



## **SPINAL INJURIES**

Spinal injuries are the most common serious injuries at beaches with shore break. They can turn a wonderful day at the beach into a traumatic life-changing experience with permanent results. Lifeguards spend a large amount of their day contacting beach goers and advising them of the risk of head and neck injuries.

### **HOW DO SPINAL INJURIES OCCUR?**

Injuries to the head, neck, and back usually occur in shallow water where there are waves breaking. When a wave breaks, water is drawn up the face of the wave and then pitches out and downwards in the form of a curl. The folding over part of the wave is called the "lip" which can suspend swimmers and surfers at the top of the wave before hurling them head first into the shallow bottom damaging the delicate spinal chord. This is commonly known as "going over the falls." Simply diving head first into the ocean without knowing the water depth or what objects lie beneath the water are also common causes of neck injuries.

### **HOW DO I PREVENT A SPINAL INJURY?**

Whenever you enter the ocean, you should always be concerned with the danger of spinal injuries. Being prepared and knowledgeable about how spinal injuries occur is the first step in accident prevention.

Shore break conditions are the most common place for spinal injuries to occur, however, uneven bottom conditions, submerged rocks, and sand bars can also contribute. It is important to be aware of the hazards and conditions before you run into the ocean. If you are uncertain about the local conditions, ask the lifeguard on duty.

If you plan to swim in the ocean where there are breaking waves, you should always think about protecting your head and neck. Every time you go under a wave or try to ride a wave, you should keep your hands out in front of your head so you can break a possible collision with the ocean bottom with your arms instead of your face.

If you are an experienced swimmer and enjoy bodysurfing or body boarding in the breaking waves, you should always wear a pair of fins designed for surf use (the kind that slip on and secure around the ankle with an open heel). These will help you get into the waves earlier and help prevent you from being held up in the lip of the wave and thrown over the falls into the ocean bottom. Fins will also enable you to better negotiate the surf zone and the associated rip currents and side currents.