



# MediTrain

## Leaders in First Aid Training

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# Student Learning Pack

**For Comprehensive Workplace, Comprehensive Childcare,  
Basic and Recertification First Aid courses**

### What do I need to do?

This Student Learning Pack is part of your MediTrain First Aid course. Your course is designed in two parts: a student learning component to be completed in your own time ("student learning component") and a practical session in the classroom ("class time session").

This Student Learning Pack provides important foundational knowledge for your course. You must complete it ahead of the course, in your own time.

Please read through the full Student Learning Pack, complete and sign the attached worksheet and bring the completed worksheet to your first aid course. Alternatively you can complete the worksheet online or return by email. Completing the Student Learning Pack has been designed to take you approximately 4 hours.

If you have any difficulties completing the Student Learning Pack, please contact MediTrain staff promptly.

During class time your instructor will go over all topics covered in the Student Learning Pack again, focusing on the practical aspects. Space has been provided on the worksheet for you to record any questions you have, and you will be able to ask any questions and discuss any related issues during class time. Please hand the worksheet to your instructor during your course. You will keep the remainder of your Student Learning Pack as a reference for later.

**Note** we cannot complete your certification unless we have received your completed and signed Student Learning Pack worksheet.



Throughout this Student Learning Pack, you will see boxes like this. These boxes highlight topics which will be covered in class time, so you know what to expect.

## **Purpose of this Student Learning Pack**

This Student Learning Pack is meant to get you thinking about first aid and explore how being a skilled and confident first aider can help you, your family, your workplace and other people in a medical emergency.

It also provides an introduction to primary assessment and to common First Aid conditions you might encounter. This material will be expanded and built upon during the class time session of your course.

## **Content of this Student Learning Pack**

This Student Learning Pack is divided into three modules:

- 1. Primary assessment**
- 2. Common First Aid conditions**
- 3. Real-life scenarios**

### **1. Primary Assessment**

This module introduces the DRSABCD framework as a means of approaching an emergency situation and assessing a patient for any immediate threats to their life.

It teaches you how to approach an accident scene so as to ensure the safety of yourself, the patient(s) and any bystanders. It also covers when to call for help and how to do so quickly and effectively.

This ensures the emergency system is activated without delay and your patient receives professional help as soon as possible.

### **2. Common First Aid conditions**

This module provides information on some of the common patient conditions you may encounter in a First Aid situation. It focuses on recognition and simple treatment of these conditions.

During the course, your instructor will go into more detail on each condition and will demonstrate practical skills which you will have the opportunity to practice.

### **2. Real-life scenarios**

In this module, you will apply your learning of modules 1 and 2 to real-life scenarios.

# Primary Assessment

Primary assessment includes approaching the accident scene and our first check of the patient for any problems which are an immediate threat to their life.

Our focus is on ensuring that: (a) there are no dangers present which threaten anybody's safety; (b) emergency services are contacted promptly if required; and (c) the patient's airway, breathing and circulation are not impaired.

This module contains five parts:

1. **DRSABCD**
2. **Safety**
3. **Barriers**
4. **Approaching an accident scene**
5. **The importance of calling for help**

## 1. DRSABCD

The DRSABCD acronym provides a framework for primary assessment. This stands for:

**D**angers

**R**esponsive

**S**end for help

**A**irway

**B**reathing

**C**PR / Circulation

**D**efibrillator (AED)

### Dangers

The first step in approaching a First Aid situation is to ensure that the scene is safe. This is done by identifying any hazard(s) and effectively managing them – either by eliminating the hazard(s) or minimising them.

Ensure your own safety first – otherwise, you risk making the situation worse by becoming a patient yourself. Then ensure the safety of the patient(s), then the safety of any bystanders. Only when hazards at the scene have been effectively managed should you provide treatment.



During class time, your instructor will go over DRSABCD in more detail and demonstrate how to perform each of the steps, including CPR. You will then practice these steps on manikins.

### Responsive

When you approach the patient, check for a response from them. Speak to them on approach. If you do not get a response from the patient, you can shout and then tap them or squeeze their shoulder.

For infants: Check for a response by picking the infant up. If the infant moves or makes a noise, they are responsive.

### Send for Help

If the patient is unresponsive, send for help immediately – **Dial 111**.

### Airway

Open the patient's airway by using the head-tilt chin-lift method.

Place one hand on the patient's forehead. With the other hand, put two fingers under the bony part of the chin. Press on the forehead and lift the chin, tilting the head.

For infants: Gently tilt their head into the neutral or sniff position. Place one hand on the infant's forehead. Place one finger under the bony part of the chin. Lift the chin slightly.

### Breathing

To check the patient's breathing, place your ear near to their mouth and nose.

Look, Listen and Feel for normal breathing: look for the chest rising and falling, listen for the sound of breathing, feel for breath on your cheek.

Take no more than 10 seconds – if a patient is not breathing normally, prompt action is vital.

### CPR

If the patient is not breathing normally, begin CPR.

If the patient is breathing normally, check for bleeding and for signs of shock, and treat the patient as appropriate (see page 9).

### Defibrillator (AED)

If you need to perform CPR on a patient, send for an Automated External Defibrillator (AED) immediately (if available), and attach it to the patient as soon as it arrives.

So that you can locate an AED easily in an emergency, we recommend downloading an AED locator app to your mobile phone.



If a patient is unresponsive but is breathing normally, they should be placed in the Stable Side Position (Recovery Position). You will learn how to do this during the class time session of your course.

## 2. Safety

When responding to a First Aid or emergency situation, our first concern is with safety. We need to quickly identify and control any hazards at the scene.

A hazard is anything that causes, or might cause, harm. This includes anything which would interfere with our ability to treat the patient. A hazard can be an activity, arrangement, circumstance, event, occurrence, phenomenon, process, situation or substance.

To avoid injuries and make our environment safer, hazards need to be controlled. There are two main ways to control hazards:

If possible, eliminate the hazard (remove it)

If this can't be done then minimise the hazard (reduce the hazard or reduce the effects of the hazard)

Examples of hazards and controls are listed in the table on the next page.

Remember: our own safety comes first, then the safety of the patient(s), then the safety of bystanders.

### Home injury prevention

Hazards also occur in everyday situations around the home and workplace. By identifying and controlling hazards ahead of time, we can help prevent accidents and injuries occurring in the first place.

Did you know that you are more likely to get injured around the home than anywhere else?

Half of the 2 million claims ACC receives every year are for home-based injuries.

### Have you considered?

Injury prevention is often straight forward: something as simple as remembering to flick the light switch on when you use the stairs can help you avoid a fall.

Home accidents take an incredible toll on families and friends, workplaces, and communities.

Injury prevention starts in the home. If we all take simple steps to ensure where we live is safe, then we reduce the risk of accidents and injuries.

## 3. Barriers

A person may have no obvious symptoms but still be a carrier of an infectious disease. In emergency situations, assume that everybody is a carrier of an infectious disease. Placing barriers between the patient's body fluids and the responder can easily prevent transmission of diseases and protect both you and the patient from infection.

### Direct contact:

Body fluids can enter into a responder's bloodstream through cuts, grazes or cracks in the skin, or through mucous membranes such as the mouth or eyes. Sneezing or coughing from the patient may spray contagious material onto a responder.

### Indirect contact:

This is when you touch a surface contaminated with blood or body fluids.

### What is a barrier?

Anything that prevents blood or body fluids transmitting between you and the patient is a barrier. Examples of barriers are gloves, face shields, resuscitation masks or eye shields. If none of these are available then improvise – for example, use plastic bags to cover hands.



You will learn how to use barriers and perform CPR during the class time session of your course.

### What else can you do to protect yourself?

- Thoroughly washing exposed skin areas with a strong solution of soap and water for a minimum of 2 minutes immediately after patient contact gives additional protection.
- When approaching an accident scene, carefully look where you are walking and check area before kneeling beside patients or placing equipment.
- When examining patients, ensure you do not come into contact with needles, syringes, knives or weapons.
- Ensure that you look ahead of where your hands are going. Never put your hands where you cannot see.

If available, you should use a barrier when administering rescue breathing as part of CPR.

**Examples of hazards and controls**

Chemicals, gases, fuel, toxic fumes	Remove all bystanders and patients from the scene, if safe to do so
Traffic	Assign bystander to divert traffic
Vehicles	Ensure vehicle ignition is off and handbrake is on
Electricity	Do not approach until power has been switched off at source
Blood, body fluids	Barriers – gloves and/or face shields
People, bystanders	Assign somebody to take charge of and manage bystanders

**4. Approaching an accident scene**

You might be the first person approaching an accident scene. Knowing what to do and how to respond safely and effectively can make all the difference to the injured person’s recovery. Ensure your own safety first, then the patient’s and bystanders’ safety.

Before you move to the patient you need to consider the hazards that may be present:

**What appears to have happened here?**

- Is electricity involved?
- Is there fire, water or traffic danger?
- Can traffic be stopped or diverted?
- Is there a bystander to control traffic?
- Do there appear to be any gases, chemicals, or poisonous fumes present?
- Is the patient still at risk of further injury?
- Can I approach safely?



You will practice how to approach an accident scene in many practical scenarios during the class time session of your course.

**Do I have barriers available?**

- If not, what do I have that I can use to protect myself and the patient?
- Put on gloves (or alternative, e.g. plastic bags).
- What is available if CPR is required, e.g. breathing shield?

**Now move to the patient**

- Take a First Aid Kit and mobile phone with you if available.
- Determine what happened from surroundings and bystanders as you approach the scene.
- If a vehicle is involved:
  - ensure traffic cannot enter the accident scene
  - switch off ignition
  - handbrake is engaged, vehicle is in gear
  - ensure vehicle stable, e.g. not in danger of rolling
- Never move a patient unless their life is in danger.
- Is the patient responsive?
- If there are multiple patients, consider where the most effective immediate assistance is required, generally silent patients first.

Ensure the continuing safety of yourself, patient(s) and bystanders.



## 5. The importance of calling for help

On finding unconscious patients, some first aiders delay starting CPR or even calling for help. Valuable minutes are lost because of this inactivity, with the result that the patient has less chance of survival. Other first aiders become so consumed with providing CPR that they persist far too long before calling for help.

Ensuring medical help is on the way is a priority.

### How to Dial 111

Check for an outside line number if it is necessary

DIAL S L O W L Y

- Tell the operator which service you require
  - » 111 connects to Police, Fire and Ambulance
- Be prepared to give further information, e.g.:
  - » Location
  - » How many people/patients involved?
  - » Telephone number
  - » What happened?
  - » Are powerlines involved?
  - » Is anybody trapped?
- Hang up only when told to do so by the operator

If your first thought is to call an ambulance, call one if you can – immediately

OR get a bystander to do it:

- Find somebody who has a mobile phone
- Point at the person or call them by name and tell them to **Dial 111** quickly
- Have the bystander report back to you on how long before help will arrive
- Ask a bystander to meet the ambulance

If you know somebody who is deaf or hearing impaired, you may want to tell them about the emergency 111 Deaf TXT service. You can find information about this service at this website: [www.police.govt.nz/111-txt](http://www.police.govt.nz/111-txt)

### Teach children to be responsible

Show children how to DIAL S L O W L Y

Emphasise that the telephone emergency system is to help save lives and must never be rung without good reason. Tell them that good reasons include:

- If an adult asks them to do so
- If the person in charge of them is unresponsive / appears asleep or hurt
- If they are afraid that something bad is going to happen

The Police have various 111 Emergency resources for children to learn about dialing 111 in emergencies in a fun and active way. You can download them from this website: [www.police.govt.nz/about-us/publication/111-emergency-resources-children](http://www.police.govt.nz/about-us/publication/111-emergency-resources-children)



### Emergency Call Plans

If a medical emergency occurs in your home, you don't want to waste precious time trying to find phone numbers and other critical information you need to call for help. Having an Emergency Call Plan is very important if visitors to your household have to respond to a medical emergency, e.g. babysitter, friends, grandparents.

Update telephone numbers yearly in case they change.

You will receive a blank Emergency Call Plan during your course. This is for you to take home and complete following your course.

Your mobile phone might just be the most accessible phone in an emergency situation. We recommend you enter all the phone numbers and emergency call plan into your mobile phone.

## Common First Aid conditions

Following primary assessment, we assess the patient for any injuries or medical conditions.

Injuries, or traumas, are a result of sudden physical damage to the body (e.g. wounds, internal injuries, burns). 'Medical condition' is a broad term, which includes injuries, diseases and disorders which can negatively impact a person's health.

People with medical conditions are often (but not always) aware of their condition and actively managing it.

Several common conditions we might encounter are presented on the following pages. As First Aiders, our focus is on:

### A. Secondary Assessment

### B. Knowing when to send for help

### C. Providing appropriate treatment

Some common conditions you might encounter when providing First Aid are presented on the following pages. Each will include signs and symptoms for that condition, a description of when to send for help and what type of help, and an outline of appropriate treatment.

## A. Secondary Assessment

Once our primary assessment of the patient is complete, our next step is a secondary assessment to gather information about the patient's condition so that we can decide what (if any) help to send for and provide appropriate treatment. We can get information from the patient, bystanders and the patient's surroundings.

The SAMPLE process provides a good guide for conducting a secondary assessment:

**S**igns / Symptoms – What can you see?  
How does the patient feel?

**A**llergies – Do they have any?

**M**edication – Are they on any?

**P**ast medical history – Do they have any?

**L**ast meal – When and what?

**E**vents leading up to injury / illness –  
What happened?

## B. Knowing when to send for help

For some conditions, you should always **Dial 111** immediately (e.g. shock, stroke). For other conditions, the decision of whether to **Dial 111** will depend on the severity of the patient's condition (e.g. bleeding) or their response to treatment (e.g. angina).

If your first instinct is to **Dial 111**, then do so.

There are also other types of help you can seek if appropriate. These include the National Poisons Centre (0800 POISON) or taking the patient to Accident & Emergency or a medical centre. You can also contact Healthline (0800 611 116) for medical advice.

## C. Providing appropriate treatment

Our objective as First Aiders is to provide simple, effective management of a patient's condition(s). This may include monitoring their condition and managing them until help arrives.

For each of the conditions on the following pages, a simple outline of the appropriate treatment for the patient has been provided. During your course, your instructor will go over each condition in turn and you will practice the practical skills involved.

There are some common actions we should be taking when treating patients:

Talk to the patient. Comfort and reassure them

Monitor the patient's condition and breathing

Document any changes

Treat for shock as appropriate



During the class time session of your course, you will participate in practical scenarios which put this knowledge into practice.



## Shock

Shock is the reaction of the body to a lack of oxygen. In order to supply enough oxygenated blood to the vital organs, the body will reduce blood flow to the skin, arms and legs.

Shock can be caused by many different conditions, as a result of heart failure, loss of blood, or failure of the blood vessels.

Shock is a serious condition – **Dial 111**

### Signs/symptoms

- Pale, cool, moist skin
- Shivering
- Thirst
- Nausea
- Rapid breathing
- Confusion, distress or anxiety
- Feeling sick, vomiting
- Feeling faint, dizziness

### Treatment/response:

- Lie patient down if conscious, place in recovery position if unconscious
- Control any bleeding
- Keep the patient warm
- Monitor airway and breathing
- Comfort and reassure

## Bleeding

Bleeding is the loss of blood from the circulatory system, either through a cut in the skin, or due to internal damage.

Any significant blood loss can impair the transport of oxygen to the body's vital organs and is potentially life-threatening if untreated.

### Signs/symptoms

- Oozing blood from capillaries
- Steady flow of blood from veins
- Spurting blood from arteries

### Treatment

- Apply direct pressure to the wound
- Place a dressing over the wound to absorb blood
- Firmly bandage over the dressing
- If blood soaks through the first dressing, apply another on top

Although the use of dressings and bandages is ideal, any absorbent material can be used if necessary (e.g. shirts, towels).

If the bleeding is severe, or direct pressure does not control the bleeding, **Dial 111**

Remember to use barriers to protect yourself from the blood.

Bleeding can also be internal, in which case no blood will be visible. The signs/symptoms of shock can indicate possible internal bleeding, and the patient may also have pain, swelling or bruising at the site of the injury. If you suspect the patient has internal bleeding, **Dial 111**



## Burns

Burns are the result of damage to the skin and underlying tissue due to extreme heat from fire, steam, water, chemicals or electricity.

There are two categories of burns – surface burns (partial skin thickness) and deep burns (full skin thickness or deeper).

For deep or extensive burns, or burns to the face or neck, **Dial 111**

For surface burns, take the patient to a medical centre following treatment.

### Signs/symptoms

#### Surface

- Pain
- Reddened skin
- Blisters
- Swelling

#### Deep

- Relatively painless
- White or charred skin
- Shock

### Treatment/response

- Cool with running water for at least 20 minutes
- Cover loosely with clingfilm
- If clingfilm unavailable, use wet sterile dressing
- Treat for shock

Clingfilm is ideal for the treatment of thermal burns because it is sterile, it protects the burn from exposure to air (helping alleviate pain), and will not stick to the burn.



The treatment outlined here is for thermal burns (caused by heat). The treatment for chemical burns is different. Your instructor will go over the treatment for chemical burns during your class.



In addition to the conditions described here, your class time session will also cover the following conditions:

- Choking
- Spinal injuries
- Diabetes
- Heat emergencies
- Hypothermia

## Head injuries & Concussion

A head injury, or injury to the scalp, skull or brain, can be a result of accidents, falls, sporting activities, or any trauma to the head. This includes concussion, which occurs from a blow to the head or violent shaking.

If you witness a head injury or concussion, take it seriously and seek medical attention.

Impacts to the head can deliver force to the spine, so such injuries may also result in spinal injuries.

**Dial 111** for any loss of consciousness or altered level of consciousness, or if there is evidence of damage to the skull.



### Signs/symptoms

- Mechanism of injury
- Bruising / bleeding around head or face
- Bumps on or dents in skull
- Lowered level of consciousness

### Treatment/response

- Keep head, neck and body in position found
- Manage any wound without applying pressure
- Monitor level of consciousness / responsiveness continuously
- Treat for shock



A reduced or altered level of consciousness can be a symptom of injury to the brain. Your instructor will go over level of consciousness during class time.

## Fractures

A fracture is a crack, break or bend in a bone. Fractures may be 'closed', in which case the skin remains unbroken, or 'open', where there is a break in the skin – bone may also protrude from the wound.

**Dial 111** for any fracture other than a very minor one (e.g. finger, toe). Depending on the nature and severity of the fracture, you may be advised to transport the patient to a medical centre yourself.

### Signs/symptoms

- Pain, difficulty moving injured part
- Swelling, bruising
- Deformity
- Bleeding (if open fracture)
- Shock

### Treatment/response

- Immobilise and treat gently

Do not bind the fracture or place it in a sling unless it is necessary to move the patient – the manipulation of a fractured limb can cause further damage. Instead, let the patient find their own position of comfort and provide support (place soft materials around the limb) to help keep the limb still.

## Soft tissue injuries

Soft tissue injuries are damage to tissues that surround the bones or joints.

### Signs/symptoms

- Pain
- Bruising or swelling of injured area

The **PRICED** acronym is a useful way to remember the treatment of soft tissue injuries:

- P**revention – Warm up /down prior to and following activity
- R**est – rest from activity following injury
- I**ce – apply wrapped ice or cold compress to injured area
- C**ompress – with bandage, firmly
- E**levate – raise the injured part and support  
Following treatment, we recommend seeking diagnosis
- D**iagnosis – by doctor or physiotherapist

It is not always easy to distinguish a soft tissue injury from a fracture. If you are in doubt, treat it as a fracture and seek medical advice.

## Poisoning

Poisoning is exposure to a poisonous substance or over-exposure to a normally harmless substance. Poisons can be ingested, inhaled, absorbed through the skin or injected.

It is important to save any evidence (e.g. the poisonous substance, packets, containers) – knowing what poisoned the patient will be useful information for emergency services.

### Signs/symptoms

- Lowered level of consciousness
- Nausea / vomiting
- Breathing difficulties
- Evidence present
- Seizures
- Rash

### Treatment/response

- Ring National Poisons Centre and do as directed – Dial 0800 POISON
- Save evidence
- Recovery / stable side position if vomiting
- Comfort and reassure
- Monitor breathing and condition
- If the patient is unresponsive, **Dial 111** as normal.

## Seizures

Seizures are an interruption in the normal electrical activity of the brain. Although patients may suffer from seizures / epilepsy, seizures can also occur as a result of another injury (e.g. head injury). People may experience an 'aura' or warning before a seizure.

### Signs/symptoms

- Changes in awareness, sensations and behaviour
- Convulsions
- Confused or drowsy
- Loss of consciousness, sudden collapse
- Spasms, jerking movements of the head, arms and legs
- Dribbling saliva
- Lose control of bowel or bladder

### Treatment/response

#### During seizure:

- Protect patient's head and body from injury
- Protect patient from embarrassment
- Loosen tight clothing
- Time the seizure

#### After seizure:

- Comfort and reassure
- Place in stable side position
- Monitor breathing

Confusion is common immediately after a seizure, and a period of exhaustion lasting 10 to 30 minutes is also common.

It is not usually necessary to Dial 111 for patients with a known history of seizures. **Dial 111** if:

- Patient is not wearing a medic alert bracelet and has no known history of seizures
- The seizure occurred as a result of an injury (e.g. head injury or poisoning)
- Patient has injured themselves during seizure
- Patient does not resume breathing
- A second seizure starts before the patient has recovered from the first
- Seizure lasts more than 5 minutes

## Heart attack & angina

Angina is temporary pain in the chest resulting from inadequate oxygen to meet the needs of the heart muscle. A heart attack is caused by the heart muscle not receiving enough blood, due to a blockage.

Since the signs and symptoms of a heart attack can vary (not all people experience chest pain), people can be unsure what is wrong and wait too long to get help.

### Common signs / symptoms – Angina

- Chest pain – may spread to neck, jaw and down left or both arms
- Pale to bluish tissue colour
- Breathlessness

### Common signs / symptoms – Heart attack

- Chest pain
- Sweating
- Feeling sick / faint
- Vomiting
- Shortness of breath

### Treatment/response

#### Ask patient:

- Have they had this pain before?
- If yes, do they have medication?
- If yes, help administer medication.
- Repeat original dose after 5 minutes if symptoms not relieved
- Monitor for improvement

Treat as a heart attack and **Dial 111** if:

- Symptoms have not been relieved 5 minutes after 2nd dose of medication
- Symptoms are severe
- Symptoms are getting worse quickly
- Symptoms have lasted more than 10 minutes

While waiting for help to arrive:

- Ask if patient is allergic to Aspirin
- If not allergic, give 300mg Aspirin/Aapec/Cartia/Disprin to be chewed or sucked but NOT swallowed
- Send for AED if practical
- Comfort and reassure patient
- Loosen tight clothing
- Move into comfortable position
- Keep patient warm
- Monitor breathing

## Asthma

Asthma is a condition where the small airways in the lungs are extra sensitive and overreact to certain stimuli (e.g. exercise, smoke, cold, stress). This can result in breathing difficulties, as the breathing tubes spasm, swell, squeeze together or produce mucus.

Asthma attacks can be mild, moderate or severe. One of the key signs of an attack's severity is how many words the patient can speak at a time, or in a single breath.

### Signs/symptoms

- Mild: Short of breath, cough, chest tightness
- Moderate: Loud wheeze, breathing difficulty, can only speak in short sentences
- Severe: Distressed, gasping for breath, unable to speak more than two words in one breath. Little or no improvement after using reliever inhaler, blueness around mouth

For a severe attack, **Dial 111**

### Treatment/response

- Sit patient comfortably upright
- Assist with reliever inhaler
- Use spacer if available
- Follow action plan if available, otherwise:
- Deliver 1 puff of medication  
Patient takes 6 breaths
- Deliver 6 puffs total
- Wait 6 minutes then repeat
- Use a spacer if available - medication is more effective
- Comfort and reassure
- Sit patient forward, arms supported

If the patient does not improve after 6 minutes of treating a mild or moderate attack, **Dial 111**

## Allergies (local reaction)

An allergy is a reaction by the body to a substance to which the person is sensitive, e.g. stings, foods, medications, seafood, peanut butter, eggs.

Allergic reactions may be triggered by insect bites or stings, medications, plants, foods or chemicals.

### Signs/symptoms

- Swelling and redness, or rash, at site of sting/bite/allergen

### Treatment/response

- Check for a medical alert bracelet/necklace
- Use ice, Stingose or similar to alleviate pain and limit reaction

## Anaphylaxis (severe allergic reaction)

Anaphylaxis is a sudden, severe and potentially fatal allergic reaction that involves multiple organ systems and is life-threatening. This allergic reaction affects all body systems including heart rate, breathing and the airway.

It is a medical emergency and can rapidly result in death in severe cases – **Dial 111**

- The faster a reaction develops, the more severe it is likely to be
- Symptoms generally occur within seconds to several hours after contact with the allergy-causing substance
- Some individuals have a reaction and the symptoms go away only to return two to three hours later

If a person is known to have a severe reaction to a substance (anaphylaxis), they should wear a medical alert bracelet/necklace and carry an EpiPen/adrenaline auto injector.

### Signs/symptoms

- May occur within minutes or hours of exposure
- Tightness in the chest or throat
- Difficult/noisy breathing – the breathing may cease
- Wheeze or persistent cough
- Swelling of face, tongue or throat
- Nausea and vomiting, abdominal pain
- Dizziness, lowered level of consciousness or collapse
- Pale and floppy (young children)
- Rash, hives, welts and body redness
- Signs of shock

### Treatment/response

- Check for medical alert necklace/bracelet
- Lie patient flat. If their breathing is difficult, allow patient to sit. Do not get patient to stand or walk
- If the patient is unconscious, place them in the stable side position and monitor their condition
- Follow DRSABCD
- If the patient carries an adrenaline auto injector such as an EpiPen, assist with medication and monitor until help arrives
- Administer further adrenaline medication if no improvement in 5 minutes
- If needed, asthma medication can be used for relief of respiratory symptoms while waiting for help

### Anaphylaxis Action Plan

People and children with known allergies often have a full Anaphylaxis Action Plan.

This plan outlines actions to be taken in case of exposure to the allergy. Follow this plan when the patient shows signs and symptoms or has been exposed to the allergy-causing substance.

### Stroke

A stroke is irreparable damage to part of the brain. It is caused by an artery serving the brain having a blockage, clot or rupture. A stroke is a life-threatening condition – **Dial 111**

Prompt recognition of a stroke is vital. A key tool for recognising a stroke is the FAST check:

- F** **ace** – Ask patient to smile. Is one side of face droopy?
- A** **rms** – Raise both arms. Is one side weak?
- S** **peech** – Can patient speak? Are words jumbled or slurred?
- T** **ime** – Lost time could mean lost brain. Act fast and **Dial 111**

### Other signs / symptoms include

- Numbness of the face, arm or leg
- Drooling, difficulty swallowing
- Sudden loss of vision or blurred vision
- Headache, drowsiness, confusion
- Reduced level of consciousness

### Treatment/response

- Nil by mouth
- Comfort and reassure
- If conscious: Position of comfort
- If unconscious: Recovery position, affected side down
- Monitor breathing

**Dial 111 for:**

<b>Unresponsive patient</b>	Always
<b>Shock</b>	Always
<b>Bleeding</b>	For severe bleeding, or If bleeding not controlled by direct pressure, or For internal bleeding
<b>Burns</b>	If burns are deep or extensive, or For burns to the face or neck
<b>Head injuries &amp; concussion</b>	For any loss of consciousness or reduced level of consciousness, or If there is evidence of damage to skull
<b>Fracture</b>	Always, unless very minor
<b>Poisoning</b>	If patient is unresponsive (otherwise, Dial 0800 POISON)
<b>Seizure</b>	Patient is not wearing a medic alert bracelet and has no known history of seizures, or If the seizure occurred as a result of another injury, or Patient has injured themselves, or Patient does not resume breathing, or A second seizure starts before the patient has recovered from the first, or Seizure lasts more than 5 minutes
<b>Heart attack or angina</b>	Symptoms have not been relieved 5 minutes after 2nd dose of medication, or Symptoms are severe or getting worse quickly, or Symptoms have lasted more than 10 minutes
<b>Asthma</b>	For a severe attack, or If patient does not improve after 6 minutes of treatment
<b>Stroke</b>	Always
<b>Anaphylaxis (severe allergic reaction)</b>	Always

## Real-life scenarios

The scenarios in this module are based on actual newspaper articles (New Zealand Herald). We shortened some articles to focus on first aid related aspects of the situations only.

The purposes of this module are:

- Emergencies do happen in the real world – often when people least expect them. These scenarios will show you what type of emergency situations you might face one day.
- You can practice applying what you have learned in the primary assessment and common first aid conditions sections of this Student Learning Pack to real-life scenarios.
- After each scenario we show what topics relevant to the scenario will be covered in your class time session. This will give you a good introduction to some of the first aid situations your instructor will teach you how to deal with.
- There are questions in the student worksheet for different scenarios to test your knowledge.

Think through each scenario and imagine you being the first responder. That means you are the first person approaching the victim and taking control of the situation. Think about how you would apply the primary assessment process of DRSABCD to the scenario.

In particular, think about:

1. What hazards may be present at the scene and what could you do to control them to prevent harm (eliminate or minimise the hazard)?
2. Based on the limited information presented in the scenario, would you **Dial 111**? What signs / symptoms or other factors would you consider when making this decision?
3. What treatment would you provide for the patient?
4. Are there any tasks you could assign to bystanders?

### Confidence and skills

very low 1 2 3 4 5 6 very high

For each scenario we will ask you to rate your confidence and skills in dealing with that type of medical emergency. The purpose of this is for you to reflect on where you are now and in which areas you would like to become more skillful and confident. There is no right or wrong answer and we do not expect you to rate yourself highly as this reflects you before your class time session.

Your First Aid course is designed to move you up the scale or, if you already consider yourself highly confident and/or skillful, maintain and strengthen this rating.

## Real-life scenario 1

First Aid Herald

### Mountain bike hero does CPR on cyclist

A 70-year-old man seriously injured in Whakarewarewa Forest was given a "fighting chance" after a passing mountain biker performed CPR before paramedics arrived.

The man fell from his bike on the mountain bike trail. He braked suddenly approaching a downhill and went over the handlebars. The trail was an easy track.

A local business owner and responder at the scene said the incident highlighted the need for first aid equipment to be kept at his business. He said two staff were at another accident where someone had a possible neck fracture when the call came in. "I got a call from a friend who said the guy was in really bad shape."

He said when he got to the accident site the helicopter

had arrived and another biker had started CPR. "He was doing everything he should have done. He did a great job. He gave this guy a fighting chance of living."

The ambulance crews stabilised the man at the scene before he was flown to hospital.

Last month, a local mountain biker started a fundraising effort to buy first aid equipment to be kept at the local business because of its "unofficial" role in responding to accidents in the forest. They are trying to raise money to buy new stabilisation equipment, as well as something to shelter injured riders and, ideally, a defibrillator. "This incident highlighted that the gear is necessary and it needs to be there."



The class time session of your course covers the following topics relevant to scenario 1:

- How to approach an accident scene
- How to call for help
- How to perform CPR
- How to use First Aid equipment
- How to treat suspected spinal injuries

## Real-life scenario 2

First Aid Herald

### John Malkovich helps save bleeding tourist

John Malkovich has been hailed a hero after he rushed to the aid of an injured tourist in Toronto, Canada.

The actor was having a cigarette break near the King Edward Hotel in the city when an American man fell over scaffolding and was left bleeding from his neck.

Malkovich, who is in the city playing Casanova at the Elgin Theatre, was the first at the scene to help the man, applying pressure to the injured spot to stem the bloodflow.

The man was briefly hospitalised before being released.



The class time session of your course covers the following topics relevant to scenario 2:

- How to ensure scene safety
- How to control bleeding
- How to use barriers



### Real-life scenario 3

First Aid Herald

## Man loses foot in accident at Port of Tauranga

A man's foot was chopped off when it became caught in a winch in a serious accident. The man was working in the log yard at a port when his foot got caught in a winch cutting his foot off just above the ankle.

The 41-year-old man was taken to hospital with a serious leg injury. The man is in a critical but stable condition.

An ambulance officer said the man's workmates did a great job of administering first aid until ambulance staff arrived.

The scene of the accident has been closed off to allow police and the Department of Labour to conduct their investigation.



The class time session of your course covers the following topics relevant to scenario 3:

- How to perform a primary assessment
- How to deal with major wounds
- Why it is important to report workplace accidents and keep good Health and Safety records

### Real-life scenario 4

First Aid Herald

## Children trapped in burning car

A three-year-old girl and her 22-month-old brother were trapped in a burning car yesterday afternoon and were pulled unconscious from the vehicle by three men. The children suffered burns to 40 per cent of their bodies, and were flown to hospital.

The children had been left alone in the vehicle in a carpark, a bystander said. It was believed the blaze was sparked by one of the children playing with a lighter and setting fire to the backseat.

Witnesses said there was a small explosion and flash fire which produced clouds of black smoke. A staff member at a nearby store saw smoke pouring from the locked car and made a call over the public address system.

The owner of another business saw the burning car, rushed out with a fire extinguisher and extinguished the fire.

The children's mother then rushed out of the store to unlock the car, which was when members of the public realised children were trapped inside. A bystander said the mother was "totally hysterical and traumatised".

"There was a little girl in there, so I pulled her out and a member of the public performed CPR on her", the business owner said. "I went back into the vehicle to see if anyone else was in there and that's when I noticed the 22-month-old in there, so I pulled him out and he was unconscious." He performed CPR on the boy. Once revived, the children were coughing and crying and had "serious burns", he said.

"It's very sad and definitely something you don't want to see a child go through." He said it was a "team effort" to save the children. "Even when we had pulled the children out, there were people coming out with bottles of water to try to bathe the children and cool them down."

The ambulance district operations manager praised the work of the witnesses who rescued the children, and said they may have made the difference in saving the children's lives. "From our point of view, removing the children from the fire and providing that initial first aid has contributed greatly to their care."



The class time session of your course covers the following topics relevant to scenario 4:

- How to manage medical emergency scenes involving multiple victims
- How to deal with burns
- How to perform CPR on children

## Real-life scenario 5

First Aid Herald

### Preschool tips help boy save mum's life

Ashika Ali knows she has her young son to thank for being alive. The 5-year-old boy was at home with his mother when she lost consciousness on the couch. At first he thought she was sleeping and covered her with a blanket so she didn't get cold. But when she still didn't wake up hours later he called 111 for help.

Ashika Ali can still hardly believe what her son had done. "He did a great job, I'm really proud of him."

Mustafaa Ali learned what to do in an emergency during a police visit to his preschool. She was grateful for the lessons Mustafaa had learned, but never would have imagined she would be the one who needed them. "You don't think it will come to use ... If it wasn't for that I wouldn't be here today."

Mustafaa said he called the "Fire Truck lady" to say his Mum was sick. "They came to my school and showed us how to ring 111," he told the Herald.

Mustafaa's father, Iftikar Ali, said he was very proud. "He saved her

life. Because he stayed the whole night with her and he told me he wondered if he should call 111 when he was in bed. He put the blanket over her and thought 'should I call 111 now?'

"He tucked her in and tried to give her some water but she didn't want it ... He got tired and then went to bed and when he woke up she still wouldn't move and he thought his Mum was dead so he called police."

Constable Lance Mulu, of the Mangere East Neighbourhood Policing Team, said the preschool visits were a key part of the Prevention First strategy. He was thrilled Mustafaa had put what he'd learned into action. "With prevention you never really hear anything good - because if you prevent it, it doesn't happen - so this gives us a sense of satisfaction." He remembered speaking to the class. "Usually at that age you don't really expect kids to remember everything so you make it really fun ... so I definitely remember going in."



The class time session of your course covers the following topics relevant to scenario 5:

- How to deal with diabetic emergencies
- Why everybody, including children, should know how to call for help

## Real-life scenario 6

First Aid Herald

### Battery warning after girl's death

When a child swallows a battery, it's a race against the clock to diagnose and remove the device before it breaks down inside the body within two hours.

Every year, about 20 children are injured so severely after swallowing batteries that they're admitted to hospital. Health professionals have renewed warnings to parents about the dangers of batteries after a 4-year-old girl suffered stomach bleeding from swallowing a lithium battery.

"Get children to a hospital as quickly as possible and let the doctors know they could have swallowed a battery. Insist that they investigate," said Ann Weaver, Safe Kids New Zealand director.

"We don't have the luxury of waiting for it to pass because it's a two-hour timeframe before it actually starts to cause damage."

Detecting that a child has swallowed or inserted a battery is difficult for doctors because it can look like a button or a coin in an x-ray, so Ms Weaver said it was vital that parents let medical professionals know it could be a battery.

Children should be taken to a hospital rather than a GP or an A&E, and should not eat or drink.

On Sunday, a 4-year-old Sunshine Coast girl died from stomach bleeding after swallowing a lithium button-shaped battery that morning.

Susan Teerds from Kidsafe Queensland said when a child swallowed a battery it often got caught in the oesophagus, around the voice box, and would start to burn a hole after an hour.

"The saliva starts a chemical reaction and burns a hole through the oesophagus and can keep burning a hole into the aorta, through to the spine and whatever else is there."

Toys usually had features to stop children getting at the power source, Ms Weaver said. Television remotes, key-rings and musical cards were devices most likely to pose danger.

Manufacturers have been investigating ways to make batteries safer, including coating them with a blue dye that would be released on contact with saliva, making the electrical current harder to set off, and designing the batteries so they were harder to swallow.

#### How to keep your child safe

- Ensure devices with battery compartments are secure.
- Keep coin-sized button batteries out of reach.
- Dispose of old batteries.



The class time session of your course covers the following topics relevant to scenario 6:

- How to assess a situation quickly
- How and when to call for help
- How to perform a primary assessment
- How to deal with internal bleeding

## Real-life scenario 7

First Aid Herald

### Saved by right people at right place – twice

Few people are unlucky enough to suffer two cardiac arrests in six months, but John Connor is counting himself lucky because trained first aiders were on hand both times.

He has a lot to thank for first aid training and is now encouraging more people to learn the skills.

The New Plymouth marine training instructor first went in to cardiac arrest during a helicopter escape training session in the pool, then again five months later while trying to perform CPR on the victim of a road accident.

Both times he was lucky enough to be surrounded by people who knew first aid. "I was very, very fortunate in where I was and who was with me," he said.

"People had the skills to keep me going. If it had happened at home in the garden I wouldn't be here now, it's that simple."

Mr Connor has no previous history of heart conditions and is otherwise

healthy and active.

His first cardiac arrest happened in the pool at his work. "A diver pulled me out, got me on the side and they all dived in and started doing CPR. They got the defibrillator out and paramedics arrived after seven or eight minutes and they carried on for half an hour." Mr Connor required 17 defibrillator shocks in total.

It was midway through performing CPR on a road crash victim in December when Mr Connor arrested for the second time. "I came across a road accident and a lot of people were standing around and nobody knew what do to so I dived in on the unresponsive guy and started doing CPR. The paramedics turned up next to me and I keeled over."

He said his advice to anyone was to learn first aid. "Get some training, no matter how little, get some. It could just make that difference."

He said he could not offer enough thanks to the people who had helped him.



Scenario 7 is included for your interest and information. There are no questions relating to it in the Student Learning Worksheet.

The class time session of your course covers the following topics relevant to scenario 7:

- How to perform CPR
- How to use defibrillators
- Why it is important that everybody should have First Aid training and refresh their training regularly