Basic First Aid Tutorial

Overview:

1-Introduction
2-Emergency Response
3-Bleeding, Shock, & Soft-Tissue Injuries
4-Bone, Joint, & Muscle Injuries
5-Medical Emergencies
6-Heat & Cold-Related Illness/Injury

I. Introduction

a. Good Samaritan Principle/Law
   i. Generally protect you from liability as long as you act in good faith, do only what you are skilled/certified in doing, and are reasonably careful
   ii. If you decide to help, you must not leave until someone more trained takes over

b. Consent
   i. An adult must agree or give permission for care.
   ii. Implied consent is assumed when an adult is unresponsive, with a child, or with a person of diminished mental capacity like Alzheimer’s disease

c. Universal Precautions
   i. A way to limit the spread of disease by preventing contact with blood and bodily fluids with personal protective equipment (goggles, gloves, rescue barrier mask)
   ii. To observe UP means you always assume victim’s bodily fluid is infected
   iii. Use an alcohol-based cleanser to clean your exposed skin, if not available use soap/water
   iv. Proper removal of contaminated gloves: peel down edge at wrists so it is folding over exposed glove making it right side in with contaminates trapped on the inside
II. Emergency Response

a. Do not move a victim unless you have to
   i. Drag by back of underneath shirt or armpits with neck supported by your forearms, moving them in the direction of the long axis of the body to protect the spine
      1. Never twist or pull sideways
      2. Use your back not your legs to lift
      3. Consider victim’s weight & need help

b. Action Steps (ABC’s)
   i. Airway – position victim face up on hard flat surface then open airway by head tilt chin lift
   ii. Breathing – look, listen, and feel for breath on your face and visible chest rise 5-10 sec.
      1. No breath – begin CPR with 2 breaths
      2. Breath – check rest of injuries
   iii. Circulation – look for movement, blood pumping out of a wound….if found control bleeding with direct pressure, look for normal color (use exposed wrist to feel head for temperature), continue ABC’s
   iv. Recovery Positions – Do not move unless you have to but these are used if you must leave a victim alone to get help so he doesn’t aspirate on his vomit, to maintain normal body temperature (may need to roll to get blanket beneath them) or for responsive victim’s who’s wound’s are being managed and are just waiting on EMS
      1. Uninjured victim – place one arm out on floor on the side/palm up/elbow bent, roll top arm & leg crossed over to floor
      2. Injured victim (HAINES)=high arm in endangered spine position – place one arm out above head on ground, roll victim over so head/neck are supported by arm above him, other arm should be crossed over body onto floor, legs both can be bent up slightly
III. Bleeding, Shock, and Soft-Tissue Injuries

a. External bleeding – observe universal precautions, alert 911 & begin ABC’s if needed, begin first aid
   i. Apply direct pressure
   ii. Rip/cut away clothing
   iii. Place absorbent pad, never remove only add
   iv. **Apply pressure bandage** by wrapping an elastic or rubber bandage/glove around wound, not so tight you can’t get a finger under
   v. Can do pressure points and elevation
   vi. Treat for shock

b. Internal bleeding – (point tenderness, blood pools to surface with discoloration/hardness, blood from nose/ears/mouth/eyes/ears/vagina/rectum) observe universal precautions, alert 911, begin ABC’s if needed, treat for shock

c. Shock - victim appears restless, cool moist skin, pale or bluish color (lips), shivering, intense thirst, nausea, vomiting, shallow breathing, below normal body temp
   i. Rest on ground flat on back
   ii. Maintain open airway (ABC’s)
   iii. Cover victim with blanket
   iv. 911

d. Burns
   i. Major (3\textsuperscript{rd} Degree- dissolved flesh)
      1. Cut away clothing, do not remove stuck clothing
      2. Liquid chemical flush with water, dry chemical brush off with protection
      3. Remove jewelry
      4. Separate fingers/toes with dry sterile dressing
      5. Lightly cover with dry sterile dressing
      6. Attend to ABC’s/911, treat for shock
   ii. Minor (1\textsuperscript{st} – discoloration, 2\textsuperscript{nd} – blisters)
      1. Cut away clothing, do not remove stuck clothing
2. Cool heat burns with cool water for 20-30 minutes or until pain is relieved
3. Cover with dry sterile dressing
4. Protect burn from friction
5. If a 2nd degree burn covers more than 2-3” or located on hands, fee, face, groin, buttocks, or major joint treat like a major burn
6. Watch for signs of infection, call doctor
   iii. DO NOT: break blisters, apply ointments/creams, apply ice

IV. Bone, Joint, and Muscle Injuries
   a. Closed fracture, strain, sprain, dislocation
      i. Place hands above & below break to immobilize (make padded splint/sling)
      ii. Ice pack
      iii. Remove jewelry
   b. Open fracture
      i. Cover with sterile dressing
      ii. Apply gentle pressure around exposed bone
         iii. 911
   c. DO NOT: move victim, ask victim to move injury, attempt to straighten deformity or push bone back under skin, allow victim to bear weight on injury, remove shoes or helmet from injury
   d. Spinal injury - assumed with major trauma like auto accidents, diving, or lightening strike/force of any kind
      i. Signs: confused, pain, numbness, burning, tingling, loss of sensation in hands/fingers/feet/toes, weakness, paralysis, loss of bladder control
      ii. 911
      iii. ABC’s, HAINES or flat on back position
      iv. Place hands on both sides of head
      v. Keep head, neck and spine in line or as found
      vi. DO NOT: remove helmet, ask victim to move or test for pain response
V. Medical Emergencies
   a. Asthma – disease which the air passages in the lungs become narrower from swelling and extra mucus; signs are coughing, wheezing, trouble breathing and asthma is worse with the cold and during exercise
      i. Inhaler – remove cap, shake, press down & breathe in slowly 3-5 sec., hold breath 10 sec.
      ii. Nebulizer (smaller children)- place machine/air compressor on sturdy surface, put liquid medicine into nebulizer cup (screws on bottom of mask), reassemble mask to top of nebulizer cup, place mask over child’s face, turn on machine, take slow breaths holding each for 2-3 sec., continue until liquid is gone about 10 min.
      iii. If not better in 15-20 minutes, DO NOT give more medication, call 911
   b. Allergic Reaction/Anaphylaxis – sudden, severe allergic reaction that involves whole body including blocked airway
      i. Epinephrine/EpiPen auto-injector – prescribed medication for single use must be used by removing cap, holding perpendicular to body, hitting into side of upper thigh for a count of 10, remove from skin and discard, call 911 (if victim is unable, you must do for him even if unconscious)
   c. Poisoning
      i. Swallowed
         1. Call poison control 1800-222-1222
         2. Know what, how much, when, weight
         3. DO NOT give anything to eat or drink
      ii. Skin contact
         1. Remove clothing, rinse skin with water
         2. ABC’s, 911
         3. For poisoness bites/stings
            a. Major - remove jewelry/constrictive clothing, wrap extremity tightly to constrict blood vessels to slow poison, 911
b. Minor – ice pack, use home remedies like Benedryl, vinegar, tobacco paste, toothpaste, meat tenderizer over sting

iii. Inhaled
   1. Get victim to fresh air
   2. ABC’s, 911 (DO NOT perform rescue breaths on victim of inhaled substance)

VI. Heat and Cold-Related Illness/Injury
a. Heat Exhaustion – still conscious, heavy sweating
   i. Get into cool place
   ii. Loosen/remove clothing
   iii. Give Gatorade or water
   iv. Apply wet cloths, fan, & cold compresses near arteries
b. Heat Stroke – unconscious
   i. 911
   ii. Water all over body
   iii. Ice pack all arteries (neck, groin, armpits, wrists)
   iv. Place in recovery position to protect airway
c. Frostbite – cold, hard, numb, pins/needles sensation, throbbing
   i. 911
   ii. Place sterile dressing between toes/fingers
   iii. Wrap area with sterile dressing
   iv. Move to warmer area
   v. Remove constrictive jewelry, clothing
   vi. DO NOT rewarm a frozen body part if refreezing may occur
d. Hypothermia – shivering, weakness, altered mental status, unconscious
   i. 911
   ii. Get out of wind, water
   iii. Remove wet clothing, get into dry/cover
   iv. Place near heat source and place warm water in contact with skin (NOT hot, NOT fully emerged)
   v. DO NOT rub/massage area, give alcohol