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 9-1-1 for victim in shock
Shock continued

Three general conditions must be present:

1. Heart must efficiently pump blood
2. Blood volume sufficient to fill blood vessels
3. Blood vessels intact and functioning normally
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)
Types of Shock

- **Hypovolemic** occurs when blood volume drops
- **Cardiogenic** occurs with diminished heart function
- **Neurogenic** occurs with nervous system problems
- **Anaphylactic** occurs with extreme allergic reaction
First Aid for 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 and Symptoms of Shock

In compensatory shock (first stage):
  • Anxiety, restlessness, fear
  • Increased breathing and heart rate

In decompensatory shock (second stage):
  • Mental status continues to deteriorate
  • Breathing becomes rapid and shallow, and heartbeat rapid
  • Skin becomes pale or ashen and cool
  • Nausea and thirst occur
Signs and Symptoms of Shock continued

In irreversible shock (third stage):
- Victim becomes unresponsive
- Respiratory and cardiac arrest
Urgency of Shock Treatment

• Shock continues to develop unless medical treatment begins.
• Call 9-1-1 immediately.
Shock in Infants and Children

- Blood loss in infants/children may quickly lead to shock.
- Infants/children are susceptible to shock from dehydration.
- Early shock may be less obvious but child’s condition rapidly declines.
- Treatment is same as for adults.
First Aid: Shock

1. Check for responsiveness, normal breathing and severe bleeding.
2. Call 9-1-1 and care first for life-threatening conditions, such as severe bleeding.
3. Be ready to give CPR if needed.
First Aid: Shock continued

4. Positioning

a) If there is no evidence of trauma, position a responsive victim on his or her back using a blanket or coat as a pad.

If the movement or position does not cause the victim pain, raise the legs such that the feet are 6-12 inches above the ground.

b) Put a breathing, unresponsive victim (if no suspected trauma, especially a neck, back, hip or pelvic injury) in the recovery position.
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First Aid: Shock continued

5. Loosen any tight clothing.

6. Be alert for the possibility of vomiting; if vomiting occurs, turn the victim’s head to drain the mouth.

7. Try to maintain the victim’s normal body temperature. If necessary, maintain the victim’s body heat with a blanket or coat over the victim.
Anaphylaxis

- Severe allergic reaction in some people
- Also called anaphylactic shock
- Life-threatening emergency because airway may swell
- Always call 9-1-1
Causes of Anaphylaxis

• Common allergens:
  • Certain drugs
  • Certain foods
  • Insect stings and bites
Development of Anaphylaxis

- Signs and symptoms may begin within seconds to minutes.
- The more quickly it occurs – the more serious.
- You cannot know how severe the reaction will be.
Prevention of Anaphylaxis: Medication Allergies

- Maintain a history of medication reactions and share it with health care providers.
- Wear a medical alert ID.
- Read product labels carefully.
Emergency Epinephrine Auto-Injector

- May be carried by people with severe allergies.
- **Medication stops anaphylactic reaction temporarily.**
- Ask a victim about it.
- Help victim open and use auto-injector.
First Aid: Use of an Emergency Epinephrine Auto-Injector

1. Call 9-1-1.

2. Help a responsive victim use his or her epinephrine auto-injector. If the victim cannot use his or her prescribed auto-injector, you may administer it yourself if permitted by state law.

3. Take the EpiPen out of its case and remove the cap or protective cover.
First Aid: Use of an Emergency Epinephrine Auto-Injector

4. To administer the medication, press the auto-injector firmly against the outer thigh and hold it there while the medication is injected. You should feel a “click” when the injection starts.

5. Monitor the victim’s breathing and be ready to give CPR, if needed.

6. Help a responsive victim sit up in a position of easiest breathing. Put an unresponsive victim who is breathing in the recovery position.