Before any first aid is administered, the immediate physical environment needs to be taken into consideration to prevent a situation from getting worse. The environment may have been the cause of the accident, or may pose more threats to the first aider, bystanders and the injured person. It is therefore important to analyse safety issues with each particular environment and plan self-protective and management strategies before approaching the accident site.

Before any first aid is administered, it is important to consider the physical environment. Analyse the particular safety issues associated with each physical environment and formulate specific self-protective strategies that should be observed.

The management of a situation will be more successful if the first aider is calm and in control. Common accident scenes are traffic accidents, water environments and electrical situations, which usually attract a lot of attention, so maintaining a confident and firm control is a good way to approach to the scene.

The first steps are vital and apply to all accident scenes:
1. Keep the accident area clear, which may include directing traffic. This may be done by bystanders; and ask one of them to also call emergency services.
2. Check for any other dangers, such as fallen wires, fuel or explosive gases, shattered glass or sharp debris, rips in the water or fire.
3. Check that all casualties have been located and assess the priority of their injury management.
4. When calling emergency services, you need to report the exact location of the accident, number of casualties, type of accident and injuries and what special services may need to attend the site, that is, rescue squad or fire department.

- **traffic accidents**

To secure control of a traffic accident scene, undertake the following:

- Avoid danger from other traffic. Park surrounding cars to protect the scene and use the vehicles’ hazard lights. Situate bystanders in position to warn approaching traffic, especially if the scene is not clearly visible.
- Light up the scene with headlights on low beam at night.
- Avoid any fallen power lines. Do not touch the vehicle if it is in contact with any power lines.
- Account for all occupants of each accident vehicle. Some occupants may be hidden behind debris or thrown from the vehicle.
• Turn off the car engine where possible.
• Extinguish all cigarettes, and have fire extinguishers ready (if available).
• Once the accident site is secure, continue with DRABCD and injury management.

**water environment**

When attending a water rescue, the safest rescue is if the first aider does not have to enter the water. It is important that the first aider does not attempt a rescue beyond their own swimming capabilities. Throwing a rope, esky lid, a ball, or anything that floats can be used as a lifesaving aid for someone in the water.

Factors to consider in an injury management plan for a water rescue include:
• the number of casualties, for example, from a boating accident
• distance from the shore or edge of a boat or pier
• the water depth and temperature (dams can be extremely cold from a depth of one metre downwards)
• what rescue equipment is available
• the physical and psychological state of the casualty, and their swimming ability
• rips or currents at the beach
• hidden dangers under the water.

Once the accident site is safe, continue with DRABCD and appropriate management of injuries to the casualty.

**Surf Skills: Escaping from a rip**

1. If you are caught in a rip:
   • Don’t panic—stay calm.
   • If you are a strong swimmer, swim at a 45° angle across the rip and in the same direction as the current until you reach the breaking wave zone, then return to shore.
   • If you are a weak or tired swimmer, float with the current, don’t fight it. Swim parallel to the shore for about 30–40 metres until you reach the breaking wave zone, then swim back to shore or signal for help.
   • Remember to stay calm and conserve your energy.

**FIGURE 3.1**

The dark water indicates a rip at this beach


**electricity**

There are many dangerous hidden aspects of electricity that may not be common knowledge to most people, such as the way electricity travels and the voltage a line may have. All electricity should be approached and treated with extreme care, as an electric shock may be fatal.
Factors to consider in an injury management plan for an electric shock include:

- Approach the casualty with extreme care and determine the power source.
- Turn off the power source, where possible, and remove the plug.
- If unable to turn off the power, use a non-conductive item, such as a broom handle or a piece of wood, stand on a dry area and attempt to move the power source.
- Stand clear of high voltage power lines until the power source has been cut off as fatal shocks can be received from a distance away. Contact emergency services.

Once the accident scene is safe, continue with DRABCD and injury management.

**infection control and protection**

- **describe the procedures to be taken to reduce risk of contact with body fluids and in the event of contact with body fluids in first aid settings**

It is essential for the first aider to ensure they undertake good hygiene practices by assuming that every situation is potentially infectious, in order to prevent transmitting diseases or infections.

Controlling infection is achieved by protecting both the first aider and the injured person from the transmission of:

- droplets—nasal, airway or throat secretions
- bodily fluids and blood—vomit, saliva, urine, faeces or pus
- infected needles of sharp objects.

Common diseases may be transferred to the first aider during treatment; however it is rare that diseases, such as hepatitis, is passed on. There has been no proven case of HIV (AIDS) being transferred. Precautionary methods prior and after treatment include:

- wash hands before giving treatment, if possible
- cover any exposed wounds
- avoid touching potentially infected material (dressings) with bare hands
- use disposable gloves (if they tear during treatment, remove, wash hands and put on a new pair)
- if available, use a resuscitation mask if EAR has to be administered (disinfect after use)
- dispose of all treatment materials in a secured plastic bag
- wash hands thoroughly with soap and warm water
- clean contaminated surfaces with detergent and water
- remove any personal protective clothing (apron, mask, eye protection or gloves).

It is generally good practice to keep up with available vaccinations to infection and diseases for protection. Current information regarding vaccinations can be obtained from the *Australian Immunisation Handbook*, which can be downloaded from the government website below.

HIV/AIDS

HIV (Human Immunodeficiency Virus) is a virus that damages the immune system of the body by attacking the white blood cells that protect the body against infection. When the white cell count has basically been destroyed, it becomes AIDS (Acquired Immune Deficiency Syndrome). At this point the patient is susceptible to repeated infections because of their damaged immune system, which could be fatal.

HIV is transferred through blood or bodily fluids, so it is essential that extreme care is taken by the first aider when dealing with ‘sharps’, which may have been used by a casualty. Blood or bodily fluids is not likely to be transferred unless the first aider has open wounds, and it is still not likely, as blood from the first aider’s wounds will flow from the body.

blood-borne viruses (Hepatitis B and C)

Hepatitis B and C are blood-borne viruses and are transferred through contaminated blood. Hepatitis B is also transferred through semen, vaginal secretions and saliva, to a lesser extent. Both viruses cause an infection in the liver and can develop into more fatal conditions (such as liver cancer). A Hepatitis B vaccination is available to the public.

It is essential to follow the safety precautions listed above when attending to a casualty to prevent the transfer of Hepatitis and take extreme care when dealing or disposing of ‘sharps’.

legal and moral dilemmas

- debate the legal and moral dilemmas associated with providing first aid
- distinguish between a manageable first aid situation and an emergency situation

legal implications, eg Occupational Health and Safety legislation, litigation

Legislation exists in New South Wales to protect those in the workplace from illness or injury. Workplaces, in turn, have a legal and financial obligation to provide a first aid service to their employees or people under their patronage.

Set out in the *NSW Occupational Health and Safety (First Aid) Regulation 2001* are minimum standard requirements for first aid in the workplace. These include:

- identification and training of first aiders
- provision of first aid facilities and equipment
- records of all injuries or treatments
- promotion of preventative procedures and safe practices in the workplace.

Complete document of the *Occupational Health and Safety Regulation 2001* is available from the government website:


moral obligations, eg duty of care, responsible citizenship

It is important to remember that the first aider is only expected to administer their aid to the best of their ability, until professional support is available. It is also important to remember that an injured person can legally refuse any treatment. Once the first aider has commenced treatment they are then committed to ‘duty of care’ until professional help arrives.

A first aider is not legally expected to stop and assist in an emergency, however, most people feel a sense of responsibility and citizenship to others, and will often offer help in whichever way possible. Avoidance from contributing aid to an emergency situation is generally due to the fear of legal action by the injured person or family. However, our legal system will tend to protect the first aider, as long as they have administered aid within their level of training, and if the casualty was injured during first aid, the prosecution of this action would be difficult to prove.
For a negligence case to become a matter of ‘common law’ it is bound by precedent and a number of general rules have stood for many years. Under common law, for a case to stand for negligence against a first aider to be successful, the casualty has to prove:

- that the first aider owed the casualty a ‘duty of care’
- this duty was breached by the first aider
- the injury incurred due to the breach of duty
- the injury could be directly related to the breach.

### commonsense versus heroics

It is essential that the first aider uses commonsense when attending a situation, to prevent any further danger to themselves or others. Having poor swimming skills yet jumping into a river to try and save someone could result in another casualty, instead of saving a life. Assessing if the situation is beyond control, such as a room filled with poisonous gases, is vital before a rescue is attempted.

### support following first aid situations

Some emergency situations that may result in severe injury or loss of life, particularly to a family member or young child, can cause trauma to those who have witnessed the incident. Each case needs to be treated individually as everyone responds to situations differently. There are many support networks available that provide management of trauma situations to help someone to recover from the ordeal.

#### debriefing

It is valuable to the first aider and those involved to debrief, talk about the incident, as a person may experience strong physical and emotional after shocks. Stress, guilt, depression, grief, fear, anger and anxiety are some emotions resulting from a trauma and can be managed through support networks.

The first aider can debrief and go through their injury management plan to help them feel that the procedure followed was the most appropriate for the situation, so that they know for sure that the best methods were followed and that they provided aid to the best of their ability.

#### counselling

Some incidents may be so traumatic that professional counselling is required to help deal with the trauma. The length of time it may take an individual to recover emotionally will depend on who was involved, the severity of the incident and other events that may be happening in their lives.

Where there may be a major disaster or fatal incident in a workplace, a group of counsellors is usually in attendance after the incident to counsel those who feel they need to ‘talk’ to someone.

Professional counsellors can be contacted through the local hospital or medical services.
Activities

Activity 1 (Page 162)
In pairs, create and present to the class an emergency scene. Describe the scene and the management procedures you would follow.

Activity 2 (Page 164)
Investigate the preventive procedures used in the OH&S manual provided from the website below, to control the transfer of infection.

Website: www.latrobe.edu.au/hr/ohs/ohs-manual/bloodborne-disease.pdf

Activity 3 (Page 165)
Outline the principles of occupational health and safety as they apply to your workplace or school.

Activity 4 (Page 165)
Debate the issue: ‘The employer is responsible for the safety of their employers’.

Activity 5 (Page 165)
Class debate: ‘How will I know how much FIRST AID to give’.

Activity 6 (Page 166)
Investigate your local area and outline the available debriefing and counselling services available.

Review Questions

1. **Analyze** how the particular safety issues associated with traffic accidents and water environments may raise legal and moral dilemmas for an individual.

2. **Discuss** strategies that can be used by a first aider to avoid legal implications.

3. **Explain** the difference between debriefing and cancelling after a serious accident.