ACTIVITY: DETAILED OUTLINE

**PERFORMING FIRST AID PROCEDURES**

1. **Understanding Vital Body Functions for First Aid**
2. **Breathing Process**
3. Humans need oxygen to live
4. Lungs draw oxygen from the air and put it into the blood
5. Heart pumps the blood through the body for cell use
6. Brain cells require constant supply of oxygen
7. Brain cells die after 4-6 min without oxygen
8. Results permanent brain damage, paralysis, death.
9. **Respiration**
10. Occurs when a person inhales oxygen and exhales carbon dioxide
11. Involves: airway, lungs, rib cage.
12. **Airway**

a.1 Canal through which air passes to and from the lungs.

a.2 Consists: nose, mouth, throat, voice box, windpipe.

1. **Lungs**

b.1Two elastic organs

b.2 Bronchial tree is a part of the lungs

1. **Rib cage**

c.1 formed by the muscleconnected ribs, which join the spine in back, and the breastbone in front.

c.2 top part is closed by the neck, the bottom is separated from the abdominal cavity by the diaphragm

c.3 diaphragm and rib muscles contract and relax

c.4 This cycle of inhaling and exhaling is repeated 12 - 18 times per minute.

1. **Blood Circulation**
2. The heart and the blood vessels (arteries,veins, and capillaries) circulate blood through the body tissues
3. heart is divided into two separate halves, each acting as a pump.
4. The left side pumps oxygenated blood (bright red) through the arteries into the capillaries; nutrients and oxygen pass from the blood through the walls of the capillaries into the cells
5. At the same time waste products and CO, enter the capillaries.
6. From the capillaries the oxygen poor blood is carried through the veins to the right side of the heart and then into the lungs where it expels the CO, and picks up oxygen.
7. Blood in the veins is dark red because of its low oxygen content.
8. Blood does not flow through the veins in spurts as it does through the arteries.
9. The entire system of the heart, blood vessels, and lymphatics is called the circulatory system.
10. **Heartbeat**

a.1 heart functions as a pump to circulate the blood continuously through the blood vessels to all parts of the body.

a.2 It contracts, forcing the blood from its chambers; then it relaxes, permitting its

chambers to refill with blood.

a.3 The rhythmical cycle of contraction and relaxation is called the heartbeat.

a.4 The normal heartbeat is from 60 to 80 beats per minute.

1. **Pulse**

b.1 The heartbeat causes a rhythmical expansion and contraction of the arteries as it forces blood through them.

b.2 This cycle of expansion and contraction can be felt (monitored) at various points in the body and is called the pulse

**b.3 Common points for checking the pulse**

**1. Side of the neck (carotid)**

1.1 feel for a pulse on the side of the casualty's neck closest to you.

1.2 This is done by placing the tips of your first two fingers beside his Adam's apple.

**2. Groin (femoral)**

2.1 Press the tips of your first two fingers into the middle of the groin

**3. Wrist (radial)**

3.1 Place your first two fingers on the thumb side of the casualty´s writst

**4. Ankle (posterial tibial)**

4.1 place your first two fingers on the inside of the ankle

5. NOTE: DO NOT use your thumb to check a casualty's pulse because

you may confuse the beat of your pulse with that of the casualty.

1. **Adverse Conditions**
2. **Lack of Oxygen**

A.1 Human life cannot exist without a continuous intake of oxygen.

A.2 Lack of oxygen rapidly leads to death.

A.3 First aid involves knowing how to open the airway and restore breathing.

1. **Bleeding**

B.1 Human life cannot continue without an adequate volume of blood circulating through the body to carry oxygen to the tissues

B.2 An important first aid measure is to stop the bleeding to prevent the loss of blood.

1. **Shock**

C.1 Shock means there is an inadequate blood flow to the vital tissues and organs. C.2 Shock that remains uncorrected may result in death even though the injury or condition causing the shock would not otherwise be fatal.

C.3 Shock can result from many causes, such as loss of blood, loss of fluid from deep burns, pain, and reaction to the sight of a wound or blood.

C.2 First aid includes preventing shock, since the casualty's chances of survival are much greater if he does not develop shock.

1. **Infection**

D.1 Recovery from a severe injury or a wound depends largely upon how well the injury or wound was initially protected.

D. 2 Infections result from the multiplication and growth (spread) of harmful microscopic organisms (sometimes referred to as germs).

D. 3 These harmful microscopic organisms are in the air, water, and soil, and on the skin and clothing.

D.4 Some of these organisms will immediately invade (contaminate) a break in the skin or an open wound.

D. 5 The objective is to keep wounds clean and free of these organisms.

D. 6 A good working knowledge of basic first aid measures also includes

knowing how to dress a wound to avoid infection or additional contamination.