NOT TO BEGIN CPR.

# STANDARD PRECAUTIONS FOR HANDLING BLOOD AND BODY FLUIDS IN SCHOOL

## Potentially Infectious Body Fluids

Blood	Urine	Saliva
Feces	Vomit	Cerebrospinal Fluid
Organ Tissue	Amniotic Fluid	Semen

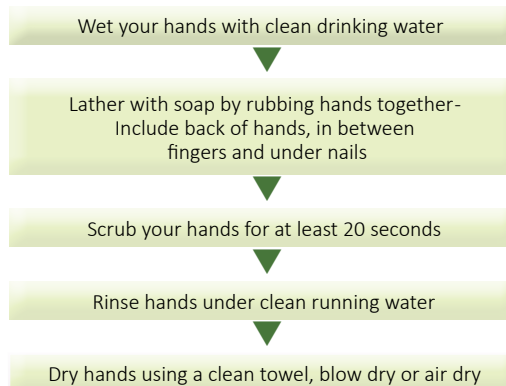
## Infections Transmitted Through Blood & Body Fluids

HIV	Hepatitis A	Hepatitis B
Hepatitis C	Staph Infections, including Methicillin Resistant Staphylococcus Aureus (MRSA)	Strep Infections
Gastroenteritis	Salmonella	Pneumonia
Syphilis	Tuberculosis	Malaria
Measles	Chicken Pox	Herpes
Urinary Tract Infections	Ebola	Norovirus
	Other blood infections	

## STANDARD PRECAUTIONS FOR HANDLING BLOOD AND BODY FLUIDS IN SCHOOL

- Anticipate potential contact with infectious materials in routine and emergency situations. Following standard precautions is the most important step in preventing exposure to and transmission of infections.
- Use Standard Precautions and infection control techniques in **all** situations that may present the hazard of infection.
- Precautions should be observed and appropriate protection used when caring for bleeding injuries or handling other body fluids in emergency situations. Body fluids include blood, drainage from cuts, scabs, skin lesions, urine, feces, vomit, nasal discharge, and saliva. The body fluids of all persons should be considered to be potentially hazardous.
- Avoid direct contact with body fluids. Caregivers who anticipate assisting in first aid when body fluids are present (e.g., cleaning cuts and scrapes, treating a bloody nose) should use disposable gloves.
- Caregivers should use protective eyewear and masks in certain situations.
- If unanticipated skin contact occurs, hands and all other affected skin should be washed with soap and running water as soon as possible. The local procedures for blood and body fluid exposure should be followed.
- Diligent and proper hand washing, the use of barriers (e.g., gloves), appropriate disposal of waste products and needles, and proper care of spills are essential techniques of infection control.
- If it is necessary to perform CPR, a one-way mask or other infection control barrier should be used. CPR should not be delayed while such a device is located.

## HAND WASHING PROCEDURE



## GLOVES

1. Gloves must be worn when direct care may involve contact with any type of body fluid. Refer to CDC Personal Protective Equipment Poster for instruction on donning and removing gloves, <http://www.cdc.gov/HAI/pdfs/ppe/ppeposter148.pdf>
2. Disposable, single-use, waterproof gloves (e.g., latex or vinyl) should be used. (Vinyl gloves should be placed with individuals who have a latex allergy or a high potential for developing a latex allergy, e.g., individuals with spina bifida.)
3. Discard gloves in the appropriate container after each use.
4. Hands should be washed immediately after glove removal.

## DISPOSAL OF INFECTIOUS WASTE

1. All used or contaminated supplies (e.g., gloves and other barriers, sanitary napkins, bandages) except syringes, needles, and other sharp implements should be placed into a plastic bag and sealed. This bag can be thrown into the garbage out of reach of children or animals.
2. Needles, syringes, and other sharp objects should be placed immediately after use in a puncture-proof container that is leak proof on the bottom and sides. To reduce the risk of a cut or accidental puncture by a needle, **NEEDLES SHOULD NOT BE RECAPPED, BENT, OR REMOVED FROM THE SYRINGE BEFORE DISPOSAL.**
3. Once the container is full, it should be sealed, bagged, and kept out of the reach of children or animals until it can be disposed of properly.

4. Body waste (e.g., urine, vomitus, feces) should be disposed of in the toilet. If body fluids (e.g., urine, vomitus) are spilled, the body fluids should be covered with an absorbent sanitary material, gently swept up, and discarded in plastic bags.

## CLEAN-UP: Spills of blood and body fluids

1. Spills of blood and body fluids should be cleaned up immediately with an approved disinfectant cleaner. Refer to locality policy or use 1:10 ratio of a bleach/water solution.
2. Mix 1 part household 5.25% bleach in 10 parts of water (1/4 cup/1 gallon) **OR** if using a concentrated bleach of 8.25 % mix 3 tbs/gallon. Replace solution daily.
3. Wear gloves.
4. Mop up spill with absorbent material.
5. Wash the area well, using an approved disinfectant cleaner or a 1:10 bleach/water solution.
6. Dispose of gloves, soiled towels, and other waste in sealed plastic bags and place in garbage.

## CLEAN-UP: Routine environmental clean-up

1. When surfaces become contaminated with blood or body fluids, use the procedures outlined above.
2. Regular cleaning of non-contaminated surfaces (e.g., toilet seats, tabletops) can be done with standard cleaning solutions or the 1:10 bleach/water solution described above. Regular cleaning of obvious soil is more effective than extraordinary attempts to disinfect or sterilize surfaces.
3. Brooms and dustpans must be rinsed with disinfectant. Mops must be soaked in disinfectant, washed, and thoroughly rinsed. The disinfectant solution should be disposed of promptly down the drain.

# FIRST AID PROCEDURES

## ABDOMINAL INJURY GENERAL WOUNDS

### TREATMENT

1. Determine cause of injury. Ensure safety of environment.
2. Call **911**.
3. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
4. Carefully position individual on back.
5. If movement of the legs does not cause pain, place a pillow under knees to help relax the abdominal muscles.
6. If movement of the legs causes pain, leave individual lying flat.
7. Control bleeding with a bulky dressing. If ineffective, or if bleeding is severe, apply QuickClot® directly to bleeding site.
8. **Do not** give food or drink.
9. **Do not** give medication.
10. Call parent/guardian.

## PROTRUDING WOUNDS

**DEFINITION:** A protruding abdominal wound is an injury to the abdomen causing internal organs to be exposed or protrude through the wound.

### TREATMENT

1. Determine cause of injury. Ensure safe environment.
2. Call **911**.
3. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
4. Carefully position individual on back.
5. If movement of the legs does not cause pain, place a pillow under knees to help relax the abdominal muscles.
6. If movement of the legs causes pain, leave individual lying flat.
7. **Do not** apply any pressure to the protruding organs.
8. **Do not** attempt to push protruding organs back into the abdomen.
9. Remove any clothing from around wound.
10. Cover wound with clean cloth (preferably sterile).
11. If there is a delay in medical assistance:
  - Loosely drape sterile dressings or a clean cloth over the wound.
  - Use sterile saline to moisten the dressings.
  - Hold dressing in place with bulky bandage.
12. Treat for Shock (see Shock).
13. **Do not** give food or drink.
14. **Do not** give medication.
15. Call parent/guardian.

## ABDOMINAL PAIN (STOMACH ACHE) NON SEVERE / STOMACH ACHE

### TREATMENT

1. Take temperature orally, ensuring no food or beverages have been consumed for at least 15 minutes.
2. Have individual rest 15-30 minutes.
3. If oral temperature is greater than **100.3 °F (38 °C)** and/or pain intensifies, call parent/guardian and recommend contact with healthcare provider via a telephone call or an office visit.

## SEVERE / WITH OR WITHOUT VOMITING

### TREATMENT

1. **Call 911**.
2. **Do not** give anything to eat or drink.
3. **Do not** give medication.
4. Take temperature.
5. Call parent/guardian.

## ALLERGIC REACTION

### ANAPHYLAXIS

**DEFINITION:** An **allergic reaction** is an exaggerated immune response by the body to a foreign material. **Anaphylaxis** is a severe and sudden immune reaction that can lead to **anaphylactic shock**, which is **potentially life threatening**.

### CAUSES

- Insects
- Foods
- Plants
- Medications
- Chemicals
- Soap
- Dust
- Makeup or perfumes

### SIGNS AND SYMPTOMS

- Apprehension/Nervousness
- Rash (particularly on face)
- Hives
- Itching
- Swelling of affected areas (particularly on face, tongue, lips and neck)
- Breathing difficulty-wheezing, coughing, gurgling, stridor, grunting or high-pitched sounds
- Skin is flushed and dry or pale, cool, and clammy
- Increased heart rate, weak pulse

### TREATMENT

1. If individual is known to have allergies, consult the written emergency action plan on file and proceed with healthcare provider's instructions, such as administration of auto-injectable epinephrine (for example, Adrenaclick®, Auvi-Q™ or Epi Pen®). (**See Epinephrine**)
2. Direct someone to call **911**.
3. Check individual's pulse and respiration. Be alert for breathing and pulse being slower or faster than usual. If necessary, certified personnel start CPR (see CPR and Shock).
4. Provide oxygen if available.
5. Call parent/guardian.

See next page





# ALLERGIC REACTION continued

## ALLERGIC REACTION

### HIVES (RASH) / ITCHING

**DEFINITION:** Hives are eruptions of the skin caused by contact with or ingestion of an allergic substance or food. Hives appear as raised blotches on the skin, pale in the middle, with reddened border, often accompanied by itching. Hives involving mouth, eyelids and tongue are **potentially life-threatening**.

#### TREATMENT

1. If hives and itching involve eyelids, lips, mouth, or tongue, call **911**.
2. If individual is known to have allergies, consult the written emergency action plan on file and proceed with healthcare provider's instructions, such as the administration of an antihistamine (for example, Benadryl) or auto-injectable epinephrine (for example, Adrenaclick®, Auvi-Q™ or Epi Pen®). **See Epinephrine.**
3. Apply cold compress.
4. Give reassurance.
5. If individual is too uncomfortable to do school work, send home.
6. Call parent/guardian.

### SWELLING

**NOTE:** An allergic reaction that causes swelling is **potentially life threatening**.

#### TREATMENT

1. If there is face, mouth, and neck swelling, call **911**.
2. If individual is known to have allergies, consult the written emergency action plan on file and proceed with healthcare provider's Instructions, such as the administration of an antihistamine (for example, Benadryl) or auto-injectable epinephrine (for example, Adrenaclick®, Auvi-Q™ or Epi Pen®). **(See Epinephrine).**
3. Apply cold compress.
4. Give reassurance.
5. Call parent/guardian.

### WHEEZING

**DEFINITION:** Wheezing is an abnormally high-pitched noise resulting from a partially obstructed airway. Check for Emergency Care Plan and initiate treatment as directed. Airway obstruction is **potentially life threatening**.

#### TREATMENT

1. If breathing difficulty worsens (skin color changes, wheezing, retraction of nose, cheeks or chest), prolongs, or occurs with hives and/or swelling, call **911**.
2. Place individual in comfortable position, usually sitting.
3. Provide oxygen if available.
4. If individual is known to have Asthma, (see Asthma section). If an individual has a prescription for an inhaled bronchodilator (for example, Albuterol), prepare to assist individual to administer prescribed medication.
5. If breathing worsens or individual stops responding, certified personnel start CPR (see CPR).
6. Call parent/guardian.

### Epinephrine

**DEFINITION:** Epinephrine (or adrenaline) is a non-selective alpha and beta-adrenergic receptor agonist indicated in the emergency management of allergic reactions and anaphylaxis. It works by constricting blood vessels and dilating airways. Examples of auto-injectable epinephrine include Adrenaclick®, Auvi-Q™, or EpiPen®. Specific instructions for their use are available online.

### DOSAGE

0.15 mg Epinephrine auto-injector IM	33 LBS - 66 LBS (15KG- 30KG)
0.30 mg Epinephrine auto-injector IM	≥66 LBS ( ≥30 KG)

1. Verify individual is having an allergic or anaphylactic reaction (see Signs and Symptoms above).

2. Obtain individual's prescribed auto-injectable epinephrine. Ensure the medication is prescribed to affected individual, is correct dosage, is not discolored and has not expired.

### DOSAGE continued

3. Remove the safety cap and grasp the center of the auto-injector.

4. Place the tip of the device against the individual's outer thigh midway between the waist and knee.

5. Push the device firmly against thigh (through clothes if necessary) and hold in place until medication is injected (at least \*10 seconds). Remove from individual and dispose of in biohazard /sharps container.

\*Note: Check manufacturer instructions for time of delivery of medication.

### SIDE EFFECTS

Increased Heart Rate	Pallor	Dizziness
Chest Pain	Headache	Nausea
Vomiting	Excitability & Anxiety	Tremor

### AFTERCARE

Once the auto-injectable epinephrine device is used, continue to closely monitor the individual's heart rate and breathing pattern

Tell the first responder the time the auto-injectable epinephrine device was used

The individual **MUST** be seen by a healthcare provider immediately once auto-injectable epinephrine has been administered

If necessary, certified personnel should be prepared to initiate CPR

## AMPUTATION

**DEFINITION:** Amputation is the severing (all or part) of a limb or digit of the body.

### TREATMENT

1. Call **911** immediately.
2. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
3. Control bleeding by placing a clean dressing (preferably sterile) over the wound and apply pressure on a nearby artery. If the individual continues to bleed, use a **tourniquet** if possible (see instructions below). And if available, apply QuickClot® directly to bleeding site.
4. Never complete the amputation.
5. Treat for Shock (see **Shock**).
6. If complete amputation:
  - Place direct pressure on wound site.
  - Place indirect pressure on nearby arteries.
  - Locate severed body part.
  - **Do not** wash severed part.
  - Wrap part in clean (preferably sterile) dressing.
  - Place part in plastic airtight bag and lay bag in pan of water kept cool with ice packs. **Do not** put part directly on ice.
  - Give part to EMS personnel.
7. Call parent/guardian.

## TOURNIQUET

**DEFINITION:** A tourniquet is a device that closes off all blood flow to and from an extremity to control severe bleeding that cannot be controlled by direct pressure to the artery. Rubber or latex tourniquets may be available in first aid kits.

**NOTE:** Tourniquets can be improvised by using belts, blood pressure cuffs, articles of clothing or other mechanical devices in an emergency. They should be at least 2-4 inches wide and several layers thick. If available, QuickClot® may be used in conjunction with tourniquet.

### PROCEDURE

1. Assess the site of severe bleeding or amputation.
2. If another person is present, have them apply firm and direct pressure above the wound to slow bleeding while the tourniquet is applied.
3. Select a site no farther than 2 inches from the wound. If the wound is on a joint, apply the tourniquet above the joint.

4. Place tourniquet around extremity and tighten to the point that bleeding is controlled. Do not tighten beyond that point.
5. Once a tourniquet has been applied, do not remove or loosen it unless ordered by a healthcare provider. This can dislodge clots and cause further bleeding.
6. Leave the tourniquet open to view and frequently assess the site. Attach a notation to the individual to alert first responders that a tourniquet has been applied and indicate the time of application.

## ASTHMA

**NOTE:** Asthma is a lung disease that causes repeated episodes of breathing problems. Symptoms of asthma can be mild, severe, or fatal. Asthma is **potentially life threatening**.

### COMMON SIGNS AND SYMPTOMS

- Difficulty breathing
- Wheezing (high-pitched, whistling sound)
- Coughing
- Tightness in chest
- Shortness of breath
- Blue lips or nail beds

### TREATMENT

#### SEVERE SIGNS AND SYMPTOMS

Difficulty breathing, irregular high pitched wheezing  
Minimal air movement  
Respiratory Rate < 12 or > 30 breaths per minute  
Decreased level of consciousness  
Bluish lips or nail beds

Refer to written emergency asthma action plan  
If applicable, assist individual in administering prescribed inhaled bronchodilator medication

CALL 911 AND PARENT / GUARDIAN

## INHALER ADMINISTRATION

**DEFINITION:** Most individuals with asthma have a prescription for a metered-dose inhaler (MDI) with an inhaled bronchodilator medication such as Albuterol. This medicine works by selectively widening the individual's small and large airway passages, so they can breathe oxygen more easily. When an individual with asthma is having an asthma attack as described above, they may need assistance or coaching in properly using their inhaled medication.

BEFORE USING ANY MEDICATION, ENSURE THE PRESCRIPTION IS FOR THE RIGHT INDIVIDUAL AND IS NOT EXPIRED

1. Shake the inhaler vigorously. Ensure it is at room temperature or warmer

2. Make sure the individual is alert enough to use the inhaler properly. Use a spacer device (Aerochamber) if available

3. Make sure the individual first exhales deeply

4. Have the individual put their lips around the opening and press the inhaler to activate the spray as they inhale deeply

5. Have the individual hold their breath 10 seconds and then exhale

## BITES

**NOTE:** For all bites, if there is any history of allergic reaction or if individual experiences signs and symptoms of an allergic reaction (see **Allergic Reaction**), call **911**.

### ANIMAL BITE

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Remove rings and bracelets from bitten extremity.
3. Cleanse wound thoroughly with soap and water for 5 minutes.
4. Cover wound with clean bandage (preferably sterile).
5. Determine individual's tetanus immunization status.
6. If injury not severe, call parent/guardian and recommend contact with healthcare provider via a telephone call or an office visit.
7. Call **Animal Control**.
8. Report all animal bites to the local health department.

### HUMAN BITE

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Remove rings and bracelets from bitten extremity.
3. Cleanse wound thoroughly with soap and water for 5 minutes.
4. Cover wound with clean bandage (preferably sterile).
5. Determine individual's tetanus immunization status.
6. Assess Hepatitis B vaccination status of involved individual.
7. Call parent/guardian and recommend contact with healthcare provider.

### SPIDER: BLACK WIDOW and/or BROWN RECLUSE BITE

**NOTE:** Bites from black widow spiders and brown recluse spiders are **potentially life threatening**.

#### SIGNS AND SYMPTOMS – Black Widow

- Pain at site of bite
- Pain, muscle spasm, and paralysis at distant site
- Nausea and vomiting
- Abdominal cramps
- Chest tightness
- Difficulty breathing
- Dizziness
- Sweating
- Signs of shock (see **Shock**)

#### SIGNS AND SYMPTOMS – Brown Recluse

- Red lesion at bite site
- Lesion blisters and may become painful ulceration
- Fever
- Nausea
- Body rash

#### TREATMENT

1. Wear gloves use Use Standard Precautions (see **Standard Precautions**).
2. Lower affected part below the level of the heart.
3. Remove rings and bracelets from bitten extremity.
4. Cleanse area with soap and water.
5. Apply cold compresses.
6. Keep bitten extremity immobilized.
7. If signs and symptoms of allergic reaction occur (see **Allergic Reaction**), call **911**.
8. Call parent/guardian and recommend contact with healthcare provider via telephone call or office visit.

### TICK BITE

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Using tweezers, remove tick as follows:
  - Grasp tick as close to the skin as possible.
  - Gently, but firmly pull tick straight out.
  - Avoid any twisting or jerking motion that may break off the mouth parts in the skin.
3. **Do not** remove tick using nail polish, petroleum jelly, alcohol, or a hot match.
4. After the tick has been removed, cleanse area thoroughly with soap and water.
5. If signs and symptoms of allergic reaction occur (see **Allergic Reaction**), call **911**.
6. Call parent/guardian and recommend contact with healthcare provider via telephone call or office visit.

## BLEEDING

### INTERNAL

**NOTE:** Internal bleeding is **potentially life threatening**.

#### SIGNS AND SYMPTOMS

- Bruising, swelling, or pain over a vital organ
- Painful, swelling of the affected area
- Tender, rigid, distended abdomen
- Signs of shock (see **Shock**)

#### TREATMENT

1. Determine cause of injury.
2. Call **911**.
3. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
4. Maintain open airway. If necessary, certified personnel start CPR (see **CPR**).
5. Monitor for signs and symptoms of shock (see **Shock**).
6. If vomiting, lay individual on side.
7. Keep individual warm, comfortable, and calm.
8. Call parent/guardian.

### SEVERE BLEEDING FROM A WOUND

#### TREATMENT

1. Determine cause of injury.
2. Call **911**.
3. Wear gloves, mask, and protective eyewear. Use Standard Precautions (see **Standard Precautions**).
4. Control bleeding by placing a clean covering (preferably sterile) over wound and applying direct pressure.
5. If injury does not appear to involve broken bone, elevate injured area above the level of the heart.
6. If necessary, add more dressings. **Do not** remove previous dressing. Secure dressing in place.
7. In case of amputation, (see **Amputation**).
8. If bleeding cannot be controlled with firm and direct pressure to wound, see instructions on applying a tourniquet (see **Tourniquet**).
9. Treat for shock (see **Shock**).
10. If necessary, certified personnel should start CPR (see **CPR**).
11. Call parent/guardian.

## BLISTERS

### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Cleanse area with soap and water. Avoid breaking blister.
3. Apply a dry bandage.
4. If blister is broken, wash with soap and water and apply dry bandage.
5. If blistered area is red, swollen, and/or painful, call parent/guardian and recommend contact with health care provider by a telephone call or office visit.

## BROKEN BONES

### DISLOCATION

**DEFINITION:** A dislocation is the movement of a bone from its normal joint position.

### SIGNS AND SYMPTOMS

- Inability to move the affected part normally
- A bump, ridge, or hollow that does not normally exist in a non-functioning joint
- Pain
- Bruising
- Swelling

### TREATMENT

1. Determine cause of injury.
2. Keep individual quiet and warm.
3. **Do not** attempt to put part back in place.
4. Support extremity with pillows, blankets, broomstick, uninjured limb, etc., to reduce pain.
5. Call parent/guardian and recommend follow-up medical care.

### CLOSED FRACTURE

**DEFINITION:** A closed fracture is a complete break, chip, or crack in a bone in which the skin is not broken. Fractures are **potentially life threatening** when the break involves a large bone (e.g., thigh), severs an artery, or affects breathing.

### SIGNS AND SYMPTOMS

- Possible deformity or angulation
- Pain and tenderness
- Bruising
- Swelling
- Inability to use the affected part normally
- Injured area is cold and numb

### TREATMENT

1. Determine cause of the injury.
2. If fracture is suspected or obvious, call **911**.
3. Keep individual quiet, still, and warm.
4. Unless there is danger to life, **do not** move from place of accident until affected part has been properly supported or immobilized.

5. Immobilize extremity by supporting joints on either side of injury with pillows, blankets, broomstick, uninjured limb, etc., to reduce pain.
6. Assess and treat for shock (see **Shock**).
7. If necessary, certified personnel start CPR (see **CPR**).
8. Apply ice/cold pack for 15 minutes. (**Do not** apply ice directly to skin.)
9. Call parent/guardian.

### OPEN FRACTURE

**DEFINITION:** An open fracture is the complete break, crack, or chip in a bone in which the skin is broken. There is the risk of infection and severe bleeding with open fractures. Fractures may be **potentially life threatening**.

### SIGNS AND SYMPTOMS

- Possible deformity or angulation
- Pain and tenderness
- Bone fragments sticking out of the wound
- Inability to use the affected part normally
- Bleeding
- Injured area is cold and numb

### TREATMENT

1. Determine cause of injury.
2. Call **911**.
3. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
4. Keep individual quiet, still, and warm.
5. Control bleeding by placing a clean cloth (preferably sterile) over the wound and applying pressure on a nearby artery.
6. Assess and treat for shock (see **Shock**).
7. If necessary, certified personnel start CPR (see **CPR**).
8. Unless there is danger to life, **do not** move from place of accident until affected limb has been properly supported or immobilized.
9. Immobilize extremity to reduce pain. Support with pillows, blankets, broomstick, uninjured limb, etc.
10. Apply ice/cold pack for 15 minutes. (**Do not** apply ice directly to skin.)
11. Call parent/guardian.

### CASTS

**NOTE:** Swelling of extremity may occur when a cast is used. This may cause a restriction in blood flow and is **potentially life threatening**.

### SIGNS AND SYMPTOMS

- Complaints of pain, tingling, and numbness
- Feelings of cold
- Swelling
- Discoloration

### TREATMENT

1. Elevate casted extremity.
2. Call parent/guardian and recommend follow-up medical care.

## BRUISES

### SIGNS AND SYMPTOMS

- Skin appears deep red, purple, and/or bluish
- Swelling
- Pain

### TREATMENT

1. Rest affected part.
2. If skin is broken, wear gloves. Use Standard Precautions (see **Standard Precautions** and **Wounds**).
3. Apply cold compresses or ice/cold packs immediately. (**Do not** apply ice directly to skin.)
4. If there is swelling or severe pain, call parent/guardian and recommend contact with healthcare provider.

## BURNS

### CHEMICAL

**NOTE:** Treatment will vary with the nature of the chemical and the extent of the burn.

### TREATMENT

1. Call **911** immediately.
2. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
3. If the chemical is in dry or powder form, carefully brush it off the skin before flushing with water.
4. Flush skin or eye immediately with large amounts of cool water.
5. Continue flushing 30 minutes or until EMS arrives.
6. If possible, remove outer clothing while burn is being flushed.
7. If available, follow directions on chemical container.
8. Call **Poison Center**.
9. Call parent/guardian.
10. If available, send chemical container with the individual.

### ELECTRICAL

**NOTE:** Electrical burns, including lightning burns, may be more serious than initial appearance. The entrance wound may be small, but the electricity continues to burn as it penetrates deeper. Electrical burns are often accompanied by respiratory or cardiac arrest. Respiratory arrest usually occurs first and is later complicated by cardiac arrest.

### TREATMENT

1. Call **911**.
2. **Do not** attempt to remove individual from the source of electricity. Never go near an individual who may have been injured by electricity until you are sure power source has been turned off.
3. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
4. If necessary, and only after contact is broken with electrical source, certified personnel start CPR (see **CPR**).
5. Cover the burned area with a dry (preferably sterile) non-stick dressing.
6. Look for a second burned area where the electricity left the body.
7. Treat for shock (see **Shock**).
8. Call parent/guardian.

### FIRST DEGREE THERMAL/HEAT

**NOTE:** Involves only the top layer of the skin. Includes sunburn.

### SIGNS AND SYMPTOMS

1. Skin is red and dry
2. Burn is usually painful
3. Area may swell

### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. If burned on face or smoke inhaled, anticipate need for CPR (see **CPR**). Call **911**.

3. Maintain open airway.
4. If necessary, certified personnel start CPR (see **CPR**).
5. Cool burn area with cool compresses or water for 10-15 minutes. (**Do not** use ice.)
6. **Do not** apply any grease, salves, or lotions.
7. If necessary, bandage lightly with sterile gauze to protect the area and to decrease pain.
8. If possible, elevate burned arm or leg.
9. If necessary, treat for shock (see **Shock**).
10. Call parent/guardian and recommend contact with healthcare provider.

### SECOND DEGREE THERMAL/HEAT

**NOTE:** Involves the top layers of skin.

### SIGNS AND SYMPTOMS

- Skin is red and blistered
- Blisters may open and weep clear fluid
- Skin may appear blotchy
- Burn is usually painful
- Area may swell

### TREATMENT

Follow guidelines for first degree burns unless extensive area (greater than the size of palm) is involved. In this instance, follow procedure for treatment of third degree burns.

If difficulty breathing, call **911** immediately.

If necessary, certified personnel start CPR (see **CPR**).

### THIRD DEGREE THERMAL/HEAT

**NOTE:** Destroys all layers of skin and any or all of the underlying structures—fat, muscles, bones, and nerves. Third degree burns are **potentially life threatening**.

### SIGNS AND SYMPTOMS

- Skin appears brown or black (charred) with tissues underneath sometimes appearing white.
- May be extremely painful or painless if burn destroys nerve endings.

### TREATMENT

1. Call **911** immediately.
2. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
3. Maintain open airway.
4. If necessary, certified personnel start CPR (see **CPR**).
5. If possible, elevate burned area.
6. **Do not** apply moist compresses, grease, salves, or lotions.
7. Keep individual quiet, comfortable and warm.
8. Cover area with clean (preferably sterile) cloth.
9. Remove clothing only if not stuck to burned area, contaminated, or on fire.
10. Treat for shock (see **Shock**).
11. Call parent/Guardian.

## CHEST PAIN

### GENERAL

**NOTE:** Any chest pain that is severe, or persists during rest (particularly in adults) requires immediate medical care. This is **potentially life threatening**.

### SIGNS AND SYMPTOMS

- Persistent pain or pressure in the chest that is not relieved by resting, changing position, or prescribed oral medication
- Pain ranges from discomfort to unbearable crushing pain behind breastbone described as dull, penetrating, pressure, or squeezing
- Pain sometimes radiating down left arm, both arms, or jaw
- Difficulty breathing
- Agitation and apprehension
- Nausea or indigestion
- Pulse faster or slower than normal or irregular
- Cold sweat

### TREATMENT

1. Call **911** immediately and request **Advanced Life Support**.
2. Remain with individual until emergency personnel arrive.
3. Place the individual in a comfortable position, usually sitting up, particularly if there is shortness of breath.
4. Loosen tight clothing.
5. Provide reassurance.
6. If individual has “heart medicine” with him in the clinic, assist him. (For a child, consult the written **emergency action plan** on file and proceed with the healthcare provider’s instructions.)
7. **Do not** give food, drink, or “pills” to an unconscious individual.
8. **Do not** attempt to transport individual. This will add additional strain.
9. If necessary, certified personnel start CPR (see **CPR**).
10. Call parent/guardian (or emergency contact person for non-student).

### CARDIAC ARREST

**DEFINITION:** The absence of signs of circulation (breathing, coughing, or movement) is the main signal of cardiac arrest. Cardiac emergencies are **life threatening**.

### SIGNS AND SYMPTOMS

- No sign of circulation (breathing, coughing, or movement).

### TREATMENT

For cardiac arrest (heart stops beating/no signs of circulation), call **911** immediately. Certified personnel start CPR (see **CPR**) unless a Do Not Resuscitate (DNR) order is in force. Call parent (or emergency contact person for non-student).

## DENTAL PROBLEMS

### BABY TEETH / TOOTH LOSS

(No injury) age 6-11

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Rinse mouth with warm water.
3. If bleeding, have individual bite on gauze for several minutes.
4. Send tooth home with individual in sealed container (e.g., envelope or plastic bag).
5. Contact parent/guardian.

### BROKEN BRACES and WIRES

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Cover ends of broken braces and wires with wax or a piece of gauze.
3. If wire becomes stuck in the cheek or gum tissues, **do not** attempt to remove it.
4. If appliance is loose or breaks, save any broken pieces.
5. Call parent/guardian and recommend follow-up dental care.

### BROKEN/DISPLACED TOOTH

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Gently clean dirt from the injured area with warm water.
3. Apply ice/cold pack for 15 minutes on the face, over the injured area. (**Do not** apply ice directly to skin.)
4. If tooth has a sharp edge, cover with gauze to prevent cutting lips or cheek.
5. Save any broken tooth fragments.
6. If tooth is displaced or has been pushed up into the gum, **do not** attempt to pull it into position or move it.
7. Call parent/guardian and recommend immediate dental care.

### KNOCKED OUT / PERMANENT TOOTH

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. If able to locate tooth, hold tooth by its crown (white portion)—not the root.
3. If dirty, rinse tooth gently in water for 10 seconds. **Do not** scrub.
4. Try to encourage the individual to replant tooth. Have them bite firmly on gauze to hold it in position.
5. If this is not possible or the individual is at risk of swallowing tooth—place tooth in a container of milk, individual’s saliva, saline solution or water.
6. Control bleeding by applying gentle pressure with sterile gauze.
7. Apply ice/cold pack for 15 minutes on the face, over the injured area. (**Do not** apply ice directly to skin.)
8. Call parent/guardian and recommend immediate dental care.

## TOOTHACHE

### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Rinse the mouth with warm water.
3. If available, individual may use dental floss to dislodge any trapped food.
4. If swelling is present, apply ice/cold pack for 15 minutes on the face over the affected part. (**Do not** apply ice directly to skin.)
5. Use ice chips for pain caused by an incoming permanent tooth.
6. Call parent/guardian and recommend dental follow-up care.

### WEDGED OBJECT BETWEEN TEETH

#### TREATMENT

1. Wear gloves. Use Standard Precautions. (See **Standard Precautions**.)
2. If available, individual may try to remove the object with dental floss.
3. **Do not** try to remove the object with sharp or pointed instrument.
4. If unsuccessful, call parent/guardian and recommend follow-up dental care.

## DIABETES

**NOTE:** The diabetic reaction may be in response to blood sugar that is too low (hypoglycemia) or blood sugar that is too high (hyperglycemia). The immediate effects of low blood sugar can be more serious than those of high blood sugar. **When the first aid care provider is uncertain of the type of diabetic reaction, treat for the symptoms of hypoglycemia (low blood sugar).** If the individual is known to school personnel as having diabetes, **consult the written emergency action plan** on file and proceed as directed in the healthcare provider’s action plan.

### HYPERGLYCEMIA

**NOTE:** The onset of symptoms of hyperglycemia (high blood sugar) is usually gradual. If untreated, this condition is **potentially life threatening**.

### SIGNS AND SYMPTOMS

- Dry, warm, and flushed skin
- Drowsiness
- Increased thirst
- Increased urination
- Hunger
- Fruity breath odor
- Nausea/vomiting
- Changes in vision
- Heavy, rapid breathing
- Eventual stupor and unconsciousness

### TREATMENT

1. If available, use blood glucose monitor and finger stick test to check blood sugar.
2. Determine if individual is hyperglycemic.
3. If individual is known to have diabetes, **consult the written emergency action plan** on file and proceed with healthcare provider’s instructions.
4. Encourage individual to drink large quantities of sugar-free fluids.
5. If signs and symptoms persist, call **911**.
6. Call parent/guardian.

### HYPOGLYCEMIA (IF THE INDIVIDUAL IS CONSCIOUS)

**NOTE:** The onset of hypoglycemia (low blood sugar) is usually sudden. If left untreated, this condition **can quickly become life threatening**.

### SIGNS AND SYMPTOMS

- Headache
- Shakiness
- Sweaty, pale skin
- Drowsiness
- Staggering
- Poor coordination
- Bad temper/anger
- Confusion
- Disorientation
- Eventual stupor or unconsciousness

### TREATMENT

1. If individual can swallow, give:
  - 2-4 glucose tablets or 1 tube of glucose gel .
  - 4-6 ounces 100% orange or other juice.
  - 6-8 ounces regular (non-diet) soft drink.
2. If available, use glucometer to check blood sugar. Recovery will usually occur in 10-15 minutes. If symptoms persist after 10-15 minutes, repeat step 1. If improving, repeat step 1 every 10-15 minutes until symptoms subside or blood sugar is above 80.
3. If the individual is known to have diabetes, **consult the written emergency action plan** on file and proceed with healthcare provider’s instructions.
4. If treatment is not effective and individual’s condition worsens, call **911**.
5. Call parent/guardian.
6. If individual improves and next meal is more than 30 minutes away, give protein and complex carbohydrate; for example, cheese and crackers.

### HYPOGLYCEMIA (IF THE INDIVIDUAL BECOMES UNCONSCIOUS)

### TREATMENT

1. Call **911** immediately.
2. Maintain open airway.
3. Place individual on side, ensuring drainage of secretions or vomiting.
4. If the individual is known to have diabetes, **consult the written emergency action plan** on file and proceed with healthcare provider’s instructions.
5. If individual awakens and is able to swallow, give sips of regular (non-diet) soft drink. Give no more than 3-6 ounces.
6. If unable to swallow, massage cake gel between cheek and gum.
7. Call parent/guardian.

## EAR

### BUG / INSECT IN EAR

#### TREATMENT

1. Place a few drops of oil in the ear to quiet the insect.
2. Call parent/guardian and recommend contact with a healthcare provider via a telephone call or an office visit.

### EARACHE

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. If discharge is present, wipe from outer ear only.
3. Allow free drainage.
4. Call parent / guardian and recommend contact with healthcare provider.

### FOREIGN OBJECT

#### TREATMENT

1. **Do not** attempt to remove object at school.
2. Call parent and recommend contact with healthcare provider.

## ELECTRICAL SHOCK

**NOTE:** Electrical shock resulting from the passage of electric current through any part of the body is **potentially life threatening**.

### SIGNS AND SYMPTOMS

- Burns
- Weak, rapid pulse
- Cold, clammy skin
- Restlessness
- Confusion
- Unresponsive/unable to answer questions
- Skin over knees, hands, and feet may appear blotchy
- Face may be pale or blue
- Mucous membranes inside mouth and eyelids may be blue
- Eyes dull, pupils dilated
- Fainting
- Sweating
- Vomiting
- Breathing may be rapid, irregular, gasping, shallow, or labored

### TREATMENT

1. Call **911**.
2. **Do not go near an individual who may have been injured by electricity until you are sure power source has been turned off.**
3. If a power line is down, wait for the fire department/power company before approaching.
4. If applicable, turn off source of electrical current.
5. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
6. Check breathing and pulse. If necessary, certified personnel start CPR (see **CPR**).
7. If necessary, treat for Shock (see **Shock**).
8. Check individual for other injuries and consult appropriate procedures.
9. **Do not** move individual.
10. Cover electrical burn with dry, sterile dressing. **Do not** cool burn (see **Burns/Electrical**).
11. If there are no signs and symptoms of electrical shock, continue to observe individual.
12. Call parent/guardian.

## EYES

### CHEMICAL BURNS

#### TREATMENT

1. Determine type of chemical.
2. Call **911**.
3. If dry chemical, carefully brush off as much as possible, avoiding additional skin contact.
4. Immediately flush eye with large quantities of cool water. Turn head to the side and pour water from nose outward. **Do not allow** chemical to wash into unaffected eye.
5. Call **Poison Center** for further instructions (see **Poisonings**).
6. Call parent/guardian.

### DISCHARGE

#### SIGNS AND SYMPTOMS

- Red, watery, swollen eyes
- Thick yellow discharge

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. **Do not** put a patch over a possible eye infection.
3. Exclude individual from school until condition has cleared up or individual has been authorized to return to school by a health care provider.
4. Call parent/guardian and recommend contact with healthcare provider.

### FOREIGN OBJECT

#### SIGNS AND SYMPTOMS

- Pain
- Tearing
- Redness
- Scratchy feeling in eye
- Vision changes

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Urge individual to avoid rubbing affected eye.
3. Flush with lukewarm water. Turn head to the side and pour water from nose outward.
4. If particle seems embedded, **do not** attempt to remove it.
5. If object remains, cover both eyes loosely with gauze or cloth to restrict eye movement.
6. Call parent/guardian and recommend immediate follow-up medical care.

## EYE INJURIES

### BRUISES / BLOWS

#### TREATMENT

1. Determine cause of the injury.
2. If minor trauma and no referral needed, apply ice/cold pack for 15 minutes to eye. (**Do not** apply ice directly to skin.)
3. Call parent/guardian, patch both eyes to minimize eye movement, and refer for immediate medical care if:
  - Iris (colored part of the eye) appears brown on blue-eyed individual or reddish on brown-eyed individual
  - Laceration to lid or eyeball
  - Visible trauma to lid or eyeball
  - Change in vision
  - Painful eye
  - Feels like foreign body in eye for over 1 hour
  - Experiences flashing light or floaters in field of vision
  - Vision seems cloudy or shady

### PENETRATING INJURY

#### TREATMENT

1. Determine cause of the injury.
2. Call **911**.
3. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
4. **Do not** attempt to remove object or wash eye.
5. Cover both eyes loosely with gauze or cloth. Do not touch object.
6. Keep individual calm and quiet.
7. Call parent/guardian.

## FAINTING

### SIGNS AND SYMPTOMS

- Blurred vision
- Light-headedness
- Nausea
- Sweating
- Loss of consciousness

### TREATMENT

1. Position individual on back on a flat surface.
2. If other injuries are present, see appropriate procedures.
3. If no injuries, elevate legs 8-12 inches.
4. Loosen clothing around neck and waist.
5. Apply cool, damp cloth to head.
6. Continue to observe carefully.
7. If recovery is not complete in 2 minutes, call **911**.
8. If breathing stops, certified personnel start CPR (see **CPR**).
9. Call parent/guardian.

## FEVER

**NOTE:** Fever may indicate a contagious illness and child may need to be excluded from school.

### SIGNS AND SYMPTOMS

Oral temperature 100.3 °F/38 °C or greater may be associated with:

- Headache
- Watery, red, eyes and nose
- Cough
- Skin rash
- Sore throat
- Vomiting
- Diarrhea

### TREATMENT

1. Take temperature at least 15 minutes after individual has consumed food or beverage. If fever is present (oral temperature 100.3 °F/38 °C or greater), check for other symptoms of illness.
2. Allow individual to lie down.
3. Apply cool compress to forehead.
4. Isolate individual for the benefit of others.
5. Call parent/guardian and recommend contact with healthcare provider.

## FINGER and TOE INJURIES

### GENERAL

#### TREATMENT

1. Determine cause of injury.
2. For minor injury, such as shutting door on finger, apply ice/cold pack for 15 minutes. (Do not apply ice directly to skin.)
3. Call parent/guardian.

### TORN FINGERNAIL/TOENAIL

#### TREATMENT

1. If there is bleeding, wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. If torn into nail bed, clean with soap and water and apply dressing.
3. Use gentle pressure to stop bleeding.
4. Apply ice/cold pack for 15 minutes to reduce swelling and pain. (**Do not** apply ice directly to skin.)
5. Call parent/guardian and recommend contact with healthcare provider.

## FROSTBITE

**NOTE:** Severity of frostbite depends on air temperature, length of exposure, and the wind. Frostbite can cause loss of fingers, hands, arms, toes, feet, and legs. If freezing is deeper than the skin, tissue damage is severe. Gangrene may result. This condition is **potentially life threatening**.

### SIGNS AND SYMPTOMS

- Lack of feeling in the affected area
- Skin appears white and waxy
- Skin is cold to the touch
- Skin may become discolored—flushed, white, yellow or blue

### TREATMENT

1. Call **911** immediately.
2. Bring individual indoors.
3. Keep individual warm.
4. **Do not** rub skin. **Do not** overheat. **Do not** use hot water bottles or heat lamps.
5. If blisters appear, **do not** break. Wear gloves. Use Standard Precautions (see **Standard Precautions**). Cover blister loosely with clean dressing.
6. If feet are frostbitten, **do not** allow individual to walk.
7. Call parent/guardian.

## GENITAL INJURY

### SCROTAL OR PENILE

#### SIGNS AND SYMPTOMS

- Bleeding
- Redness
- Pain

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. If possible, have another adult present when examining an individual's genital area.
3. Determine cause of the injury.
4. Apply ice/cold pack as tolerated for up to 10-15 minutes. (**Do not** apply ice directly to skin).
5. Call parent/guardian and recommend contact with healthcare provider via telephone call or office visit.

### VAGINAL INJURY

#### SIGNS AND SYMPTOMS

- Bleeding
- Redness
- Pain
- Swelling

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. If possible, have another adult present when examining an individual's genital area.
3. Determine cause of the injury.
4. Apply sanitary napkin and direct pressure.
5. Maintain individual in a reclining position with knees and legs together.
6. Call parent/guardian and recommend contact with healthcare provider via telephone call or office visit.



## HEADACHE

**NOTE:** Headaches should receive emergency care if they are severe; persistent; severe with sudden onset; or accompanied by changes in vision or speech, numbness, vomiting, seizure, confusion or alteration in consciousness.

### TREATMENT

1. If there has been a head injury, see **Head Injury**
2. If there has been no trauma to the head, have individual lie down for 30 minutes in darkened area.
3. Check temperature. If febrile, see **Fever**.
4. If desired, place a cool cloth on the forehead to promote relaxation.
5. Offer water to individual.
6. If headache persists, call parent/guardian for follow-up medical care.

## HEAD INJURY

**NOTE:** All head injuries are **potentially life threatening** and may need to be referred for immediate medical care. Suspect neck injury with all serious head injuries and treat head and neck as one unit in order to prevent further injury.

### SIGNS AND SYMPTOMS

- Projectile vomiting
- Personality changes
- Drowsiness
- Disorientation, confusion, memory loss
- Dizziness
- Severe headache
- Loss of consciousness at any time
- Bleeding from ears and/or nose
- Clear fluids from ears and/or nose
- Irregular breathing
- Increasing pain
- Slurring of speech
- Marked swelling
- Blurred or double vision
- Unequal pupils
- Numbness or tingling in extremities
- Seizure

### TREATMENT

1. Determine cause of injury.
2. If individual has any of the signs or symptoms listed above, call **911**.
3. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
4. Keep individual lying down and quiet. Ensure safe environment.
5. If individual is unconscious, assume possible neck injury. Support head and gently turn entire body to one side (log roll) so secretions drain from mouth. Turn head and body as one unit with two personnel (one controlling head/neck and one controlling body).
6. Loosen clothing around neck.
7. Check for airway obstruction. If necessary, certified personnel start CPR (see **CPR**).
8. **Do not** insert anything into the individual's mouth.
9. Control extensive bleeding by applying direct pressure to injury site.
10. **Do not** wash head wounds if skull fracture is suspected or obvious.
11. Small cuts on face or scalp may bleed extensively. Control bleeding of this kind by applying clean dressings (preferably sterile) directly on the wound.
12. If dressings become blood soaked, add more dressings. **Do not** remove original dressing.
13. If any of the above signs and symptoms occur at a later time, call **911** and parent/guardian.

## CONCUSSION

**DEFINITION:** A **concussion** is a brain injury caused by any bump, blow or jolt to the head or a fall or blow to the body that causes the head to move back and forth rapidly. They can be mild or severe, and even mild injury can be serious. Children and adolescents are most at risk, but a concussion can happen to anyone. They may or may not lose consciousness. Appropriate sporting safety equipment (helmets, mouth guards, padding) should always be used.

**Under no circumstances should a child be allowed to return to play or activity the same day that a concussion occurs.**

### SIGNS AND SYMPTOMS

- Confusion
- Memory loss
- Brief loss of consciousness
- Staring
- Lethargy
- A persistent and/or severe headache
- Dizziness
- Poor balance or coordination
- Nausea and/or vomiting
- Seizures
- Slurring of speech
- Agitation
- Changes in vision
- Unequal pupils
- Numbness or tingling in extremities
- Sensitivity to light
- Insomnia

### SHORT -TERM TREATMENT

1. If possible, do not move the individual. Ensure the area is safe.
2. If individual has any of the symptoms listed above, call **911**. The individual needs medical assistance from a licensed healthcare provider.
3. Keep individual lying down and quiet.
4. Assume neck injury may be present. Do not move the individual's neck.
5. If prolonged loss of consciousness or drainage of blood/clear fluid from ears/nose occur, see **Head Injury**.
6. If bleeding, see **Head Injury**.
7. Check for airway obstruction. If necessary, certified personnel start CPR (see **CPR**).
8. **Do not** insert anything into the individual's mouth.
9. **Do not** let the individual return to activity.
10. Closely monitor individual for several hours after injury. If any of the above signs or symptoms occur at a later time, call **911** and parent/guardian.

### LONG-TERM TREATMENT

1. Follow up with healthcare provider.
2. **Rest.** Avoid mental, physical and emotional exertion.
3. Individual should not return to sports or physical activity until completely free of symptoms.
4. If symptoms persist or worsen, seek medical attention immediately.

### ADDITIONAL RESOURCES

CENTER FOR DISEASE CONTROL AND PREVENTION: HEADS UP PROGRAM <http://www.cdc.gov/headsup>

VIRGINIA BOARD OF EDUCATION GUIDELINES FOR POLICIES ON CONCUSSIONS IN STUDENT-ATHLETES [HTTP://www.doe.virginia.gov/boe/guidance/health/2015\\_guidelines\\_concussions\\_in\\_student\\_athletes.pdf](HTTP://www.doe.virginia.gov/boe/guidance/health/2015_guidelines_concussions_in_student_athletes.pdf)

VDH TRAUMATIC BRAIN INJURY PREVENTION <http://www.vdh.virginia.gov/livewell/programs/tbi/>

## HEAT EMERGENCIES

### HEAT CRAMPS

**NOTE:** Heat cramps are often the first signal that the body is having trouble with its ability to regulate heat.

### SIGNS AND SYMPTOMS

Painful muscle spasm, usually occurring in the legs and abdomen in hot weather.

### TREATMENT

1. Have individual rest in a cool place.
2. Give cool water or commercial sports drink.
3. Apply moist towels over cramped muscles.
4. Lightly stretch muscles and gently massage.
5. **Do not** give individual salt tablets or salt water.
6. When cramps stop, have individual drink plenty of fluids.
7. Watch individual for further signals of heat-related illness.
8. Individual may resume normal activity.
9. Call parent/guardian and recommend contact with healthcare provider if no improvement.

### HEAT EXHAUSTION

**NOTE:** Heat exhaustion is a more severe condition than heat cramps. Often affects athletes and those wearing heavy clothing in a hot, humid environment.

### SIGNS AND SYMPTOMS

- Cool, moist, pale, or flushed skin
- Rapid, shallow breathing
- Weak pulse
- Heavy perspiration
- Dizziness
- Weakness
- Exhaustion

### TREATMENT

1. Remove to cool area.
2. Keep individual lying down and elevate feet 8-12 inches.
3. Loosen clothing and remove the outer layers.
4. Cool by fanning.
5. If fully conscious, give sips of water.
6. If individual becomes drowsy, unconscious or vomits, call **911**.
7. If necessary, certified personnel start CPR (see **CPR**).
8. Call parent/guardian.

### HEATSTROKE

**NOTE:** Heat stroke is the most severe heat emergency and is **potentially life threatening**

### SIGNS AND SYMPTOMS

- Hot, dry skin
- No perspiration
- Changes in consciousness, unconsciousness
- Weakness
- Rapid pulse
- Shallow breathing
- High body temperature (oral temperature 106°-110°F / 41°-43°C)
- Pupils dilated

### TREATMENT

1. Remove individual to a cool area.
2. Call **911**.
3. Loosen clothing and remove outer layer.
4. Attempt to cool quickly. Apply cool packs to neck, groin, armpits, and fan aggressively.

## **HEATSTROKE** (continued)

### **TREATMENT** (con't)

5. Keep skin wet.
6. **Do not** apply rubbing alcohol.
7. If individual is conscious and can drink, give cool water to drink. **Do not** let individual drink too quickly. Give about 4 ounces of water every 15 minutes.
8. Let individual rest in a comfortable position.
9. Watch for changes in individual's condition and level of consciousness.
10. If individual vomits, wear gloves. Use Standard Precautions (see **Standard Precautions**). Stop giving fluids and position on side.
11. If breathing difficulty develops, certified personnel start CPR (see **CPR**).
12. If necessary, treat individual for shock (see **Shock**).
13. Call parent/guardian.

## HYPERVENTILATION

### SIGNS AND SYMPTOMS

- Rapid, shallow breathing
- Profuse sweating
- Pale skin
- Nausea
- Tingling of hands, face, and feet

### TREATMENT

1. Calm and reassure individual.
2. Encourage individual to breathe slowly and deeply.
3. **Do not** have individual breathe into a paper bag.
4. If individual does not respond and condition worsens and/or individual faints, call **911**.
5. Call parent/guardian.

## MOUTH/JAW INJURIES

**NOTE:** Bleeding and fracture injuries of the mouth, jaw, lips, tongue, teeth, or inner cheek can create breathing difficulties. These injuries are **potentially life threatening**.

### SIGNS AND SYMPTOMS

- Bleeding from mouth, lip, jaw, teeth
- Swelling
- Difficulty breathing
- Choking
- Pain

### TREATMENT

1. Determine cause of injury.
2. If bleeding is severe or injury is extreme, call **911**.
3. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
4. Maintain open airway. If necessary, certified personnel start CPR (see **CPR**).
5. If individual is conscious, bleeding from the mouth, and no neck injuries are suspected, prop individual up—leaning forward—to allow blood to drain.
6. If sitting position is not possible, place individual on side to allow blood to drain from the mouth.
7. If lip is penetrated, place a rolled dressing between the lip and gum and another dressing on the outer surface of the lip. Apply ice/cold pack for 15 minutes to reduce swelling and decrease pain. (**Do not** apply ice directly to lip.)
8. If tongue is bleeding, apply a dressing with gentle pressure. Rinse mouth with cold water for 15 minutes to reduce swelling and decrease pain. (**Do not** apply ice directly to tongue.)
9. If tooth has been knocked out, control bleeding and save tooth or tooth fragments. (See **Dental Problems**)
10. If bleeding is external, apply dressing (preferably sterile) with gentle pressure.
11. If bleeding is not severe or injury is not extreme, call parent/guardian and recommend follow-up medical care.

## NOSE

### NOSE BLEEDS

#### SIGNS AND SYMPTOMS

- Bleeding
- Swelling
- Bruising
- Choking

#### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. If bleeding is from trauma, see **Head Injury**.
3. If bleeding is not related to trauma, keep individual slightly leaning forward and breathing through the mouth.
4. Loosen anything tight around the neck.
5. Instruct the individual to pinch the sides of the nose against the septum (bone in center of nose) for at least 5-10 minutes to allow a clot to form and bleeding stops.
6. Tell individual not to blow nose or sniff for 1-2 hours in order to prevent dislodging the clot.
7. If bleeding does not stop in 5-10 minutes or individual has frequent episodes, repeat pressure to septum (see step 5 above).
8. Call parent/guardian and recommend contact with healthcare provider.

### FOREIGN OBJECTS

#### SIGNS AND SYMPTOMS

- Pain
- Swelling
- Foul odor

#### TREATMENT

1. **Do not** attempt to remove object.
2. Call parent and recommend follow-up medical care.

## SEIZURE

**NOTE:** Remain calm. A seizure cannot be stopped once it starts.

### SIGNS AND SYMPTOMS

- Aura- may experience unusual sensation or feeling immediately preceding seizure, such as:
  - Visual hallucination
  - Bright lights
  - Strange sound
  - Strange smell
  - Strange behavior
  - Daydreaming
- Shaking, muscle jerking, and/or falls to the ground
- Confused or unaware of surroundings, dazed
- Unable to respond to directions or questions for a brief period of time
- Loss of consciousness followed by stiffening of entire body for a few seconds followed by a period of jerking.

### TREATMENT

1. Call **911** (unless individual has a seizure disorder, then follow written **emergency action plan**).
2. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
3. If individual is standing or sitting, gently lower to ground to avoid a fall.
4. **Do not** place anything in individual's mouth. Place on side to prevent choking on secretions and blockage of airway by the tongue.
5. Loosen restrictive clothing. Ensure privacy.
6. If possible, place a cushion or blanket under individual's head.
7. **Do not** hold or restrain individual.
8. Clear area around the individual to prevent injury from sharp objects.
9. **Do not** give food, drink, or medications during a seizure.
10. Remain with individual during the seizure to monitor progress.
11. Observe all of the individual's activity during the seizure, including:
  - Time the seizure began.
  - Area of the body where seizure began.
  - Any movement of the seizure from one area of the body to the other.
  - Type of movements of the head, face, and arms that occur during the seizure.
12. When the seizure is over:
  - If necessary, clear secretions from mouth. Turn individual onto side to allow for drainage of secretions.
  - Monitor breathing.
  - Determine level of awareness.
  - Determine individual's ability to move arms and legs.
  - Provide privacy.
  - Check for loss of control of urine and stool.
  - Check for injuries. See appropriate procedures for treatment.
  - If individual remains unconscious after seizure is over, maintain open airway and continue to assess breathing. If necessary, certified personnel start CPR (see **CPR**).
  - Keep individual comfortable.
  - Allow individual to sleep as needed. (May last from 30 minutes to several hours.)
  - Record the length of the seizure and activity during and after the seizure.
  - If **911** not called, call parent / guardian and recommend contact with healthcare provider.

### ADDITIONAL RESOURCES

CENTERS FOR DISEASE CONTROL AND PREVENTION: EPILEPSY  
[HTTP://WWW.CDC.GOV/EPILEPSY](http://www.cdc.gov/epilepsy)

EPILEPSY FOUNDATION: SEIZURE FIRST AID  
[HTTP://WWW.EPILEPSY.COM/GET-HELP/SEIZURE-FIRST-AID](http://www.epilepsy.com/get-help/seizure-first-aid)

## SHOCK

**NOTE:** Shock occurs when there is inadequate blood flow and oxygen to critical organs including the brain. Causes of shock may be significant blood loss, hypoglycemia (low blood sugar), failure in cardiac output, anaphylaxis, or severe infection. First aid for shock attempts to preserve blood flow to critical organs until EMS arrives. Shock is **life threatening**.

### SIGNS AND SYMPTOMS

- Altered consciousness (weakness, confusion, drowsiness)
- Restlessness, anxiety, combativeness
- Pale, cool, clammy skin
- Nausea, occasional vomiting
- Rapid weak pulse (greater than 100 beats per minute)
- Rapid shallow breathing
- Extreme thirst
- Late stage: skin, lips, and area around eyes appear blue

### TREATMENT

1. Call **911** immediately.
2. Remain calm.
3. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
4. Control all obvious bleeding by placing firm pressure at site of bleeding.
5. Keep individual warm by covering with blanket to avoid heat loss.
6. If necessary, certified personnel start CPR (see **CPR**).
7. If vomiting occurs, turn individual onto side, rolling body and head as one unit. Clear material from the mouth. **If neck injury is suspected, do not turn individual.**
8. Unless injuries make this inadvisable, lay individual flat with legs elevated 12 inches. **Do not** elevate legs if head and neck injuries are suspected.
9. Individual in shock because of heart attack or with lung disease, may find it easier to breathe sitting up or in a semi-sitting position.
10. Darken room. Avoid rough and excessive handling of individual.
11. **Do not** give anything to eat or drink.
12. Give first aid for any identified cause of shock (e.g., bleeding, burns). See appropriate procedure.
13. Call parent/guardian.

## SPINAL INJURY

### BACK INJURY/NECK INJURY

**NOTE:** Injuries to the head, neck, or spine can cause paralysis, speech or memory problems, or other disabling conditions. This is **potentially life threatening**.

### SIGNS AND SYMPTOMS

- Severe pain in head, neck, or back
- Tingling or loss of sensation in hands, fingers, feet, and toes
- Partial or complete loss of movement of any body part
- Unusual bumps or depressions on head or spine
- Difficulty breathing

### TREATMENT

1. Determine cause of injury. Spinal injuries should be suspected in all falls, collisions, and impact injuries (e.g., contact sports).
2. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
3. **Call 911** immediately.
4. Do not move individual.
5. If it is necessary to move the individual due to an immediate danger, support the head and move in the direction of the long axis without bending the spine. **Do not** drag sideways.
6. Keep individual warm and comfortable.
7. If necessary, treat for shock (see **Shock**).
8. If necessary, certified personnel start CPR (see **CPR**).
9. Call parent/guardian.

## SPLINTERS

### SIGNS AND SYMPTOMS

- Redness or other discoloration
- Swelling
- Pain

### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Cleanse thoroughly with soap and water.
3. Inspect to determine depth.
4. If protruding from skin, grasp portion protruding above the skin and attempt to gently remove with tweezers. **Do not** probe under the skin with tweezers or other object.
5. Determine individual's tetanus immunization status from school record.
6. If lodged beyond superficial layer of skin, call parent/guardian and recommend follow-up medical care.

## SPRAINS/STRAINS

### SIGNS AND SYMPTOMS

- Swelling
- Tenderness
- Pain upon motion
- Discoloration

### TREATMENT

1. Determine cause of injury.
2. Keep individual warm and comfortable.
3. Immobilize extremity. Support with pillows, blankets, broomstick, uninjured limb, etc.
4. Apply ice/cold pack for 15 minutes to the area. (**Do not** apply ice directly to skin.)
5. If movement does not cause pain, elevate affected part.
6. Call parent/guardian and recommend contact with healthcare provider.

## STINGS (INSECT)

**NOTE:** Individuals with known allergy should have an **Emergency Care Plan**.

### SIGNS AND SYMPTOMS

- Local Reaction
  - Intense pain
  - A whitish bump with a red dot in its center
  - Swelling **at the site** of the sting
- Anaphylactic Reaction (see **Allergic Reaction**)
  - Apprehension
  - Rash (particularly on face)
  - Swelling of face and tongue
  - Difficulty breathing, wheezing, gurgling, high pitched sounds
  - Skin feels moist and or appears flushed, pale or bluish
  - Rapid, weak pulse

### TREATMENT

1. If necessary, call **911** (see **Allergic Reaction**).
2. If individual is known to have allergies to insect stings (for example; bees, wasps), consult the written **emergency action plan** on file and proceed with healthcare provider's instructions.
3. If necessary, certified personnel start CPR (see **CPR**).
4. Remove stinger as quickly as possible.
5. Apply cold compress to reduce pain and swelling.
6. If the sting is on the arm or leg, keep extremity below the level of the heart.
7. **Call Poison Center** for additional treatment advice as appropriate.
8. Call parent/guardian.

## VOMITING

### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. **Do not** give anything to eat or drink.
3. When vomiting stops, position individual comfortably. Apply cool compress to forehead.
4. Take temperature to check for fever. (See **Fever**).
5. Call **911** if vomiting is associated with severe pain or individual is vomiting blood.
6. Call parent/guardian and recommend contact with healthcare provider.

## WOUNDS

### CUTS / SUPERFICIAL ABRASION

#### TREATMENT

1. Determine cause of injury.
2. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
3. Cleanse thoroughly with soap and water. **Do not** use hydrogen peroxide, alcohol, or other disinfectant.
4. Apply dry dressing (preferably sterile).
5. Determine individual's tetanus immunization status from school record.
6. Call parent/guardian and recommend contact with healthcare provider.

### DEEP / EXTENSIVE LACERATION

#### TREATMENT

1. Determine cause of injury.
2. Call **911**.
3. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
4. Control bleeding by covering with gauze dressing (preferably sterile) and applying direct pressure.
5. If bleeding is still not controlled, and if available, apply QuickClot® directly to wound site.
6. If necessary, apply more dressings. **Do not** remove original dressing.
7. **Do not** move individual unnecessarily.
8. In case of amputation, see **Amputation**.
9. If no fracture is suspected, elevate the extremity above the level of the heart to help stop bleeding.
10. Determine individual's tetanus immunization status from school record.
11. Call parent/guardian.

### PUNCTURE

#### TREATMENT

1. Determine cause of injury.
2. Call **911**.
3. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
4. Use direct pressure to control bleeding. Do not remove lodged foreign objects.
5. Cleanse thoroughly with soap and water.
6. Apply gauze dressing (preferably sterile).
7. Determine tetanus immunization status from school record.
8. Call parent/guardian.

## POISONINGS

In cases of possible poisonings, contact the **POISON CONTROL HOTLINE**:

**1-800-222-1222**

### REGIONAL POISON CONTROL CENTERS IN THE STATE OF VIRGINIA:

- **VIRGINIA POISON CENTER** (VCU/MCV HEALTH SYSTEM)
- **BLUE RIDGE POISON CENTER** (UVA HEALTH SYSTEM)
- **NATIONAL CAPITOL POISON CENTER** (NORTHERN VIRGINIA & WASHINGTON, DC)

The poison center's nurses will assess the situation, determine if there is any risk to the individual, and recommend appropriate care. They can also advise the first aid provider on the need for the individual to be seen by a healthcare provider. **Most** cases of accidental poisoning can be managed without referral to a health care facility.

### ADDITIONAL RESOURCES

AMERICAN ASSOCIATION OF POISON CONTROL CENTERS (AAPCC)  
**WWW.AAPCC.ORG**

### INGESTED / SWALLOWED

**NOTE:** Ingested poisoning can occur from drug overdoses, medication errors, household and industrial chemicals, and improperly prepared foods. **Call Poison Center immediately.**

#### TREATMENT

1. If individual is unconscious, in severe respiratory distress, or if directed by Poison Center, call **911**.
2. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
3. If necessary, certified personnel start CPR. Avoid direct mouth-to-mouth contact (see **CPR**).
4. If necessary, treat for Shock (see **Shock**).
5. If a potentially caustic or corrosive liquid chemical has been swallowed and individual is not vomiting blood, have individual rinse mouth with water and spit it out several times before giving **only** 4 ounces (1/2 cup) of water to drink. This is the **only** situation in which an individual can have something to drink before calling **Poison Center**.
6. If individual is in no apparent life threatening distress, allow individual to rest.
7. **Do not** give any medication, food, or liquid until told to do so by the **Poison Center**.
8. Call Poison Center for additional treatment. Provide following information:
  - Substance ingested
  - When ingested
  - Quantity ingested
  - Individual's estimated weight
  - Current symptoms (nausea, vomiting, abdominal pain, etc.)
9. When medical personnel are notified provide them with:
  - All containers, food, drinking glasses, bottles, etc. found near the individual.
  - Container of known poison.
  - Any information known regarding prescription medicine the individual is taking.
10. Call parent/guardian.

### SYRUP OF IPECAC & ACTIVATED CHARCOAL

**DEFINITION:** **Syrup of Ipecac**, a liquid suspension used to induce vomiting, is no longer available and is not recommended for use. It is rarely used, but the poison control center may direct its use in managing overdose in young children if available, especially if a hospital is not nearby. **Activated charcoal** is a substance used to adsorb and bind poisonous substances within the stomach. This may be given by first responders or hospital staff. Activated charcoal is not recommended for use in the child or school setting.

- **ALWAYS** call the **Poison Control Center** immediately with any known or suspected poisoning.
- **NEVER** give the above substances without direction and instruction from the Poison Control Center.
- **NEVER** attempt to give to unconscious individual.
- If these substances are given, the individual **MUST** seek medical attention immediately.

## INHALATION OF GAS VAPORS

**NOTE:** Inhalation poisoning can result from inhalation of gas vapors and sprays including carbon monoxide, chlorine gas, biological agents, and insect sprays. **Do not enter an unsafe area without protective equipment.**

### TREATMENT

1. If individual stops breathing or is in severe respiratory distress, call **911**.
2. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
3. If necessary, certified personnel start CPR (see **CPR**).
4. If individual cannot be moved, the room in which the gas/vapor exposure occurred should be ventilated with open windows, fans, etc.
5. Check individual for other injuries. See appropriate procedure for treatment.
6. If there is no injury that indicates individual should not be moved, move to fresh air immediately.
7. Allow individual to rest.
8. Individuals with asthma or other respiratory disease may react to inhaled gas/vapors more severely than others. If an asthma episode occurs, see **Asthma**.
9. **Call Poison Center** for additional advice. Provide following information:
  - Substance inhaled
  - When inhaled
  - Quantity inhaled
  - Individual's estimated weight
  - Current symptoms (difficulty breathing, coughing, nausea, vomiting, etc.)
10. Call parent/guardian.

### OCULAR (EYE) EXPOSURE

**NOTE:** Eye poisonings can result from exposure to chemical and other toxic substances.

### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Immediately rinse out the eye(s) with a gentle, steady stream of tepid water for at least **20 minutes**. When only one eye is affected, position the head so that affected eye is lower than non-affected eye. Remove the poison quickly to prevent corneal injury.
3. Assist individual to keep eyes open while the rinsing is done.
4. **Call Poison Center** for additional treatment advice. Provide following information:
  - Substance in eye
  - When exposed
  - Quantity in eye
  - Individual's estimated weight
  - Current symptoms (visual changes, eye pain, etc.)
5. Call parent/guardian.

## SKIN EXPOSURE

### SKIN EXPOSURE

**NOTE:** Skin poisoning can result from exposure to chemical or biological substances slowly absorbed into blood and body tissues. Avoid touching contaminated area with bare skin.

### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. Remove any clothing that has become contaminated by the substance(s).
3. If poison is a dry substance, brush off as much as possible before rinsing. Avoid getting poison on skin.
4. Rinse skin with a steady stream of tepid water for **20 minutes**.
5. If individual is in no apparent life threatening distress, allow individual to rest.
6. **Call Poison Center** for additional treatment advice. Provide following information:
  - Substance on skin
  - When exposed
  - Quantity
  - Individual's estimated weight
  - Current symptoms (pain, skin changes, nausea, vomiting, etc.)
7. Call parent/guardian.

### LEAD PENCIL PUNCTURE WOUND

**NOTE:** Pencil lead is made of graphite, a carbon compound, and does not contain the metal lead. Graphite has no harmful effect other than staining the skin. Complete removal is difficult.

### TREATMENT

1. Wear gloves. Use Standard Precautions (see **Standard Precautions**).
2. If lead is superficially lodged, remove with tweezers.
3. **Do not** push tweezers beneath the skin.
4. Wash with soap and water.
5. Determine individual's tetanus immunization status from the school record.
6. Call parent/guardian and recommend follow-up medical care.

## CHEMICAL, BIOLOGICAL, RADIOLOGIC, NUCLEAR, EXPLOSIVE EVENTS OR BOMB THREAT

### CHEMICAL, RADIOLOGIC, NUCLEAR, OR EXPLOSIVE EVENTS

#### Actions:

1. Call **911** immediately.
2. Follow child care/school's Crisis Management Plan.

### BIOLOGICAL EVENTS

#### Actions:

1. Call **local health department immediately**. They will call police and, if necessary, the FBI.
2. Follow child care / school's **Crisis Management Plan**.
3. Minimize contact by moving the individual to a private or isolated section of the clinic.
4. If you suspect a communicable disease, wear a gown and gloves. If you suspect that respiratory transmission is possible, use the most efficient mask you have.
5. If the individual is wearing contaminated clothing, do not remove the clothing over the head in order to avoid contact with the mouth, nose, and eyes.
6. Put contaminated clothing in a sealed plastic bag and place the bag inside of another plastic bag.
7. Have the individual shower or rinse off affected areas. Use plain, clean water. If eyes are involved, flush for several minutes (**see Eyes, Chemical Burns**).
8. After individual has removed clothing and rinsed affected areas, individual can dress in clothing that is not contaminated.
9. Obtain a complete listing of all individuals who are in the clinic. Make sure you have contact information for all of them.
10. Call **911**, if necessary.
11. Call parent/guardian.

### BOMB THREAT

#### Actions:

If received by phone:

1. Remain calm.
2. Keep the caller on the line. DO NOT HANG UP, even after the caller does.
3. Write a note to a colleague to notify authorities if possible. Otherwise, notify authorities as soon as caller hangs up.
4. Copy the incoming phone number if available.
5. Attempt to ask the following questions:
  - Where is the bomb located?
  - When will it go off?
  - What does it look like?
  - What kind of bomb is it?
  - What will make it explode?
  - Did you place the bomb?
  - Why?
  - What is your name?
6. Write down:
  - Answers to the above questions.
  - Date and time call received.
  - Time caller hung up.
  - Exact words of the threat.
  - Any additional details such as gender, estimated age and background noise.
7. Follow the child care/school's **crisis management** plan and call **911**.

#### If received by email:

1. Do not delete the message.
2. Follow the child care/school's **crisis management plan** and call **911**.

#### If received by note:

1. Handle the note as little as possible.
2. Follow the child care/school's **crisis management plan** and call **911**.

#### NOTES:

- **Do NOT** evacuate the building until police arrive and evaluate the threat.
- **Do NOT** activate the fire alarm.
- **Do NOT** touch or move a suspicious package.

#### SIGNS OF A SUSPICIOUS PACKAGE:

- **No return address**
- **Excessive postage and/or foreign postage**
- **Stains**
- **Strange odor or sounds**
- **Unexpected delivery**
- **Poorly handwritten**
- **Misspelled words**
- **Incorrect titles**

## BEHAVIORAL AND MENTAL HEALTH EMERGENCIES

### RISK OF SUICIDE

**NOTE:** Always take a suicide risk **seriously**. Be alert of your personal safety and the safety of others in the situation. If the individual has a weapon, do not approach them, but get to a secure area and call **911**.

#### Factors Associated with Suicide Risk:

- Depression
- High current or recent stress levels
- Recent emotional trauma
- Alcohol and drug use
- Threats of suicide
- Suicide plan
- Previous attempts or threats
- Sudden improvement from depression
- Discussing suicide or hinting at a desire to die
- Violent or aggressive behavior

#### Questions to ask if suicidal ideation is suspected:

- Do you ever think about hurting yourself?
- Do you ever think about dying?
- Are you thinking about suicide?
- Have you ever thought about how you would kill yourself?
- Do you have a specific plan?
- Do you have access to weapons or other methods of suicide (drugs)?
- Have you ever tried to harm or kill yourself before?

#### **If the answers above lead you to suspect attempted suicide, follow this procedure:**

1. Remain calm. Take the situation seriously.
2. Be alert to personal safety. Be alert of your personal safety and the safety of others in the situation. If the individual has a weapon, do not approach them, but get to a secure area and call 911 immediately.
3. If there is no apparent risk to yourself or others (no weapons or aggressive/violent behavior), do not leave the individual alone.
4. If necessary and able, treat any life threatening problems.
5. Listen and talk to the individual. Talk in a calm, reassuring voice. Use positive body language and good eye contact. Avoid unnecessary physical contact and quick movements.
6. Encourage the individual to discuss what is troubling them.
7. Never play along with any visual or auditory hallucinations. Do not lie to the individual.
8. If it appears to help and is possible, involve family members or friends in the conversation. If the presence of others is agitating, ask them to leave.
9. Develop a safety contract and list of available resources including local and national 24-hour suicide prevention hotlines and friends or family members they can stay with and talk to.
10. If the risk of suicide still seems imminent or the individual has stated they have a plan or means of suicide, call **911**. They must receive medical care immediately.

### ACTIVE SHOOTER

1. If you see an individual acting aggressively, with or without a weapon, do not approach them.
2. Get yourself and others to a secure area immediately.
3. Follow the child care/school's **lockdown** or **crisis management plan** and call **911**.

#### NOTES:

- **Do NOT** evacuate the building until police arrive and evaluate the threat.
- **Do NOT** activate the fire alarm.

### ADDITIONAL RESOURCES

#### NATIONAL SUICIDE PREVENTION LIFELINE

1-800-273-TALK  
1-800-273-8255

#### VIRGINIA DEPARTMENT OF HEALTH: SUICIDE PREVENTION

[HTTP://www.vdh.virginia.gov/livewell/programs/suicide/](http://www.vdh.virginia.gov/livewell/programs/suicide/)

# EMERGENCY CARE PROCEDURES

## Summary of CPR and AED for Adults, Children, and Infants

Action	Adult and Older Child (has gone through or is going through puberty)	Child (1 to puberty)	Infant (less than 1 year old)
<b>Check for response</b>	Tap and shout		
<b>Phone your emergency response number (or 911)</b>	Phone your emergency response number (or 911) as soon as you find that the person does not respond	Phone your emergency response number (or 911) after giving 5 sets of 30 compressions and 2 breaths (if you are alone)	
<b>• Give compressions</b>			
<b>• Compression location</b>	Lower half of the breastbone		Just below the nipple line
<b>• Compression method</b>	2 hands	1 or 2 hands	2 fingers
<b>• Compression depth</b>	At least 2 inches	About 2 inches	About 1 1/2 inches
<b>• Compression rate</b>	At least 100 a minute		
<b>• Sets of compressions and breaths</b>	30:2		
<b>Open the airway</b> Use a head tilt-chin lift	Head tilt-chin lift		Head tilt-chin lift (do not tilt the head back too far)
<b>Check breathing</b>	Look for only gasping or no breathing (take at least 5 seconds but no more than 10 seconds)		
<b>Start CPR</b>	Give sets of 30 compressions and 2 breaths (1 second each)		
<b>AED</b>	Use the AED as soon as it arrives		
<b>• Press the "ON" Button or open the lid</b>			
<b>• Attach pads to the person's bare chest</b>	Use adult pads	Use child pads/key/switch if child is between 1 and 8 years old or adult pads if child is 8 or older	
<b>• Follow the AED Prompts</b>			

**SUMMARY OF CPR AND AED**

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For the most current American Heart Association (AHA) Summary of CPR and AED for Adults, Children and Infants Chart, consult the Virginia Department of Health School Age Health web site at

<http://www.vdh.virginia.gov/livewell/programs/schoolage/>

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## CHOKING - RESPONSIVE CHILD OR ADULT (Speaking, breathing and / or coughing)

### Child (ages 1-8) and Adult (age 8 and older)

1. If individual can breathe, cough, or speak, do not interfere.
2. Stay with the individual. Encourage them to cough out the obstruction.
3. If individual cannot clear airway by coughing, is unable to speak, breathe, or cough, or if breathing and coughing become weaker and more difficult, call **911** and see **CHOKING RESPONSIVE CHILD OR ADULT: Unable to dislodge object**.

## CHOKING - RESPONSIVE CHILD OR ADULT unable to dislodge object (Difficulty breathing, weak / faint cough, difficulty speakin

### Child (ages 1-8) and Adult (age 8 and older)

1. **Universal sign of choking** – Individual clutching neck
2. **Ask individual "Are you choking?"**
3. **Perform Heimlich Maneuver if any of the following are present:**
  - Unable to speak;
  - Weak, ineffective cough;
  - High-pitched sound or no sound while inhaling;
  - Increasing difficulty breathing; or
  - Blue lips or skin
4. If someone is with you, have them call **911**.
5. **Heimlich Maneuver**
  - Stand behind individual.
  - Wrap arms around waist. Make a fist with one hand. Place thumb side of fist against middle of the abdomen, just above navel and well below lower tip of breastbone.
  - If individual is pregnant or obese, use chest thrusts instead of abdominal thrusts. Stand behind individual, wrap arms around chest, position hands (one in fist, the other grasping it) on center of breastbone, between nipples. Deliver set of 5 chest thrusts until object is expelled or victim becomes unresponsive.
  - Grasp your fist with your other hand.
  - Provide quick upward thrusts into individual's abdomen.
  - Repeat thrusts until the individual coughs up the object or becomes unresponsive.
6. **If individual coughs up object** and is coughing, breathing, and speaking normally, watch the individual to make sure he or she continues to breathe easily.
7. If a call has not been made, call **911** now.
8. **If individual becomes unconscious, see CHOKING UNRESPONSIVE CHILD OR ADULT**

## CHOKING - UNRESPONSIVE CHILD OR ADULT UNABLE TO DISLODGE OBJECT

### Child (ages 1-8) and Adult (age 8 and older)

1. If you are alone, call **911**. If someone is with you, have him call **911**.
2. **Begin CPR (see CPR)** starting with chest compressions and **activate the emergency response system**.
3. Every time you open airway to provide **rescue breaths**, open the mouth widely. Quickly look for a foreign body. If you see an object in the throat, remove it. **Do not perform a blind finger sweep**.
4. If you do not see an object, **continue CPR**.

#### NOTE:

You can tell you have successfully removed an airway obstruction in an unresponsive victim if you:

- Feel air movement and see the chest rise when you give breaths
- See and remove a foreign body from the victim's mouth
- Continue to provide CPR or rescue breathing as needed if victim remains unresponsive
- If victim responds, they must seek medical attention immediately

## CHOKING - RESPONSIVE INFANT Infant (up to 1 year old)

1. If an infant is coughing forcefully, allow the infant to continue to cough. Watch the infant carefully.
2. If the infant does not stop coughing in a few minutes or if the infant coughs weakly, makes a high pitched sound while coughing, or cannot cry, cough, or breathe, call **911**.
3. **Position the infant:**
  - Kneel or sit with the infant on your lap.
  - If easy to do, remove clothing from the infant's chest.
  - Place the infant face down with head slightly lower than chest on your arm with hand supporting the infant's head and jaw. Rest your forearm on your thigh. Avoid compressing the soft tissue of the infant's throat.
  - With other hand, give up to **5 back slaps** with the heel of your hand forcefully between infant's shoulder blades.
  - If object not expelled, turn the infant over while supporting the infant's head with the palm of your hand.
  - Hold the infant face up, with your forearm resting on your thigh. Keep the infant's head lower than the trunk.
  - Place **two or three fingers** in the middle of the chest over the lower half of the breastbone.
  - Give up to **5 downward** chest thrusts. Each thrust should be given at a rate of 1 per second.
4. **Repeat** back slaps and chest thrusts until object is coughed up and infant begins to breathe on own.
5. Continue to watch the infant until EMS arrives.
6. **If infant becomes unresponsive,**
  - **Stop performing back slaps.**
  - **Open airway widely and look for object.**
  - **Remove it** if you can see it. **Do not do blind finger sweep.**
  - **Begin CPR (see CPR).**

**NOTE:** Infants who have been treated for choking should always be examined by a healthcare provider.

## CHOKING - UNRESPONSIVE INFANT Infant (up to 1 year old)

1. **If infant becomes unresponsive,**
  - Call for help and activate the emergency response system.
  - Stop performing back slaps.
  - Place the infant on a firm, flat surface.
  - **Open airway widely and look for object.**
  - **Remove it** if you can see it and it is easily removable. **Do not do blind finger sweep.**
  - **Begin CPR (see CPR).**
  - Each time you open the airway, look for the obstructing object in the back of the throat and remove if possible. Do not do blind finger sweep.
  - **Continue CPR (see CPR).**

**NOTE:** Infants who have been treated for choking should always be examined by a healthcare provider.



## AUTOMATIC EXTERNAL DEFIBRILLATION (AED)

**DEFINITION:** Automated external defibrillators (AEDs) are computerized devices that can identify cardiac rhythms that need a shock, and they can then deliver the shock.

### NOTE:

- Become familiar with where the AEDs are located in your school or community setting.
  - If multiple rescuers are present, have one person retrieve the AED while the other(s) continue to perform CPR. The second rescuer should also turn on and attach the AED pads while CPR continues. CPR should never be stopped to retrieve an AED.
  - Never push the analyze button while moving the victim, as movement can interfere with analysis.
- **HAIR**
    - If the pads stick to the hair instead of the skin, press down firmly on each pad.
    - If the AED continues to prompt you to “check pads” or “check electrodes,” quickly pull off the pads. This will remove a large amount of hair and should allow the pads to stick to the skin.
    - If a large amount of hair still remains where you will put the pads, shave the area with the razor in the AED carrying case.
    - Put on a new set of pads. Follow the AED voice prompts
  - **WATER**
    - Do NOT use the AED in water.
    - If the victim is in water, pull them out.
    - If water is covering the victim’s chest, quickly wipe the chest before attaching the AED pads.
    - If the victim is lying on snow or in a small puddle, you may use the AED.
  - **IMPLANTED DEFIBRILLATORS AND PACEMAKERS**
    - Victims with a high risk for sudden cardiac arrest may have an implanted defibrillator / pacemaker that automatically deliver shocks directly to the heart.
    - These devices create a hard lump (half the size of a deck of cards) beneath the skin of the upper chest or abdomen with an overlying scar.
    - If a device is present, avoid placing the AED pad directly over the implanted device, as it may block delivery of the shock to the heart. Follow the normal steps for operating an AED.
  - **TRANSDERMAL MEDICATION PATCHES**
    - Do NOT place AED pads directly on top of a medication patch, as it may block the transfer of energy from the AED pad to the heart and may cause small burns to the skin. If necessary, remove the medication patch and wipe the area clean before attaching the AED pad.

## AUTOMATIC EXTERNAL DEFIBRILLATION (AED)

### Adults and Children 8 Years of Age and Older

1. **POWER on the AED**
  - Open the top of the AED and turn the power on by pushing the power button. Some devices will power on automatically when the case is opened.
2. **ATTACH AED**
  - Choose ADULT pads for victims 8 years of age and older.
  - Peel the backing away from the AED pads.
  - See note above regarding chest hair.
  - Attach the adhesive AED pads to the victim’s bare chest.
    - Place one AED pad on the victim’s upper-right chest (directly below the collarbone).
    - Place the other pad to the side of the left nipple, with the top edge of the pad a few inches below the armpit.
  - Attach the AED connecting cables to the AED box if they are not pre-connected.
3. **CLEAR the victim and ANALYZE the rhythm**
  - If the AED prompts you, clear the victim during analysis. Be sure no one is touching the victim, not even the rescuer in charge of giving breaths.
  - Some AEDs will tell you to push a button to allow the AED to begin analyzing the heart rhythm; others will do that automatically. The AED may take about 5 to 15 seconds to analyze.
  - The AED then tells you if a shock is needed.
4. **If the AED advises a shock, it will tell you to CLEAR the victim. If the AED does NOT advise a shock, skip to step 5.**
  - Clear the victim BEFORE delivering the shock. Be sure no one is touching the victim.
  - LOUDLY state a “clear the victim” message, such as “everybody clear” or simply “clear.”
  - Look to be sure no one is in contact with the victim.
  - Press the SHOCK button.
  - The shock will produce a sudden contraction of the victim’s muscles.
5. **If no shock is needed, AND after any shock delivery, immediately resume CPR, starting with chest compressions.**
6. **Leave the AED and pads in place and continue CPR. After 5 cycles or about 2 minutes of CPR, the AED will prompt you to repeat steps 3 and 4. If no shock is advised, immediately restart CPR beginning with chest compressions.**

## AUTOMATIC EXTERNAL DEFIBRILLATION (AED)

### Children 8 Years of Age and Younger

### NOTE:

- Some AEDs have been modified to deliver different shock doses: one shock dose for adults and one for children. If you use a pediatric-capable AED, there are features that allow it to deliver a child-appropriate shock. The method to choose the shock dose for a child differs based on the type of AED you are using.
  - If your AED includes a smaller size pad designed for children, use it. If not, use the standard pads making sure they do not touch or overlap.
  - Be familiar with the AED you will be using, if possible, before you need to use it.
  - Remember to first turn on the device and follow the prompts.
  - For infants, a manual defibrillator is preferred to an AED for defibrillation. If a manual defibrillator is not available, an AED equipped with a pediatric dose attenuator is preferred. If neither is available, you may use an AED without a pediatric dose attenuator.
1. **POWER on the AED**
    - Open the top of the AED and turn the power on by pushing the power button. Some devices will power on automatically when the case is opened.
  2. **ATTACH AED**
    - Choose PEDIATRIC pads for victims less than 8 years of age. If pediatric pads are not available, adult pads can be used, but make sure they do not overlap.
    - Peel the backing away from the AED pads.
    - Attach the adhesive AED pads to the victim’s bare chest.
      - Place one AED pad on the victim’s upper-right chest (directly below the collarbone).
      - Place the other pad to the side of the left nipple, with the top edge of the pad a few inches below the armpit.
    - Attach the AED connecting cables to the AED box if they are not pre-connected.
  3. **CLEAR the victim and ANALYZE the rhythm**
    - If the AED prompts you, clear the victim during analysis. Be sure no one is touching the victim, not even the rescuer in charge of giving breaths.
    - Some AEDs will tell you to push a button to allow the AED to begin analyzing the heart rhythm; others will do that automatically. The AED may take about 5 to 15 seconds to analyze.
    - The AED then tells you if a shock is needed.
  4. **If the AED advises a shock, it will tell you to CLEAR the victim. If the AED does NOT advise a shock, skip to step 5.**
    - Clear the victim BEFORE delivering the shock. Be sure no one is touching the victim.
    - LOUDLY state a “clear the victim” message, such as “everybody clear” or simply “clear.”
    - Look to be sure no one is in contact with the victim.
    - Press the SHOCK button.
    - The shock will produce a sudden contraction of the victim’s muscles.
  5. **If no shock is needed, AND after any shock delivery, immediately resume CPR, starting with chest compressions.**
  6. **Leave the AED and pads in place and continue CPR. After 5 cycles or about 2 minutes of CPR, the AED will prompt you to repeat steps 3 and 4. If no shock is advised, immediately restart CPR beginning with chest compressions.**

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*Emergency Medical Responder: First on Scene, 9<sup>th</sup> Edition* (Le Baudour, et. a., 2011)

*Brady Emergency Care, 12<sup>th</sup> Edition* (Limmer, et. al., 2012)

*Clinical Guidelines for School Nurses, 8th Edition* (School Health Alert, 2013)

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