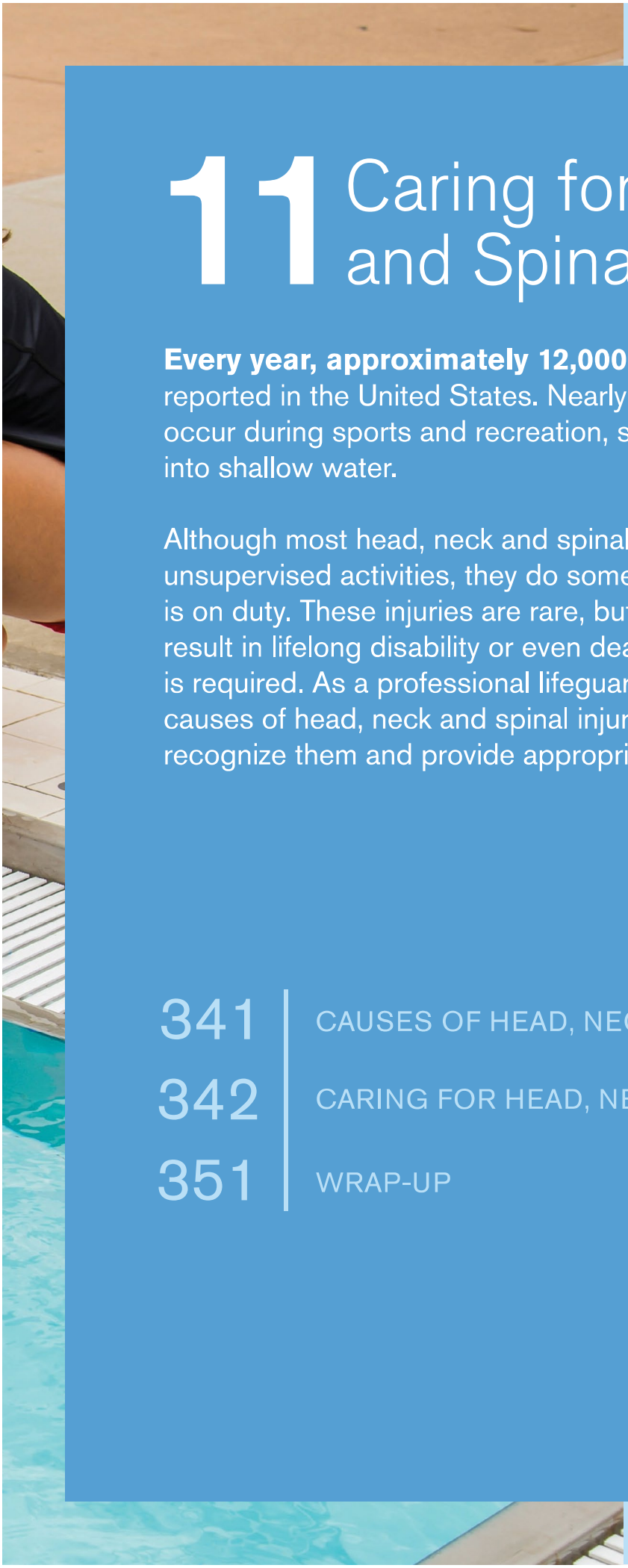


11 Caring for Head, Neck and Spinal Injuries

Every year, approximately 12,000 spinal cord injuries are reported in the United States. Nearly 8 percent of these injuries occur during sports and recreation, some from head-first entries into shallow water.

Although most head, neck and spinal injuries occur during unsupervised activities, they do sometimes happen while a lifeguard is on duty. These injuries are rare, but when they do occur, they can result in lifelong disability or even death. Prompt and effective care is required. As a professional lifeguard, you must be aware of the causes of head, neck and spinal injuries. You also must know how to recognize them and provide appropriate care.

11-1 CAUSES OF HEAD, NECK AND SPINAL INJURIES

Head, neck and spinal injuries rarely happen during supervised diving into deep water. In pools, head, neck and spinal injuries most often occur at the shallow end, in a corner or where the bottom slopes from shallow to deep water. They also occur when someone strikes a floating object, like an inner tube or person, while diving. Head, neck or spinal injuries also happen out of the water, such as when a person trips or falls on a pool deck or in a locker room.

At lakes, rivers and oceans, head, neck and spinal injuries usually occur in areas where depths change with the tide or current. At beaches, these injuries happen mainly when someone plunges head-first into shallow water or a breaking wave. These injuries also result from collisions with an underwater hazard, such as a rock, tree stump or sandbar.

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

- Entering head-first into shallow water.
- Falling from greater than a standing height.
- Entering the water from a height, such as a diving board, water slide, embankment, cliff or tower.
- 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 or surfing.

Signs and Symptoms

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 or spinal injury include:

- Unusual bumps, bruises or depressions on the head, neck or back
- Heavy external bleeding of the head, neck or back
- Bruising of the head, especially around the eyes and behind the ears
- Blood or other fluids in the ears or nose
- Confusion or disorientation
- Changes in level of consciousness
- Seizures
- Impaired breathing
- Impaired vision
- Nausea or vomiting
- Partial or complete loss of movement of any body part
- Loss of balance
- Behavior similar to that of a person under the influence of alcohol or drugs (e.g., confusion, stumbling, repeatedly asking the same questions, memory loss, nausea or vomiting, speech problems)
- Severe pain or pressure in the head, neck or back (reported by the person, or indicated by the person holding their head, neck or back)
- Back pain, weakness, tingling or loss of sensation in the hands, fingers, feet or toes
- Persistent headache

11-2 CARING FOR HEAD, NECK AND SPINAL INJURIES

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 to stabilize and restrict motion of the victim's head, neck and spine. You must also be familiar with and train using your facility's equipment. Skill sheets that describe the steps to care for head, neck and spinal injuries are located at the end of the chapter.

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 backboarding 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.

The care that you provide to a victim with an injury to the head, neck or spine depends on:

- The victim's condition, including whether they are responsive and breathing.
- The location of the victim (shallow or deep water, at the surface of the water, submerged or not in the water.)
- The availability of additional help, such as other lifeguards, bystanders, firefighters, police or emergency medical services (EMS) personnel.
- The facility's specific procedures.
- The air and water temperature.

Caring for Head, Neck and Spinal Injuries in the Water

If you suspect a head, neck or spinal injury and the victim is in the water, follow these general rescue procedures:

1. Activate the facility's emergency action plan (EAP). Facilities may have a distinct signal to begin a suspected head, neck or spine injury rescue.
2. Safely enter the water. If the victim is near a pool wall or pier, minimize water movement by using a slide-in entry rather than a compact or stride jump. If you use a running entry, slow down before reaching the victim.
3. Perform a rescue providing manual in-line stabilization Move the victim to safety. If in deep water, move to shallow water if possible.
4. Check for responsiveness and breathing.
   - If the victim is breathing, proceed with the spinal backboarding procedure to remove the victim from the water (See page 366).
   - If the victim is not breathing, immediately remove the victim from the water using the passive victim extrication technique and provide resuscitative care. Do not delay extrication from the water by strapping the victim onto the board or using the head immobilizer device.
5. Re-assess the victim's condition and provide appropriate care. Additionally:
   - Minimize shock by keeping the victim from getting chilled or overheated.
   - If the victim vomits, tilt the backboard or place the person on their side in a recovery position to help clear the vomit from the victim's mouth.

Manual In-Line Stabilization

The head splint technique is used for performing manual in-line stabilization for victims in the water (Figure 11-1). You can use this technique when the victim is face-up or face-down. The technique is performed in subtly different ways, depending on the victim's location and position in the water and can be used when the victim is in shallow or deep water and at, near or below the surface. However, regardless of the variation used, your objective should remain the same—to get the victim into a face-up position while minimizing movement of the head, neck and spine.

Vary the technique in the following ways, based on the victim's position in the water:

- If the victim is face-up, approach from the victim's side and use the over-arm head splint technique.
- If the victim is face-down, approach from the victim's side and use the head splint technique to rotate them to a face-up position. Once rotated, change to an over-arm head splint position. This position makes it easier to load a victim on the backboard for extrication from the water.
- If the victim is in shallow water, you do not need to use the rescue tube to support yourself.
- If the victim is at the surface in deep water, you may need the rescue tube to support yourself and the victim.
- If the victim is submerged, do not use the rescue tube when you are submerging and bringing the victim to the surface. Once at the surface, another lifeguard can place a rescue tube under your armpits to help support you and the victim.

Figure 11-1 | Use the head splint technique for performing manual in-line stabilization for victims in the water.

The head splint technique uses the victim's arms to help hold the victim's head in line with the body. Avoid lifting or twisting the victim when performing this skill. Do not move the victim any more than necessary. Minimize water movement by moving the victim away from crowded areas and toward the calmest water possible. Keep the victim's mouth and nose out of the water and minimize water splashing onto the victim's face.

As soon as the victim is stabilized in the head splint and is face-up in the water, immediately check the victim for responsiveness and breathing.

Fortunately, injuries to the head, neck or spine rarely occur in deep water. Should this occur, the victim often can be moved to shallow water. Lane lines or safety lines may need to be moved to clear a path to shallow water. If you cannot move the victim to shallow water, use the rescue tube under both armpits to help support yourself and the victim until the backboard arrives.

ALTERNATE METHOD FOR MANUAL IN-LINE STABILIZATION TECHNIQUE—HEAD AND CHIN SUPPORT

When caring for victims with head, neck or spinal injuries in the water, special situations may require a modification to the in-line stabilization technique used, such as when a victim has one arm. The head and chin support can be used for face-down or face-up victims who are at or near the surface in shallow water at least 3 feet deep or for a face-up victim. Be aware of the following situations:

- Do not use the head and chin support for a face-down victim in water that is less than 3 feet deep. This technique requires you to submerge and roll under the victim while maintaining in-line stabilization. It is difficult to do this in water less than 3 feet deep without risking injury to yourself or the victim.
- Do not use the rescue tube for support when performing the head and chin support on a face-down victim in deep water. This impedes your ability to turn the victim over. However, once the victim is turned face-up, another lifeguard can place a rescue tube under your armpits to help support you and the victim.

To perform the head and chin support for a face-up or face-down victim at or near the surface:

1. Approach the victim from the side.
2. With your body about shoulder depth in the water, place one forearm along the length of the victim's breastbone and the other forearm along the victim's spine.
3. Use your hands to gently hold the victim's head and neck in line with the body. Place one hand on the victim's lower jaw (Figure 11-2) and the other hand on the back of the lower head. Be careful not to place pressure on the neck or touch the front or back of the neck.

Figure 11-2 | Place one hand on the victim's lower jaw and the other hand on the back of the lower head.

4. Squeeze your forearms together, clamping the victim's chest and back. Continue to support the victim's head and neck.
   - If the victim is face-down, you must turn them face-up. Slowly move the victim forward to help lift the victim's legs. Turn the victim toward you while submerging.
   - Roll under the victim while turning the victim over. Avoid twisting the victim's body. The victim should be face-up as you surface on the other side.
5. Check for responsiveness and breathing.
   - If the victim is not breathing, immediately remove the victim from the water using an appropriate extrication method for a passive victim. Do not delay removal from the water by strapping the victim onto the backboard or using the head immobilizer device.
   - If the victim is breathing, hold the victim face-up in the water and move toward safety until the backboard arrives. In deep water, move the victim to shallow water if possible.

HEAD INJURIES

Any significant force to the head can cause an injury, ranging from bleeding to a concussion. A **concussion** is a Traumatic Brain Injury (TBI) that involves a temporary loss of brain function after a blow to the head and alters the way the brain functions. It is a very common type of head injury in many sports, including swimming. It is not always easy to tell if someone is suffering from a concussion, especially since they may or may not lose consciousness. In fact, while the effects of a concussion may occur immediately or very soon after a blow to the head, in some cases, it may be hours or even days before any changes are seen. These effects can then last for several days or even longer. Suspect a concussion if a patron shows any of the following signs and symptoms:

- Confusion, which can last from moments to several minutes
- Headache
- Repeated questions asking about what happened
- Temporary memory loss
- Brief loss of consciousness
- Nausea and vomiting
- Speech problems
- Blurred vision and/or sensitivity to light
- Balance problems

Be aware that a person in the water who receives a severe blow to the head could lose consciousness temporarily and submerge. Anyone suspected of having any head injury in or out of the water should be examined immediately by a healthcare provider.

IMMOBILIZATION EQUIPMENT FOR VICTIMS OF HEAD, NECK OR SPINAL INJURIES

The backboard (Figure 11-3) is the standard piece of rescue equipment used at aquatic facilities for immobilizing and removing a victim from the water. Backboards work best when they are equipped with:

- A chest strap to secure the victim to the board.
- A head immobilizer device that can be attached to the top, or head-end, of the board.

Backboards vary in shape, size, buoyancy, number or style of body straps and style of head immobilizer device. Every aquatic facility develops its own backboarding procedures based on the facility type, equipment, number of rescuers available and local EMS protocols. Your facility should train you on using a backboard extrication according to the facility's procedures.

Figure 11-3 | Backboard with head immobilzer

Spinal Backboarding Procedure

After stabilizing the victim's head, neck and spine, you and at least one other lifeguard should place and secure the victim on a backboard. Using a backboard helps to restrict the victim's motion during the process of removing them from the water. A minimum of two lifeguards is needed to place and secure a victim on a backboard, but additional lifeguards or bystanders should also help, if available.

An assisting lifeguard remains on the deck and slides the backboard into the water, resting it on the pool edge. Then, the rescuing lifeguard guides the victim onto the backboard. The lifeguard secures the victim to the backboard with a single chest strap and a head immobilizer device. Throughout the spinal backboarding process (Figure 11-4), lifeguards must maintain manual in-line stabilization of the victim's head and neck. To aid in floatation of the backboard, a rescue tube can be placed under the board if needed (Figure 11-5). Additional lifeguards also can assist in keeping the board afloat.

Spinal Backboarding Procedure—Alternative Procedure for Facilities with High Edges

Some facilities have pools with high edges that require an alternate method for spinal backboarding. When using this method, two rescuers must enter the water to load the victim onto the backboard. While in the water, lifeguards secure the victim to the backboard with a single chest strap and a head immobilizer device (Figure 11-5).

Communication between lifeguards is critical during the spinal backboarding procedure. Communication with the victim also is important. Let the victim know what you are doing and reassure them along the way. Tell the victim not to nod or shake their head but instead to say "yes" or "no" in answer to your questions.

Figure 11-4 | Maintain manual in-line stabilization of the victim's head and neck throughout the spinal backboarding process.

Figure 11-5 | Some facilities have pools with high edges.

Team Spinal Backboarding

Spinal backboarding and extrication from the water can be a challenge in deep or shallow water. Having other assisting rescuers work with you is helpful and may be necessary to ensure your safety as well as that of the victim. Working together as a team, other lifeguards can help by:

- Helping to submerge, position and stabilize the backboard from the deck.
- Supporting the in-water rescuer in deep water.
- Supporting the backboard while the chest strap and head immobilizer are secured.
- Securing the chest strap or the head immobilizer device.
- Communicating with and reassuring the victim.
- Guiding the backboard as it is being removed from the water.
- Removing the backboard from the water.
- Providing care after the victim has been removed from the water.

Additional lifeguards should be able to arrive at the scene, identify what assistance is needed and begin helping.

Spinal Backboarding Procedure Using the Head and Chin Support

When using the head and chin support as the stabilization technique, modify the backboarding procedure in the following ways:

- While the rescuing lifeguard guides the victim onto the backboard, they carefully remove their arm from beneath the victim and place it under the backboard while the other hand and arm remain on the victim's chin and chest.
- The assisting responder moves to the victim's head and places the rescue tube under the head of the backboard to aid in floatation of the board.
- The additional rescuer then supports the backboard with their forearms and stabilizes the victim's head by placing their hands along side of the victim's head. The primary rescuer can now release.

Extrication from the Water

Once the victim is secured onto the backboard, you should remove the victim from the water. Your technique will vary depending on the characteristics of your exit point (e.g., shallow or deep water, speed slide or sloping waterfront entry).

After the victim is out of the water, assess their condition using the primary assessment and provide the appropriate care. Place a towel or blanket on the victim to keep them warm if needed.

Use the following skills to secure a victim suspected of having a spinal injury to a backboard and extricate them from the water:

- **Spinal Backboarding Procedures**
- **Spinal Backboarding Procedure—High Edges**
- **Spinal Backboarding Procedure—Speed Slide**

Special Situations

In-line stabilization and backboarding can be more difficult to perform in some waterpark attractions and waterfront facilities that have extremely shallow water, moving water or confined spaces. Caring for a victim of a head, neck or spinal injury in these situations requires modification of the techniques for in-line stabilization and extrication from the water. During orientation and in-service trainings, your facility's management should provide information and skills practice for in-line stabilization and backboarding procedures used at the facility for its specific attractions and environments. These trainings should include emergency shut-off procedures to stop water flow and movement.

Extrication from Extremely Shallow Water

Many facilities have extremely shallow water, such as zero-depth pools, wave pools and sloping beaches. To remove a victim from a zero-depth or sloping entry, have sufficient lifeguards on each side of the backboard to support the victim's weight. After the victim is secured to the backboard:

- After reaching the zero-depth entry, the lifeguards slightly lift the head end of the backboard, carefully pulling the backboard and victim out of the water.
- Gently lower the backboard and the victim to the ground once out of the water, using proper lifting techniques to prevent injuring yourself.

Moving Water

You may need to modify the way you care for a person with a head, neck or spinal injury if waves or currents are moving the water. In water with waves, move the victim to calmer water, if possible. At a waterfront, a pier or raft may break or block the waves. If there is no barrier from the waves, have other rescuers form a "wall" with their bodies to block the waves. At a wave pool, stop the waves by pushing the emergency stop (E-stop) button. Remember, even though the button has been pushed, residual wave action will continue for a short time.

Rivers, Streams and Winding River Attractions

A special problem in rivers, streams and winding rivers at waterparks is that the current can pull or move the victim. At waterparks, the facility's EAP may include signaling another lifeguard to stop the flow of water in a winding river by pushing the E-stop button. In all cases:

- Ask other lifeguards or patrons for help in keeping objects and people from floating into the rescuer while they are supporting the victim.
- Do not let the current press sideways on the victim or force the victim into a wall. This would twist the victim's body. Keep the victim's head pointed upstream into the current. This position also reduces the splashing of water on the victim's face.
- Once the in-line stabilization technique is performed and the victim is turned face-up, slowly turn the victim so that the current pulls their legs around to point downstream.
- Place the victim on a backboard by following the facility's spinal backboarding procedures.

Catch Pools

The water in a catch pool moves with more force than in a winding river and can make it difficult to hold a victim still.

- If a person is suspected of having a head, neck or spinal injury in a catch pool, immediately signal other lifeguards to stop sending riders.
- If possible, someone should stop the flow of water by pushing the emergency stop button.
- Once in-line stabilization is achieved and the victim is turned face-up, move the victim to the calmest water in the catch pool if water is still flowing (Figure 11-6). If there is only one slide, the calmest water is usually at the center of the catch pool. If several slides empty into the same catch pool, calmer water usually is between two slides (Figure 11-7, A—B).
- Place the victim on a backboard, following the facility's spinal backboarding procedures.

Speed Slides

A head, neck or spinal injury may happen on a speed slide if the patron twists or turns their body the wrong way, strikes their head on the side of the slide, or sits up and tumbles down off the slide. The narrow space of a speed slide is problematic for rescuing a victim with a head, neck or spinal injury. Backboarding can be a challenge because the water in the slide is only 2 or 3 inches deep and does not help to support the victim.

Figure 11-6 | Move the victim to the calmest water in the catch pool once manual in-line stabilization is achieved.

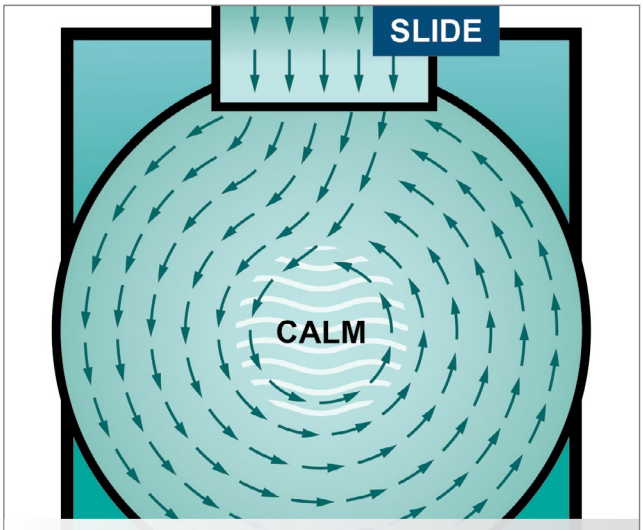


Figure 11-7A | Catch pool with only one slide

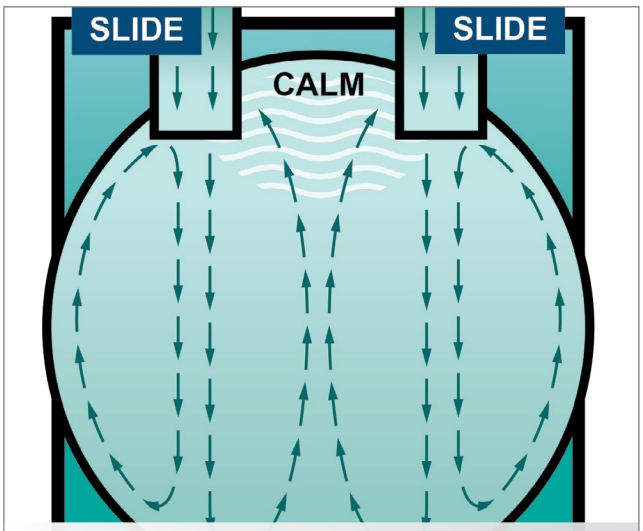


Figure 11-7B | Catch pool with two slides

Caring for Head, Neck and Spinal Injuries on Land

If you suspect that a victim on land has a head, neck or spinal injury, activate the facility's EAP and follow the general procedures for injury or sudden illness on land:

- Size up the scene.
- Perform a primary assessment.
- Summon EMS personnel.
- Perform a secondary assessment.
- Provide the appropriate care.

Use appropriate personal protective equipment, such as disposable gloves and breathing barriers.

Approach the victim from the front so that they can see you without turning the head. Tell the victim not to nod or shake their head but instead by responding verbally to your questions, such as by saying "yes" or "no."

Caring for a Non-Standing Victim

If you suspect that a victim on land has a head, neck or spinal injury, have the victim remain in the position in which they were found and protect them from further injury from others until EMS personnel assume control (Figure 11-8). Do not attempt to align the head and neck, unless the victim is not breathing and you cannot maintain an open airway. Gently position the victim's head in line with the body only if you cannot maintain an open airway.

Figure 11-8 | If a non-standing victim has a suspected head, neck or spinal injury, keep them positioned as they were found until EMS personnel assume control.

Caring for a Standing Victim

If you encounter a patron who is standing but has a suspected head, neck or spinal injury, activate your facility EAP, have someone bring a chair and have the victim sit so they don't fall. Protect them from further injury and comfort them until more advanced help arrives. Minimize movement of the victim's head by telling the victim to remain still and avoid turning or twisting their head, neck or back. Most victims will self-splint by limiting their own motion if pain exists.

If the victim's condition becomes unstable (e.g., the victim complains of dizziness, has a potential life-threatening condition or begins to lose consciousness), and a chair is not available, slowly lower the victim to the ground with the assistance of other lifeguards. Try to limit excessive movement of the head, neck or spine while the victim is being lowered.

Blog Post #5 | End of Summer

August 27th 9:00 pm

I can't believe our season is coming to an end!

I spoke with Emma earlier this month about how I can gain more management experience and she suggested I apply for the head lifeguard position. I submitted my application, interviewed and guess what – I got the job! To prepare for my new position, I registered for the American Red Cross Lifeguard Management online course. I'm really excited to learn more about management and emergency action planning. As head lifeguard, I will be responsible for planning in-service training and evaluations, which means I'll get to work with Emma and our Red Cross examiner to help keep our safety team trained and prepared. I can't wait until next summer!

11-3 WRAP-UP

Although they are rare, head, neck and spinal injuries do occur at aquatic facilities. They can cause lifelong disability or even death. Prompt, effective care is needed. As a professional lifeguard, you must be able to recognize and care for victims with head, neck or spinal injuries. To decide whether an injury could be serious, consider both its cause and the signs and symptoms. If you suspect that a victim in the water has a head, neck or spinal injury, make sure to summon EMS personnel immediately. Minimize movement by using in-line stabilization. Secure the victim to a backboard to restrict motion of the head, neck and spine. When the victim is out of the water, provide the appropriate care until EMS personnel arrive and assume control of the victim's care.

BENCHMARKS FOR LIFEGUARDS

Lifeguards must provide appropriate care and effective spinal management for victim's of a suspected head, neck or spinal injury. Lifeguards should:

- Tend to life-threatening situations via an appropriate assessment.
- Use rescue techniques that are appropriate and effective for the situation (high risk, high impact).
- Prioritize the safety of victim, yourself and others during all parts of the rescue.
- Handle rescues with a sense of urgency.

BENCHMARKS FOR LIFEGUARDING OPERATIONS:

Lifeguard managers should ensure that:

- Lifeguards practice the appropriate spinal backboarding technique(s) at a variety of locations within your facility where spinal injuries are most likely to occur.

Chapter 11 Review

1. Head, neck or spinal injuries often are caused by high-impact/high-risk activities. List three examples of high-impact/high-risk activities in an aquatic environment.

1)
2)
3)

2. Place the general rescue procedures for caring for a head, neck or spinal injury in the water in order:

Check for responsiveness and breathing.	
Activate the EAP.	
Perform a rescue providing manual in-line stabilization.	
Re-assess the victim's condition and provide appropriate care.	
Safely enter the water.	
Remove the victim from the water using the appropriate spinal backboarding procedure.	

Chapter 11 Review

3. Fill in the blank. The _____ technique is used for performing manual in-line stabilization for victims in the water.

4. Backboards are a standard piece of rescue equipment used at aquatic facilities for immobilizing and removing the victim from the water. Backboards work best when they are equipped with:

1)

2)

5. You enter the water to rescue a victim with a suspected spinal injury. You determine that the victim is not breathing. What should you do next?

A | Remove the victim from the water using the passive victim extrication technique.

B | Remove the victim from the water using the spinal backboarding procedure.

C | Remove the victim water using a modified spinal backboarding procedure.

D | Delay removal from the water and provide 2 minutes of in-water ventilations.

6. The following statements describe appropriate rescue techniques for a victim with a suspected spinal injury, EXCEPT:

A | If the victim is in shallow water, you do not need to use a rescue tube to support yourself.

B | If the victim is submerged, you should not use the rescue tube when submerging and bringing the victim to the surface.

C | If the victim is small and is in shallow water, you do not need to use a backboard to extricate the victim.

D | If the victim is at the surface in deep water, you may need a rescue tube to support yourself and the victim.

Chapter 11 Review

7. When rescuing a victim of a suspected head, neck or spinal injury using the spinal backboarding procedure, communication with the victim is important. What should lifeguards tell the victim?

8. Describe four ways that additional lifeguards can help during spinal backboarding and extrication from the water.

1)

2)

3)

4)

Chapter 11 Review

ADDITIONAL REVIEW QUESTIONS FOR WATERFRONT LIFEGUARDS:

1. Special considerations for spinal injuries at a facility with a beach or other zero-depth entry may include:

A | Injury from board diving and extrication from deep water onto a pier high above the water.

B | Injury from exiting a slide and dealing with current in a catch pool.

C | Injury from plunging during a running entry, in-line stabilization and extrication from extremely shallow water.

D | Injury from fall from play structure, dealing with victim's life jacket during stabilization and extrication.

2. How should lifeguards extricate a suspected spinal injury victim who is secured to a backboard from a zero-depth or sloping entry waterfront?

Chapter 11 Review

ADDITIONAL REVIEW QUESTIONS FOR WATERPARK & AQUATIC ATTRACTION LIFEGUARDS:

1. How should lifeguards extricate a suspected spinal injury victim who is secured to a backboard from a zero-depth entry wave pool?

2. When rescuing a suspected head, neck or spinal injury victim from a winding river or other moving water attraction, moving water and objects in the water can pull or move the victim. What should be done to help minimize movement and protect the victim?

Chapter 11 Review

ADDITIONAL REVIEW QUESTIONS FOR WATERPARK & AQUATIC ATTRACTION LIFEGUARDS:

3. What actions should lifeguards take when responding to a victim with a suspected head, neck or spinal injury in a catch pool?

4. What challenges might you encounter when responding to a head, neck or spinal injury in a waterpark? Consider different attractions such as a wave pool, winding river, speed slide, etc.

HEAD SPLINT

Face-Up Victim at or Near the Surface

1. Approach the victim from the side.
   - In deep water, use the rescue tube under both of your arms for support.

2. Grasp the victim's arms midway between their shoulder and elbow. Grasp the victim's right arm with your left hand and the victim's left arm with your right hand. Gently move the victim's arms up alongside the head.

3. Slowly and carefully squeeze the victim's arms against their head to help hold the head in line with the body. Do not move the victim any more than necessary.

4. If the victim is unresponsive, quickly look, listen and feel to check for breathing.
   - If the victim is not breathing, immediately remove the victim from the water using the passive victim extrication method and provide resuscitative care. Do not delay removing the victim from the water by using the spinal backboarding procedure.
   - If the victim is breathing, hold the victim's head in line with the body and move toward safety until the backboard arrives. In deep water, move the victim to shallow water, if possible.

5. Continue to check for breathing. If at any time the victim stops breathing, immediately remove the victim from the water then provide appropriate care.

HEAD SPLINT

Face-Down Victim at or Near the Surface

1. Approach the victim from the side.
   - In deep water, use the rescue tube under both of your arms for support.

2. Grasp the victim's arms midway between the shoulder and elbow. Grasp the victim's right arm with your right hand and the victim's left arm with your left hand.

3. Squeeze the victim's arms against their head to help hold the head in line with the body.

4. Glide the victim slowly forward.
   - Continue moving slowly and turn the victim until they are face-up. To do this, push the victim's arm that is closest to you under the water while pulling the victim's other arm across the surface toward you.

5. If the victim is unresponsive, quickly look, listen and feel to check for breathing.
   - If the victim is not breathing, immediately remove the victim from the water using the passive victim extrication method and provide resuscitative care. Do not delay removal from the water by using the spinal backboarding procedure.
   - If the victim is breathing, hold the victim's head in line with the body and move toward safety until the backboard arrives. In deep water, move the victim to shallow water, if possible.

HEAD SPLINT

Face-Down Victim at or Near the Surface *continued*

6. Switch to an overarm head splint position. Position the victim's head in the crook of your arm, with the head in line with the body.
   - To switch to an overarm head splint:
     - Apply firm pressure with your outside hand to pull the victim toward your chest (hug them against your chest).
     - Release your hand that is holding the arm against your chest and reach over the victim and grab the victim's outside arm, placing it next to your other hand.
     - Release your hand that is under the victim and move it to the victim's arm that is against yout chest and continue to apply pressure.

7. Continue to check for breathing. If at any time the victim stops breathing, immediately remove the victim from the water then provide appropriate care.

HEAD SPLINT

Submerged Victim

1. Approach the victim from the side. In deep water, release the rescue tube if the victim is more than an arm's reach beneath the surface.

2. Grasp the victim's arms midway between the shoulder and elbow.Grasp the victim's right arm with your right hand and the victim's left arm with your left hand. Gently move the victim's arms up alongside the head.

3. Squeeze the victim's arms against their head to help hold the head in line with the body.

4. Turn the victim face-up while bringing the victim to the surface at an angle. To turn the victim face-up, push the victim's arm that is closest to you down and away from you while pulling the victim's other arm across the surface toward you. The victim should be face-up just before reaching the surface or at the surface.

5. If the victim is unresponsive, quickly look, listen and feel to check for breathing.
   - If the victim is not breathing, immediately remove the victim from the water using a technique, such as the passive victim extrication method, and provide resuscitative care. Do not delay removal from the water by strapping the victim in or using the head immobilizer device.
   - If the victim is breathing, hold the victim with the head in line with the body and move toward safety until the backboard arrives. In deep water, move the victim to shallow water, if possible.

HEAD SPLINT

Submerged Victim *continued*

6. Switch to an over-arm head splint position Position the victim's head close to the crook of your arm with the head in line with the body. Another lifeguard can place a rescue tube under your armpits to help support you and the victim.
   - To switch to an overarm head splint:
     - Apply firm pressure with your outside hand to pull the victim toward your chest (hug them against your chest).
     - Release your hand that is holding the arm against your chest and reach over the victim and grab the victim's outside arm, placing it next to your other hand.
     - Release your hand that is under the victim and move it to the victim's arm that is against your chest and continue to apply pressure.

7. Continue to check for breathing. If at any time the victim stops breathing, immediately remove the victim from the water, then provide appropriate care.

HEAD SPLINT

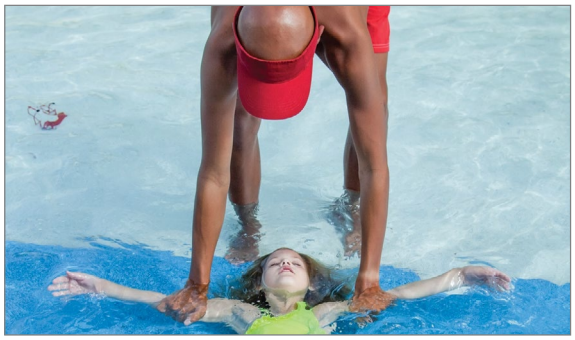
Face-Up in Extremely Shallow Water

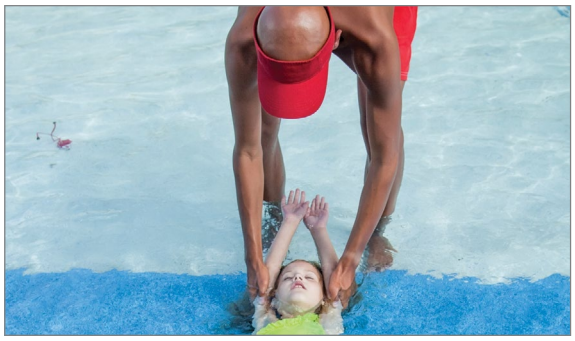
1. Approach the victim's head from behind. Grasp their right arm with your right hand and their left arm with your left hand, trapping the victim's head between their arms.

2. Gently move the victim's arms up alongside their head.

3. Squeeze the victim's arms against their head to help hold the head in line with the body. Remain positioned above and behind the victim's head.

4. If the victim is unresponsive, quickly look, listen and feel to check for breathing.
   - If the victim is not breathing, immediately remove the victim from the water and give the appropriate care.
   - If the victim is breathing, hold the victim in this position. Place a towel or blanket on the victim to keep them from getting chilled.





Note: If you are unable to keep the victim from getting chilled and there are enough assisting lifeguards, follow the care steps for skill sheet, Spinal Backboarding Procedure—Speed Slide.

HEAD SPLINT

Face-Down in Extremely Shallow Water

1. Approach the victim's head from the side. Grasp the victim's right arm with your right hand and the victim's left arm with your left hand, trapping the victim's head between their arms.

2. After the victim's head is trapped between their arms, begin to roll the victim toward you.

3. While rolling the victim, step from the victim's side toward the victim's head and begin to turn the victim face-up.

4. Lower your arm on the victim's side that is closest to you so that the victim's arms go over the top of your arm as you step toward the victim's head. Maintain arm pressure against the victim's head, since your hand rotates during this maneuver. You are now positioned above and behind the victim's head.

5. If the victim is unresponsive, quickly look, listen and feel to check for breathing.
   - If the victim is not breathing, immediately remove the victim from the water and give the appropriate care.
   - If the victim is breathing, hold the victim in this position. Place a towel or blanket on the victim to keep them from getting chilled.

6. Continue to check for breathing. If at any time the victim stops breathing, immediately remove the victim from the water then provide appropriate care.

Note: If you are unable to keep the victim from getting chilled and there are enough assisting lifeguards, follow the care steps for skill sheet, Spinal Backboarding Procedure—Speed Slide.

SPINAL BACKBOARDING AND EXTRICATION

Spinal Backboarding Procedure

1. The rescuing lifeguard provides in-line stabilization using the head splint technique and swims with the victim toward the side of the pool.
   - Rotate the victim to a face-up position if necessary.
   - Use the overarm head splint technique to maintain in-line stabilization before reaching the side of the pool.

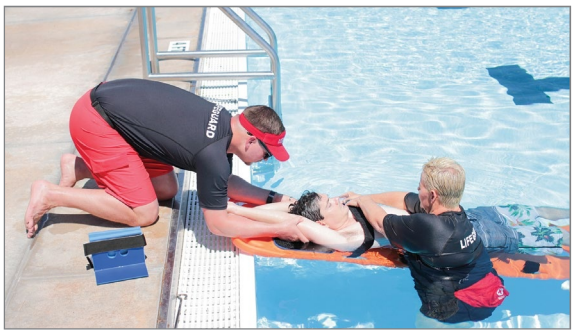
2. The assisting responder(s) on deck brings the backboard to the edge of the water and removes the head immobilizer, placing it within reaching distance.

3. The assisting responder(s) on deck places the board at an angle in the water, submerging the head space of the board if possible.

4. The rescuing lifeguard now approaches the board and moves to the side of it. The rescuing lifeguard then places one foot (steps on) the end of the backboard to hold it down.

5. The rescuing lifeguard places the victim on the center of the backboard with the head on the designated head space.

6. With the head of the backboard resting on the pool edge, the assisting responder stabilizes the board by pressing down on it with both elbows and stabilizes the victim by placing both hands on the victims arms and applying pressure, using the head splint. The rescuing lifeguard can release the arms.
   - A rescue tube may be quickly placed under the foot end of the board, if needed for support.



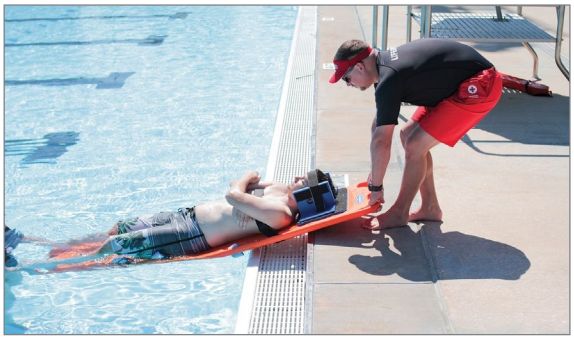
Spinal Backboarding Procedure *continued*

7. The rescuing lifeguard secures one strap across the victim's chest, under the armpits, and then stabilizes the victim by placing one hand and arm on the victim's chin and chest and the other hand and arm under the backboard. The assisting responder then releases the victim's arms and lowers the victim's arms down and secures the victim's head to the backboard using a head immobilizer and strap across the forehead.
   - The rescuers should place the victim's arms on the victim's torso to prevent discomfort or injury during extrication.

8. The rescuing lifeguard moves to the foot end of the board while the assisting responder holds the backboard at the head of the board from the pool deck.

9. The assisting responder lifts the head of the backboard so the runners are on the deck.

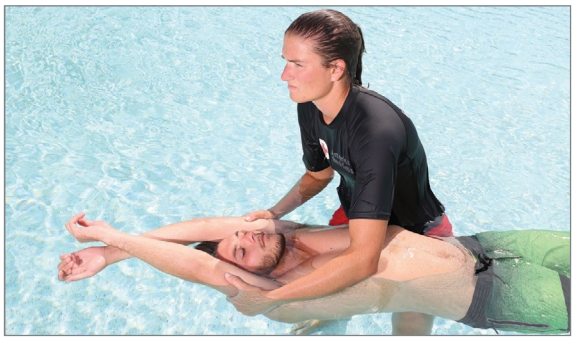
10. Working together, the lifeguards pull and push the backboard onto the deck, then begin to assess the victim's condition and provide the appropriate care.



SPINAL BACKBOARDING AND EXTRICATION

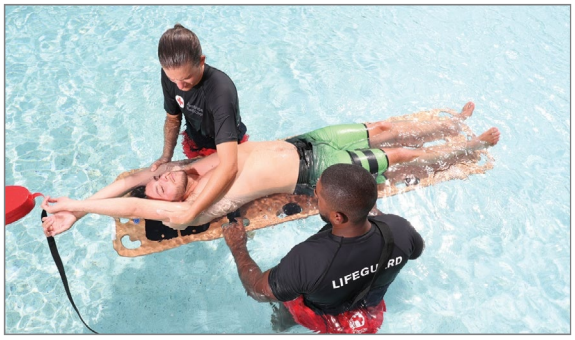
Spinal Backboarding Procedure—High Edges

1. The rescuing lifeguard provides in-line stabilization using the head splint technique and swims with the victim toward the side of the pool.
   - Rotate the victim to a face-up position if necessary.
   - Use the overarm head splint technique to maintain in-line stabilization before reaching the side of the pool.



2. The assisting responder(s) on deck brings the backboard to the edge of the water and removes the head immobilizer, placing it within reaching distance.

3. The assisting responder enters the water, submerges the backboard and positions the board under the victim so that it extends slightly beyond the victim's head. The victim's head should be centered on the backboard's head space.



4. Once the backboard is in place, the assisting rescuer places a rescue tube under the head end of the backboard for support and then the assisting responder maintains stabilization of the victim's head by placing both hands on the victims arms and applying pressure, using the head splint technique. The rescuing lifeguard can release the arms.

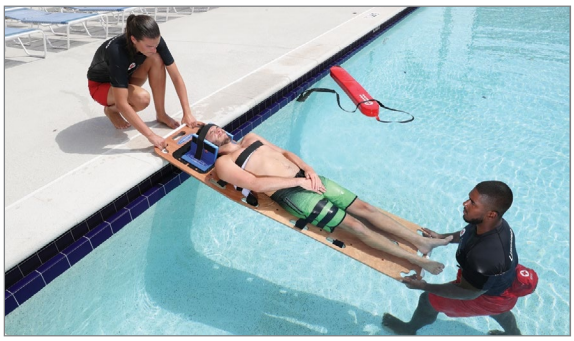
5. The rescuing lifeguard secures the victim to the backboard by securing the chest strap high across the victim's chest and under the victim's armpits. The rescuing lifeguard then stabilizes the victim by placing one hand and arm on the victim's chin and chest and the other hand and arm under the backboard.

Spinal Backboarding Procedure—High Edges *continued*

6. The assisting responder then releases the victim's arms and lowers the victim's arms down and secures the victim's head to the backboard using a head immobilizer and strap across the forehead.

7. The rescuing lifeguard gets out of the water and grasps the handholds of the backboard while the assisting responder maintains control of the backboard from in the water.
   - Once the rescuing lifeguard has control of the board from the pool deck, the assisting responder moves to the foot of the board.

8. Working together, the lifeguards pull and push the backboard onto the deck, then begin to assess the victim's condition and provide the appropriate care.



SPINAL BACKBOARDING AND EXTRICATION

Spinal Backboarding Procedure—Speed Slide

1. The rescuing lifeguard (Lifeguard 1) approaches the victim's head from behind to stabilize the victim by performing a head splint:
   - Grasp the victim's right arm with your right hand and their left arm with your left hand. Gently move the victim's arms up to trap their head between their arms.
   - Squeeze the victim's arms against their head to help hold the head in line with the body. Remain positioned above and behind the victim's head.

2. If the victim is unresponsive, quickly look, listen and feel to check for breathing.
   - If the victim is not breathing, immediately remove the victim from the water and give the appropriate care.
   - If the victim is breathing, hold the victim in this position. Place a towel or blanket on the victim to keep them from getting chilled.

3. Lifeguard 2 positions themselves at the side of the victim, even with the victim's waist, and grasps the victim at the hip and knee while Lifeguard 3 takes the backboard to the opposite side of the victim.

4. Lifeguard 1 signals to Lifeguard 2 (by counting 1-2-3) to roll the victim to their side; when the victim is on their side, Lifeguard 3 places the backboard in line with the victim.

Spinal Backboarding Procedure—Speed Slide *continued*

5. Lifeguard 1 counts to signal to the other lifeguards (by counting 1-2-3) and the victim is rolled on to the backboard.

6. Lifeguard 2 secures the victim to the backboard by securing the chest strap high across the victim's chest and under the victim's armpits. Lifeguard 2 then stabilizes the victim by placing one hand and arm on the victim's chin and chest and the other hand on the side of the backboard.

7. Lifeguard 1 releases the victim's arms, lowers the victim's arms down and secures the victim's head to the backboard using a head immobilizer and strap across the forehead.
   - Lifeguard 3 can assist by handing the head immobilizer to Lifeguard 1 and/or placing the forehead strap on the head immobilizer.

8. Lifeguards lift the backboard and victim out of the slide.
   - When available additional rescuers can assist with lifting and moving the victim.