

Shock:

- Shock occurs when the body cells (critical organs, including the brain) are not getting enough oxygen-rich blood (Inadequate perfusion). It is one of the most common causes of death in an injured person.

•**There are several types of shock such as:**

Cardiogenic - (A damaged heart does not supply enough blood to the body).

- Heart Failure (Congestive Heart Failure)
- Myocardial Infarction (Heart Attack)

Obstructive - (Something is suppressing blood flow)

- Pulmonary Embolism (Blockage in pulmonary arteries)
- Cardiac Tamponade (Fluid around the heart is putting pressure on the heart)
- Tension Pneumothorax (air trapped in the space between the lung and the chest wall)

Distributive - (Abnormal Vasodilation) (may see an abnormally low distal BP (ex:80/30))

- Sepsis (Bacteria in the blood)
- Anaphylaxis (Severe allergic reaction causing dilated blood vessels)
- Neurogenic (Brain and or Spinal injury)
- Psychogenic (Emotional or other factors which cause a neurologic response that temporarily dilates the blood vessels)

Hypovolemic - (Low fluid volume)

- Bleeding out
- Dehydration

Shock can be expected if a person has any of the following conditions:

- Massive external or internal bleeding.
- A severe infection
- Multiple severe broken bones
- Sign of a heart attack
- Abdominal or chest injury
- Severe allergic reaction

Note:

- Automatically treat any ill or injured person for shock, because many illnesses and injuries affect the circulatory system to some degree.
- Provide care for shock even if the person does not have any symptoms, as once a person starts showing signs, shock is already occurring.
- First aid providers can prevent shock from getting worse, but cannot reverse it.
- Treatment requires addressing the root cause, which requires professional medical care.

Shock Continued

- What to look for:

- a. Altered mental status, anxiety and restlessness
- b. Person is weak, faint or dizzy
- c. Pale/ashen, cold, and clammy skin
- d. Bluish lips and nail beds (Cyanosis) - Slow capillary refill
- f. Nausea / vomiting
- g. Rapid breathing and heart rate
- h. Unresponsiveness when shock is severe

- What to do:

- a. Phone or send someone to phone 911 and get the F/A kit and AED
- b. Treat any life-threatening bleeding.
- c. If unresponsive and not breathing, begin CPR
- d. If the person is responsive, help the person lie on their back unless contraindicated
- e. Elevate the feet (without hyper extending the knees) - **Demo**
- f. Place an unresponsive, breathing person in the “recovery position”
- g. Cover the person to keep them warm (a foil emergency space blanket works well).
 - When a person is in shock, blood is being pulled from the extremities & skin back to the vital organs.
 - If not covered and warm, the body will try to re-warm itself by pulling blood from the vital organs back to the skin via vasodilation.
 - This could cause a drop in blood pressure which must be avoided.
- h. Do not give the person anything to eat or drink (nausea and vomiting likely)

- Cautions:

- a. DO NOT place people with breathing difficulties, chest injuries, penetrating eye injuries, or heart attacks on their backs; place them in a half-sitting position or position of comfort to help with breathing.
- b. DO NOT give the person anything to eat or drink.
- c. DO NOT raise the legs of a person with head injuries, stroke, chest injuries, breathing injuries, or suspected heart attack.

- Shock in Children

- a. Children in the early stages of shock may not show symptoms, however, once symptoms appear, children will deteriorate quickly.
- b. Children have less blood volume than adults, so they can develop shock after losing a relatively small amount of blood.
- c. Dehydration, often related to vomiting, is more commonly seen in children and can also lead to shock.
- d. First aid for children in shock is the same as for adults: call 9-1-1, stop any bleeding, monitor breathing, and keep the child warm.