# First Aid for Shock

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## SHOCK

- This life-threatening condition occurs when the circulatory system fails and as a result vital organs such as the heart and the brain are deprived of oxygen.
- It requires emergency treatment to prevent permanent organ damage and death.
- Shock can be made worse by fear and pain.
- Whenever there is a risk of shock developing, reassuring the casualty, making him comfortable and keeping him warm may be sufficient to prevent him from deteriorating.

## SHOCK

- Dangerous condition
  - Not enough oxygen-rich blood reaching vital organs such as brain and heart
- Caused by anything that significantly reduces blood flow
- Life-threatening emergency
- May develop quickly or gradually
- Always call medical emergency number for victim in shock

## CAUSES OF SHOCK

- Severe bleeding
- Severe burns
- Heart failure
- Heart attack
- Head or spinal injuries
- Severe allergic reactions
- Dehydration
- Electrocution
- Serious infections
- Extreme emotional reactions (temporary/less dangerous)

- Hypovolemic shock
- Cardiogenic shock
- Others-
- Septic shock
- Metabolic shock
- > Hypothermic
- Respiratory shock

#### **Hypovolemic shock**

occurs when blood volume drops.

- The most common cause of shock is severe blood loss. If the blood loss exceeds 1.2 litres (this is about onefifth of the normal blood volume of an adult), shock may occur.
- The blood loss may occur due to external and/or internal bleedings.
- Loss of other body fluids can also result in shock. Conditions that cause heavy fluid losses include diarrhoea, severe burns, etc.

#### **Cardiogenic Shock**

occurs with diminished heart function

- Shock may occur when an adequate volume of blood is available, but the heart is unable to pump the blood around.
- This problem can be due to severe heart diseases, heart attack or acute heart failure.

Others Septic shock due to overwhelming infections Metabolic shock

Due to lack of certain hormones/ low blood sugar level (hypoglycaemia)

#### **Hypothermic shock**

Due to under-cooling (Hypothermia)

Respiratory shock Due to injuries to the respiratory track or lungs Anaphylactic shock Due to severe allergic reactions Neurogenic shock Due to drug overdose or spinal cord injuries

#### DEVELOPMENT OF SHOCK

- Assume any victim with serious injury is at risk for shock
- Often occurs in stages
- May progress gradually or quickly
- Victim ultimately becomes unresponsive
- Not all victims experience all signs and symptoms of shock

## SIGNS & SYMPTOMS OF SHOCK

#### Initially:

- rapid pulse
- pale looks
- cold clammy, sweaty skin

#### As shock develops

- rapid, shallow breathing
- cold, clammy skin
- rapid, weak pulse
- dizziness or fainting
- weakness
- eyes appear to stare



- anxiety or agitation
- seizures
- confusion or unresponsiveness
- low or no urine output
- bluish lips and fingernails
- sweating
- nausea and vomiting might occur.

#### SIGNS & SYMPTOMS OF SHOCK

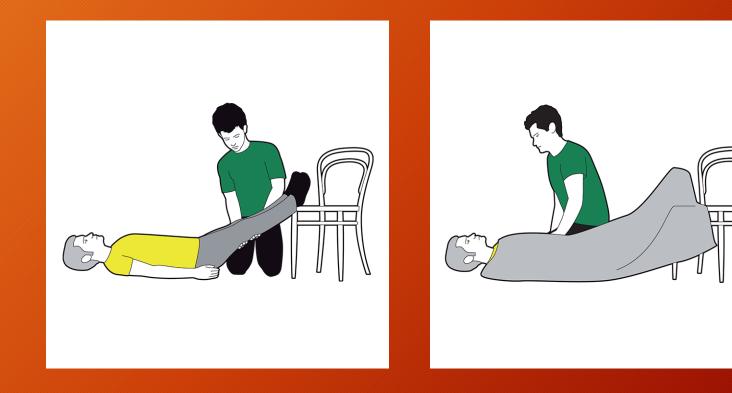
- The casualty might feel thirsty.
- The casualty might become restlessness and aggressive.
- The casualty might complain of chest pain.

## URGENCY OF SHOCK TREATMENT

- Shock continues to develop unless medical treatment begins.
- Call medical emergency number immediately

- Reassure the casualty (when conscious)
- Treat the possible cause of shock that you can detect, such as a severe bleeding.
- Lay the casualty comfortably on his back on a blanket. However, in cases of injury of the head, chest or of the abdomen, lower the head slightly and turn it to a side. In cases of vomiting put the casualty in the recovery position.
- You may raise and support the legs. However, do not do this when you suspect a fracture or spinal injuries.
- Loosen the tight clothing.





- Keep the injured person warm by taking off wet clothing, covering him with a blanket or other covering, taking care not to overheat him.
- Never use hot water bottles or very warm rugs.
- Do not rub any part of the body to get him warm.
- In case of major injuries nothing should be given by mouth as he may later need an operation or blood transfusion.

- The general principle is never to give food or drink to a casualty. Important exceptions include hypothermia (low body temperature), hypoglycaemic shock (low blood sugar in a diabetes patient), diarrhoea and fever leading to dehydration and in case of heat exhaustion or heatstroke when the person remains conscious.
- Observe the casualty's consciousness and breathing.
- If the casualty loses consciousness, put him in the recovery position.
- If the casualty stops breathing, start CPR.
- Arrange urgent transport to the nearest healthcare facility or hospital.

 Wash your hands after taking care of the patient. Use soap and water to wash your hands. If no soap is available, you can use ash to wash your hands. Alcohol-based sanitizers can also be used, if available.

#### WHEN TO REFER TO A HEALTHCARE FACILITY?

 Always urgently transport a casualty showing shock symptoms to the nearest healthcare facility.

