



P R O J E C T[®]
WIPEOUT

H O A G M E M O R I A L H O S P I T A L P R E S B Y T E R I A N

PROJECT WIPEOUT

Given its oceanfront location, Hoag Memorial Hospital Presbyterian knows firsthand that serious injuries happen at the beach each day – the most serious of which are drowning and neck and spinal cord injuries. These injuries are not limited to beginners, but are suffered by experienced swimmers and surfers as well.

An accident can occur in seconds, but the physical damage can paralyze you for life or even kill you. That's why in 1979, Hoag Hospital developed Project Wipeout – an educational beach safety program. Through school presentations and community events, Project Wipeout teaches young people about the potential dangers at the beach, the types of injuries that occur and how to prevent them. Project Wipeout also works collaboratively with lifeguard departments and other community agencies to further spread the word about beach safety.

TYPES OF INJURIES AND HOW THEY HAPPEN

The beach is a wonderful place to spend time, yet there are many dangers that can turn a fun day into a tragic one. To help prevent injuries, Project Wipeout has created this informative brochure, which provides basic safety information on the types of injuries that occur, how they happen and what you can do to protect yourself.

COMMON BEACH INJURIES

Cuts, abrasions and fractures

The most common injuries at the beach are cuts or abrasions, and fractured or dislocated shoulders, wrists and ankles. These injuries frequently occur from inappropriate use of sports equipment such as surfboards and boogie boards.

To avoid these types of accidents, familiarize yourself with your equipment. Make sure it is the appropriate type and size for you, and know your limitations when using it.

Also, please don't bring glass containers to the beach. Broken glass, hidden in the sand, also causes injuries.

Sunburn

Reduce your risk of sunburn and more importantly, skin cancer, by following these "sun safe" tips courtesy of Hoag Cancer Center's Project Sun Safe program.

- Apply sunscreen with a minimum of SPF 30, a half hour before going outdoors.

- If surfing or swimming, make sure your sunscreen is waterproof.
- Reapply sunscreen every two hours, or more frequently, especially if you're sweating or swimming. There's no such thing as all-day protection, even if your sunscreen is waterproof.

Burns due to fire pits

Keep children away from fire pits. The majority of fire pit victims are children, two to five years of age, who may mistake fire pits for sandboxes.

Fire pit burns occur when a child or an adult comes into contact with hot coals that have been covered up with sand. That's why it's important to assume every fire pit is hot, even if it is full of sand and there is no smoke. The sand acts like an oven, allowing the coals to remain red hot for as long as 24 hours. Anyone who walks or falls on the coals can be severely burned, and a small child may sustain life-threatening burns.

When using a fire pit, please be sure to extinguish it correctly – by covering the coals completely with water, not sand!

TYPES OF INJURIES AND HOW THEY HAPPEN, continued

DROWNING AND NEAR-DROWNING INCIDENTS

Supervise your children

Drowning is the leading cause of unintentional injury-related death to children ages one to four, and the second leading cause of unintentional injury-related death to children ages 14 and under. For every child who drowns, four more are hospitalized for near-drowning. And as many as 20 percent of near-drowning survivors suffer severe, permanent neurological disabilities.

Childhood drownings happen quickly and silently – usually as a result of a child being left unattended, or during a short lapse in adult supervision. The key to drowning prevention is constant, attentive adult supervision. “Supervision” means watching your child at all times, not occasionally glancing while reading, talking or napping. Most parents carefully monitor their children

while they are swimming, but please don’t forget to also supervise your children when they are near buckets, fish ponds, lakes and bathtubs.

Surviving rip currents

Eighty percent of all beach rescues are related to rip currents. A rip current is a channel of water that flows away from the shore. Rip currents often form at breaks in sandbars and near jetties and piers. They can be narrow or more than 50 yards wide. Rip currents are common and can be found on many beaches and large lakes.

When you arrive at the beach, ask the lifeguard about water conditions and any rip currents that may be present. Rip currents contain choppy water that creates clouds of sediment or sand, which change the color of the water. Look for a channel of brown foamy water, possibly containing seaweed or debris that is moving out to sea.

If caught in a rip current, stay calm and don’t fight the current. A rip current will pull you away from the shore, but it will not pull you under water. To escape, swim parallel to the shore, until you are out of the current. Then swim at an angle away from the current toward the shore. See page 6 for a detailed illustration.

If you are unable to escape, face the shore, float or tread water and call or wave for help. If the current weakens, swim at an angle away from the current toward the shore.

If you see someone caught in a rip current, get help from a lifeguard. If a lifeguard isn’t present, yell instructions on how to escape. If possible, throw the victim something that floats and call 911 for help. Do NOT try to rescue the victim yourself. Many people have died trying to rescue others from rip currents.

NECK AND SPINAL CORD INJURIES

Most beach-related neck and spinal cord injuries are caused by the tremendous strength of the ocean's waves forcing a person's neck and spine into harmful, unnatural positions. See pages 4-5 for a detailed illustration.

These injuries occur in a variety of ways. When your body tumbles in the waves, gets thrown by the waves to the ocean floor or when your head spears into the sand; your head can be forced down onto your shoulders, pushed forward into your chest or pushed backward further than it can naturally extend. And once spinal cord damage is sustained, little can be done to medically repair it. The result is severe pain, paralysis, the inability to breathe on your own or even death.

Dangerous activities that may result in neck and spinal cord injury include, but are not limited to:

- Diving headfirst into waves or the water,
- Jumping off of piers, rocks, jetties or surf boards; and
- Any activity that puts you at risk for trauma to the head or neck.

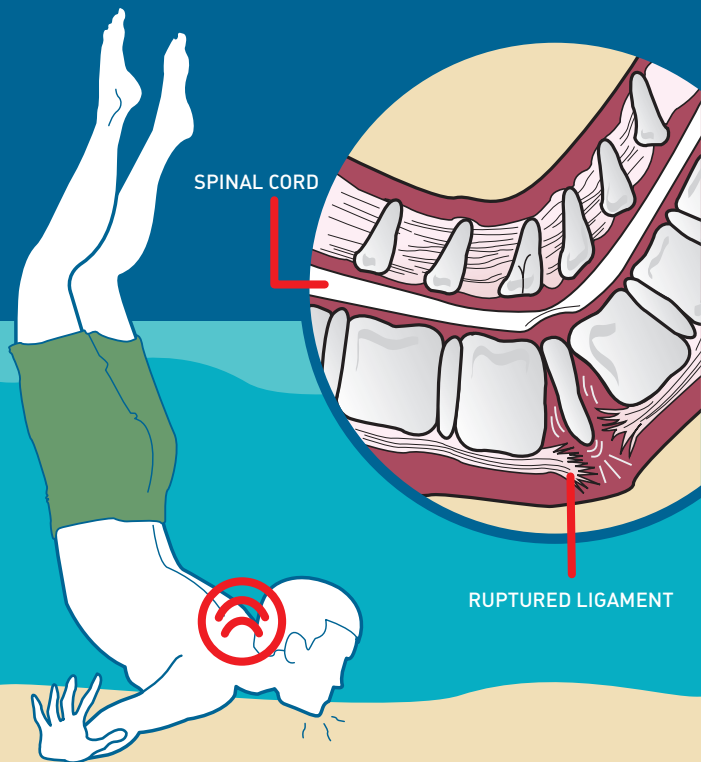
BEACH SAFETY TIPS

For a quick and easy reference, check out Project Wipeout's beach safety tips on page 8. You can also find more information about beach safety on Project Wipeout's Web site at:

www.hoag.org/projectwipeout

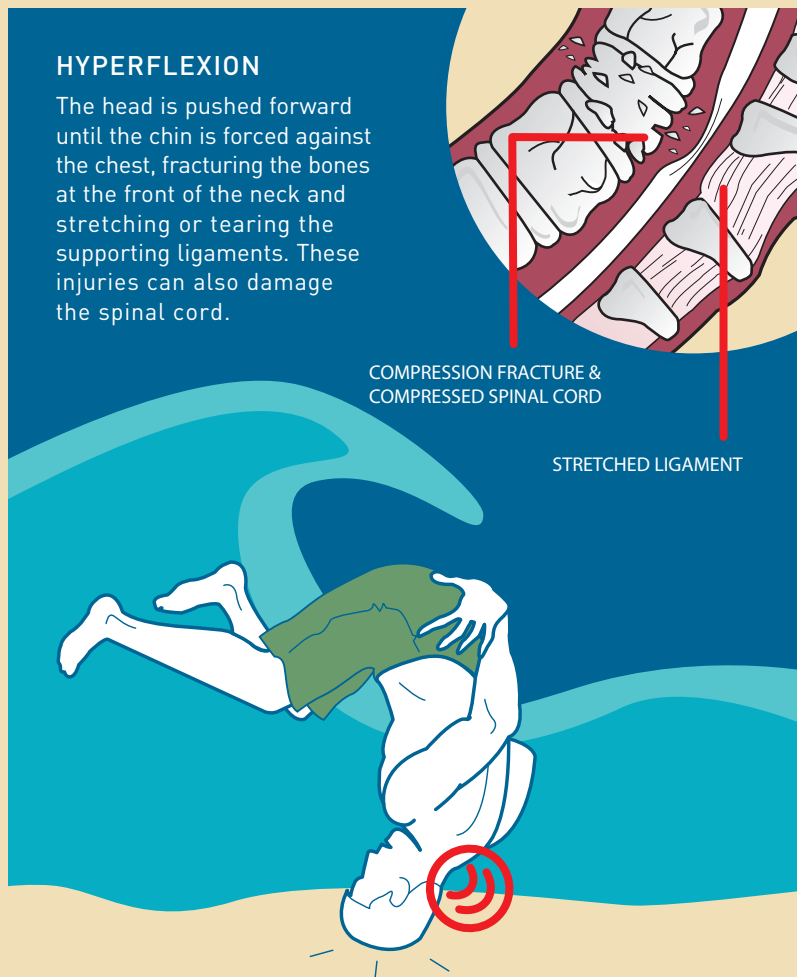
HYPEREXTENSION

The head is forced back further than it can extend, fracturing the bones in the back of the neck and tearing the supporting ligaments in the front.



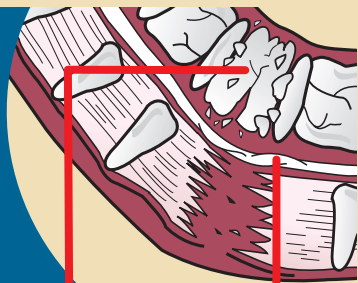
HYPERFLEXION

The head is pushed forward until the chin is forced against the chest, fracturing the bones at the front of the neck and stretching or tearing the supporting ligaments. These injuries can also damage the spinal cord.



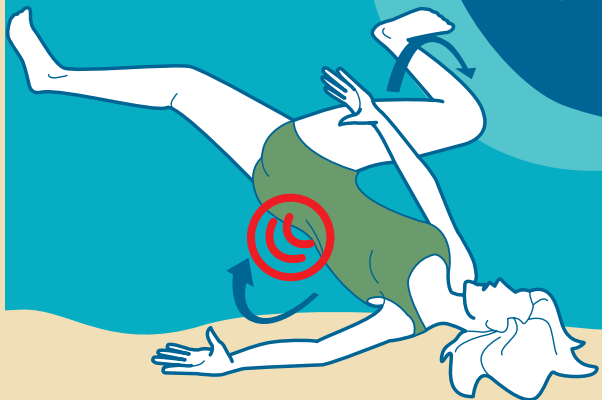
ROTATIONAL INJURY

The head and body rotate in opposite directions severely twisting the ligaments, bones and spinal cord to the point where they may rupture, fracture or sever.



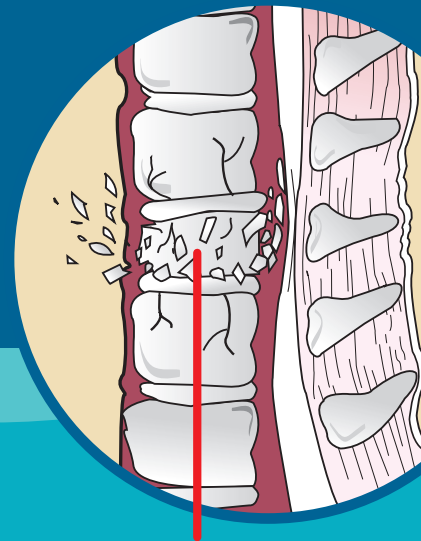
FRACTURED VERTEBRAE

TWISTED SPINAL CORD

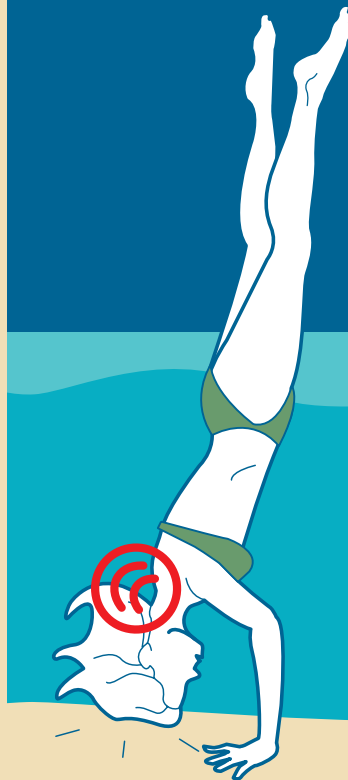


VERTICAL COMPRESSION

The head is forced down onto the shoulders with great pressure, compressing the spinal cord and possibly fracturing bones in the neck.

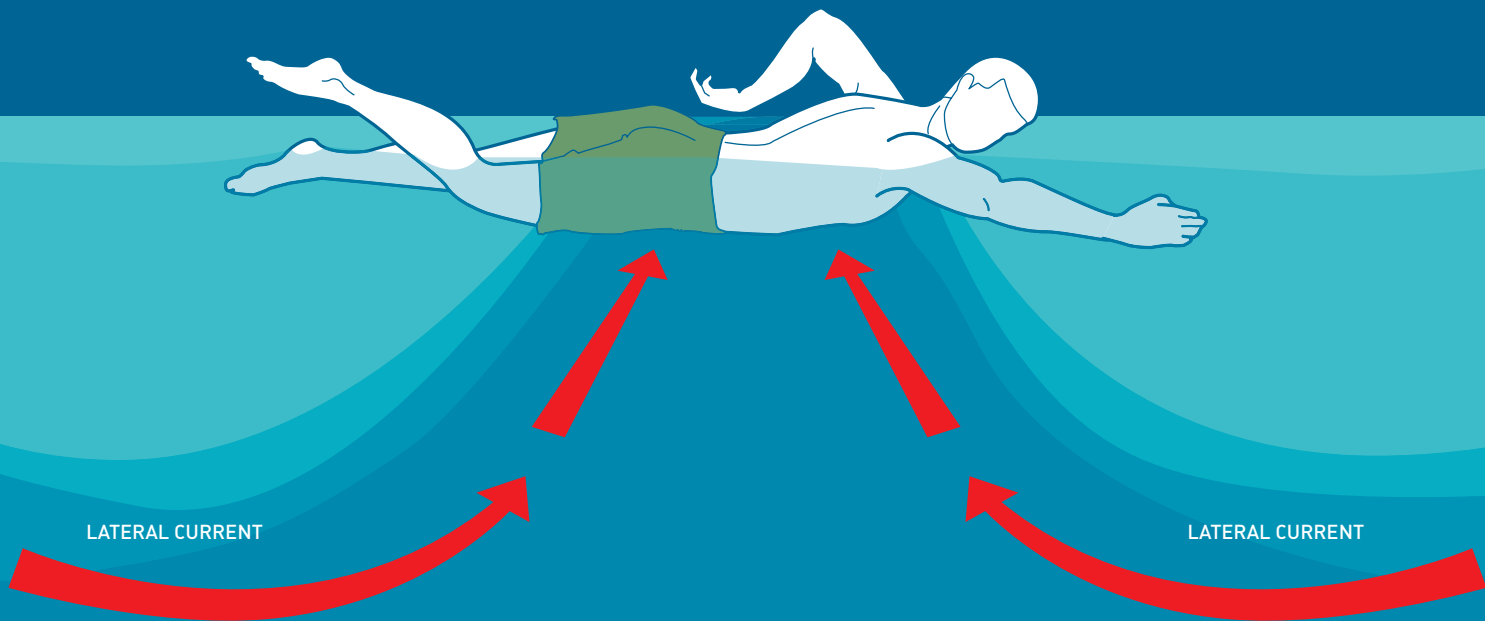


COMPRESSION FRACTURE &
COMPRESSED SPINAL CORD



HOW TO SURVIVE A RIP CURRENT

A rip current is a channel of water that flows away from the shore. When caught in a rip current, swim parallel to the shore until you are out of the current. Then swim at an angle away from the current toward the shore. See page 2 for details on how to survive a rip current.



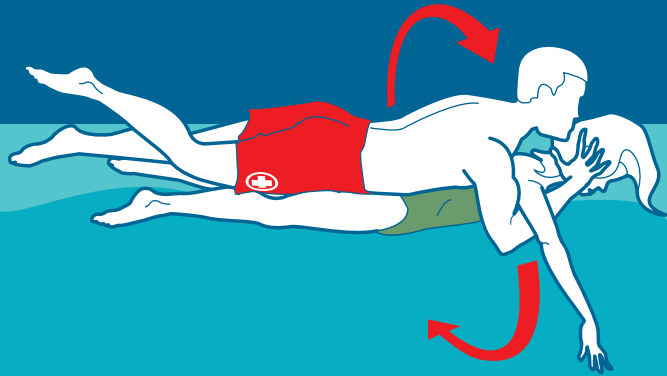
WATER RESCUE TECHNIQUE

If you see someone in trouble, Project Wipeout suggests following the guidelines below. Properly handling the situation could help prevent further injury, or even make the difference between life and death.

Call for help!

If you are safely able to reach the victim DO NOT remove the victim from the water until a rigid support (such as a surfboard) can be placed under the victim and enough people are present to assist you.

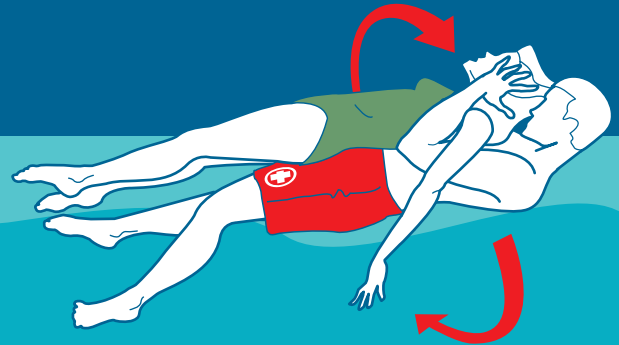
If the victim is floating face down slide your arms under her armpits, wrap your arms back up towards her head, and place your hands on both sides of her head.



Supporting her with your forearms, gently roll the victim over to a face-up position while maintaining her head and body alignment. Keep her head above water so she can breathe.

When no support or help is available, you may use your body as support. With your hands supporting both sides of the victim's head and maintaining head and body alignment, tow the victim to shallow water.

Hold the victim's head and neck as still as possible and keep the head and back in alignment. Further movement could cause even more injury.



PROJECT WIPEOUT SAFETY TIPS

By following Project Wipeout's safety tips, you and your family can enjoy a fun and safe day at the beach.

- Learn to swim. If you can't swim an overhead stroke for at least 15 minutes, you should not be in the ocean.
- Never swim alone. Always swim with a buddy, and swim near a lifeguard whenever possible.
- Stay out of the "surf zone" where the waves break at the shoreline. Waves are at their greatest force here, and even a small wave can lift you up and throw you headfirst into the sand.
- Never run from the beach into the water and dive headfirst into the waves. The same applies for jumping headfirst into the water from a surfboard – don't do it! Sandbars that cannot be seen from the surface may be present and or the water may be too shallow.
- Don't jump or dive into the water from a pier or rock jetty. From the viewpoint of a pier or jetty, water appears much deeper than it really is. What looks like 10 to 20 feet of water may only be two to three feet deep. Diving in could be fatal.
- If you are bodyboarding or bodysurfing, always keep your arms out in front of you to protect your head and neck. Also when bodysurfing, swim at angle to the shore.
- Remember: When caught in a rip current, swim parallel to the shore until you are out of the current. Then swim at an angle away from the current toward the shore.
- Always apply sunscreen with a minimum of SPF 30, a half hour before going outdoors and don't forget to reapply sunscreen every two hours or more frequently, especially if you're sweating or swimming.
- Keep children away from fire pits! Assume that every fire pit is hot, even if it is full of sand and there is no smoke. Hot coals may be hidden under the sand, which can cause severe burns.
- Never drink alcohol or use drugs at the beach. It clouds your ability to make wise decisions, and that could be fatal!

WANT TO LEARN MORE?

For more about Project Wipeout, visit our Web site at hoag.org/projectwipeout or call 949/764-5501. Free Project Wipeout educational materials and a DVD are available to schools, community organizations and lifeguard departments, as are educational presentations by Project Wipeout and Orange County lifeguard representatives.





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