PRIMARY ASSESSMENT–ADULT, CHILD AND INFANT

Primary Assessment–Adult, Child and Infant

Note: Activate the EAP and get an AED on the scene as soon as possible.

1. Size up the scene while forming an initial impression:
   - Use your senses to check for hazards that could present a danger to you or the victim.
   - Use appropriate PPE.
   - Determine the number of injured or ill victims.
   - Determine what caused the injury or the nature of the illness. Look for clues to what may have caused the emergency and how the victim became ill or injured.
   - Form an initial impression that may indicate a life-threatening emergency, including responsiveness or severe bleeding.
   - Does the victim look sick? Are they awake and moving?
   - Determine what additional resources may be needed.

Note: If you see severe life-threatening bleeding, use any available resources to control the bleeding including a tourniquet if one is available and you are trained.

2. Check for responsiveness.
   - Shout, "Are you okay?" (use the person's name if you know it) then tap the victim on the shoulder and shout, "Are you okay?" again in a shout-tap-shout sequence.
     - For an infant, tap the foot.

3. If no response, summon EMS personnel, if you have not already done so.
   - If the victim is face-down, roll the victim onto their back while supporting the head, neck and back.

4. Perform a primary assessment, open the airway and simultaneously check for breathing and a pulse for at least 5 seconds, but no more than 10 seconds.
   - To open the airway:
     - From the side, use the head-tilt/chin-lift technique.
     - From above the victim's head, use the jaw-thrust (with head extension) maneuver.
     - If a head, neck or spinal injury is suspected, use the jaw-thrust (without head extension) maneuver.

Primary Assessment–Adult, Child and Infant *continued*

- Look, listen and feel for breathing and pulse simultaneously.
  - For an adult or child, feel for a carotid pulse by placing two fingers in the middle of the victim's throat and then sliding them into the groove at the side of the neck closest to you. Press lightly.
  - For an infant, feel for the brachial pulse on the inside of the upper arm between the infant's elbow and shoulder. Press lightly.

5 Give two ventilations **ONLY IF** the victim is not breathing as the result of a drowning.

- If the chest does not clearly rise when attempting the first 2 ventilations, re-tilt the head and try to give another ventilation.
- If after the second attempt the chest clearly rises, give 1 more ventilation so there are two successful ventilations.
- If after the second attempt, the chest does not clearly rise, immediately begin CPR.

6 Provide appropriate care.

- If the victim is not breathing but has a pulse, give ventilations.
  - Adult: Give 1 ventilation about every 5-6 seconds.
  - Child and Infant: Give 1 ventilation about every 3 seconds.
- If the victim is not breathing and has no pulse, begin CPR starting with compressions.
- If unresponsive but breathing and you do not suspect a head, neck or spinal injury, place the victim in a side-lying recovery position. To place the victim in a recovery position:
  - Raise the victim's arm that is closest to you.
  - Roll the victim toward you so that their head rests on their extended arm.
  - Bend the victim's knees to stabilize their body.

GIVING VENTILATIONS

Giving Ventilations

Note: *Activate the EAP, size up the scene while forming an initial impression, obtain consent, use PPE, perform an initial assessment, care for any severe, life-threatening bleeding and get an AED on the scene as soon as possible.*

If the victim is not breathing but has a pulse:

1. Position and seal the resuscitation mask.

2. Open the airway and blow into the mask.
   - Adult: Give **1** ventilation about every **5** to **6** seconds.
   - Child or infant: Give **1** ventilation about every **3** seconds.
   - Each ventilation should last about 1 second and make the chest clearly rise.
   - The chest should fall before the next ventilation is given.
   - Give ventilations for about 2 minutes.

Notes:
- *For a child, tilt the head slightly past a neutral position. Do not tilt the head as far back as for an adult.*
- *For a victim with a suspected head, neck or spinal injury, use the jaw-thrust (without head extension) maneuver to open the airway to give ventilations.*
- *For an infant, maintain a neutral position.*

3. Recheck for breathing and pulse about every 2 minutes.
   - Remove the mask and look, listen and feel for breathing and a pulse for at least 5 seconds but no more than 10 seconds.

4. Assess the victim's condition and provide appropriate care.

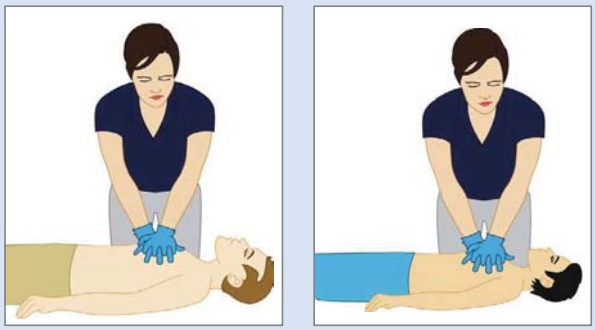
If unresponsive and no breathing but there is a pulse:
- Continue giving ventilations.

If unresponsive and no breathing or pulse:
- Begin CPR.

Table 8-3: **Providing Care for Obstructed Airway—Adult, Child and Infant**

	Caring for a Responsive Choking Victim	**If a Choking Victim Becomes Unresponsive**
Adult and Child	▪ 5 back blows ▪ 5 abdominal thrusts ◦ Use chest thrusts if you cannot reach around the victim or the victim is pregnant.	▪ Carefully lower the victim to a firm, flat surface. ▪ Send someone to get an AED and summon EMS if you have not already done so. ▪ Immediately begin CPR, starting with chest compressions. ▪ After each set of chest compressions and before attempting ventilations, open the victim's mouth and look for the object. ◦ If you see an object in the victim's mouth, carefully remove it using your finger. Never perform a blind finger sweep.
Infant	▪ 5 back blows ▪ 5 chest trusts	▪ Carefully lower the victim to a firm, flat surface. ▪ Send someone to get an AED and summon EMS if you have not already done so. ▪ Immediately begin CPR, starting with chest compressions. ▪ After each set of chest compressions and before attempting ventilations, open the victim's mouth and look for the object. ◦ If you see an object in the victim's mouth, carefully remove it using your finger. Never perform a blind finger sweep.
Continue the cycle of care until:	▪ The object is forced out. ▪ The victim begins to cough forcefully or breathe. ▪ The victim becomes unresponsive.	▪ The victim begins to breathe on their own. ▪ Another trained rescuer takes over. ▪ More advanced medical personnel, such as EMS personnel, take over. ▪ You are too exhausted to continue. ▪ The scene becomes unsafe.
When providing care:	▪ Use less force on a child than you would on an adult when giving abdominal thrusts. ▪ Use two fingers on the center of the chest, just below the nipple line, when giving chest trusts to an infant. ▪ Keep one hand on the victim's forehead to maintain an open airway when giving chest thrusts to an infant.	▪ Remember to never attempt more than 2 ventilations during one cycle of CPR, even if the chest does not rise. Continuing cycles of 30 compressions and 2 ventilations is the most effective way to provide care. ▪ If the victim vomits at any time, including during a compression cycle, immediately roll the victim to their side, clear the mouth, reposition the victim on their back and resume CPR.

Table 9-1: **Summary of Techniques for CPR—Adult, Child and Infant**

	Adult	Child	Infant
Hand position	Heel of one hand in center of chest (on lower half of sternum) with the other hand on top 		Two fingers on the center of the chest (just below the nipple line) 
Compression depth	At least 2 inches (Try to avoid greater than 2.4 inches if using a feedback device.)	About 2 inches	About 1½ inches
Ventilations	Until chest begins to rise (1 second per ventilation)		
Cycles (one rescuer)	30 chest compressions and 2 ventilations		
Cycles (two rescuers)	30 chest compressions and 2 ventilations	15 chest compressions and 2 ventilations	
Rate	Between 100 and 120 compressions per minute		

9-5 AEDS

AEDs are portable electronic devices that analyze the heart's rhythm and provide an electrical shock (Figure 9-5). Defibrillation is the delivery of an electrical shock that may help re-establish an effective rhythm. CPR can help by supplying blood that contains oxygen to the brain and other vital organs. However, the sooner an AED is used, the greater the likelihood of survival. You must assess victims quickly and be prepared to use an AED in cases of cardiac arrest.

Figure 9-5 | An AED

One-Rescuer CPR

Notes:

- *Activate the EAP, size up the scene while forming an initial impression, use PPE, perform primary assessment and get an AED on the scene as soon as possible.*
- *Ensure the victim is on a firm, flat surface, such as the floor or a table.*
- *Expose the victim's chest to ensure proper hand placement and the ability to visualize chest recoil.*

If the victim is not breathing and has no pulse:

1 Give 30 chest compressions.

- Adult or child: Place the heel of one hand in the center of the chest on the lower half of sternum with the other hand on top.
  - Keep your arms as straight as possible and shoulders directly over your hands.
- Infant: Place one hand on the infant's forehead. Place two or three fingers from your hand closest to the infant's feet on the center of the chest just below the nipple line. The fingers should be oriented so they are parallel not perpendicular to the sternum.
- Push hard, push fast.
  - Compress the chest at a depth of:
    - Adult: At least 2 inches but not more than 2.4 inches.
    - Child: About 2 inches.
    - Infant: 1½ inches.
  - Compress the chest at a rate of at least 100 per minute but no more than 120 per minute.
    - Let the chest fully recoil between each compression.

One-Rescuer CPR *continued*

2. Give 2 ventilations.

3. Perform cycles of 30 compressions and 2 ventilations.

Do not stop CPR except in one of the following situations:

- You see an obvious sign of life, such as normal breathing or victim movement.
- An AED is ready to analyze the victim's heart rhythm.
- Another trained responder or responders take over, such as a member of your safety team or EMS personnel, and relieve you from giving compressions or ventilations.
- You are alone and too exhausted to continue.
- The scene becomes unsafe.

Notes:

- *Keep your fingers off the chest when performing compressions on an adult or child by interlacing your fingers.*
- *Use your body weight, not your arms, to compress the chest.*
- *Count out loud or to yourself to help keep an even pace.*

USING AN AED

Using an AED

Notes:

- *Activate the EAP, size up the scene while forming an initial impression, use PPE, perform a primary assessment and get an AED on the scene as soon as possible.*
- *Ensure the victim is on a firm, flat surface, such as the floor or a table.*

If the victim is not breathing and has no pulse:

1. Turn on the AED and follow the audible and/or visual prompts.

2. Expose the victim's chest and wipe it dry if necessary.

Tip: Remove any medication patches with a gloved hand and wipe away any remaining medication residue.

3. Attach the AED pads to the victim's bare, dry chest.
   - Place one pad on the victim's upper right chest and the other pad on the left side of the chest.
     - Child: Use pediatric AED pads, if available. If the pads risk touching each other, place one pad in the middle of the child's chest and the other pad on the child's back, between the shoulder blades.
     - Infant: Always place one pad on the chest and the other on the back.

4. Plug in the connector, if necessary.

Using an AED *continued*

5 Stand clear.
- Make sure that no one, including you, is touching the victim.
- Say, "Everyone, stand clear!"

6 Analyze the heart rhythm.
- Push the "Analyze" button, if necessary. Let the AED analyze the heart rhythm.

7 Deliver a shock or perform CPR based on the AED recommendation.
- If a shock is advised:
  - Make sure no one, including you, is touching the victim.
  - Say, "Everyone clear" in a loud commanding voice.
  - Deliver the shock by pushing the "Shock" button, if necessary.
  - After delivering the shock, perform about 2 minutes of CPR, starting with chest compressions.
- If no shock is advised:
  - Perform about 2 minutes of CPR, starting with chest compressions.
  - Continue to follow the prompts of the AED.

Notes:

- *If at any time you notice an obvious sign of life, such as normal breathing or victim movement, stop CPR and monitor the victim's condition.*
- *The AED will not advise a shock for normal or absent heart rhythms.*
- *If two trained rescuers are present, one should perform CPR while the second rescuer operates the AED.*
- *Do not interrupt CPR (chest compressions and ventilations) until the AED pads are applied and the AED is turned on and ready to analyze unless you are the only rescuer able to operate the AED and perform CPR.*
- *If there are multiple responders, they should:*
  - *Hover with their hands a few inches above the chest during the AED analysis and the shock (if indicated) to minimize interruptions to resuming CPR.*
  - *Resume compressions immediately following the delivery of a shock or after the AED determines that no shock is advised.*
  - *Switch responsibility for compressions each time the AED performs an analysis to limit their fatigue.*
  - *Do not wait for the AED to deliver a "resume CPR" prompt before resuming compressions.*

Perform a Secondary Assessment

If you are certain that the victim does not have any immediate life-threatening conditions, you should perform a secondary assessment to identify any additional problems. The secondary assessment provides additional information about injuries or conditions that may require care and could become life-threatening if not addressed. (See Chapter 10 for more information on injuries, illnesses and performing a secondary assessment.)

CALL FIRST OR CARE FIRST?

If you are alone when responding to someone who is ill, you must decide whether to Call First or Care First.

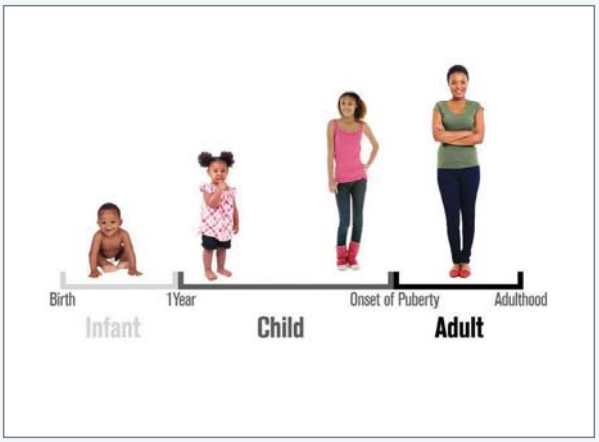
If you are ALONE:

- **Call First** (call 9-1-1 or the designated emergency number before providing care) for:
  - Any adult or child about 12 years of age or older who is unresponsive.
  - A child or an infant whom you witnessed suddenly collapse.
  - An unresponsive child or infant known to have heart problems.
- **Care First** (provide 2 minutes of care, and then call 9-1-1 or the designated emergency number) for:
  - An unresponsive child (younger than about age 12) whom you did not see collapse.
  - Any victim suspected of drowning.

Call First situations are likely to be cardiac emergencies in which time is a critical factor. In Care First situations, the conditions often are related to breathing emergencies.

WHEN IS A CHILD A CHILD?

In most instances, determining whether to treat a child as a child or as an adult has been based on age. Typically, an adult is defined as someone about the age of 12 (adolescent) or older; someone between the ages of 1 and 12 has been considered to be a child for CPR care; and an infant is someone younger than 1 year of age. However, for the purposes of this course, a child is defined as the age of 1 to the onset of puberty, as evidenced by breast development in girls and underarm hair development in boys. An infant is considered under the age of 1 year.



Secondary assessment

In the secondary assessment we will be checking for non-life-threatening condition, but if we don't take care of them, they may develop into life threatening. In all of the following situations, before we start providing care, we have to obtain consent from the person (or the parent), activate the EAP and put our gloves on.

Take a brief history using SAMPLE:

Signs and symptoms: • What happened? • Where do you feel any pain or discomfort? If so, can you describe it? • Do you have any numbness or loss of sensation?

Allergies: • Do you have any allergies to medications or food? If so, what type of reactions have you experienced when you were exposed?

Medications: • Do you have any medical conditions or are you taking any medications? If so, what conditions do you have or what medications are you taking? • Have you taken any medications in the past 12 hours?

Pertinent past medical history: • Have you recently been ill? • Do you have any medical conditions? • Have you experienced any recent falls, accidents or blows to the head? • Have you had surgery, been in a traumatic accident or had a medical emergency?

Last oral intake: • When did you last eat or drink? • What did you last eat or drink and how much?

Events leading up to the incident: • What were you doing before the incident occurred? • What were you doing when the incident occurred?

Look for a medical ID tag, necklace or bracelet on the victim's wrist, neck or ankle which can show us the victim's condition.

Signs and Symptoms of Sudden Illness:

Many sudden illnesses have similar signs and symptoms.

These include: • Changes in LOC • Nausea or vomiting • Difficulty speaking or slurred speech • Numbness or weakness • Loss of vision or blurred vision • Changes in breathing; the person may have trouble breathing or may not be breathing normally • Changes in skin color (pale, ashen or flushed skin) • Sweating • Persistent pressure or pain • Diarrhea • Paralysis or an inability to move • Severe headache

General Care Steps for Sudden Illness:

• Care for any life-threatening conditions first. • Monitor the victim's condition and watch for changes in LOC. • Keep the victim comfortable and reassure them. • Keep the victim from getting chilled or

overheated. • Do not give the victim anything to eat or drink, unless the victim is awake, able to swallow and follow simple commands and intake is indicated based on the treatment recommendations. • Care for any other problems that develop, such as vomiting.

Heart Attack:

Signs and symptoms: Chest pain (spreading to the arm, jaw or back), holding the chest, problems with breathing, pale/white face, sweating on the face

Care steps: Call 911, ask the person to stop any activity and to sit in the shade, loosen tight or uncomfortable clothing, ask if they have medications? Ask if they are allergic to aspirin and if no, give the person two pills of aspirin.

Stroke:

Signs and symptoms: it's affecting the brain, a blood vessel bringing blood to the brain is stuck, which will result in paralysis and inability to move 1 side of the body.

How to make sure that someone has a stroke?

F – Face – ask the person "Can you smile for me, please"

A – Arms – ask the person "Can you rise your hands in front of your body like this"

S – Speech – ask the person to repeat a simple sentence li "The sky is blue", "The grass is Green", "Today is a nice day"

T- Time – to call 911 and to check the time when the stroke started

Diabetic emergency:

The person will feel ill because there is either too much or too little sugar in their blood. The person may tell us that they have diabetic problems or we can learn it from their medication ID tag. Give 15 to 20 grams of sugar in the form of glucose tablets to the victim. If glucose tablets are not available we can offer juice, soda, milk or sugar with water.

If the person feels better we don't need to call 911, but if there is no improvement, we don't have any type of sugar or the person is about to lose consciousness we must CALL 911

Seizures on the ground (epilepsy)

Always call 911 for some who has a seizure on the ground, the only exception is when the person told us that it's normal for them to have seizures and also come back to consciousness within 2-3 minutes.

Than we remove the nearby objects so the person won't hurt themselves, we can put something soft under the head (t-shirt or towel)

After the seizure is over we turn the victim on their side to allow the fluids from the mouth to drain, after we bring them again on their back we perform primary assessment.

Seizures in the Water:

Point someone and ask them to call 911.

Enter the water, get to the victim, keep their body away from the pool edge and their face – above the water

After the seizure is over remove the person from the water and perform Primary Assessment.

Nose bleeding: Ask the person to lean slightly forward, to pinch the nose, put something cold on the back on the neck or on their forehead.

Severe Bleeding: apply pressure on the wound with gauze pad than wrap it around with a rolling bandage, than make a knot on top of the wound. If the bleeding doesn't stop – repeat the procedure and if needed call 911.

Burns: the first step is to remove the person from the source of the burn, than to cool down the area with large amounts of cold water, than we put a cream to heal the wound and we can bandage gently.

Insect stings: Insect stings are painful. They can be fatal for people who have severe allergic reactions and may result in a breathing emergency. If someone is having breathing emergency summon EMS.

To care for an insect sting: Remove the stinger if it is still present. Scrape it away from the skin with the plastic card; Wash the wound with soap and water, cover the site and keep it clean; Apply a cold pack to the site to reduce pain and swelling;cWatch the victim for signals of an allergic reaction; Care for life-threatening conditions; Monitor the victim's condition, look for changes in LOC and keep the victim comfortable.

Injuries to muscles bones and Joints: Keep the injured area in the position you found it and call 911.

If immobilization, is needed we use the RICE model:

Rest - ask the person to stop any activity.

Immobilize – we immobilize the injured area in the position we found it

Cold – apply something cold to reduce the pain

Elevate – elevate the injured area if possible and doesn't cause more pain.

If we have an open fracture/bone protruding – Call 911 and calm the person down.

Heat-related illnesses:

Heat-related illnesses are progressive conditions caused by overexposure to heat. If not recognized early they may progress to heat stroke, a life-threatening condition.

Caring for Heat-Related Illnesses:

Move the victim to cool place; Loosen tight clothing, remove clothes wet with sweat; Cool the person by spraying with cool water or applying cool, wet towels to the skin; Fan the victim; Encourage the victim to drink small amounts of a commercial sport drink, milk or water if victim is conscious and able to swallow; Summon EMS personnel if the victim refuses water, vomits or starts to lose consciousness.

Cold-related emergencies:

Hypothermia occurs when a victim's entire body cools because its ability to keep warm fails. The victim will die if not provided care.

Sign and symptoms will be glassy stare, blue lips, shivering.

To care for hypothermia: Perform primary assessment, including a pulse check for up to 30 to 45 seconds. Summon EMS personnel, gently move the victim to a warm place. Remove wet clothing. Warm the victim gradually by wrapping all exposed body surface in blankets or putting dry clothing on the victim. If the victim is alert, have him or her drink liquids that are warm, but not hot and do not contain alcohol or caffeine. Monitor the victim's condition and watch for changes in LOC.

Caring for Head, Neck and Spinal Injuries:

Head, neck and spinal injuries often are caused by high-impact/ high-risk activities. In aquatic environments, examples of these activities include:

Entering head first in shallow water; Falling from greater than a standing height; Striking a submerged or floating object; Receiving a blow to the head; Colliding with another swimmer; Striking the water with high impact, such as falling while water skiing.

You should suspect a possible head, neck or spinal injury only if the activity was high-impact or high-risk and the signs or symptoms of injury are present. The signs and symptoms of possible head, neck and spinal injury include: Unusual bumps or bruises on the head, neck or back; Heavy external bleeding of the head neck or back; Blood or other fluids in the ears or nose; Confusion or disorientation; Changes in LOC; Impaired breathing or Vision; Partial or complete loss of movement of any body part; Loss of balance; Severe pain or pressure in the head, neck or back; Back pain, weakness, tingling or loss of sensation in the hands, fingers, feet or toes; Persistent Headache.

For a victim of a suspected head, neck or spinal injury, your objective is to minimize movement of the head, neck and spine. If the victim is in the water, you must use specific rescue techniques, called head splint/over-arm head splint, to stabilize and restrict motion of the victim's head, neck and spine.

If the victim is on land and standing you have to bring a chair and ask the victim to sit on it, while waiting for 911 to arrive and take over.

If the victim is in the water and is breathing, you and at least one assisting lifeguard will try to minimize movement of the head, neck and spine during extrication, using a spinal back-boarding procedure to extricate the victim from the water. However, if the victim is in the water and is not breathing, extricate the victim from the water as quickly as possible, and then begin resuscitative care. Whether on land or in the water, higher priority is given to airway management, giving ventilations, performing CPR or controlling severe bleeding, than to spinal care.

Responsibilities of a professional Lifeguard

Primary responsibility is to prevent downing and other injuries from occurring at your aquatic facility. Lifeguards do this in many ways, such as: Monitoring activities in and near the water through patron surveillance; Preventing injuries from happening by minimizing or eliminating hazardous situations or behaviors; Enforcing facility rules and regulations and educating patrons about them; Recognizing and responding quickly and effectively to all emergencies; Administering first aid and CPR and using an automated external defibrillator (AED); Working as a team with other lifeguards, facility staff and management.

Secondary responsibilities must never interfere with patron surveillance. Secondary responsibilities can include: Testing the pool water chemistry; Assisting patrons when needed; Cleaning or performing maintenance; Completing records and reports; Performing opening duties, closing duties or facility safety checks and inspections.

Recognition of Dangerous Behaviors

A focus of preventive lifeguarding is to intervene quickly to stop potentially dangerous behaviors that could result in emergency. Examples include:

A weak swimmer or non-swimmer who is: Bobbing in or near water over their head; Crawling hand-over-hand along a pool wall; Beyond arm's reach of supervising adult, even if wearing a flotation aid; Clinging to something or struggling to grab something to stay afloat; Wearing a life jacket improperly.

A person who is: Breath-holding or swimming underwater for an extended period after hyperventilating; Participating in a high-risk, high-impact activity, such as diving; Experiencing a medical emergency.

VICTIM RECOGNITION

It is important to understand the behaviors that a victim shows when in distress or drowning. Someone in trouble may struggle at the surface for just a short time or may quickly disappear beneath the surface without any signs of distress. A swimmer may be in distress or actively struggling to

survive. Others may be passive and therefore unable to help themselves, showing little or no movement. Lifeguards should be able to recognize and respond to a drowning victim within 30 seconds.

Swimmers in Distress - A swimmer can become distressed for several reasons, such as exhaustion, cramp or sudden illness. Quick recognition is the key to preventing the distressed swimmer from becoming a drowning victim. A distressed swimmer makes little or no forward progress, and may be unable to reach safety without assistance.

Distressed swimmers may be: Able to keep their face out of the water; Able to call for help; Able to wave for help; Horizontal, vertical or diagonal, depending on what they use to support themselves; Floating, sculling or treading water.

Drowning Victim — Active

A drowning victim who is struggling: Cannot call out for help because his or her efforts are focused on getting a breath; Works to keep the face above water in an effort to breathe. A young child may be in a horizontal face-down position during the struggle because he or she is unable to lift the face out of the water; Has extended the arms to the side or front, pressing down for support; Is positioned vertically in the water with no supporting kick. A young child may tip into a horizontal face-down position; Might continue to struggle underwater once submerge; Eventually will lose consciousness and stop moving.

Drowning Victim—Passive

Some drowning victims do not struggle. They suddenly slip under water due to a medical condition or another cause, such as: A heart attack or stroke, a seizure, a head injury, a heat-related illness, Hypothermia, Hyperventilation and prolonged underwater breath-holding activities, Use of alcohol and other drugs.

These drowning victims: Might float face-down at or near the surface or might sink to the bottom; May be limp or have slight convulsive-type movements; Have no defined arm or leg action, no locomotion and no breathing; May appear to be floating, if at the surface of the water; May be face-down, on one side or face-up, if at the bottom.