



City of Los Angeles
Bureau of Contract Administration

**First Aid/CPR
Basic Training**




**FIRST AID
II**

The first
5 MINUTES
are
CRITICAL



**FIRST AID II ~
MAJOR INJURIES**

- Objectives
 - Learners will demonstrate what constitutes a serious injury.
 - Learners will demonstrate knowledge of proper techniques for various serious injuries
 - Learners will successfully complete/pass a written test on major injury first aid.




**FIRST AID II ~
MAJOR INJURIES**

You are the first responder at an accident scene.
What are you legally obligated to do?

What can you do?

What should you do?

 **FIRST AID II - MAJOR INJURIES**

First Thing to Do
when you arrive at an injury situation

Survey the scene to ensure there are no hazards that may harm you

 **FIRST AID II - MAJOR INJURIES**

Prior to providing assistance

Always state

Your name

State: I have basic training to render first aid

Then

Ask for permission to give first aid
(If a minor seek permission from a parent or guardian)

FIRST AID II - MAJOR INJURIES

Recognizing how serious an injury you have

DR. ABC - the letters that save lives

First aid has a framework - the letters "DR ABC" provide a checklist for every emergency.

- > **D is for Danger**
Check carefully before going to the assistance of a casualty
- > **R is for Response**
"Are you all right?"
- > **A is for Airway**
- > **B is for Breathing**
- > **C is for Circulation**

Is the injured person
Alert
Talking
Responsive
Treat with General First Aid


Dr. S. Siva, ABC Hospital, Little Adam.

BCA **FIRST AID II - MAJOR INJURIES**
CONTRACT ADMINISTRATION

Recognizing a serious injury



If the injured person is conscious but has an **OBVIOUS** serious injury
Immediately Call 9-1-1



BCA **FIRST AID II - MAJOR INJURIES**
CONTRACT ADMINISTRATION

- It takes 5 minutes for Paramedics to arrive



NEXT 5 MINUTES

BCA **FIRST AID II - MAJOR INJURIES**
CONTRACT ADMINISTRATION

- Avulsion
 - A partial or complete tearing away of skin and tissue. Avulsions usually occur during violent accidents, such as body-crushing accidents, explosions, and gunshots. They bleed heavily and rapidly.



BCA FIRST AID II - MAJOR INJURIES

CONTRACT ADMINISTRATION

ARTERIES

- Spurting blood
- Pulsating flow
- Bright red color

If the bleeding is from an arterial source, death may only take 20 seconds to a couple of minutes.

VEINS

- Steady, slow flow
- Dark red color

Damage to larger veins like the superior vena cava will result in death in 4-6 minutes.

CAPILLARIES

- Slow, even flow

Death or serious injury only occurs in very rare circumstances

Hemorrhaging
(excessive bleeding)

Class 1 -up to 15% blood loss
 Class 2 -up to 15-30% blood loss
 Class 3 -up to 30-40% blood loss
 Class 4 ->40% blood loss

10-15% loss the patient will survive without any major medical difficulties.

BCA FIRST AID II - MAJOR INJURIES

CONTRACT ADMINISTRATION

1. Call 9-1-1
2. Ensure Your Safety
3. Wear Gloves
4. Find the Bleeding Injury

5. Compress and Control

- ✓ Take gauze or Quick Clot bandages and cover wound.
- ✓ If wound is large and deep, "Stuff" gauze or Quick Clot bandages into wound.
- ✓ Apply continuous pressure with both hands directly on top of bleeding wound.
- ✓ Push down as hard as you can.
- ✓ Hold pressure to stop bleeding. When bleeding is controlled, wrap wound and gauze tightly with elastic bandage. Continue pressure until relieved by medical responders.

APPLY PRESSURE WITH HANDS

APPLY DRESSING AND PRESS

For severe or life-threatening bleeding from an arm or leg: Use a tourniquet if available - ➡

BCA FIRST AID II - MAJOR INJURIES

CONTRACT ADMINISTRATION

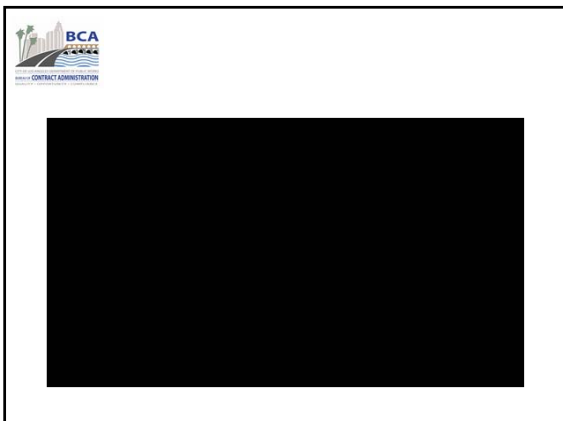
Blood LOSS GRAPH

Loss of blood **IN THE AVERAGE ADULT** produces the following symptoms:

- A - 750 ml: feel blood loss
- B - 1500: weak, thirsty & anxious
- C - 2000 ml : dizzy, unconscious
- D - 3000 ml: Dead

154 lb
5 to 6 liter

125 lb
4 to 5 liter



BCA **FIRST AID II - MAJOR INJURIES**
CONTRACT ADMINISTRATION


Treatment

- If a body part is severed
 - Always send it with the patient to the hospital for possible reattachment.
 - Wrap the body part in moist gauze and pack it in ice if you can.

BCA **FIRST AID II - MAJOR INJURIES**
CONTRACT ADMINISTRATION

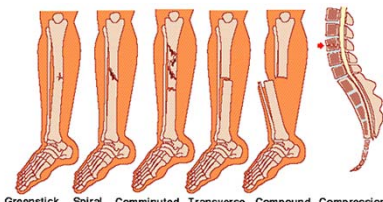
Treatment

- Tourniquet
 - Effective in controlling life-threatening bleeding from a limb.
 - Apply a tourniquet only if you're trained.
 - When emergency help arrives, explain how long the tourniquet has been in place.



BCA FIRST AID II - MAJOR INJURIES

• Compound Fractures



TYPICAL BONE FRACTURES *Attnwell*

BCA FIRST AID II - MAJOR INJURIES

- Don't move the person
 - except if necessary to avoid further injury.
- Stop any bleeding.
 - Apply pressure to the wound with a sterile bandage, a clean cloth or a clean piece of clothing.
- Immobilize the injured area.
 - Don't try to realign the bone or push a bone that's sticking out back in.
- Apply ice packs to limit swelling and help relieve pain.
 - Don't apply ice directly to the skin. Wrap the ice in a towel, piece of cloth or some other material.
- Treat for shock.
 - If the person feels faint or is breathing in short, rapid breaths, lay the person down with the head slightly lower than the trunk and, if possible, elevate the legs.

BCA FIRST AID II - MAJOR INJURIES

- Burns - classified based upon their depth.
 - Second degree
 - deeper and in addition to the pain,
 - redness and inflammation
 - blistering of the skin



BCA FIRST AID II - MAJOR INJURIES

- Burns - classified based upon their depth.
 - Third degree
 - deeper involving all layers of the skin, in effect killing that area of skin.
 - Because the nerves and blood vessels are damaged, third degree burns appear white and leathery and tend to be relatively painless.




BCA FIRST AID II - MAJOR INJURIES

Solar	Overexposure to the sun	Chemical	Laboratory Chemicals Household Chemicals
<ul style="list-style-type: none"> • Cool the burn • Apply product that relieves sunburn • Stay out of the sun or cover up burn • Wear sunscreen and reapply frequently 		<ul style="list-style-type: none"> • Call 9-1-1 • Flush with large amounts of cool water • Be careful not to spread the chemical to the other parts of the body or yourself 	
Electrical	Power lines Lightning Electrical equipment	Thermal	Flames Hot liquid, steam Heat source
<ul style="list-style-type: none"> • Call 9-1-1 • Make sure power source is turned off • If victim is unconscious check for pulse and breathing • Do not move the victim but check for other injuries • Do not cool burn - cover with dry sterile bandage • Keep victim from getting chilled • There may be wounds - entrance & exit 		<ul style="list-style-type: none"> • If severe call 9-1-1 • Remove from source of heat • Cool with water or cold compress (no ice) • Cover with clean bandage (no ointment) • Do not use home remedies or break blisters 	

BCA FIRST AID II - MAJOR INJURIES

Heat Stroke

- Heatstroke occurs when your body temperature rises rapidly and you're unable to cool down.
- It can be life-threatening by causing damage to your brain and other vital organs.
- It may be caused by strenuous activity in the heat or by being in a hot place for too long.



BCA FIRST AID II - MAJOR INJURIES

If you suspect **HEATSTROKE**
Immediately call 9-1-1

Then immediately move the person out of the heat and cool him or her by whatever means available.



- * Move the person to shade
- * Give cold water to drink
- * Pour water over the skin (mainly head & neck)
- * Place ice packs on : Neck Armpit & Groin

BCA

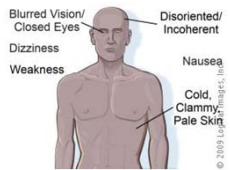


LIVE
KSHR.COM
UNDERSTANDING THE RISKS OF HEAT EXHAUSTION
STOCKS SPRINT CORP: (S) 4.52 0.00
4 NEWS 5:17 92°


BCA FIRST AID II - MAJOR INJURIES

Shock

- A result from trauma, heatstroke, blood loss, an allergic reaction, severe infection, poisoning, severe burns or other causes.
- When a person is in shock, his or her organs aren't getting enough blood or oxygen.
- If untreated, this can lead to permanent organ damage or even death.




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 **FIRST AID II - MAJOR INJURIES**

If you suspect **SHOCK**
Immediately call **9-1-1**

- Lay the person down and elevate the legs and feet slightly, unless you think this may cause pain or further injury.
- Keep the person still and don't move him or her unless necessary.
- Loosen tight clothing and, if needed, cover the person with a blanket to prevent chilling.
- Don't let the person eat or drink anything.
- If the person vomits or begins bleeding from the mouth, turn him or her onto a side to prevent choking, unless you suspect a spinal injury.
- Begin CPR if the person shows no signs of life, such as breathing, coughing or movement.

 **FIRST AID II - MAJOR INJURIES**

Summary

- A major injury – the injured person is alert, talking, and mobile with serious trauma to the body.
- A major injury –requires immediate medical services. Call **9-1-1**
- The first five minutes are critical.
- Serious injuries are sometimes very disturbing. Keep your composure. If you need help to cope have your supervisor schedule time with a City Crisis Counselor.
