**Common Medical Emergencies and their treatment**

**Shock (Hypoperfusion)** - is depressed body condition due to lack of circulation; inadequate tissue perfusion

Types of Shock:

* **Respiratory Shock** - trauma to the respiratory tract (trachea, lungs)
* **Neurogenic Shock** - Injury or trauma to the nervous system (spinal injury, head injury, stroke/aneurysm)
* **Cardiogenic Shock** - the heart is unable to pump effectively (heart attack)
* **Hemorrhagic Shock** - caused by severe bleeding or loss of body fluid (internal/ external bleeding)
* **Anaphylactic Shock** – caused by an allergic reaction (bee sting, medication, food, etc)
* **Metabolic Shock** – caused by body fluid chemical imbalance (diabetic emergency)
* **Psychogenic Shock** - caused by overwhelming emotional factors
* **Septic Shock** – caused by a system wide infection (illness, poison)

Signs and Symptoms:

* Weak, rapid pulse
* Short, shallow breathing
* Dilated (big) pupils
* Cool, clammy skin
* Nausea and vomiting

Treatment:

1. Lie the victim down
2. Supplemental O2
3. Elevate legs 6-12 inches off the ground (unless there is a head injury)
4. Maintain body temperature (keep cool on hot days and warm on cold days)
5. Reassure the victim; communicate and encourage
6. **GET HELP**

**TEMPERATURE RELATED ILLNESS**

**Heat Exhaustion** - generally caused by physical activities in a hot humid environment

Signs and Symptoms:

* Headache
* Weakness, dizziness, or fainting
* Profuse sweating
* Thirsty
* Weak rapid pulse
* Muscle cramps

Treatment:

1. Move the patient out of the hot environment
2. Sponge with water and fan the victim lightly
3. If the patient is conscious, give cool water to drink
4. Seek immediate medical assistance (call 911) if victim does not improve in five minutes or shows signs/symptoms of Heat stroke

**Heat Stroke** - Heat Exhaustion can quickly develop into a more serious condition known as heat stroke, which can cause death if left untreated.

Signs and Symptoms of Heat Stroke:

* Altered mental status/behavior (confusion, anxiety, aggression and agitation)
* Hot, reddish, dry skin
* Dilated pupils
* Convulsions/seizures

Treatment:

1. Seek immediate medical assistance (call 911)
2. Treatment is same as Heat Exhaustion

**Hypothermia** - a condition when the body is colder than the usual core temperature. It is caused by the excessive loss of body heat and/or the body’s inability to produce heat.

Signs and Symptoms:

* Uncontrollable shivering (may be absent in advanced stages)
* Skin that is cold to the touch
* Blue/grey colored skin
* Numbness
* Slow/slurred speech
* Disoriented, clumsy, confused, or exhausted

Treatment:

1. Remove the patient from the cold environment
2. Remove any wet clothing
3. Wrap in blanket
4. Give warm beverage
5. If showing signs of shock, seek immediate medical assistance (call 911)

**SUDDEN ILLNESSES**

**Stroke** (Cerebral Vascular Accident) - a disruption of blood flow to the brain.

Signs and Symptoms:

* Sudden weakness or numbness of the face, arm or body (usually on one side if the body)
* Facial droop or drooling
* Difficulty speaking or understanding speech
* Loss of coordination and balance
* Unequal pupils
* Incontinence

Treatment:

1. Calm and reassure the victim
2. Place the patient in the comfortable semi-seated position
3. Seek immediate medical assistance (call 911)

**Seizure** - caused by an interruption of the normal electrical activity to the brain. Seizures commonly occur in people with epilepsy, but they may also occur with any trauma or illness (head injury, stroke, heart attack, high fever, etc.)

Signs and Symptoms:

* Sudden collapse
* Uncontrolled shaking
* Vomiting and/or drooling
* Incontinence
* Unresponsive

Treatment:

1. Protect the person from any further injury during the seizure
2. DO NOT restrain the patient or put anything in the mouth
3. After the seizure, place the victim in the recovery position (lying on their side)
4. Seek immediate medical assistance (call 911)

**Heart Attack** (Myocardial Infarction) - a disruption of blood flow to the heart.

Signs and Symptoms:

* Persistent central chest pain, tightening, or discomfort
* Radiating pain to the jaw, neck, or arm
* Difficulty breathing
* Sweating
* Nausea and vomiting

Treatment:

1. Calm and reassure the victim
2. Place the patient in the most comfortable position
3. Seek immediate medical assistance (call 911)

**CPR-** Cardiopulmonary Resuscitation.

* Basic Life Support ( BLS )
* Only if Pulseless and Breathless Patient
* Circulates O2 to Brain
* Advanced Medical Assistance Needed
* A,B,C = Airway, Breathing, Circulation

**Steps –**

1. Scene Safety
2. BSI ( Gloves, Mask, etc )
3. Assess Responsiveness ( Tap and Shout )
4. Activate EMS
5. Open airway ( head tilt/chin lift ); Look Listen and Feel for 10 seconds
6. Place hands in middle of chest/sternum
7. Begin Compressions and Breaths at a rate of **30:2**. Compressions at a rate of about 100 a minute
8. After 2 minutes reassess ( step 5 )
9. If ROSC is obtained and breathing is adequate, put in Recovery position.
	1. If breathing is absent or inadequate, 1 breath per 5 sec.
10. Reassess every 5 mins

**NORMAL VITAL SIGNS**

* HR 80-100 BPM
* Breathing 12-20 per minute
* BP 120/80