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SAFE OPERATING PROCEDURES

First Aid

SOP 10-8

In any emergency situation, there are three simple steps to guide your actions. If you ever feel nervous or confused, remember the Check/Call/Care emergency action steps to get you back on track.

1. **CHECK** the scene then the person.
 - Before rushing to help an injured or ill person, conduct a scene size-up and form an initial impression.
 - Is the scene safe to enter? Any potential; hazards; look for things that could jeopardize your safety or bystanders' safety.
 - What happened; look for anything that might tell you what happened. If the person is unresponsive, ask any bystanders.
 - If the person is awake and responsive, obtain consent to provide assistance and get information of the nature of the person's illness or injury.
 - If person unresponsive, shout then tap their shoulder and check for normal breathing for no more that 5 to 10 seconds.
2. **CALL** 9-1-1; get a bystander to make the call for the following situations:
 - If the person is not breathing assume cardiac arrest; while someone calls 911 get someone to retrieve an AED if available along with First Aid Kit. An AED will increase the person's chance for survival.
 - If the person has severe life-threatening bleeding; while someone calls 911 begin care for the person.
3. **CARE** for the person using items from the First Aid Kit; avoid moving the person unless an immediate danger requires it.
4. **Cardiac Arrest** – For an unresponsive person that is not breathing or only gasping.
 - Making sure person is lying face-up, begin CPR starting with (30) chest compressions followed by (2) rescue breathes.
 - Place your hands, one on top of the other, in the middle of the chest. Use your body weight to help you administer compressions that are at least 2 inches deep and delivered at a rate of at least 100 compressions per minute. Push hard and fast.
 - Deliver (2) rescue breathes using a breathing barrier if available. With the person's head tilted back slightly and the chin lifted, pinch the nose shut and place your mouth over the person's mouth to make a complete seal. Blow into the person's mouth to make the chest rise. Deliver two rescue breaths, then continue compressions.
 - Continue CRP until the person shows sign of life by breathing, an AED arrives, or EMS arrives at the scene.

5. **If the Person Is Responsive**, moving, opening their eyes, or moaning and breathing normally but not fully awake, put the person in the recovery position.

- Extend the person's arm that is closest to you above the person's head.
- Roll the person toward yourself onto his or her side, so that the person's head rests on his or her extended arm.
- Bend both of the person's knees to stabilize the body.
- The recovery position helps lower the person's risk for choking and aspiration (the inhalation of foreign matter, such as saliva or vomit , into the lungs).
- The recovery position should also be used if the person with injury begins to vomit.
- Have someone call 911 or call yourself if no one else is around.



While waiting for EMS to arrive, interview the injured person using “SAMPLE” to get a better understanding of the situation and nature of the person's illness or injury.

- **S = Signs and Symptoms.** Take note of signs you can observe yourself and ask the person to describe to you what they are experiencing.
- **A – Allergies.** Ask the person about allergies and whether allergic reactions are severe or life-threatening.
- **M – Medications.** Ask about any over the counter and prescription medications they are taking and when the person last took it.
- **P = Pertinent Medical History.** Ask the person whether they have any medical conditions.
- **L = Last Food or Drink.** Ask the person when they last had something to eat or drink; what the person ate or drank and how much.
- **E = Events leading up to the Incident.** Ask the person what was happening and what they were doing just prior to beginning to feel ill or injured.

Check each part of the body in a systematic manner from head to toe by looking for:

- Bleeding or cuts
- Burns
- Bruising or swelling
- Any deformities
- Any pain or discomfort
- Unable or unwilling to move any body part.
- Do not ask the person to move if you suspect a head, neck, or spinal injury.

6. Severe Bleeding from major open wounds requires immediate action. Latex-free protective gloves should be worn. A Tourniquet may be needed if direct pressure does not stop the bleeding.

- Call or have someone call 911
- Have someone retrieve a First Aid Kit.
- If severe life-threatening bleeding that cannot be stopped with direct pressure, a **Tourniquet** made need to be applied.
 - i. A **tourniquet** is a device placed around an arm or leg to constrict blood vessels and stop blood flow to a wound.
 - ii. If it is necessary to use a tourniquet and a commercially manufactured tourniquet is not available, make a tourniquet using a strip of soft material that is 2 to 4 inches wide (such as a triangular bandage that has been folded into a tie) and a short, sturdy stick or other rigid object. Tie the stick or other rigid object into the material and twist it to tighten the makeshift tourniquet.
- For all other bleeding wounds, apply sterile gauze or other clean dressing and apply direct pressure after putting on latex-free disposable gloves; you may need to apply direct pressure with any available cloth items until First Aid Kit arrives.
- This may take as long as 15 minutes. If blood soaks through the first dressing, place another dressing on top of the first dressing and apply even more pressure until bleeding stops.
- When bleeding stops, apply a roller bandage by placing one hand on end of roller bandage while you wrap the other end around the wound several times using overlapping turns. Tie or tape the bandage to secure it.
- Have the person rest comfortably and provide care for shock if necessary until EMS arrives.

7. Shock may occur from severe blood loss due to failure of circulatory system to provide enough oxygen rich blood to all body parts. Signs of shock may include altered consciousness, pale or ashen bluish cool or moist skin, rapid and weak pulse.

- Elevate person's legs about to help blood circulate to vital organs unless this may cause pain or further injury.
- Loosen tight clothing and cover person with blanket to prevent chilling.
- If person stops breathing, administer CPR until EMS arrives.

8. Bleeding from minor open wounds can be cared for effectively using First Aid.

- Apply direct pressure with a gauze pad to stop the bleeding.
- Cleanse the wound with antiseptic wipe.
- Apply small amount of antibiotic ointment.
- Cover with a sterile gauze pad or bandage.

9. Choking occurs when the airway becomes either partially or completely blocked by a foreign object. If the person is making high-pitched noises or coughing weakly, or if the person is unable to speak or cry, the airway is blocked and the person will soon become unresponsive unless the airway is cleared.

- Have someone call 9-1-1 while you begin to give first aid for choking using a combination of (5) Back Blows and (5) Abdominal Thrusts.
- To give Back Blows, place one arm diagonally across the person's chest (to provide support) and bend the person forward at the waist so that the person's upper body is as close to parallel to the ground as possible.
- Firmly strike the person between the shoulder blades with the heel of your other hand. Repeat (5) times.
- To give Abdominal Thrusts, stand behind the person, with one foot in front of the other for balance and stability. If possible, place your front foot between the person's feet. Wrap your arms around the person's waist.
- Find the person's navel by placing one finger on the person's navel, and the adjacent finger above the first. Make a fist with your other hand and place the thumb side just above your fingers. Cover your fist with your other hand and give quick, inward, and upward thrusts into the person's abdomen. Repeat (5) times.
- Continue giving sets of back blows and abdominal thrusts until the person can cough forcefully, speak, cry, or breathe.

First Aid/CPR/AED Training

- OSHA requires that every workplace include one or more employees who are trained and certified in First Aid/CPR in the absence of a medical care provider that is reasonable accessible in terms of time (3-4 minutes) and distance to the worksite.
- NCDOT SPP 1910.151 First Aid/CPR/AED requires each location have adequate number of employees trained in First Aid/CPR with refresher training required every (2) years by a certified First Aid/CPR instructor.
- Field units should have at least one member of each crew trained in First Aid/CPR.

Related SOP's

General SOP's.....Chapter 10