FIRST AID AWARENESS BOOKLET FOR WATERSKI RACERS

INTRODUCTION

The sport of waterskiing has the potential to cause serious injuries due to participants' reliance on speed and high powered machinery, and the fact that it is a physical activity conducted on, and in, the water.

Though most clubs and associations demand stringent safety measures, accidents DO happen.

This booklet is designed to refresh your memory with regard to first aid procedures required in the event of an accident or sudden illness.

MOST IMPORTANT

It is very easy when an accident occurs particularly when we may know the person involved for us to want to help irrespective of the consequences. Always take a moment to look at and asses the situation for any danger to yourself. A couple of seconds taken in removing a danger may mean that we will survive long enough to help the patient.

Always have a good look around at the scene before you do anything else.

UNCONSCIOUS PATIENTS

A person may become unconscious for any number of reasons; a head injury, an illness related to a medical condition, near drowning, drunkenness, etc.

It is most important that any individual, if unconscious or drowsy, be placed on his or her side. This will allow the airway to remain open and, should the patient, vomit, allow any vomitus to flow onto the ground and not into the lungs.

If the patient is breathing place the patient into the **STABLE SIDE POSITION**, ensuring that the uppermost leg is slightly bent to maintain the position and that the head is tilted back slightly to open the airway. if the unconscious patient has a suspected spinal injury, he or she must still be placed in the stable side position. Movement of this type of patient must be done with great care, slowly and with a first – aider holding the patients head in line with the shoulders during movement.

** REMEMBER

An unconscious patient should never be left alone and all movement should be gentle with care of the neck and spine.

- **Check for Danger**
- **Check for Response**

What to do for the patient now

AIRWAY

- Check airway is clear and open
- Place neck and jaw in correct positions
- Listen for breathing
- Watch chest movement
- If breathing, place person on their side – keep airways clear

IF PATIENT IS NOT BREATHING

- Open airway
- Start mouth to mouth or mouth to nose
- 2 Breaths
- Begin external cardiac compressions
- Place the heel of one hand on the lower half of the sternum
- Lock the other had to the first by grasping wrist of interlocking fingers
- Keep fingers off the chest
- 2 ventilations and 30 compressions every 20 seconds

- **If breathing returns**
  - Place person into Stable Side Position
  - Keep the airway clear

NEAR DROWNING

All water sports have the potential for drowning or near drowning. The safety requirements associated with well organised waterskiing clubs provide generally adequate facilities to avoid such catastrophes. Unfortunately, accidents do happen and the temporary 'blackout' associated with a bump on the head on dry land is nothing compared

to a similar incident in the water. As you all know it is easy to inhale water when you are not in full control of your body.

Any person unconscious in the water must be assumed to have inhaled water. And must be removed from the water as a matter of urgency person need to be on a firm surface as quickly as possible and if not breathing cardiopulmonary resuscitation (CPR) commenced as a matter of urgency. Your chances of saving a drowning victim in cardiac arrest are very good if CPR is commenced rapidly.

Any patient who has responded to your treatment (even though its most unlikely) and regained consciousness coughing up water and vomiting SHOULD BE SENT TO HOSPITAL FOR FURTHER TREATMENT BY AMBULANCE. This is important as a lot of the water inhaled by the patient has entered the body through the lungs during the incident. For some hours after this additional water finds it's way back into the lungs and can precipitate a condition known as 'LATEDROWNING' or at the least may cause pneumonia and or brain swelling or-similar breathing problems.

**REMEMBER

Patients unconscious in the water may have associated neck and/or spinal injuries. If it is necessary to remove the patient from the water quickly, DO IT but take as much care as possible without delay.

2 Breaths and 30 Compressions

Every twenty seconds

HEAD INJURIES

Head injuries may be classified into one of two types; open head injury or closed head injury. With the requirement to wear safety helmets during competition many of the injuries encountered are of the closed type.

OPEN HEAD INJURIES

Basically open head injuries are those with an associated head wound. This may be due to striking the head on some object or coming in contact with a propeller or moving boat.

The wound may be superficial i.e. Involve a laceration to the scalp , or it may involve a fracture of the skull with associated serious brain injury.

Treatment of this patient depends on rapidly stemming the bleeding from the open injury. This can be done by initial pressure from a hand, then subsequent application of a large pad held by a firm bandage. Remember that just because this patient may not have been unconscious when fished from the water, it does not mean that he or she may not become unconscious later. As a precaution put the patient in the stable side position and watch carefully until medical aid arrives.

CLOSED HEAD INJURY

A closed head injury may appear as unconsciousness in the patient or even as an altered level of consciousness. If the patient appears conscious, ask several questions (eg. 'What day is it?', 'What's your telephone number?', etc.) to satisfy yourself that the patient is with it. Check the patient's pupils to gauge reaction and size. Ascertain if the patient has a headache and the degree of pain. In your opinion is the patient becoming worse? If so, place him or her in the stable side position, observe and get an ambulance URGENTLY.

Should the patient be unconscious, check his or her pupils carefully and check for any snoring/respirations (a sign of brain injury).Check if any blood or straw coloured fluid is escaping from the patient's ears or nose if so then this indicates some relief of pressure within the cranium. If not and the patient starts making inappropriate noises or movements while unconscious this may indicate that pressure is building up inside the head. This is a critical injury. Attempt to keep the patient in a stable side position and watch for changes. It is essential that urgent ambulance transport be requested and if the patient is exhibiting any of the above signs inform the ambulance controller, he will in turn in form the crew and they will save critical time at the scene.

**REMEMBER

If you are unsure as to the seriousness of a head injury, always treat it as a potentially serious injury. Head injured patients have a bad habit of deteriorating rapidly when you least expect it.

CARDIOPULMONARY RESUSCITATION

STEP 1. Clear the airway first then open it by extending the head back.

STEP 2. Look, listen and feel for breathing. If none, position yourself close to the head.

STEP 3. Close the patient's nose and deliver two good breaths into the patients mouth to inflate the lungs. After each breath look at the patient's chest to see if it rises.

STEP 4. Locate patient's heart by placing two fingers on the bottom of the sternum. Place one hand above the fingers in the centre of the chest.

STEP 5. Lean over the patient lock the elbows and depress the sternum until resistance is felt (approx5-6cm.). Do this thirty (30) times

STEP 6. Remove your hands ensure that the patient's airway is open and deliver two good breaths. Observe the rise and fall of the chest.

STEP 7. Return to the chest, locate the heart and depress the sternum thirty (30) times within ten (10) seconds.

Repeat Steps 6 and 7 at a rate of 5 cycles every two minutes. Cease CPR only if the patient recovers, or if you are relieved by an ambulance crew or other medical aid.

SPINAL INJURIES

As can be appreciated, when an unprotected body is dragged at high speed behind a boat, any interruption to the body's smooth progress has the potential for serious damage. One part of the body which is susceptible to injury when sudden deceleration occurs during a fall or striking another object, is the spine.

During a fall at high speed, the spine is subjected to enormous stresses; twisting, flexing, extending and bending. The spine is subject to dislocation and fracture when the body strikes the water at high speed at an unnatural attitude.

As was discussed during the first-aid course, damage to the spine is reflected in the loss faculties of the body, the higher up the spine the injury, the more calamitous the result to the patient. It is important that any rescuer recognise the severity of the injury and treat the patient accordingly.

Generally, the injured waterskier will still be in the water after the injury has occurred. He or she may not be able to move and the safety vest should not be relied upon to stabilise an immobile person upright, so BE AWAKE THAT THE PATIENT MAY DROWN if immediate assistance is not provided.

The rescuer should immediately ascertain if the patient is conscious or unconscious and if the patient is not breathing and is pulseless, cardiopulmonary resuscitation (CPR) should commence immediate 1 y.

**LIFE SUPPORT TAKES PRIORITY OVER SPINAL AND OTHER INJLJRIES!!

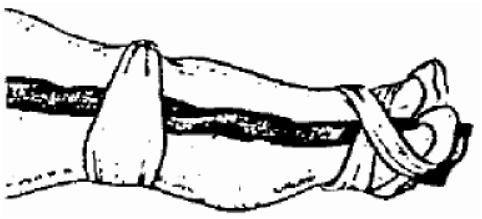
To facilitate further treatment it is desirable that the patient be removed from the water. . When moving a suspected spinal injured patient it is imperative that the spine/neck/head are all moved together and in the same attitude. If you are unable to remove the patient from the water without unnecessary spinal movement support him or her in situ and bring the ambulance crew and their specialist equipment to the patient. In some instances it may not be possible to leave the patient in the water (hypothermia, cut-rents, etc.,), therefore extreme care must be taken to move the patient with the minimum flexion of the spine.

The conscious spinal patient should be able to indicate to you any symptoms of injury he or she may experience. Some symptoms are; lack of feeling below a certain point,

tingling, pain at a point on the spine, inability to fell a first-aider's touch, inability to move legs, difficulty with breathing (neck, injuries). Male patients may have an inappropriate erection.

Any suspected spinal patient MUST have a cervical collar applied, especially before movement. Such a collar may be constructed by use of a towel, a newspaper or similar item though it is recommended that the club safety boat carry proper commercial collars. Once in place a collar should only be removed by a healthcare professional.

When the patient is extricated from the water, it is recommended that his or her legs be immobilised by a knee bandage and a figure-of-8 bandage around the feet. This is to ensure that the legs do not flop about causing more damage.



FRACTURES AND SOFT TISSUE INJURIES

Most active sports have their share of soft tissue injuries which include;

Sprains – involving joints

Strains – involving muscles and tendons

Dislocations – again involving joints

Contusions – swelling and bruising

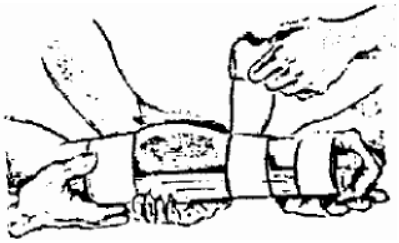
These injuries require rest, icepacks, a compression bandage and elevation of the injured part. Ask the patient to rest quietly, apply an icepack wrapped in a cloth or towel (never place ice in direct contact with the skin, apply a roller bandage FIRMLY over the injured part and elevate the injury in a sling if an arm or propped up on a pillow if a leg. If in doubt as to the severity of the injury, then treat it as a fracture. Ice packs are used for a maximum of 10-15 minutes each hour

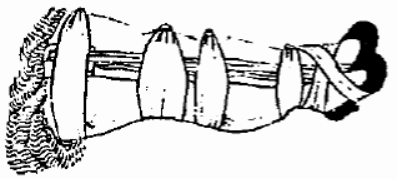
Fractures are generally divided into three types; open, closed and complicated. An open fracture is one with an associated wound, perhaps where the broken bone has penetrated the skin. A closed fracture is one without a wound. A complicated fracture is one which has occurred in bones close to important organs, eg. ribs, because of the proximity of the lungs, the skull, due to the proximity of the brain.

Fractures are treated by immobilisation, treatment of associated injuries, and ambulance transport to hospital.

The first priority with open fractures is to treat any bleeding from the wound. Apply a pad and bandage then treat as for a closed fracture.

Immobilisation of fractures takes the form of splinting. The splint held in place by triangular bandages. Bandages are applied above and below the point of fracture and also to the joints above and





below the fracture. Both legs are splinted as required and fractured arms are splinted then put in a sling. Where bare skin is in contact with a splint pad the area with bandages.

Complicated fractures such as head injuries and chest injuries should be managed with precautions against bleeding, rest, reassurance and urgent, ambulance transport

**REMEMBER

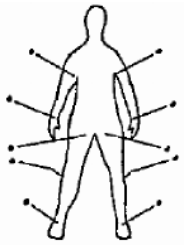
Fractures are underrated as serious injuries. Fractures of long bones such as femurs (top of the Leg), and humerus (upper-arm), can cause serious loss of blood into the surrounding tissues so don't delay transport to hospital. Remember that any movement of a fracture will usually cause the patient increased pain so **unless necessary leave it alone and wait for a healthcare professiona**l

LACERATIONS

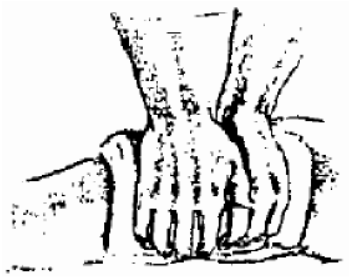
Most of us have come into contact with lacerations and have probably had the dubious honour of treating one. Rule Number One is to stop the bleeding.

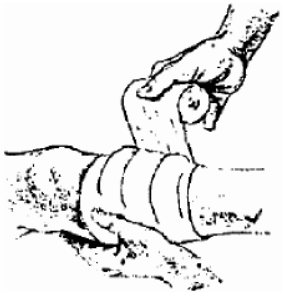
Bleeding is stopped initially by the application of pressure to the wound, perhaps by a hand. If you use a hand it is best to use the patient's own, as he or she has a vested interest in the injury, and not using yours it then frees you to prepare a suitable bandage. Apply a large pad over the wound and then apply a firm bandage over the pad. Should the wound continue bleeding through the bandage, DO NOT REMOVE IT – place another pad and bandage over the first one.

If the laceration is too large to control with a pad and bandage, then it may be necessary to apply pressure to certain pressure points of the body. The diagram shows where the major points are but remember that this is only a temporary measure and that a firm pressure bandage will be required as soon as you are able to apply one.



Don't bother to attempt to clean a laceration, as this is generally a futile action, but. Get the patient to hospital for wound c1eaning sutures (stiches) and a necessary inoculation against tetanus.





RESPIRATORY CONDITIONS

There are several types of respiratory conditions, but the most likely condition encountered while involved in the sport is ASTHMA.

Asthma can be a killer and Australia, unfortunately, has the highest incidence of this debilitating condition in the world. Asthma affects the airway tracts and in severe cases, the lungs. During an asthma attack, the sufferer (asthmatic), encounters a constricted airway and finds it progressively more difficult to breathe.

Asthma attacks may be loosely defined as mild, moderate or severe. Most asthmatics know their limitations and carry their own medication in the form of a small ‘puffer’ which when used while inhaling, relieves their symptoms.

People suffering mild to moderate asthma attacks usually respond well to their medication and are aware of what to do if they experience further difficulty. Unfortunately, severe asthma attacks do not respond to ‘puffer’ medication.

A severe asthma attack is life-threatening. The patient will only become worse and his or her breathing will become progressively more laboured and the ability to breathe efficiently will be compromised. The patient will become ‘blue’ and collapse. Any one with Asthma who is only able speak in words rather than sentances (or unable to talk) is having a severe asthma attack.

****Always call an ambulance immediately you recognize that a person is suffering from a severe Asthma attack**

Attempts should be made to make the patient comfortable. Do not attempt to force the patient to lie down, sitting is the best position and extend the patient's arms up and forward to increase the chest expansion capacity. If the patient has medication, help them to give it a try.

When managing asthma it is always better to have an ambulance on the way and not need it than to wait until its to late Remember **ASTHMA KILLS.**

If the patient collapses and ceases to breathe, commence CPR immediately.

CHEST PAIN

Chest pain related to cardiac conditions can strike anyone at anytime. The physical effort required to waterski has the potential to precipitate chest pain in otherwise healthy people. It may also occur that an elderly spectator may suddenly fall ill with a cardiac condition.

There are two major conditions common in the community; angina and heart attack.

ANGINA

Many elderly people have been diagnosed with angina. This is a condition which causes stress on the heart, usually due to a constricted blood vessel and usually occurs after exercise or exertion.

Usually the patient is aware of his or her condition and takes medication in the form of a tablet under the tongue which relieves the pain. These patients generally require only rest, reassurance and perhaps assistance with their medication.

However, if a person complains of sudden chest pain which they have never had before, or if an angina sufferer's pain is unrelieved by medication then it's possible that the person is having a.....

HEART ATTACK

A heart attack is usually heralded by a sudden pain, 'heavy', 'vice-like', or 'crushing' generally in the centre of the chest but which may also appear in the left arm and/or jaw.

**IT IS CRITICAL THAT AN AMBULANCE BE CALLED IMMEDIATELY!!

The patient may appear pale, cool and may sweat profusely. In extreme cases the patient may be grey in colour. Ask the patient to draw a deep breath. If the pain remains the same whether breathing in or out then there is a good chance that the pain is cardiac related (muscular and pleuritic pain is usually 'sharper' on inspiration).

Rest the patient, usually half-sitting and reassure him or her until the ambulance arrives.

If the patient becomes unconscious, put him or her into the stable side position AND WATCH THE PATIENT LIKE A HAWK because he or she is likely to cease to breathe and become pulseless. If the patient does go into cardiac arrest, begin cardio-pulmonary resuscitation (CPR) immediately.

**REMEMBER

Don't panic! Don't bundle the patient into a car and hurtle off towards the hospital because if the patient gets worse or goes into cardiac arrest you can't do anything about it in the back seat of a speeding car. WAIT FOR THE AMBULANCE the crew have all the drugs and equipment required to treat the patient on the scene.