

First Class First Year: First Aid – Basics II



First Aid: Basics II

Learning Objectives

As a result of this experience, each participant should be able to:

Complete advancement requirement S7c

Treat for object in the eye, bite of suspected rabid animal, puncture wounds, second degree burns, heat exhaustion, and shock.

Materials Required

Blanket

Bandages (for snakebite, cold cloths, etc)

Gauze pad

Discovery

Stage a first aid situation in the meeting during at an unexpected time. Use one of the injuries in the presentation and see how scouts react. Alternatively, tell scouts that one member of their patrol has one of these injuries and see how they react.

First Aid: Basics II

Teaching-Learning

As always, consult a current first aid manual to verify these techniques.

- I. Shock.
- II. Object in eye
- III. Bite of suspected rabid animal.
- IV. Puncture wound
- V. Second degree burns.
- VI. Heat exhaustion.
- VII. Heatstroke, dehydration, hypothermia, and hyperventilation
- VIII. Tell patrol members that they will have a chance to practice this skill at this month's outing.

Application: First Aid Steps Games.

Cut out the First Aid steps cards in the appendix. For each first aid situation, the patrol must line up with the patrol leader in front and each member holding a step card. Members must be in the proper order to get credit (e.g. the patrol leader has the first step, the second scout has the next step, etc). If time allows, have the patrol do all the situations presented. The patrol can compete against its own time. Note, there are not enough cards for each injury so the patrol could be split into two teams if there are enough scouts.

2nd Class 7c - Shock

Shock: Occurs when blood flow is inadequate to maintain the supply of oxygen.

Causes: Low blood volume (caused by internal or external blood loss, severe dehydration, anaphylaxis, or spinal cord damage) and low blood pressure (heart Attack or damage,) and Severe infections (Loss of 1 to 1 ½ pints in an adult may cause first stages of shock.)

Symptoms: Rapid, weak pulse (in early shock pulse may be normal when lying down.) Rapid breathing. Weak pulse. Pale or bluish skin, nail beds, & lips. Damp, clammy skin. Restlessness, anxiety, weakness. Nausea & vomiting. Altered state of responsiveness. (Note: children pulse 120/min. A child who is bleeding will maintain blood pressure until the lose 40% of their blood volume, after which they deteriorate quickly!!!)

Treatment: Note: Shock requires immediate Medical attention!

- Check the ABCs. Examine victim for bleeding.
- Control all bleeding and treat any major injuries.
- Lay the victim on his back with feet elevated 8 to 12 inches.
- Keep victim sheltered and warm.
- Do not give food to victim. If able to swallow, give clear liquids.
- Evacuate as quickly as possible.

2nd Class 7c - Shock

EMERGENCY FIRST AID

ABC'S OF IMMEDIATE FIRST AID ACTION

A Open the Airway **B** Check for Breathing **C** Check for Circulation

MOUTH TO MOUTH RESUSCITATION

- Place victim on his/her back. Open the airway by tilting the forehead back. Head tip - Chin lift.
- Place fingertips of other hand under the bony part of the chin. Place your ear close to the victim's mouth and nose. Look at victim's chest to see if it rises and falls. Listen and feel for about 5 seconds for air to be exhaled. Flush nostrils with water and make a tight seal around victim's mouth. Give two slow (1-1.5 seconds per ventilation) breaths.

CHOKING

If choking victim can cough, speak or breathe, do not interfere. Call a paramedic. IF VICTIM CANNOT BREATHE:

- Stand behind victim and put arms around victim's waist. Make a fist, placing thumb side against victim's abdomen between navel and rib cage.
- Grasp fist with other hand and give 4-5 upward, inward thrusts. Repeat until object is dislodged.

SEVERE BLEEDING

- Place clean compress over wound and apply direct pressure. Elevate limb if bleeding severely.
- When bleeding stops, apply pressure bandage. Do not cut off circulation by tying bandage too tightly.

FRACTURE

- Do not move victim.
- Splint injured area.
- Treat for shock, being careful when handling injured area.

BURNS

- Hold burn under cool running water or apply a cold compress.
- Cover burn with clean bandage.
- DO NOT treat burns with grease or butter.

EYE INJURY

CHEMICAL BURNS OF THE EYE

- Flush eye with eye and skin irrigator or clear water for 15 minutes.

OBJECT IN THE EYE (PARTICLE):

- Do not rub eyes.
- Put eyelid over eye and hold to close tearing. Tears will normally wash object to wash line.
- If above procedure is unsuccessful, hold eyelid up and force victim back downward.
- Place a cotton tip applicator horizontally across the eyelid and hold back over it.
- Carefully remove object with Eye Magnet Loop or tong, clean sharp.

ELECTRIC SHOCK

- Remove victim from source of shock using stick or other non-conductive object.
- Begin mouth to mouth resuscitation if breathing has stopped.
- Call for medical assistance promptly.

SHOCK DUE TO INJURY

- Clear the airway.
- If the face is pale, elevate the feet.
- If the face is red, elevate the head and shoulders.
- Keep the victim warm.

YOUR LOCATION

Paramedic _____
 Police _____
 Fire _____
 Doctor _____
 Poison Control Center _____
This card is a compilation of general first aid information obtained from sources believed to be reliable. However, there is no guarantee as to the medical validity of the information or the results obtained from using said information. This does not represent that every emergency safety procedure is contained herein, or that abnormal or unusual circumstances may not occur or require further or additional procedure.

EMERGENCY TELEPHONE NUMBERS

FOR LOCAL SALES AND SERVICE

FIRST AID DIRECT

- Place the victim in shock position
- Keep the person warm and comfortable
- Turn the victim's head to one side if neck injury is not suspected



2nd Class 7c – Object in Eye

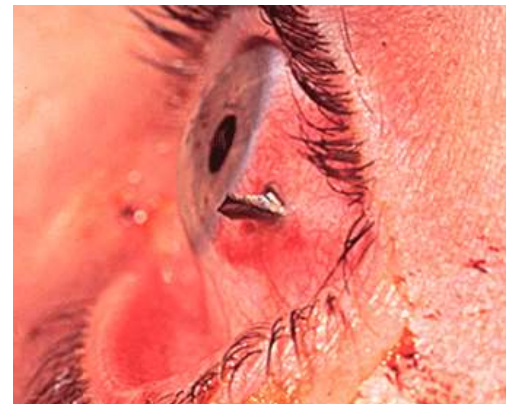
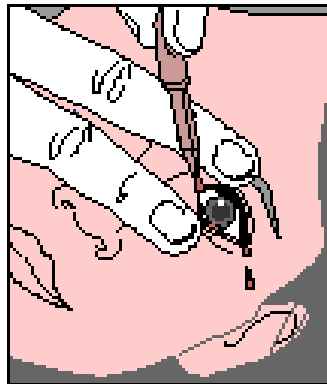
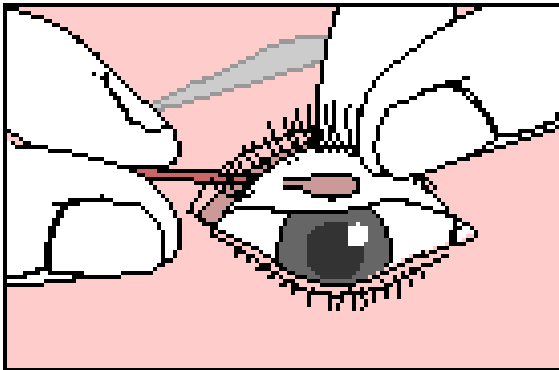
Object in the Eye

Prevention: Be Prepared Wear eye protection for all hazardous activities and sports-at school, home, and on the job. Stock a first aid kit with a rigid eye shield and commercial eyewash before an eye injury happens.

- **DO NOT** assume that any eye injury is harmless. When in doubt, see a doctor immediately.
- **DO NOT** rub the eye
- Try to let tears wash the object out or use an eyewash.
- Try lifting the upper eyelid outward and down over the lower lid.
- Place a cotton-tipped swab behind the upper eyelid and carefully roll the eyelid back onto it. If you can see the object, remove it with the moistened end of another cotton swab or a facial tissue.
- Tilt the person's head to one side. Hold the eyelids open with two fingers and carefully use an eyedropper or a cup of water to flush water over the eye from the nose outward. If the object cannot be removed, cover the eye with a gauze bandage and seek medical attention

Cuts and Punctures of the Eye or Eyelid

- **DO NOT** wash out the eye with water or any other liquid.
- **DO NOT** try to remove an object that is stuck in the eye.
- Cover the eye with a rigid shield without applying pressure. The bottom half of a paper cup can be used.
- See a doctor at once.



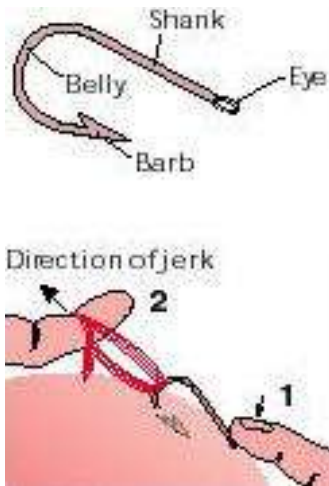
2nd Class 7c – Animal Bite

Rabid Animal Bite

- Consider Rabies if: in area where rabies is endemic, if bite was unprovoked, if bitten by bat or large carnivore, or if an open wound is licked by potentially rabid animal.
- **Treatment:** Wash bite vigorously with a strong solution of soap and water or irrigate the bite with benzalkonium chloride. Iodine solutions as effective but if it is only thing available use providone-iodine. Seek Medical attention.
- **Note:** to confirm rabies the animals brain must be examined.



2nd Class 7c – Puncture Wounds



Impaled Object – Fishhook

- **Never** remove a fishhook that is embedded in the eye or face; seek medical attention immediately to have it removed. Note: A fishhook embedded in skin should be removed by a doctor. If you are in a remote area and a doctor is not available, remove the fishhook following the directions below. If the fishhook is embedded deeply in tissue, follow the instructions below for a multi-barbed fishhook.
- **Removing:** Make sure that any bystanders are out of the way of the fishhook's path. Next, loop a piece of fishing line several times around the belly of the hook near the skin surface. Press the shank of the hook against the skin with your index finger
- Wrap the other end of the string several times around the index finger of your other hand (use your thumb to hold the loose end of the string tightly)
- Move your index finger close to the hook to generate slack in the line. Pull on the string suddenly, with a jerk, in line with the hook. Flush the area with water, clean it with soap and water, and bandage it.
- A multi-barbed fishhook should ideally be removed by a physician. If this is not possible, cut the eye off the shank of the hook, and then push the shank of the hook through the wound, following the path of the hook until the barbs exit and can be grasped with pliers. Flush the area well with running water, clean it with soap and water, and cover it with a bandage.



2nd Class 7c – 2nd Degree Burns

Second-degree Burn: Second-degree burns are more serious than first-degree burns because a deeper layer of skin is burned. They can more easily become infected. Also, if the burn affects more than 10% of your skin, you may go into shock because large quantities of fluid are lost from the burned area. All second-degree burns greater than 2 to 3 inches in diameter should be treated by a medical professional.

Causes: Deep Sunburn, Exposure to Flame, Contact with hot liquids, contact with chemicals, Burning kerosene or gasoline

Symptoms: The skin is bright red and blotchy and has blisters. It usually looks wet because of the loss of fluid through the damaged skin. Very painful.

Treatment:

- Remove jewelry, belts, & tight clothing from the burned area before it begins to swell.
- For small burns (less than 20%), immerse in clean, cold water for about 10 minutes. Cooling extensive burns (greater than 20%) creates a risk of hypothermia.
- Keep burned skin clean and prevent blisters from breaking (burned skin is sterilized by the heat.)
- Cover burn with a clean, dry (sterile) dressing. Cover a large burn with a clean sheet or blanket.
- If the burn is on hands or feet, put non-stick gauze pads between the victim's toes or fingers.
- Unless burn is minor, evacuate to medical care.
- Monitor the airway and breathing at frequent intervals.
- Encourage a large fluid intake in all victims except those with minimal burns.
- Relieve pain and inflammation with aspirin or ibuprofen.
- For extended after-care: Wash the burn gently with lukewarm water and mild soap. Apply thin layer of nonstick dressing. If the burn is wet and oozing, remove dressing daily with clean lukewarm water, wash area and reapply antibiotic ointment and a non-stick dressing.

2nd Class 7c – 2nd Degree Burns



2nd Class 7c – Heat Exhaustion

Heat Exhaustion: develops due to water and electrolyte loss from sweating.

Prevention: Drink when exercising, before feeling thirsty, and after feeling satisfied.

Should drink every hour, enough to produce clear urine. For sustained exertion, lasting 2-3 hours, replace salt & glucose by eating. Wear light-colored clothing. Avoid caffeine.

Be aware of early symptoms: headache, nausea, and muscle cramps.

Symptoms: Inability to continue activity, headache, nausea, dizziness, and weakness.

Rapid pulse. Thirst & profuse sweating. Gooseflesh, chills, & pale skin. Moderately high temp 102 to 105. Low blood pressure. Fainting.

Treatment:

- Victim should rest in shade and maximize air circulation.
- Remove excess clothing.
- Wet victim with cold water to increase evaporation.
- Administer fluids. For severe cases: add ¼ tsp. salt and 6 tsp. sugar to 1 liter water.

2nd Class 7c - Heatstroke

Heatstroke: From heavy exertion in hot climates or exposure to several days in excessive heat.

Symptoms: Headache, drowsiness, irritability, unsteadiness, sudden confusion, delirium, convulsions, coma, Rapid pulse, Low blood pressure, dry or sweat-moistened hot skin, & excessively high temperatures above 106 (Note: do not take temperature orally when victim is experiencing confusion, delirium, or convulsions.)

Treatment:

- Remove victim from heat.
- Remove all clothing or as much as possible to accelerate cooling.
- Immediately do one of the following: sprinkle or spray water on the skin (ineffective in high humidity) fan vigorously, immerse in a stream or cold bath, and/or place cold packs on the neck, abdomen, armpits, and groin.
- Stop cooling when the rectal temp falls below 102 or mental status improves.
- Monitor temp frequently.

2nd Class 7c - Heatstroke

Heatstroke fact box

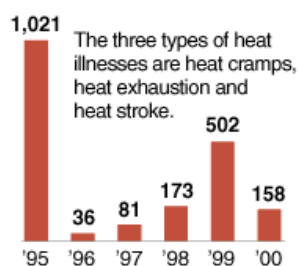
Symptoms

- ▶ High body temperature of 106° or higher
- ▶ Reddish tinge to skin
- ▶ Rapid pulse
- ▶ Nausea and/or vomiting
- ▶ Weakness; dizziness
- ▶ Unconsciousness

Prevention

- ▶ Drink plenty of fluids
- ▶ Wear lightweight clothing
- ▶ Protect yourself from the sun
- ▶ Spend as much time indoors as possible on very hot and humid days
- ▶ Take frequent drink breaks during outdoor activities
- ▶ Schedule vigorous activities and sports for cooler times of the day

U.S. heat-related deaths



SOURCES: University of Maryland Medicine; National Weather Service

AP



Relative Humidity	50%	60%	70%	80%	90%	100%
Temp C						
28	28.4	29.4	30.7	32.1	33.7	35.6
29	29.7	31.0	32.7	34.7	37.1	39.7
30	31.0	32.8	35.0	37.7	40.7	44.2
31	32.6	34.8	37.6	40.9	44.7	49.0
32	34.4	37.1	40.4	44.4	49.0	54.2
33	36.3	39.5	43.5	48.1	53.5	59.7
34	38.4	42.2	46.8	52.2	58.4	65.5
35	40.7	45.1	50.3	56.5	63.7	71.7
36	43.1	48.1	54.2	61.2	69.2	78.2

Extreme Caution - Heat cramp and exhaustion possible.

Danger - Heat exhaustion likely.

Extreme Danger - Heat stroke imminent.

2nd Class 7c - Dehydration

Dehydration:

Causes: not replacing water that has been expelled from sweating, breathing, burns, evaporation, elimination, and vomiting.

Symptoms:

- **Mild to Moderate:** Dry or “gooey” mouth. Headache, red face, elevated body temperature. Thirst, possible loss of appetite. Decreased urine volume and/or dark urine, constipation Unexplained tiredness, loss of endurance, rapid fatigue. Dizziness when standing.
- **Severe (the above possibilities, intensified, plus):** Irritability, fussiness or confusion. Dry skin and mucous membranes; may not sweat Little or no urination, or dark yellow or amber in color. Sunken eyes. Loss of skin elasticity; Doesn't bounce back when compressed. Low blood pressure Rapid heartbeat. Fever. Tingling in the limbs. Delirium or unconsciousness.

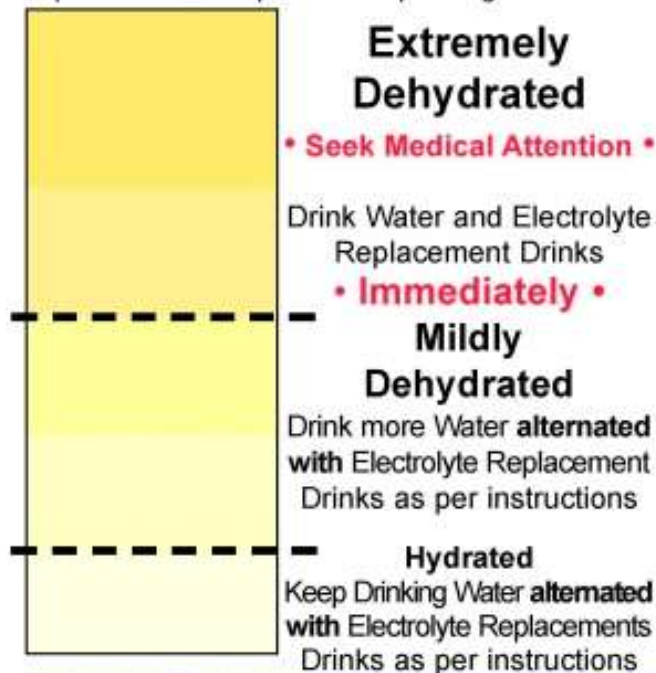
Prevention: Drink more water than you think you need, enough for urine to remain clear. Ensure urination every 3-5 hours.

Treatment: Administer cool water in copious amounts. Administer diluted electrolyte replacement drinks or rehydration solutions. (For moderate dehydration victim should drink at least ¼ liter of electrolyte replacement drink an hour with as much water as possible.) Avoid caffeine, carbonated drinks, & alcohol. Avoid antihistamines & decongestants. If you suspect severe dehydrations, seek medical attention immediately. Monitor vitals & watch for signs of shock.

2nd Class 7c - Dehydration

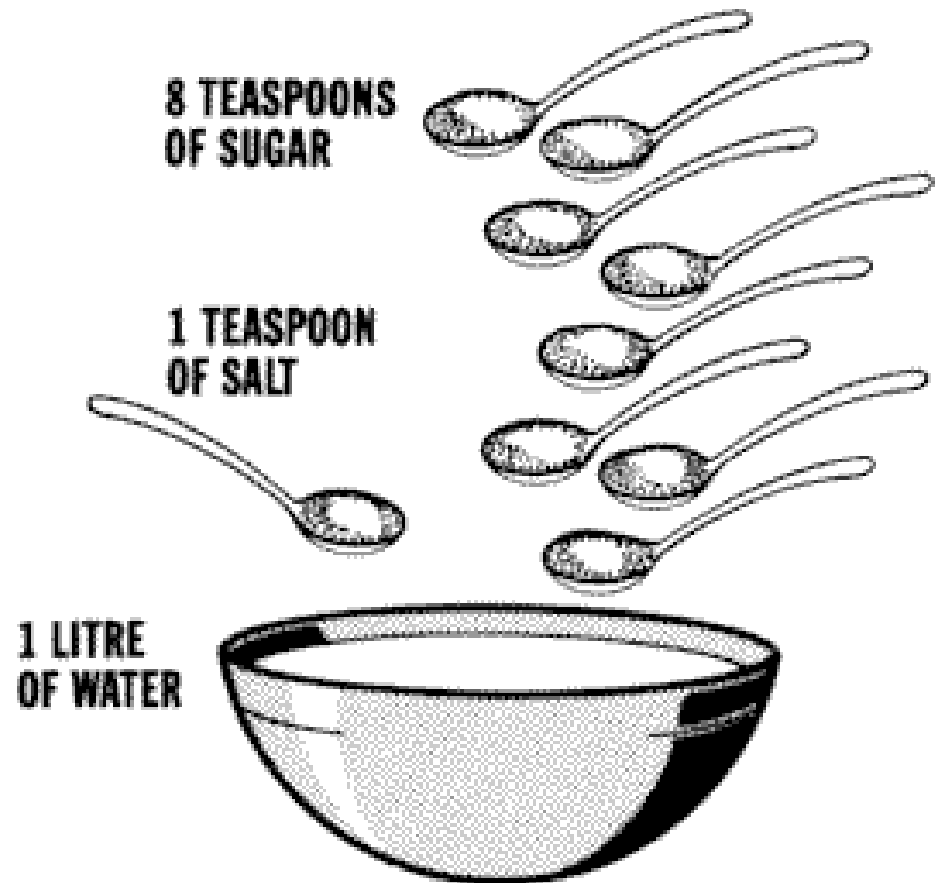
What Colour is your Urine?

It is recommended that you drink up to 1200ml of water per hour and 600ml of electrolyte replacement drink per hour depending on work rate.



DO YOU PASS THE TEST?

Note: Urine colour may vary because of diet or supplements (e.g. multivitamins).



2nd Class 7c - Hypothermia

Hypothermia: Result of the body losing more heat than the body can generate.

Causes: Wet or inadequate clothing. falling into cold water. Cold temperatures. Inadequate shelter. Fatigue, exhaustion. Dehydration. Poor food intake. Alcohol intake.

Symptoms: Temperature below 95. Shivering. Slurred speech. Abnormally slow breathing. Cold, pale skin. Loss of coordination. Fatigue, lethargy, or apathy. Confusion or memory loss. Rigid muscles. Numbness. Erratic heartbeat. Irrational behavior. Dilated pupils.

Treatment: Apply all steps necessary to increase victim's body heat.

- Move victim to a sheltered area, out of the elements.
- Remove wet clothing and replace with dry clothes.
- Place victim in sleeping bag.
- Wrap warm rocks and place near the victim.
- Give the victim a warm drink. Avoid caffeine, alcohol, & tobacco.
- Place victim in a sleeping bag with another person, exhale warm air near the victim's mouth and nose. Body-to-body contact.
- Apply Hypothermia wrap.

2nd Class 7c - Hypothermia

TREATMENT IN THE FIELD

BODY SIGNS/SYMBOLS TEMP. (rectal)

www.hypothermia.org

37.5°C NORMAL

36 FEEL COLD

Seek dry shelter, replace wet clothing with dry including socks, gloves, hat, cover neck, insulate whole body including HEAD from cold. Exercise but avoid sweating. External warmth (bath, fire) ONLY if CORE TEMP. above 35°C. Warm sweet drinks and food (high calories).

35 SHIVERING 95

BODY CORE TEMPERATURE BELOW 35°C = HYPOTHERMIA = HOSPITAL

NO EXERCISE, HANDLE GENTLY, REST. NO EXTERNAL WARMTH (except to chest, trunk, eg. Hiebler Jacket).

CLUMSY 94

34 IRRATIONAL 94

CONFUSED
(may appear drunk)

Warm sweet drinks and calories. Internal warming via warm moist air (exhaled air, steam) or warm moist oxygen (40 - 42°C at mask).

33 MUSCLE STIFFNESS 92

Monitor pulse, breathing. Restrict all activity, lie down with feet slightly raised.

32 SHIVERING STOPS. COLLAPSE. TRANSFER TO HOSPITAL. URGENT. 90

31 SEMI CONSCIOUS 88

30 UNCONSCIOUS 86
No response to painful stimuli

Nothing by mouth. Check airway remains open. May tolerate plastic airway, put in recovery position, check airway, turn every 2 hours to protect skin, monitor pulse and breathing.

29 SLOW PULSE AND BREATHING 85

Slow mouth-to-mouth breathing, at victim's own rate (may be very slow).

28 CARDIAC ARREST 83

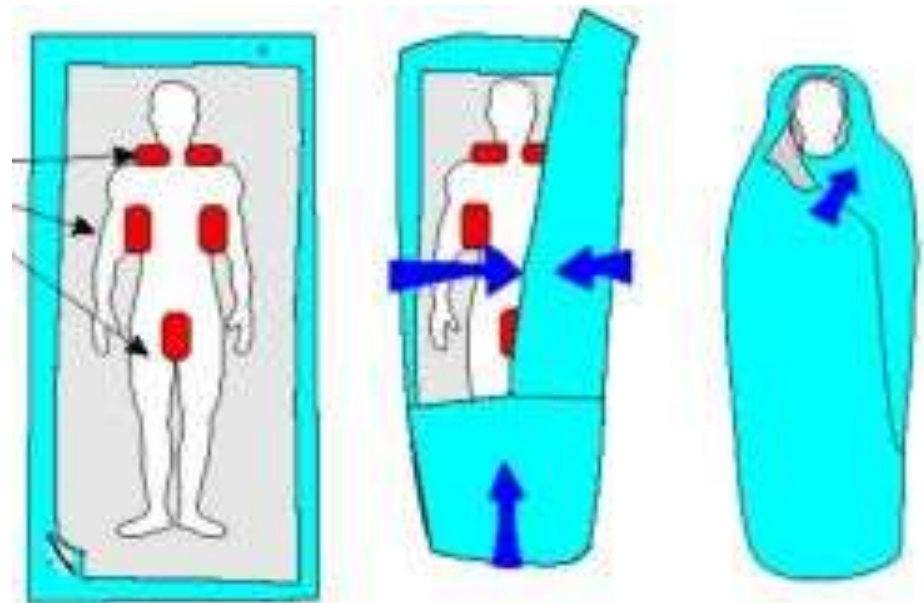
No obvious pulse or breathing
Pupils dilated

Check airway, CPR, with mouth-to-mouth breathing. Aim for normal CPR rates of 12-15 breaths/min. and 80-100 compressions/min. but slower rates of 6-12 breaths/min. and 40-60 compressions/min. may be adequate. Continue for as long as you can.

BELOW 28°C. NO VITAL SIGNS, COLD. DO NOT GIVE UP TREATMENT.

NOTE: NOT DEAD UNTIL WARM AND DEAD!
Avoid rapid rewarming and **HANDLE GENTLY AT ALL TIMES.**

Core temperature may lag behind skin temperature and continue to drop, so keep monitoring.



Hypothermia Wrap

2nd Class 7c - Hyperventilation

Hyperventilation: Breathing too deeply and faster than normal. This causes too much carbon dioxide to be exhaled. As a result, levels of carbon dioxide in the blood and brain tissue drop.

Causes: Anxiety. Panic Attacks. Central Nervous System problems.

Symptoms: Rapid Pulse Rate. Heavy Breathing. Tingling in the arms, legs, & around mouth. Fainting. Panic.

Treatment:

- Place a small paper bag over victim's mouth, loosely cover mouth and nose.
- Have victim breath slowly into the bag. Repeat 10 times.
- Set bag aside and have victim breathe normally for A few minutes.
- Repeat steps for up to 15 minutes.
- Have victim breathe slowly, focusing on one breath every 5 seconds.

Shock Have person lie down
Shock Raise feet 10 to 12 inches. If he is having trouble breathing raise his head.
Shock Never leave him alone
Shock Talk to him to assure him that everything will be ok.
Object In the Eye Have the person blink
Object in the Eye Pull the upper lid down over the lower one.
Object in the Eye Place your thumb on the skin just below the lid and pull it down gently.
Object in the Eye Lift the object out with the corner of a sterile gauze pad.
Object in the Eye Cover the eye with a gauze pad and get the patient under medical care.
Bite of Animal Call police to come pick up the animal.
Bite of Animal Scrub the bite with plenty of soap and water.
Bite of Animal Cover the wound with a sterile bandage and get the victim to a doctor.
Nail and Splinter Take out any foreign matter.

Nail and Splinter Squeeze gently around the wound.
Nail and Splinter Wash Gently with soap and water.
Nail and Splinter Apply and sterile bandage.
Fishhook Cut the line and allow a doctor to remove the fishhook.
Fishhook Push the barb out through the skin.
Fishhook Snip off the barb with a pair of pliers.
Fishhook Back the fishhook out of the wound.
Second Degree Burn Do not break the blisters.
Second Degree Burn Place the injury in cool water until the pain lessens.
Second Degree Burn Apply a moist dressing
Second Degree Burn Bandage loosely.
Second Degree Burn Do not apply creams, ointments or sprays.
Heat Exhaustion Symptom: Pale skin.

Heat Exhaustion Symptom: shallow breathing.
Heat Exhaustion Symptom: nausea.
Heat Exhaustion Symptom: Dilated pupils, Headache and dizziness.
Heat Exhaustion Move patient to a cool shady spot.
Heat Exhaustion Place him on his back and raise his feet.
Heat Exhaustion Fan him and apply cool wet cloths. Give him sips of water.
Poisonous Plants Poison ivy have three leaves.
Poisonous Plants Poison oak has three leaves
Poisonous Plants Poison Sumac has white berries.
Poisonous Plants Do not scrub.
Poisonous Plants Rinse with water immediately.
Poisonous Plants Use Calamine lotion to relieve itching.
Poisonous Plants Remove lingering sap by laundering clothing.