Module # 5 Primary and Secondary Care overview

Patient Care Standards

- Emergency First Response Primary Care (CPR) and Secondary Care (First Aid) are medically based, following the same priorities of care used by professional emergency care providers.

What is the definition of primary care?

- The Emergency First Response Primary Care (CPR) covers emergency care for most life-threatening Situations.

What Primary Assessment and Primary Care?

1. Primary means first in a series or sequence – most important.

2. An assessment is an evaluation or an appraisal.

3. Therefore, in terms of emergency care, primary assessment is an Emergency Responder's first evaluation of an injured or ill person. Primary assessment is the first step of emergency care.

4. Primary assessment also refers to evaluation of a patient for ANY life-threatening conditions needing immediate attention – heart and breathing problems, choking, serious bleeding, shock and spinal injuries.

5. Emergency Responders provide primary care to patients with life-threatening injuries or illnesses.

What is the CPR?

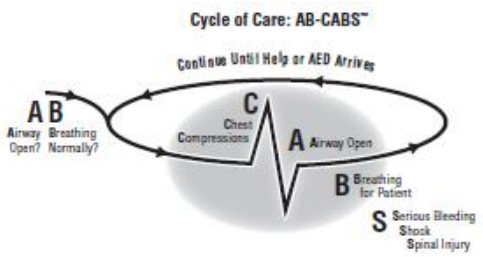
1. CPR stands for Cardiopulmonary Resuscitation. Cardio – means "heart." Pulmonary– means "concerning the lungs and breathing." Resuscitation – means "to revive from unconsciousness."

2. If a patient is unresponsive and not breathing normally, you begin CPR immediately.

3. CPR is a two-step process. First, press on a patient's chest and second, blow in the patient's mouth providing him oxygen.

4. Complete CPR combines manual chest compressions with rescue breathing.
- Students are taught the Cycle of Care to guide them.

A = Airway Open?
B = Breathing Normally?
C = Chest Compressions
A = Airway Open
B = Breathing for the Patient
S = Serious Bleeding, Shock, Spinal Injury



What is the definition of secondary care?

The Emergency First Response Secondary Care (First Aid) covers secondary patient Assessment and first aid. What are Secondary Assessment and Secondary Care?

1. Secondary means *second in a series or sequence.* Secondary Care follows Primary Care (CPR).

2. An assessment is an *evaluation or appraisal.*

3. A Secondary Assessment is an Emergency Responder's second evaluation of an injured or ill person.

4. Once a patient is stabilized during primary care you attend to the next level of emergency care – Secondary Care.

5. Secondary Care is what you provide to a patient with injuries or illnesses that are not immediately life-threatening.

What are The Difference between Injury and Illness?

1. **An injury**: is physical harm to the body. Examples include:
   a. Cuts, scrapes and bruises
   b. Chest injuries
   c. Head, eye and dental injuries
   d. Burns.
   e. Dislocations and fractures.
   f. Temperature-related injuries such as hypothermia, frostbite, heat exhaustion & heat stroke
   g. Electrical injuries.

2. **An illness**: is an unhealthy condition of the body.
Illnesses may be caused by preexisting conditions such as allergies or diabetes. Generally, illnesses are determined through a patient's signs and symptoms.

What is the Signs and Symptoms?

a. **A sign**: is something you can see, hear or feel. Such as wounds bleeding, discolorations, or deformities, you also listen for unusual breathing sounds and feel for swelling or hardness, tissue softness or unusual masses.

b. **A symptom**: is something the patient tells you is wrong. For both injury and illness assessments, the patient may complain of nausea, thirst, dizziness, numbness or pain.

What is the definition of secondary care?

The Emergency First Response Secondary Care (First Aid) covers secondary patient Assessment and first aid.

How to Assessment First Aid?

1. Assessment first aid is the treatment of conditions that are not immediately life threatening or uncovered during either an Illness Assessment or an Injury Assessment.

2. To provide secondary care, you may use the skills you learn during this course, or you may reference your *Emergency First Response Participant Manual* for important emergency care information.

Keeping Your Skills Fresh

Think of a sport you use to participate in years ago but haven't tried recently. Do you think you could return to the sport this very moment, and be as successful as you once were? Probably not. The same is true with emergency care skills. Keeping your skills fresh is important if you are ever called upon to help another in need. Be a good citizen, practice your skills periodically.

How can you practice and fine-tune your skills?

- by enrolling in an Emergency First Response Refresher course.
- During the refresher, you'll practice your skills by once again completing just the Skill Development portion of an Emergency First Response course.
- By completing a refresher, you'll be issued a new Emergency First Response completion card.
- It's a good idea to take a refresher course at least every 12 to 24 months to keep your skills and completion card current.
- Our next Emergency First Response Refresher course is: _____.

Protecting yourself against Blood borne Pathogens

- Infections – viruses, bacteria or other microorganisms – carried by the blood are called blood borne Pathogens. As an Emergency Responder you will want to avoid these infections. Fear of disease
- Transmission is a common reason why laypersons trained in CPR avoid action. However, it is important to note that research has shown that the chance of disease transmission is very rare when providing CPR and other emergency care. Don't delay helping a person in need just because barriers are not available.

What Blood bore Pathogens of Greatest Concern to Emergency Responders?

1. Hepatitis C virus.
2. Hepatitis B virus.
3. Human immunodeficiency virus (HIV).

What are the Four Ways to Protect Yourself against Disease Transmission?

1. Use gloves.
2. Use ventilation masks or shields when giving mouth-to-mouth rescue breathing.
3. Use eye or face shields; including eyeglasses or sunglasses, goggles and face masks.
4. Always wash your hands or any other area with antibacterial soap and water after providing primary (CPR) and secondary (first aid) care. Scrub vigorously, creating lots of lather.

*If water is not available, use antibacterial wipes or soap less liquids.

What you do if delay in wearing protections?

1. IMPORTANT: Do NOT delay emergency patient care if barriers are not available. Remember: Research has shown that the chance of disease transmission is very rare when providing CPR and other emergency care.

1. If gloves and ventilation barriers are immediately available, use them during CPR to protect yourself and the patient from possible disease transmission.

2. When available, use eye shields and facemasks when patients have serious bleeding.

Recognizing Life-Threatening Problems

If you witness a serious car accident or watch someone take a bad fall, it's reasonable to assume the patient will have life-threatening injuries. Even if you don't see the accident occur, many accident scenes clearly point to medical emergencies.

Unfortunately, not all life-threatening emergencies are so obvious. Some serious conditions occur due to illness or subtle accidents. Sometimes the patient's symptoms come on quickly and other times the patient gets progressively worse over time.

Because time is critical, as you've already learned, you need to be able to recognize all life-threatening conditions and then provide appropriate emergency medical care.

How Recognizing a heart attack?

1. A heart attack occurs when blood flow to part of the patient's heart is stopped or greatly reduced.

2. the most common symptom of a heart attack is pain accompanied by an uncomfortable pressure or squeezing in the center of the chest behind the breastbone that lasts for more than a few minutes, or goes away and comes back.

3. Pain described as an ache, heartburn or indigestion. This pain often spreads to the shoulders, back, neck, jaw or arms.

4. Other signs and symptoms include fainting, nausea, shortness of breath, sweating, extreme fatigue, dizziness, and/or lightheadedness.

How to Recognizing cardiac arrest?

1. Caused by a blocked artery, depriving oxygen to the heart. The heart stops beating or quivers. This quivering of a heart is called ventricular fibrillation.

2. Two ways to recognize:
   a. Patient does not respond when you speak or touch him.
   b. No signs of circulation – no movement, breathing or coughing.

How to Recognizing a stroke?

1. Caused by blocked or ruptured blood vessel in the brain – depriving the brain of oxygen.

2. Use the memory word FAST to help you identify warning signs of stroke.
   a. F = Face. Ask the patient to smile. Does one side of their face droop?
   b. A = Arms. Ask the patient to raise both arms. Does one arm drift downward?
   c. S = Speech. Ask the person to repeat a simple phrase. Is their speech slurred or strange.
   d. T = Time. If you observe any of these signs, call EMS immediately.

3. Common signs and symptoms of stroke:
   a. Sudden weakness or numbness of the face, arm, or leg, especially on one side of the body or on both sides.
   b. Sudden confusion or drowsiness.
   c. Trouble speaking, understanding or swallowing.
   d. Sudden vision trouble from one or both eyes.
   e. Sudden trouble walking, dizziness, loss of balance or coordination.
   f. Sudden severe headache with no known cause.

How to Recognizing complete (severe) airway obstruction?

1. Grasping, clutching the neck (universal distress signal for choking).
2. Unable to speak, breathe or cough.

Explain why an unconscious, no breathing snorkeler should be resuscitated while being towed to shore even if no pulse is suspected

You can never be fully certain if a pulse does or doesn't exist if it is taken in the water. You might be wearing gloves, or have difficulty in getting to the carotid artery due to the diver's exposure suit.

Even if you can check the pulse, you might be unable to detect it due to the decreased sensitivity of your fingers from prolonged immersion in water.

Therefore, you shouldn't even bother checking for a pulse while in the water. Just assume an unconscious, non-breathing diver has a pulse and ventilate.

Concentrate on towing the victim to assistance while providing adequate ventilations.
If you determine that you are more than five minutes from the need shore or boat, you to evaluate whether the victim has any movement or other reactions to ventilations.

If the victim shows some response to ventilations, but doesn't completely resume self-sufficient breathing, it still indicates that ventilations are having a positive effect.

You should continue to ventilate during the tow because the person may be able to regain control through your efforts.

If the person regains complete breathing control, you should discontinue ventilations but continue to monitor the diver during the tow.

If you determine that you are more than five minutes from the shore or boat, and the victim has no reaction to ventilations- for example, has no movement and appears extremely pale or blue- you should stop ventilations and tow the victim to shore as quickly as possible.

In this case the victim is probably in cardiac arrest and needs advanced life support which is only available on the shore or boat. Ventilations only slow down the tow and do not assist the victim who has no heartbeat.

State the compression-to-ventilation ratio for administering one-rescuer CPR.

The rate of compressions must be sufficient to maintain artificial circulation for the victim regardless of what the rescuer is able to do.

This rate is 120 compressions per minute. While a rescuer might be able to sustain a faster rate at first, it's doubtful whether such a rate could be maintained.

Therefore, the rescuer should concentrate on maintaining the 120 compression rate. A good way of judging this is to compress slightly faster than once per second.

When administering one-rescuer CPR, the ratio of compressions to ventilations is **30 compressions followed by 2 ventilations.**

You may see this procedure altered in two-person CPR. However, two-person CPR is considered an advanced life support technique and is not commonly taught in basic first aid courses like Emergency First Response.

Explain what action should be taken with a victim of a near-drowning accident.

You get the victim to shore and he begins to breathe on his own, and shows signs of responsiveness.

Several minutes later he appears fully conscious and alert.

Embarrassed by the incident, he tells you he feels all right and wants to be taken home. What action should you take? Often victims of near drowning appear to recover only to be found dead a few hours later.

This phenomenon has been termed "secondary drowning" and requires an understanding of the physiology of the lungs.

The lungs contain a substance referred to as a surfactant.

This surfactant keeps the tiny airways of the lungs from collapsing; if they do collapse, it keeps them from sticking together.

When a person is involved in a near-drowning accident, and they inhale even a slight amount of water, some of this surfactant can be diluted or washed away.

Once the surfactant is removed the tiny airways can collapse, remain closed and fill with fluid (edema).

This is a progressive disorder taking hours to manifest itself as a problem.

The only way to deal with this condition is under medical supervision.
As a result, anyone involved in a near-drowning accident must be hospitalized even if they apparently recover at the scene and “feel fine.”

Common signs/symptoms of marine life injuries.

a. Loss of consciousness, weakness and nausea
b. Mental confusion
c. Spreading numbness
d. Paralysis
e. Local swelling, inflammation or welts

What are the recommended first aid measures for wounds?

Resulting from venomous marine life? Often, even those trained in first aid will think in terms of applying ice in the event of an injury.

This is precisely what should not be done in the case of wounds resulting from venomous marine life. In this case, after carefully removing any foreign matter, the area should be soaked in hot water (43° to 48°C/110° to 120° F) for at least 30 to90 minutes.

Try to keep the victim positioned so that the wound is below the level of his heart. Finally, treat the victim for shock.

WORKSHOP

SKILL # 1 CPR – Cardiopulmonary Resuscitation

Performance Requirements

Demonstrate how to:

- Perform adult CPR – chest compressions at a rate of at least 120 chest compressions per Minute and depressing the chest approximately one-third the depth of chest – at least 5 Cm/2 inches.

- Minimize interruptions in chest compressions.

Key Points

- CPR is a two-step process. Step one – chest compressions is followed by step two – rescue breathing. During this skill, you'll learn step one.

- If you are unable or feel uncomfortable giving a patient the rescue breaths – relax. Give the patient immediate and continuous chest compressions. Chest compressions alone are very beneficial to an unresponsive patient who is not breathing normally. Your efforts will still help circulate blood that contains oxygen.

- Use the *Cycle of Car*e and AB-CABS memory word to help you remember to perform **C**hest Compressions before opening a patient's **A**irway and **B**reathing for the patient.

- Give the Responder Statement and tap the patient on the collarbone. If the patient is unresponsive, quickly check for an open airway and normal breathing.

- If the patient is not breathing normally, immediately begin Chest Compressions.

- The patient must be on his back and on a sturdy surface prior to beginning chest compressions.
- Only practice CPR – chest compressions on a mannequin, never on another participant.

How it's done

1. Assess the scene for safety. Check the patient for responsiveness by giving the Responder
Statement: Hello? My Name is_____. I'm an Emergency Responder. May I help you? If no response to your statement, then tap the patient on collarbone and ask, Are you okay? Are you okay? The collarbone is sensitive and tapping it will reveal a level of responsiveness.

2. After delivering the Responder Statement, quickly check for an open Airway and normal breathing. If the patient isn't breathing at all or is only gasping, give CPR immediately.

3. Alert EMS if the patient is unresponsive and not breathing normally. CALL FIRST before providing care.

- Ask a bystander to call EMS and secure an AED if possible.
- If you are alone, use your mobile phone to call EMS.
- Leave the patient to call EMS if no other option exists.

4. Position patient on his back (if not already in this position).

5. Locate the chest compression site.

- Expose the patient's chest only if necessary, to find the compression site.
- Find the compression site by putting the heel of one hand in the chest center. On some individuals, this position is between the nipples
- Place your other hand on top of the hand already on the chest and interlock your fingers
- Use the palm of your hand on the compression site. Keep fingers off the chest.

6. Deliver chest compressions.

- Position yourself so that your shoulders are directly over your hands and your arms are straight – lock your elbows.
- Keep the force of the compressions straight down – avoid pushing on the rib cage or the lower tip of the breastbone. With locked elbows, allow your body weight to deliver the compressions.
- To provide effective chest compressions you should push hard and push fast, depressing the breast bone approximately one-third the depth of the patient's chest – at least 5 centimetres/2 inches.
- After each chest compression, release, allowing the chest to return to its normal position.
- Repeat at a pace of – one-two-three-four – and so on, (counting fast) for 30 compressions. Perform the compressions as fluidly as possible. Your rate should be at least120 compressions per minute. The rate is a lot faster than most people think – *Push Hard, Push Fast.*

SKILL # 2 Chest Compressions Combined With Rescue Breathing

Performance Requirements

Demonstrate how to

- Perform adult complete CPR – chest compressions and rescue breathing – at a ratio of 30 Chest compressions to 2 rescue breaths.
- Minimize interruptions in chest compressions.

Key Points

- Use the *Cycle of Care* and AB-CABS memory word to help you remember to perform **C**hest
  Compressions before opening a patient's **A**irway and **B**reathing for the patient.

- Give the Responder Statement and tap the patient on the collarbone. If the patient is unresponsive, quickly check for an open airway and normal breathing. If the patient is not
  Breathing normally immediately begins Chest Compressions.

- If immediately available, use gloves and a ventilation barrier to protect yourself and patient from disease transmission. However, do not delay providing emergency care by trying to locate barriers.

- Open the patient's airway and pinch the nose closed. Improper positioning of the head tilt-chin lifts to open an airway is the number one reason rescue breaths are ineffective

- Effective rescue breaths last just over 1 second, with just enough air to make the patient's chest rise.

- If during an actual situation you are unable or feel uncomfortable giving a non-breathing patient rescue breath, give the patient continuous chest compressions. Chest compressions alone are very beneficial to a patient without a heartbeat. Your efforts may still help circulate blood that contains some oxygen. Remember – *adequate care provided is better than perfect care withheld*.

How it's done

1. Assess the scene for safety. Check the patient for responsiveness by giving the Responder
Statement: Hello? My Name is_____. I'm an Emergency Responder. May I help you? If no response to your statement, then tap the patient on collarbone and ask, Are you okay? Are you okay? The collarbone is sensitive and tapping it will reveal a level of responsiveness.

2. After delivering the Responder Statement, quickly check for an open Airway and normal breathing.

3. If the patient is not responsive or breathing normally, ask a bystander to call EMS and bring an AED if one is available. If you are alone, use your mobile phone to call EMS. If you do not have A mobile phone, leave the patient to call EMS if no other option exists. This is the Call First approach to emergency care. You Call First to activate EMS, then you provide assistance.

4. Position patient on his back (if not already in this position).

5. Locate the chest compression site.

- Expose the patient's chest only if necessary, to find the compression site.
- Find the compression site by putting the heel of one hand in the chest center. On some Individuals, this position is between the nipples.
- Place your other hand on top of the hand already on the chest and interlock your fingers.
- Use the palm of your hand on the compression site. Keep fingers off the chest.

6. Deliver chest compressions.

- Position yourself so that your shoulders are directly over your hands and your arms are straight – lock your elbows.

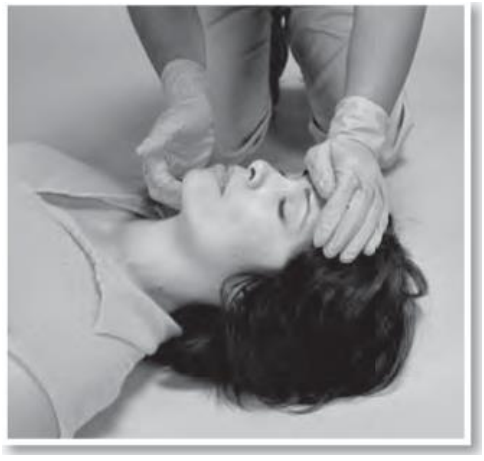
- Keep the force of the compressions straight down – avoid pushing on the rib cage or the lower tip of the breastbone. Allow your body weight to deliver the compressions.

- To provide eff ective chest compressions you should *push hard and push fast,* depressing the breast bone approximately one-third the depth of the patient's chest– at least 5 centimeters/2 inches.

- After each chest compression, release, allowing the chest to return to its normal position.

- Repeat at a pace of – one-two-three-four – and so on, (counting fast) for 30 compressions. Perform the compressions as fl uidly as possible. Your rate should be at least 120 compressions per minute. The rate is a lot faster than most people think – *Push Hard, Push Fast.*

7. Position a ventilation barrier on the mannequin for mouth-to-mouth or mouth-to-mask rescue breaths.



8. Open the patient's airway. Use one of two common methods

1. *Use the head tilt-chin lift.*
   • Place your hand on the patient's forehead. Apply fi rm, backward pressure with the palm Of your hand, tilting the head back.

   • Place the fingers of your other hand under the bony part of one side of the lower jaw near The chin. Important: Avoid pushing directly under the chin.

   • Lift the jaw upward to bring the chin forward.

2. *Use the pistol grip lift*.
   • With your thumb and index finger, point it like a pretend *handgun*.

   • Place your thumb and index finger together, as if you "fired" the gun.

• Place your thumb and index finger along the patient's jaw line. Your thumb is just below the patient's lip and your index finger is positioned across the patient's chin.

• Use your thumb, index finger and middle fingers to open the patient's lips and mouth. Keep other fingers off the soft tissue of the neck.

• Place your other hand on the patient's forehead.

• Gently lift the patient's jaw with your middle finger and tilt head back.

9. With the patient's head tilted back and the ventilation barrier in place, pinch the nose closed.

10. Now, give two rescue breaths. Each breath should last about 1 second. Provide the patient with just enough air to make the patient's chest rise. Look for this rise in the patient's chest.

- If you can't make the patient's chest rise with the first breath, repeat the head tilt-chin lift or pistol grip lift to re-open the airway before attempting another breath. Improperly opening a patient's airway is the most common cause for not being able to inflate a patient's lungs

11. After delivering two rescue breaths, immediately begin another cycle of 30 chest compressions. Minimize delays in providing chest compressions.

12. Continue alternating 30 compressions with two breaths until:

- EMS arrives.
- You can defibrillate with an AED (Automated External Defibrillator).
- The patient becomes responsive and begins to breathe normally.
- Another Emergency Responder takes over CPR efforts.
- You are too exhausted to continue.

SKILL #3 Emergency Oxygen Use Orientations

Performance Requirement

Demonstrate how to administer emergency oxygen to a patient with a serious or life-threatening
Illness or injury.

Key Points

- Remember to stop, think, then act – assess scene and alert EMS.
- Protect yourself and patient from disease transmission by using gloves and barriers if available. Do not delay emergency care if barriers are not available.
- Perform a patient responsiveness check by giving the Responder Statement and then if unresponsive, tapping the collarbone. Before placing the oxygen mask on a responsive patient say, this is oxygen, may I place this mask on you?
- Perform a primary assessment and use the *Cycle of Care* to continually monitor a patient's medical status.
- Become familiar with emergency oxygen units before you need to use them – at home, work, school, etc.
- Use emergency oxygen in a ventilated area away from any source of flame or heat.
- Handle oxygen cylinder carefully because contents are under high pressure. Avoid dropping cylinder or exposing it to heat.
- In some regions, oxygen use is restricted.

Critical Steps

1. Follow system instructions to set up oxygen unit.
2. Always turn the valve on slowly and test that oxygen is fl owing to the mask.
3. For a responsive patient, ask if you may provide oxygen and place mask over the patient's mouth and nose. Say, *"This is oxygen, may I place this mask on you?"* Responder takes the first breath to test mask and show patient it works. Responder does not exhale into mask.
   - If the patient agrees, have the patient hold the mask in place and tell the patient to Breathe normally.
   - If the patient can't hold the mask, use the strap to keep it in place.
4. For a nonresponsive, breathing patient, place the mask on the patient's nose and mouth and secure with the strap.

5. For an unconscious, nonbreathing patient, use a mask that allows you to supply rescue breaths while oxygen flows into the mask.

6. Monitor the oxygen unit pressure gauge to avoid running it empty while the mask is still on the patient.

7. Additional training in administering emergency oxygen may be required in some regions.
