Performance Objective 9: Physical Fitness, Health and First Aid

Enabling Objectives:

1. **Pursue a healthy lifestyle.**
2. **First Aid**
3. **Re-qualify in CPR**

Review

1. Safety.

   a. Know your limits - Select and participate in physical activities that you are ready for - in skill, fitness level, and knowledge of the rules. Avoid pushing yourself to a point where you cannot back-out safely—e.g. half way up a rock face is not the point to suddenly decide you cannot continue.

   b. Prepare - it is good to wait 2-3 hours after a meal before starting a physical activity. Drink water (up to 8 cups a day for the average person), and warm up properly before physical activity. Keep in mind weather, safety equipment and your personal goals when planning to participate.

   c. Hot and cold weather - Reduce the intensity of your workouts and drink more fluids than usual (as you will dehydrate faster) during hot or cold weather. Dress appropriately for the weather—remember wind chill! Avoid strenuous activity above 30ºC or below -20ºC.

2. Warm-up and Cool-down. A 5-10 minute warm-up is an essential part of every fitness session. A warm-up routine has a number of benefits. It is beneficial because it:

   a. Prepares the body for action;

   b. Helps develop sports skills; and,

   c. Helps prevent injury. Muscles that are supple and strong, they become less prone to overstretch and strain.

3. Warm-ups. Here are some guidelines for a warm-up session:

   a. Start with three minutes of brisk walking or easy jogging;

   b. Do your stretching exercises slowly and smoothly;

   c. Stretch only until you feel tightness, not pain;

   d. Do strengthening exercises at a controlled speed;

   e. Breathe naturally, inhaling and exhaling fully on each repetition. Breath holding should be avoided;

f. Arm Circles, Curl and Stretch and Ankle Rocker require gentle, continuous action. For the other stretching exercises, use a stretch-and hold movement (see figures below). Start with a minimum of five repetitions, holding the stretched position for at least 10-20 seconds.

Warm-up and Cool-down Exercises

a. Arm Circles – Full, slow sweeping circles with both arms forward then backwards.

b. Side Stretch – Reach one arm overhead and the other down the side of the leg. Repeat alternately to the other side.

c. Sit & Reach – One leg straight, one bent with the sole of the foot near the knee of the straight leg. Reach out with both arms along the straight leg.

d. Cat Back – Flatten lower back to floor, then slowly curl up with arms straight.

e. Thigh Stretch – Bend one knee, grasp ankle, pull foot gently toward the buttock. Repeat alternately with the other leg. Don't arch the back.

f. Pelvic Tilt – On your back, knees bent, feet flat on the deck. Tighten abdominals and buttocks, and press your lower back firmly against the deck.

g. Cross-overs – Seated on deck, legs in front of you, knees bent and feet flat on the deck. Roll legs to one side toward the deck. Look over the other shoulder. Repeat to other side.

h. Calf Stretch – One foot in front of the other with toes pointed straight ahead. Bend both legs (squatting) to stretch the soleus muscle in the rear leg. Repeat with legs further apart and back straight to stretch the calf muscle in the rear leg.

4. Cool-downs. Stretching exercises play an important role in the cool-down following an activity session. A cool-down (warm up done in reverse order) brings the heart rate and body temperature back to normal, and it helps prevent unnecessary stiffness and soreness that can result from vigorous activity.

5. Activity.

Time Needed Depends on Effort				
Very Light Effort	**Light Effort 60 minutes**	**Moderate Effort 30-60 minutes**	**Vigorous Effort 20-30 minutes**	**Maximum Effort**
• Strolling • Dusting	• Light walking • Volleyball • Easy gardening • Stretching	• Brisk walking • Biking • Raking leaves • Swimming • Dancing • Water aerobics	• Aerobic • Jogging • Hockey • Basketball • Fast swimming • Fast dancing	• Sprinting • Racing
	How does it feel? How warm am I? What is my breathing like?			

• No change from rest state • Normal breathing	• Starting to feel warm •Slight increase in breathing rate	• Warmer • Greater increase in breathing rate	• Quite warm • More out of breath	• Very hot/ perspiring heavily • Completely out of breath
	Range needed to stay healthy			

6. Endurance Activities. This type of activity help your heart, lungs and circulatory system stay healthy and give you more energy. They range from walking and household chores to organized exercise programs and recreational sports.

7. Flexibility Activities. This type of activity helps your muscles and bones stay strong, improve your posture and help to prevent diseases like osteoporosis. Strength activities are those that make you work your muscles against some kind of resistance, like when you push or pull hard to open a heavy door.

8. Increasing your Physical Fitness. Physical activities that increase your fitness are designed around these guidelines.

   a. Progression - the principle of progressive overload—increase the demands of an activity (duration and intensity) gradually over a period of time;

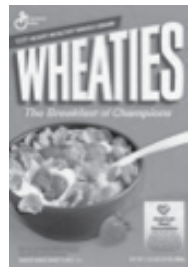
   b. Specificity - the effects of activity are specific to the types of training done: running improves aerobic fitness; medicine ball exercises improve coordination, agility, and strength; and so on;

   c. Consistency - it is important to exercise regularly. Studies show that, for fitness improvement, three times a week is twice as good as tow times a week; and,

   d. Flexibility - Inclement weather (heat and humidity or extreme cold), facility conflicts, or other factors may cause you to miss or modify sessions. Try to stick to a routine, but be flexible and improvise whenever necessary.

E.O. 1. Pursue a Healthy

Lifestyle. Food Groups.

Grain Products 6 oz. every day	  

Vegetables and Fruit 2 1/2 Cups - Vegetables and 2 Cups Fruit per day	 
Milk Products 3 Cups every day	 
Meat and Alternatives 5 1/2 oz. every day	 

Other Foods
Taste and enjoyment can also come from other foods and beverages that are not part of the 4 food groups. Some of these foods are higher in fat or calories, so use these foods in moderation.

2. Nutrition.

a. Variety - select foods from all 4-food groups daily. Reduce or eliminate your consumption of processed food products, fast food and junk food. There are also other foods that can be used as meat and dairy alternatives if you prefer a vegetarian or vegan diet.

b. Carbohydrates - are the best source of energy for physical activity. Get them from enriched and whole grain breads, pasta, cereals, and fruits and vegetables.

c. Fats - beware of the fat content in food. While your body can accept some fat intake, it is quickly stored and becomes difficult to use up or get rid of!

d. Protein - is found in meats, eggs, cheese, soy products, nuts, etc. A balanced diet contains enough protein for an average active person.

e. Supplements - with proper nutrition, you do not need vitamins, minerals or other supplements. Supplements for weight loss or muscle development are usually much less effective than a balanced diet combined with regular activity.

f. Eating and sleeping - the human body requires energy and rest to perform at its peak. Balanced meals and about 8 hours sleep will give you what you need to perform and improve.

3. Drug and Smoking Policy.

a. Young Marine regulations on drugs and smoking: Any involvement with illegal drugs, prohibited substances, or drug-related paraphernalia will not be tolerated. Incidents involving Young Marines and drugs will be referred to local authorities for prosecution and you could be released from the Young Marine Organization. Smoking is NOT permitted by any Young Marine.

b. Smoking affects the body in many ways. It narrows the blood vessels and puts added strain on your heart, shortness of breath (3 times more than non-smokers), makes your hair and clothes stink, stains teeth and causes bad breath. Most people once they start smoking they can not quit, it becomes addictive. There are many more added health risks. Do not waste your money on tobacco. Spend it on new clothes, CD's, movies and going out.

c. Drug Use has the same hazards as smoking but the health risks are greater. Damage and loss of brain cells, respiratory problems, overdose and death are some of the main factors. Do not start using. Start refusing! Let people know that you do not want any part of drugs.

E.O. 2 First Aid

Review

1) Definition of First Aid. First Aid is defined as immediate care given to a victim until services of trained personnel arrive.

2) Caution Statement. Legally, you must be given permission by the victim before you begin to help. If the victim is unconscious, consent is implied. If the victim is a child or disturbed try to get consent from the parent or guardian. "Good Samaritan" laws give legal protection to individuals who act in good faith and are not guilty of willful misconduct or gross negligence. This varies from state to state so know the laws in your state.

Before you begin first aid:

1) Survey the scene. Make sure it is safe for you to attempt first aid. Approach carefully. Look around to see what caused the accident then be sure you don't get hurt as you

approach the victim. Be aware of slippery footing, electrical wires that are down, traffic and other potential hazards. Remember, if you get hurt attempting to provide first aid, you will not be helping the victim.

2) Do a primary survey of the victim. This survey, or assessment, should take no more than fifteen to twenty seconds. The assessment includes:

   a) Is the victim breathing? If the victim seems to be unconscious, pat them on the shoulder and ask if they are alright. Place your ear next to the victim's mouth and nose where you can hear and feel the movement of air. Watch for the chest to rise and fall.

   b) Is the victim's heart beating? Feel for a pulse in the neck artery beneath the ear and just under the jawbone.

   c) Is there severe bleeding? Open any outer clothing that might be hiding wounds.

   d) Is there evidence of poisoning? Consider the victim's appearance and behavior and any clues suggesting what they might have swallowed.

   Once the assessment has been completed, begin treatment and have someone call for help. If you are alone perform basic lifesaving first aid and then go for or call for help. Treat those that pose the greatest threat to life first.

Below are some of the basic first aid steps that you became certified in for your Basic First Aid Ribbon. It is a good idea to re-certify each year in Basic First Aid to refresh your memory of the skills learned.

1) The ABC's. ABC stands for Airway, Breathing and Circulation. Following the initial assessment of the victim, the certified person will perform the ABC's as follows:

   a) Airway – This is checking to ensure that the airway is open and unobstructed.

   b) Breathing – This is checking to ensure that the victim is breathing by means of looking, listening and feeling. Look to see if the chest is rising, listen for sounds of breathing, and feeling for air coming from the victim's mouth and nose.

   c) Circulation – This is checking for a heart beat by way of carotid artery.

2) Rescue Breathing. Performing rescue breathing requires you to be trained by certified personnel. The following is the procedure for performing rescue breathing **but is in no way a certified course.** Seek certification from qualified personnel.

   First, check the ABC's to determine if a victim requires artificial respiration (rescue breathing). If the victim has a pulse but is not breathing, begin rescue breathing. Open the airway using the head-tilt/ chin-lift method taught for rescue breathing. Pinch the nose and give one breath every 5 seconds for anyone over 9 years of age. Every three seconds for anyone under 9. Each breath should last one to one and one-half seconds. Check to ensure the chest is rising and falling. If it is not there may be a blockage or you may not be getting a tight seal over the victim's mouth and nose. After one minute, (12 breaths) check the pulse to ensure the victim has not gone into cardiac arrest. (No pulse) In the event of cardiac arrest, CPR will

be required. Without proper training CPR can cause further damage to the victim. If trained, begin CPR. If not, continue giving rescue breathing until help arrives or you become too exhausted to continue. **Proper training by qualified personnel should be sought each year.**

3) Choking. The universal distress signal for choking is the victim clutching at his throat with one or both hands. Choking is caused by an airway obstruction. The victim may stop breathing and lose consciousness.

   a) Partial Obstruction. If there is a partial obstruction, you can hear air coming out, leave the victim alone. They may be able to cough it out. If they are successful, call EMS. Do not try to help them dislodge it.

   b) Complete Obstruction. If the obstruction is lodge completely and the victim is not able to get any air into their lungs you may need to perform abdominal thrusts on the victim. **This should only be done after you have been trained by qualified personnel.** If abdominal thrusts are done improperly you may cause more harm to the victim.

4) Bleeding. Stop the bleeding, prevent infection and treat for shock. Loss of too much blood can cause death. Use the following steps to control bleeding:

   a) Apply direct pressure. **Important** – Once pressure has been applied, keep it in place. If dressings become soaked with blood, apply new dressing over the old dressings. The less a bleeding wound is disturbed, the easier it will be to stop the bleeding.

   b) Elevate the injury above the heart, if possible. **Important** – If bleeding continues and you do not suspect a fracture, ELEVATE the wound above the level of the heart and continue to apply direct pressure.

   c) Apply pressure at pressure points. **Important** – If the bleeding still can not be controlled, the next step is to apply PRESSURE AT A PRESSURE POINT. For wounds of the arms or hands, pressure points are located on the inside of the wrist (radial artery-where the pulse is checked) or on the inside of the upper arm (brachial artery). For wounds of the leg, the pressure point is at the crease in the groin (femoral artery). Steps 1 and 2 should be continued with the use of the pressure points.

   d) Use a pressure bandage. **Important** – The final step to control bleeding is to apply a PRESSURE BANDAGE over the wound. Note the distinction between a dressing and a bandage. A dressing may be a gauze square applied directly to a wound, while a bandage, such as a roll of gauze, is used to keep the dressing in place. Pressure should be used in applying the bandage. After the bandage is in place, it is important to check the pulse to make sure circulation is not interrupted. When faced with the need to control major bleeding, it is not important that the dressings you have are sterile. Use whatever you have at hand and work fast!

A slow pulse rate, or bluish fingertips or toes, signal a bandage may be too tight and impeding circulation.

Proceed to the next step if the first one fails to control the bleeding. The use of a

tourniquet is determined when you go through your training. It has been used as a last resort and at times it has been said never to use one. Check with your certified instructor for the current answer to this question.

5) Open wounds. Open wounds have the following classifications:

   a) Abrasions – damage by a scrape with a little bleeding

   b) Incisions – sharp, even cuts.

   c) Lacerations – jagged, torn wounds from sharp, irregular edges.

   d) Punctures – small holes with little bleeding caused by small caliber bullets, pins or nails.

   e) Avulsion – tissue torn or hanging from the body with heavy bleeding usually caused by accidents. Often tissue can be reattached.

   f) Amputation – complete removal of an extremity. In the event of amputations, the amputated body part should be wrapped in a moist dressing and placed in a plastic bag. This should be transported with the victim.

   g) Crushing injuries – parts of the body caught between heavy equipment, etc. with possible external and internal bleeding

6) Internal Bleeding. Signs and symptoms of internal bleeding are:

   a) Bruised, swollen, tender or rigid abdomen

   b) Bruises on chest or signs of fractured ribs

   c) Blood in vomit

   d) Wounds that have penetrated the chest or abdomen

   e) Bleeding from the rectum or vagina

   f) Abnormal pulse and difficulty breathing

   g) Cool, moist skin

   First aid in the field for internal bleeding is limited. If the injury appears to be a simple bruise, apply cold packs to slow bleeding, relieve pain and reduce swelling. If you suspect more severe internal bleeding, carefully monitor the patient and be prepared to administer CPR if required (and you are certified to do so). You should also reassure the victim, control external bleeding, care for shock, loosen tight fitting clothing and place victim on side so fluids can drain from mouth if the situation allows.

7) Types of Bleeding. There are three types of bleeding: arterial, venial and capillary.

   a) Arterial – Arterial bleeding is characterized by spurts with each heartbeat, is bright red in color (although blood darkens when it meets the air) and is usually severe and hard to control. Arterial bleeding requires immediate attention.

b) Venial – Venial bleeding is characterized by a steady flow and the blood is dark, almost maroon in shade. Venial bleeding is easier to control than Arterial bleeding.

c) Capillary - Capillary bleeding is usually slow, oozing in nature and this type of bleeding usually has a higher risk of infection than other types of bleeding.

8) Shock. Shock usually accompanies severe injury or emotional upset. The signs are cold and clammy skin, pale face, chills, confusion, frequent nausea or vomiting and shallow breathing. Until emergency help arrives, have the victim lie down with the legs elevated. Keep the victim covered to prevent chilling or loss of body heat. Give non-alcoholic fluids if the victim is able to swallow and has not sustained an abdominal injury.

9) Bites. All bites, from animals require medical care. Infection from a bite can set in within hours.

a) Minor wounds – If the bite barely breaks the skin and there is no danger of rabies, treat it as a minor wound. Wash the wound thoroughly with soap and water. Apply an antibiotic cream to prevent infection and cover the bite with a clean bandage.

b) Deep wounds – If the animal bite creates a deep puncture of the skin or the skin is badly torn and bleeding, apply pressure with a clean, dry cloth to stop the bleeding and see your doctor.

c) Infection – If you notice signs of infection, such as swelling, redness, increased pain or oozing, see you doctor immediately.

d) Suspected rabies – If you suspect the bite was caused by an animal that might carry rabies – including any wild or domestic animal of unknown immunization status – see your doctor immediately.

Doctors recommend getting a tetanus shot every 10 years. If your last one was more than 5 years ago and your wound is deep or dirty, your doctor may recommend a booster. You should have a booster within 48 hours of the injury.

Domestic pets cause most animal bites. Dogs are more likely to bite than cats are. Cat bites, however, are more likely to cause infection. Bites from non-immunized domestic animals and wild animals carry the risk of rabies. Rabies is more common in raccoons, skunks, bats and foxes than cats and dogs. Rabbits, squirrels and other rodents rarely carry rabies. If you think an animal that bit you the victim is rabid, immediately call EMS, and then call the police and animal control. Describe the animal and give its location. DO NOT attempt to capture the animal yourself. It may bite you!

e) Insect bites and stings – The greatest danger from insect bites or stings is an allergic reaction.

i) Watch for any of the following symptoms:

(1) Difficult or noisy breathing

(2) Hives

(3) Itching

(4) Decreased consciousness

(5) Pain

(6) Swelling of the throat

(7) Redness or discoloration

Severe allergic reaction may cause shock. On any sign of an allergic reaction, immediately call EMS, begin treatment for shock and monitor the ABC's.

ii) Try to remove stingers left in skin with tweezers or scrape it away with something like a credit card. Do not try to squeeze it out as it may release more venom into the blood.

iii) Wash the bite with soap and water and watch for symptoms of allergic reaction and shock.

f) Snake bites – Each year, nearly 8,000 people receive poisonous snake bites in the United States. Even a bite from a so-called "harmless" snake can cause infection or allergic reaction in some people. People who frequently visit wilderness areas, camp, hike, and picnic or live in a snake-inhabited area should be aware of the potential dangers posed by venomous snakes.

i) Poisonous snakes - Any of the following snakes cause poisonous bites:

(1) Rattlesnake

(2) Copperhead

(3) Cottonmouth Water Moccasin

(4) Coral Snake

ii) Symptoms – While each individual may experience symptoms differently, the following are the most common symptoms of poisonous snake bites:

(1) Bloody wound discharge

(2) Fang marks in the skin and swelling at the site of the bite

(3) Severe localized pain

(4) Diarrhea

(5) Burning

(6) Convulsions

(7) Fainting

(8) Dizziness

(9) Weakness

(10) Blurred vision

(11) Excessive sweating

(12) Fever

(13) Increased thirst

(14) Loss of muscle coordination

(15) Nausea and vomiting

(16) Numbness and tingling

(17) Rapid pulse

iii) Treating snake bites

(1) Call for emergency assistance immediately if someone has been bitten by a snake. Responding quickly in this type of emergency is crucial. While waiting for emergency assistance:

(a) Wash the bite with soap and water

(b) Immobilize the bitten area and keep it lower than the heart

(c) Cover the area with a clean, cool compress or a moist dressing to minimize swelling and discomfort

(d) Monitor vital signs

(2) If a victim is unable to reach medical care within 30 minutes, the American Red Cross recommends: Apply a bandage, wrapped two to four inches above the bite, to help slow the venom. This should not cut off blood from a vein or artery – the band should be loose enough to slip a finger under it.

A suction device can be placed over the bite to help draw venom out of the wound without making cuts. These devices are often included in commercial snake bite kits. Most often, physicians use antivenin – an antidote to snake venom – to treat serious snake bites. Antivenin is derived from antibodies created in a horse's blood serum when the animal is injected with snake venom. Because antivenin is obtained from horses, snake bite victims sensitive to horse products must be carefully managed.

iv) Preventing snake bites - Some bites, such as those inflicted when you accidentally step on a snake in the woods, are nearly impossible to prevent. However, there are precautions that can reduce your chances of being bitten by a snake. These include:

(1) Leave snakes alone. Many people are bitten because they try to kill a snake or get too close to it.

(2) Stay out of tall grass unless you wear thick leather boots and remain on hiking paths as much as possible.

(3) Keep hands and feet out of areas you can not see. Do not pick up rocks or firewood unless you are out of a snake's striking distance.

(4) Be cautious and alert when climbing rocks.

10) Other types of injuries and treatments

a) Fractures, dislocations, sprains and strains – These types of injuries involve bones, tendons, ligaments and muscles. Immobilize the injured area, if possible, and seek medical care. For a compound fracture, where the bone has broken through the skin, control the bleeding, immobilize the injury by using a splint, treat for shock and monitor the ABC's until EMS arrives.

b) Frostbite – When exposed to very cold temperatures, skin and underlying tissues may freeze, resulting in frostbite.

i) Areas most likely to be affected:

(1) Hands

(2) Feet

(3) Nose

(4) Ears

You can identify frostbite by the hard, pale and cold quality of the skin that has been exposed to the cold. As the area thaws the flesh becomes red and painful.

ii) If your fingers, ears or other areas suffer frostbite:

(1) Get out of the cold

(2) Warm your hands by tucking them under your arms. If your nose, ears or face is frostbitten, warm the area by covering it with dry, gloved hands.

(3) Don't rub the affected area. Never rub snow on frostbitten skin.

(4) If there's any chance of refreezing, don't thaw out the affected areas. If they're already thawed out, wrap them up so they don't refreeze.

(5) Get emergency medical help if numbness remains during warming. If you can't get help immediately, warm severely frostbitten hands or feet in warm – not hot – water. You can warm other frostbitten areas such as your nose, cheeks or ears, by covering them with your warm hands or by applying warm cloths.

c) Heart attack – A heart attack occurs when an artery supplying your heart with blood and oxygen becomes blocked. This loss of blood flow injures your heart muscle. A heart attack generally causes chest pain for more than 15 minutes, but it can also be "silent" and have no symptoms at all. Many people who suffer a heart attack

have warning symptoms hours, days or weeks in advance. The earliest predictor of an attack may be recurrent chest pain that's triggered by exertion and relieved by rest (angina).

i) Symptoms – Someone having a heart attack may experience any or all of the following:

(1) Uncomfortable pressure, fullness or squeezing pain in the center of the chest. The pain may last several minutes or come and go. It may be triggered by exertion and relieved by rest.

(2) Prolonged pain in the upper abdomen.

(3) Discomfort or pain spreading beyond the chest to the shoulders, neck, jaw, teeth, or one or both arms.

(4) Shortness of breath.

(5) Lightheadedness, dizziness, fainting.

(6) Sweating

(7) Nausea

ii) What to do is you or someone else may be having a heart attack:

(1) Dial 911 or your local emergency medical assistance number. Don't tough out the symptoms of a heart attack fro more than 5 minutes. If you don't have access to emergency medical services, have a neighbor or friend drive you to the nearest hospital. Police or fire-rescue units also may be a source of transportation. Drive yourself only as a last resort, if there are absolutely no other options, and realize that it places you and other at risk when you drive under these circumstances.

(2) Chew and swallow an aspirin, unless you're allergic to aspirin or have been told by your doctor never to take aspirin. But seek emergency help first, such as calling 911.

(3) Take nitroglycerin, if prescribed. If you think you are having a heart attack and your doctor has prescribed nitroglycerin for you, take it as directed. Do not take anyone else's nitroglycerin, because that could put you in more danger.

(4) Begin CPR. If you are with a person who might be having a heart attack and he or she is unconscious, tell the 911 dispatcher or another emergency medical specialist. You may be advised to begin cardio-pulmonary resuscitation (CPR). If you haven't received CPR training, doctors recommend skipping mouth-to-mouth rescue breathing and proceeding directly to chest compression. The dispatcher can instruct you in the proper procedures until help arrives.

d) Heat and cold injuries

i) Heat exhaustion – Heat exhaustion is one of the heat-related syndromes,

which range in severity from mild heat cramps to heat exhaustion to potentially life-threatening heat stroke.

(1) Signs and symptoms of heat exhaustion often begin suddenly, sometimes after excessive exercise, heavy perspiration and inadequate fluid intake. Signs and symptoms resemble those of shock and may include:

(a) Feeling faint or dizzy

(b) Nausea

(c) Heavy sweating

(d) Rapid, weak heartbeat

(e) Low blood pressure

(f) Cool, moist, pale skin

(g) Low-grade fever

(h) Heat cramps

(i) Headache

(j) Fatigue

(k) Dark-colored urine

(2) If you suspect heat exhaustion:

(a) Get the person out of the sun and into a shady or air-conditioned location.

(b) Lay the person down and elevate the legs and feet slightly.

(c) Loosen or remove the person's clothing.

(d) Have the person drink cool water.

(e) Cool the person by spraying or sponging him or her with cool water and fanning.

(f) Monitor the person carefully. Heat exhaustion can quickly become heat stroke.

(g) If a fever greater than 102 F (38.9 C), fainting, confusion or seizures occur, dial 911 or call for emergency medical assistance.

ii) Heat Stroke – Heat stroke is the most severe of the heat-related problems, often resulting from exercise or heavy work in hot environments combined with inadequate fluid intake.

(1) High risk factors for heat stroke include:

(a) Young children

(b) Older adults

(c) People who are obese

(d) People born with an impaired ability to sweat

(e) Other

(i) Dehydration

(ii) Alcohol use

(iii) Cardiovascular disease

(iv) Certain medications

What makes heat stroke severe and potentially life-threatening is that the body's normal mechanisms for dealing with heat stress, such as sweating and temperature control, are lost.

(2) Signs and Symptoms

(a) Main sign –

(i) Markedly elevated body temperature – generally greater than 104 F (40 C) –

(ii) Changes in mental status ranging from personality changes to confusion and coma.

(iii) Skin may be hot and dry – although if heat stroke is caused by exertion the skin may be moist.

(b) Other signs and symptoms may include:

(i) Rapid heartbeat

(ii) Rapid and shallow breathing

(iii) Elevated or lowered blood pressure

(iv) Cessation of sweating

(v) Irritability, confusion or unconsciousness

(vi) Feeling dizzy or lightheaded

(vii) Headache

(viii) Nausea

(ix) Fainting, which may be the first sign in older adults

(3) If you suspect heat stroke:

(a) Move the person out of the sun and into a shady or air-conditioned space.

(b) Dial 911 or call emergency medical assistance.

(c) Cool the person by covering him or her with damp sheets or by spraying with cool water. Direct air onto the person with a fan or newspaper.

(d) Have the person drink cool water if he or she is able.

iii) Hypothermia – Under most conditions your body maintains a healthy temperature. However, when exposed to cold temperatures or to a cool, damp environment for prolonged periods, your body's control mechanisms may fail to keep your body temperature normal. When more heat is lost than your body can generate, hypothermia can result. Hypothermia is defined as an internal body temperature less than 95 F (35 C).

(1) May increase chances of hypothermia

(a) Wet or inadequate clothing

(b) Falling into cold water

(c) Uncovered head during cold weather

(2) Signs and symptoms – Signs and symptoms usually develop slowly. People with hypothermia typically experience gradual loss of mental acuity and physical ability, so they may be unaware that they need emergency medical treatment.

(a) Shivering

(b) Slurred speech

(c) Abnormally slow breathing

(d) Cold, pale skin

(e) Loss of coordination

(f) Fatigue, lethargy or apathy

(g) Confusion or memory loss

(3) People at higher risk

(a) Older adults

(b) Infants

(c) Young children

(d) People who are very lean

(e) Those who judgment may be impaired by mental illness or Alzheimer's disease

(f) People who are intoxicated

(g) Homeless

(4) Conditions that may predispose people to hyperthermia

(a) Malnutrition

(b) Cardiovascular disease

(c) Under-active thyroid (hypothyroidism)

(5) To care for someone with hypothermia

(a) Dial 911 or call for emergency medical assistance. While waiting for help to arrive, monitor the person's breathing. If breathing stops or seems dangerously slow or shallow, begin cardiopulmonary resuscitation (CPR) immediately.

(b) Move the person out of the cold. If going indoors isn't possible, protect the person from the wind, cover his or her head, and insulate his or her body from the cold ground.

(c) Remove wet clothing. Replace wet things with warm, dry covering.

(d) Don't apply direct heat. Don't use hot water, a heating pad or heating lamp to warm the victim. Instead, apply warm compresses to the neck, chest wall and groin. Don't attempt to warm the arms and legs. Heat applied to the arms and legs forces cold blood back toward the heart, lings and brain, causing t he core body temperature to drop. This can be fatal.

(e) Don't give the person alcohol. Offer warm nonalcoholic drinks, unless the person is vomiting.

(f) Don't massage or rub the person. Handle people with hypothermia gently, because they are at risk for cardiac arrest.

E.O. 3. Re-qualify in CPR

You must re-qualify in CPR by attending the necessary classes either set up by the unit or by an authorized group, and submitting a copy of your certification to your unit adjutant for inclusion in your Young Marine Record Book.

PERFORMANCE QUALIFICATION REVIEW
Performance Objective 9: Physical Fitness, Health and First Aid

E.O. No.	Enabling Objective Description and Performance Requirement	Authorized Evaluators Signature
1	**Pursue a healthy lifestyle.**	
a.	Knows the food groups and the recommended servings per day	
b.	Knows the types of food carbohydrates are found in	
c.	Knows the types of food proteins are found in	
d.	Knows the Young Marine drug and smoking policy	
e.	Assist with administering the Young Marine Physical Fitness Test and the Young Marine Health Fitness Test	
2	**First Aid**	
a.	**Knows what to do before beginning First Aid**	
b.	**Knows the procedures for rescue breathing**	
c.	**Knows the universal sign for choking**	
d.	**Knows the 4 steps to control bleeding**	
e.	**Can identify the 7 types of open wounds**	
f.	**Knows the signs and symptoms of internal bleeding**	
g.	**Name the three types of bleeding**	
h.	**Can identify signs of shock.**	
i.	**Knows the classifications of bites.**	
j.	**Knows the symptoms of allergic reaction from insect stings**	
k.	**Can name 4 kinds of poisonous snakes**	
l.	**Name the areas most likely to be affected by frostbite**	
m.	**Can identify the symptoms of a heart attack**	
n.	**Knows why heat stroke is severe and potentially life threatening**	
o.	**Define Hypothermia**	
3	**Re-qualify in CPR to be eligible for YM SSgt**	
a.	Must have re-qualified in CPR and submitted the necessary certification for inclusion in their Young Marine Record Book.	