APPROACHES TO ENVIRONMENTAL EMERGENCIES:

DROWNING

RESCUE, ON-SCENE MANAGEMENT & TRANSPORTATION

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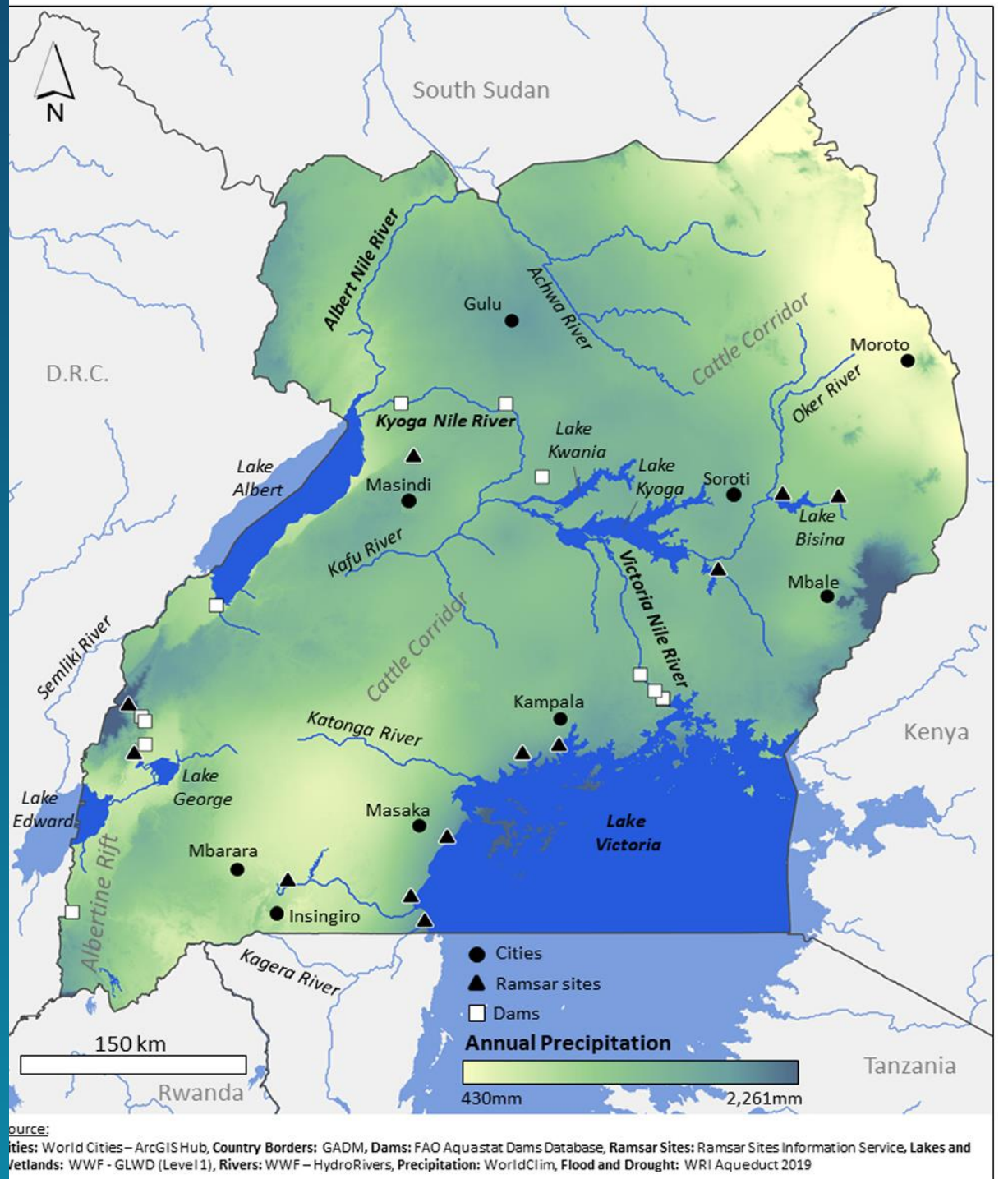
SWIM SAFE UGANDA

Why is this Relevant in Uganda?

- Uganda's vast water resources: Lakes (e.g., Victoria, Kyoga) and rivers.
- High drowning risks from fishing, transport, and flooding.
- Over 1000 drownings reported on an annual basis

Key Risk Factors in Uganda:

- Poor swimming skills.
- Lack of safety equipment (e.g., life jackets).
- Use of sea unworthy boats.

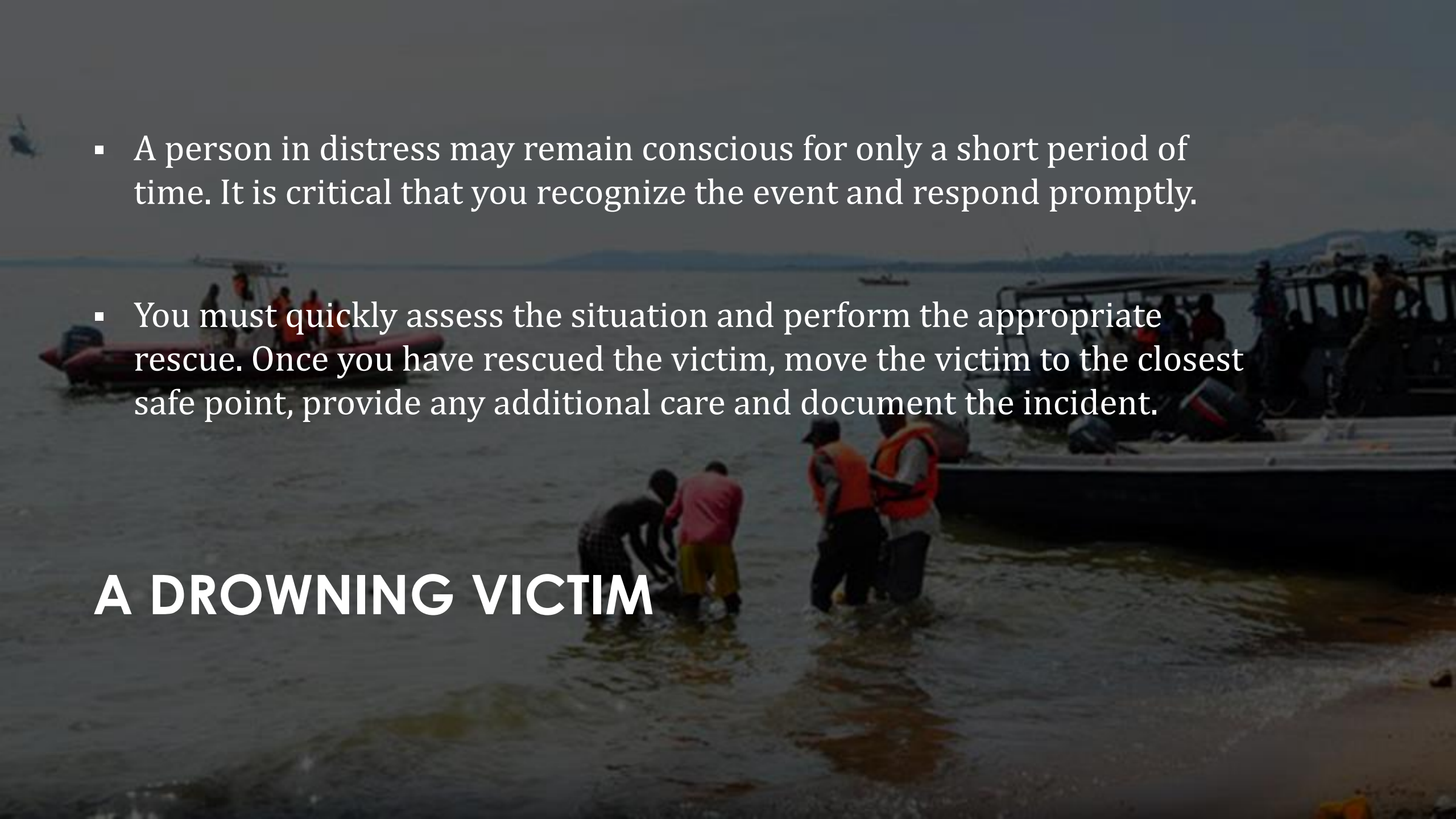


Objectives of this presentation:

- Understand some of the effective rescue techniques.
- Highlight key on-scene management strategies.
- Explain safe transportation methods

SAFETY FIRST!!!

- Avoid entering the water unless trained.
- Use rescue aids: throw lines, ropes, flotation devices, or long sticks.



- A person in distress may remain conscious for only a short period of time. It is critical that you recognize the event and respond promptly.

- You must quickly assess the situation and perform the appropriate rescue. Once you have rescued the victim, move the victim to the closest safe point, provide any additional care and document the incident.

A DROWNING VICTIM

GENERAL WATER RESCUE PROCEDURES

When making a rescue, you must also quickly determine some critical information before you reach the victim the STA principle:

- Does the victim appear to be active (responsive) or passive (unresponsive)
- What is the fastest way to get to the victim
- How do you safely enter the water
- What rescue technique will you need to use
- How many victims are involved
- Is it likely that assistance from other rescuers may be needed

GENERAL WATER RESCUE PROCEDURES

10 GENERAL STEPS TO FOLLOW WHEN MAKING A RESCUE

1. Activate your Emergency Action Plan (EAP)
2. Depress the emergency stop (E-Stop) button if your duty station has one to stop operation of the attraction such as waves at a wave pool
3. Head to the water safely
4. Quickly approach the victim
5. Perform the appropriate rescue
6. Move the victim to safety while providing any necessary care
7. Remove the victim from the water
8. Provide any additional emergency care needed
9. Complete a rescue report
10. Release the victim or transfer the victim to EMS personnel.

ASSISTS

- Sometimes you can help a victim without entering the water, while still maintaining your 10/20 Protection standard. This is known as providing an assist.

However, if you're attempting to assist the victim and are unable to maintain the 10/20 Protection standard, you must activate the EAP and make a rescue.

Extension Assists

The rescue aid can be extended to a person in distress. Extension assists can be performed if the aquatic emergency responder is within the reach of the victim. Extend the rescue aid to the victim and pull them to safety. If a rescue aid is not available, reach out and grasp the victim's arm and pull the guest to a safe point.

WATER ENTRIES

A rescue is when you must enter the water to help a person in distress. When entering the water, your personal safety is just as important as the safety of the one in distress. Choose a safe entry approach that is appropriate for the situation.

The Compact Jump -The compact jump entry is the most common entry. The compact jump entry is designed to be used in various depths of water and from various heights into the water.

High Step Entry - Suitable with a zero-depth entry area, After you reach a water depth that slows you down (e.g. above your knees), release the rescue aid and let it trail behind you as you begin your approach swim.

Ease-In Entry -The ease-in entry is used to enter shallow water or when a nearby victim has a suspected spinal injury.

STROKES

- After safely entering the water, your objective is to reach the victim as quickly as possible. With the rescue aid under your arms, approach the victim. This can be done by modifying the breaststroke or front crawl stroke so that your head remains out of the water allowing you to see the victim during your approach. In open-water situations, where the distance to the victim may be greater than in a pool, use the front crawl stroke with the rescue aid trailing behind you.

- When you get close to the victim, slow down and place the rescue aid in front of you and finish your approach. This will put you in the correct position to perform the water rescue.

- As you near the victim, communicate clearly with simple instructions, such as “Grab the AID.” The victim may change position as you approach.

- The victim on the surface may slip below the surface requiring a different rescue.

THE 5 R'S OF A RESPONSE

Rescue - Rescue the victim by using one of several techniques that enable the victim's face to be above the surface of the water

Removal - Remove (extricate) the victim from the water to the nearest safe area to exit the water.

Render aid - Render any additional care when necessary. This could include helping calm the victim who is distraught over the need to be rescued. It could be more complex, including performing CPR or rescue breathing for an unresponsive guest

Report - Complete a rescue report. Documenting rescues serves as legal supportive data and tracks statistical trends for evaluation.

Release - Once the incident is documented, the victim can be released. Depending on the situation, you may release the victim to a higher trained healthcare facility for further management.

RESPONSIVE VICTIM ON THE SURFACE

A person in distress can be in any depth of water anywhere. There are different rescues to use depending on the actions of the person as you approach. Once you identify a drowning victim, activate EAP, quickly respond and perform the appropriate rescue based on the situation.

Grab and Lift Rescue - The grab and lift rescue is used with responsive young adults in shallow water and does not require the use of a rescue aid.

Front Drive Rescue - The front drive rescue is used when a responsive victim of any size is on the surface of deep water and facing you as you approach.

Front Hug Rescue - The front hug rescue can be used when a small, responsive victim is on the surface of deep water and facing you as you approach.

Rear Hug Rescue - The rear hug rescue can be used when a responsive victim of any size is on the surface of deep water and facing away from you as you approach.

RESPONSIVE VICTIM BENEATH THE SURFACE

❖ Sometimes a victim is responsive but is beneath the surface of the water; reach from the surface, or deeper under the water requiring you to submerge to perform the rescue.

The Duck Pluck Rescue - The duck pluck rescue can be used when a responsive victim of any size is beneath the surface of the water but within arm's reach.

Deep Water Submerged Rescue - The deep water submerged rescue is used when a victim of any size is under water beyond your reach from the surface. In this case, you must submerge to reach the victim. Push the rescue aid into the victim's chest as the victim nears the surface.

CHALLENGING RESCUE SITUATIONS

Victims can be unpredictable. A victim is often frightened or disoriented and might not behave as you might expect as you make your approach. A victim may panic and try to grab you.

Aggressive victims

If you are unable to control an aggressive responsive victim, separate from the victim momentarily. The push away technique is an effective means of moving away from a victim briefly so that you can attempt another rescue or seek assistance from other rescuers.

Multiple Responsive persons in Distress

When multiple people are in distress at the same time, you may need help from other water emergency responders.

Two – Rescuer's rescue

If a person in distress is too difficult for you to rescue due to the victim's large size or aggressive behavior, you need multiple-rescuers so that you can perform the rescue.

ON-SCENE MANAGEMENT

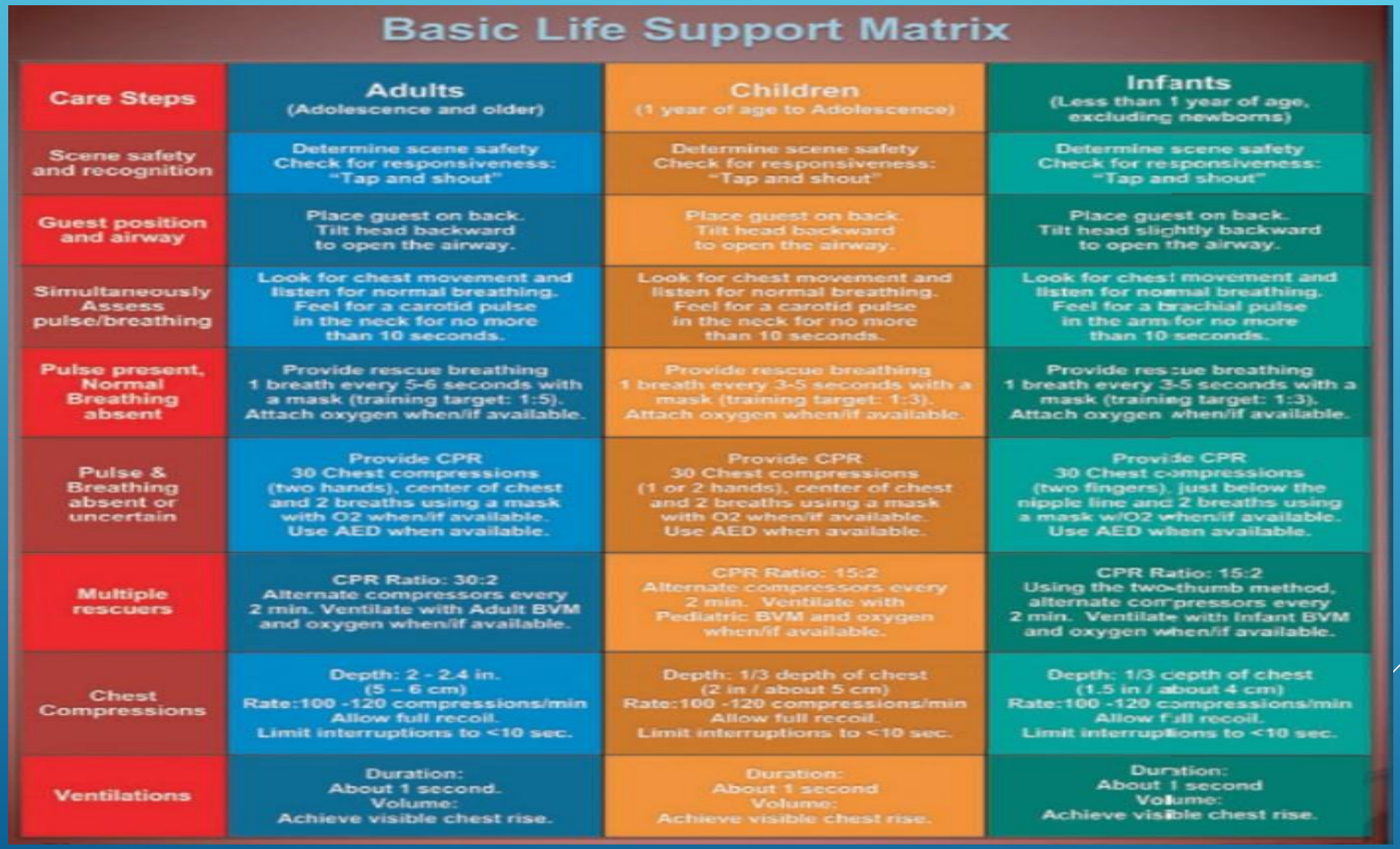
SCENE ASSESSMENT

As you approach any scene, quickly answer these key questions;

- Is the scene safe to approach? If not safe, make it safe or stay away.
- What is the possible cause of the incident? Determine if it is an injury, an illness, or something else
- Is further assistance needed? If so, activate the EAP
- Is personal protective equipment (PPE) needed?

Take any necessary caution when contact with bodily substances is likely

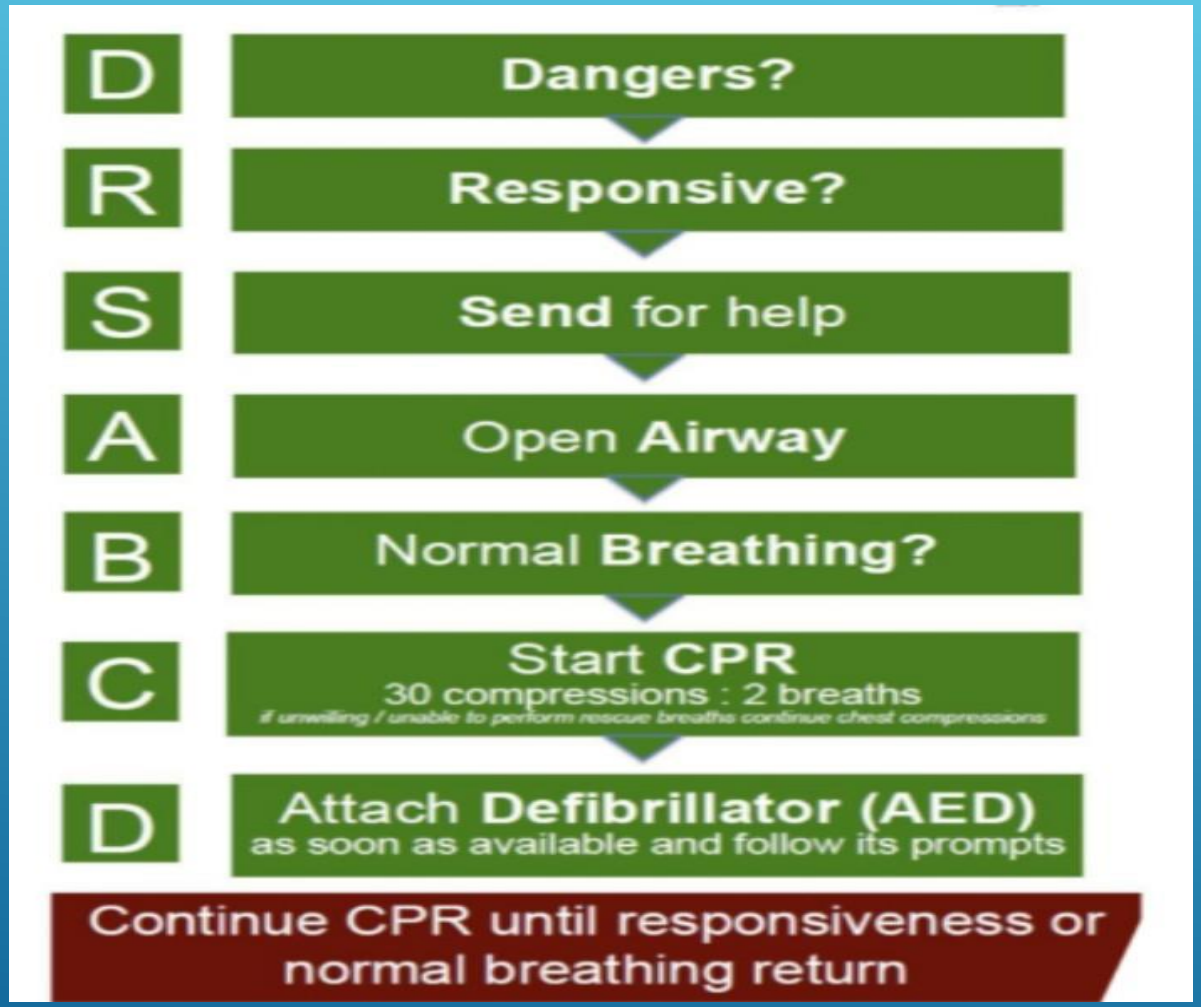
BASIC LIFE SUPPORT MATRIX



Basic Life Support Matrix

Care Steps	Adults (Adolescence and older)	Children (1 year of age to Adolescence)	Infants (Less than 1 year of age, excluding newborns)
Scene safety and recognition	Determine scene safety Check for responsiveness: "Tap and shout"	Determine scene safety Check for responsiveness: "Tap and shout"	Determine scene safety Check for responsiveness: "Tap and shout"
Guest position and airway	Place guest on back. Tilt head backward to open the airway.	Place guest on back. Tilt head backward to open the airway.	Place guest on back. Tilt head slightly backward to open the airway.
Simultaneously Assess pulse/breathing	Look for chest movement and listen for normal breathing. Feel for a carotid pulse in the neck for no more than 10 seconds.	Look for chest movement and listen for normal breathing. Feel for a carotid pulse in the neck for no more than 10 seconds.	Look for chest movement and listen for normal breathing. Feel for a brachial pulse in the arm for no more than 10 seconds.
Pulse present, Normal Breathing absent	Provide rescue breathing 1 breath every 5-6 seconds with a mask (training target: 1:5). Attach oxygen when/if available.	Provide rescue breathing 1 breath every 3-5 seconds with a mask (training target: 1:3). Attach oxygen when/if available.	Provide rescue breathing 1 breath every 3-5 seconds with a mask (training target: 1:3). Attach oxygen when/if available.
Pulse & Breathing absent or uncertain	Provide CPR 30 Chest compressions (two hands), center of chest and 2 breaths using a mask with O2 when/if available. Use AED when available.	Provide CPR 30 Chest compressions (1 or 2 hands), center of chest and 2 breaths using a mask with O2 when/if available. Use AED when available.	Provide CPR 30 Chest compressions (two fingers), just below the nipple line and 2 breaths using a mask w/O2 when/if available. Use AED when available.
Multiple rescuers	CPR Ratio: 30:2 Alternate compressors every 2 min. Ventilate with Adult BVM and oxygen when/if available.	CPR Ratio: 15:2 Alternate compressors every 2 min. Ventilate with Pediatric BVM and oxygen when/if available.	CPR Ratio: 15:2 Using the two-thumb method, alternate compressors every 2 min. Ventilate with Infant BVM and oxygen when/if available.
Chest Compressions	Depth: 2 - 2.4 in. (5 – 6 cm) Rate:100 -120 compressions/min Allow full recoil. Limit interruptions to <10 sec.	Depth: 1/3 depth of chest (2 in / about 5 cm) Rate:100 -120 compressions/min Allow full recoil. Limit interruptions to <10 sec.	Depth: 1/3 depth of chest (1.5 in / about 4 cm) Rate:100 -120 compressions/min Allow full recoil. Limit interruptions to <10 sec.
Ventilations	Duration: About 1 second. Volume: Achieve visible chest rise.	Duration: About 1 second Volume: Achieve visible chest rise.	Duration: About 1 second Volume: Achieve visible chest rise.

DRSABCD ASSESSMENT



BASIC LIFE SUPPORT PRIORITIES

There 4 general BLS care guidelines

1. Perform a primary check to assess the victim
2. Provide early cardiopulmonary resuscitation (CPR)
3. Provide early Automated External Defibrillation (AED)
4. Provide supplemental oxygen

BLS: PRIMARY (INITIAL CHECK)

Assessing a victim begins with 3 steps of the primary check to determine any immediate threat to life;

1. Check for responsiveness- tap and shout.
2. Check for normal breathing - look for chest rise, listen and feel fir breathing.
3. Check for pulse – carotid (neck) artery for adults and children or brachial (upper arm artery) for infant.

Step 2 and 3 can be simultaneously.

VOMITING IN AN UNRESPONSIVE VICTIM

If an unresponsive victim vomits, you need to protect the airway;

1. Log roll the victim into the recovery position
2. Use a finger sweep or a sanction device to remove vomit
3. Roll the victim back attempt a ventilation.
4. If the ventilation is successful, continue the care that was interrupted.

VICTIM WITH PULSE PRESENT NORMAL BREATHING ABSENT

Provide Rescue Breathing

- One breath every 5-6 seconds with a mask (target 1:5)
- Attach oxygen when/ if available

PULSE AND BREATHING ABSENT OR UNCERTAIN

Provide CPR

- 5 initial breaths (using a mask).
- 30 chest compressions (two hands), center of the chest.
- Add oxygen when/ if available

Multiple Rescuers

CPR ratio: 30:2

- Alternate compressors every 2 minutes
- Ventilate with adult BVM and oxygen when/if available.

Chest Compressions

- Depth: 2-24 in (5-6cm)
- Rate : 100-120 compressions /min
- Allow full recoil
- Limit interruptions to <10secs

Ventilation

- **Duration:** about 1 sec
- **volume:** achieve visible chest rise

TRANSPORTATION

Importance of Timely Transport:

•Prevent secondary drowning (water in lungs).

•Reduce risks of brain damage or infection.

Once EMS arrives, handle the victim to the EMS team with proper documentation and they continue with care.

Use available resources (community vehicles, boda-bodas, ambulances) if EMS is not available.

Ensure the victim is in a safe position (e.g., lying on their side if unconscious).

KEY TAKEAWAYS

Prevention is the first step in reducing drowning incidents.

Rescue and on-scene management require safety, skill, and tools.

Rapid transportation can save lives.

“You won’t die if you do not know how to play football, but you can die if you do not know how to swim”

-MOSES KALANZI