



Queensland Ambulance Service

Pre-course **READING**

Excerpts from the QAS FIRST AID MANUAL – Edition 9.0



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Disclaimer

This QAS resource has been derived from a variety of medical sources as well as policies and procedures of the Australian Resuscitation Council (ARC) and International Liaison Committee on Resuscitation (ILCOR) and represents the authors' and QAS's interpretation of current practice on this subject at the time of writing.

It should be noted that it is important to review first aid procedures and literature as it is released and to reassess appropriate areas of the text of this book accordingly. Treatments may vary with time and should never be used or adopted exclusive of, or in substitution for, medical consultation.

Readers of this first aid resource must be aware that this book outlines typical rather than definitive signs and symptoms, and therefore first aid administered in response to apparent signs and symptoms as listed cannot be guaranteed to succeed.

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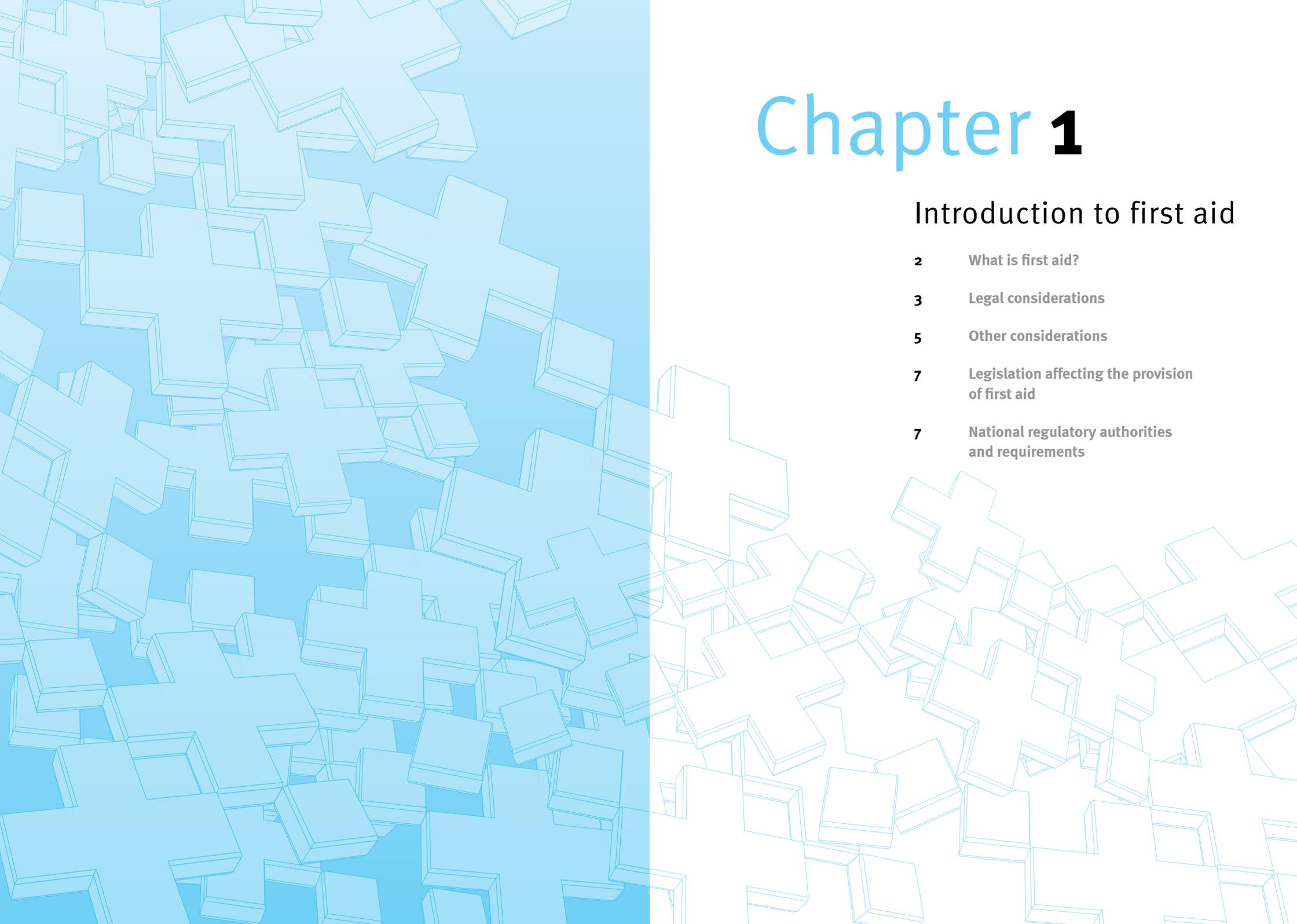
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Chapter **1**

Introduction to first aid

- 2** **What is first aid?**
- 3** **Legal considerations**
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What is first aid?

First aid is the earliest care given to someone who is ill or injured. It can be administered by anyone with proper training, from an ordinary person to more advanced medical practitioners, like doctors, nurses and paramedics. For minor incidents, first aid may be all that is required to assist a casualty to a full recovery. In more serious situations, first aid can greatly increase the chances of a positive outcome for the casualty.



The primary objectives of first aid are to:

- + Preserve life
- + Protect the unconscious
- + Prevent a casualty's condition from becoming worse
- + Promote the recovery of the casualty.

Providing first aid may be as simple as providing reassurance to a casualty, or it may involve giving cardiopulmonary resuscitation (otherwise known as CPR).

In emergency situations, it is often the quick but simple actions of someone applying first aid that ensure a casualty has the best chance of making a full recovery.

First aid training is the best preparation you can have in the event that someone becomes ill or injured and requires assistance.

Legal considerations

A common concern that people have about administering first aid is the risk of legal liability which could arise from assisting an injured or ill person. First aid providers should feel confident in providing assistance when they work within the guidelines of their current first aid training and act in good faith with reasonable care and skill, carefully, and with full and proper consideration for the welfare of the casualty.

REMEMBER: In life-threatening situations, any form of assistance is likely to be of greater benefit than no assistance at all.



Queensland Ambulance Service (QAS) offers treatment liability insurance protection when a Statement of Attainment is issued. This insurance protects the first aid provider in the highly unlikely event of litigation following first aid intervention.

When providing first aid, consideration should be given to the follow legal issues:

- + Consent
- + Duty of care
- + Breach of duty.

Consent

Before administering first aid, consent must be obtained from the casualty. This is to preserve their right to refuse any unwanted form of personal contact or treatment.

A casualty's consent is valid when:

- + Their decision is made voluntarily
- + Their decision is informed
- + Their decision covers the first aid treatment to be performed, and
- + They have the capacity to provide consent.

People who are considered to lack adequate capacity to provide consent include:

- + A minor (a person under 18 years of age in Queensland) or
- + A person who has diminished ability to understand or communicate the nature and consequences of their decision, for example, a casualty who is unconscious or confused.

If the casualty is a minor, the first aid provider must attempt to obtain permission from their parent or guardian to apply first aid. If they are not with the minor or treatment will be delayed whilst seeking their consent, then consent can be inferred.

IMPORTANT: If a casualty cannot provide direct consent and first aid could prevent death or serious injury, the general principles governing consent may not apply as it is assumed the casualty would agree to being helped.



Duty of care

Under Queensland law, and outside any other legal obligation, a first aid provider is not compelled to render assistance (first aid providers in other states should check their legal obligations). Some employees with first aid training may be expected to provide assistance within their own workplace to their colleagues, should the need arise. This legal obligation arises out of the contract of employment.

Once a first aid provider commences providing first aid treatment, they have a duty of care to continue the treatment until:

- + The casualty recovers
- + More advanced care arrives
- + The scene becomes a danger to the first aid provider, or
- + The casualty refuses treatment.

Breach of duty of care

A breach of duty of care occurs when the first aid provider fails to act in accordance with their first aid training.

It can be determined that the first aid provider has breached their legal obligation of care if they have provided first aid outside of the limits of their first aid training and have not remained with the casualty until more experienced medical care arrives.

These expectations may be affected, however, by the conditions and circumstances in which the first aid care is being provided. For example, allowances may be made for the particular stress of a situation. The expectation of a single first aid provider at a multi-casualty incident may be different to the provision of first aid to a single casualty.

Other considerations

When providing first aid, consideration may also need to be given to:

- + Cultural differences
- + Language barriers
- + Beliefs about death
- + Religious beliefs
- + Authorisation to administer medication
- + Obligations and priorities when involved in a road incident (such as a road traffic crash).

When considering the above issues, it is difficult to make a judgement about the actions that should be taken in a particular situation. However, in all circumstances, first aid providers should primarily remain aware of the objectives of first aid, the aims of a first aid provider, and any legal considerations that may affect their actions.

First aid providers may assist with administering a casualty's prescribed medication, unless their first aid training provides authorisation to administer other medication (such as asthma reliever medication). When administering medication, first aid providers should ensure they:

- + DO NOT administer medication which they are not authorised to administer
- + DO NOT administer medication which they are not trained to administer
- + DO NOT administer medication that has been prescribed to a person other than the casualty.

Obligations and priorities at the scene of a road incident

Under Queensland law, there are obligations imposed on a driver involved in a road incident (such as a road traffic crash) that results in injury to or death of any person or damage to property. With regard to the provision of first aid, these obligations include:

- + Immediately stop at the scene
- + Remain at the scene and render any assistance possible to casualties
- + Call for medical assistance and any other assistance that may reasonably be required for casualties
- + Show proper respect for any deceased casualties.

You must also report the incident to police if any person is killed or injured.

First aid management at a road traffic crash

- + Approach the scene with caution and make it as safe as possible (without endangering yourself or others)
- + Do not touch a vehicle, or attempt to rescue a person from within 10 metres of a fallen power line unless an appropriate electrical authority has declared the area safe
- + Use hazard lights, road triangles, torches or where appropriate, bystanders to warn oncoming traffic of the accident scene
- + Turn off the ignition of a crashed vehicle and activate the park brake (if unable to activate the park brake place a chock under a wheel)
- + Be aware of the risk of airbag activation
- + Remove a motorbike from a casualty as necessary
- + Where there is more than one casualty, the care of an unconscious casualty has priority
- + If an unconscious, breathing casualty can be managed within the vehicle, do not remove them unless there is a threat to life. Clear the casualty's airway, maintain head tilt and jaw support and continue to monitor and assess vital signs
- + If the casualty is unconscious and not breathing normally, remove the casualty from the vehicle if possible and commence CPR immediately.



Legislation affecting the provision of first aid

There is a wide range of regulations, legislation, policies and procedures that govern the provision and administration of first aid. These may vary across workplaces, states and territories, and countries. Some examples of regulations, legislation, policies and procedures that affect the provision of first aid in Queensland include:

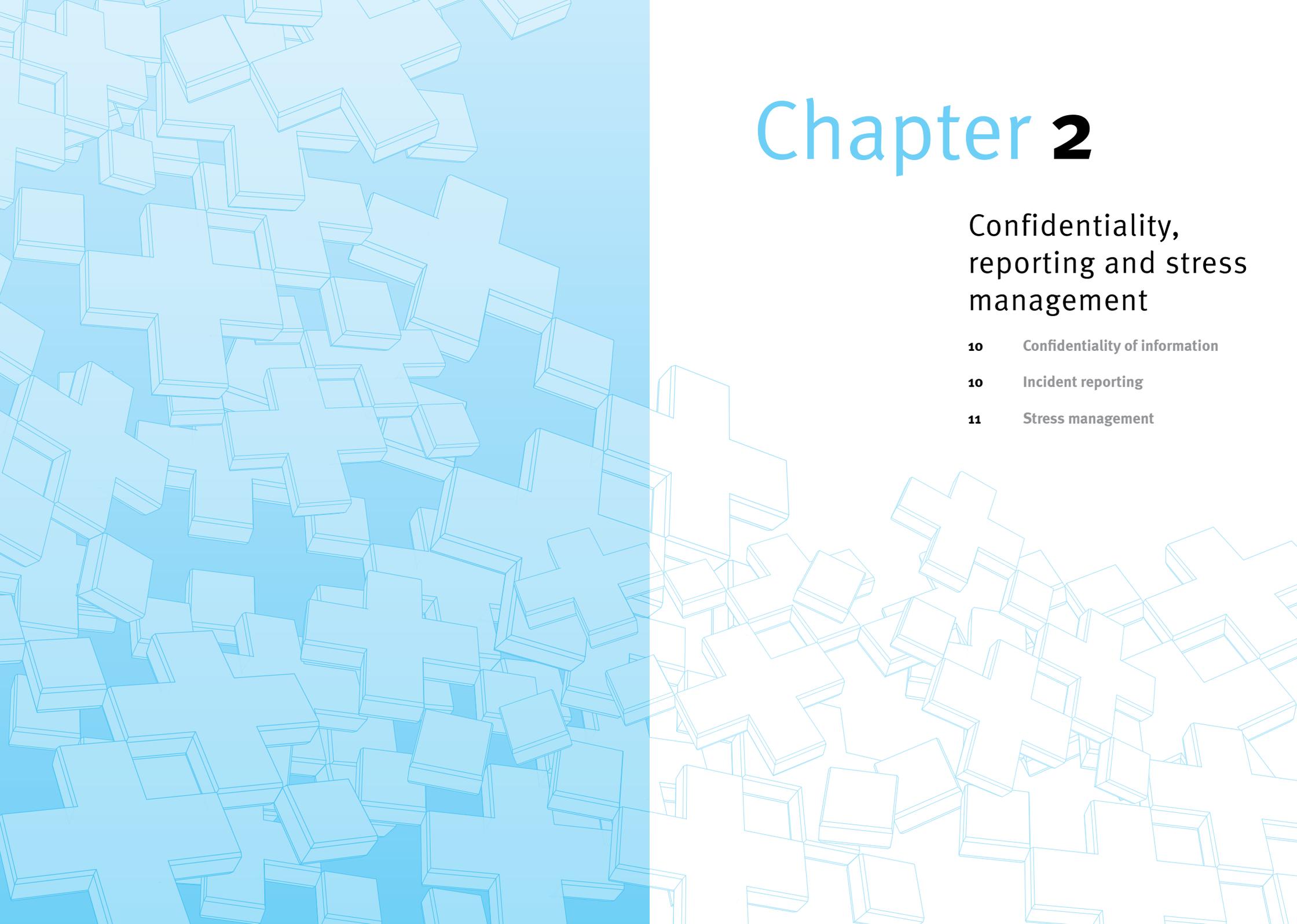
- + *First Aid Code of Practice 2004*
- + *Work Health and Safety Act 2011*
- + *Health (Drugs and Poisons) Regulation 1996*
- + *Ambulance Service Act 1991*
- + *Fire and Rescue Service Act 1990*
- + *Transport Operations (Road Use Management) Act 1995*
- + *Criminal Code Act 1899.*

National regulatory authorities and requirements

Current and accepted practices in the first aid management and treatment of injuries and illnesses within Australia is guided by a range of national regulatory authorities and peak bodies. These may include:

- + Australian Resuscitation Council (ARC)
- + International Liaison Committee on Resuscitation (ILCOR) (of which the Australian Resuscitation Council is a member)
- + Specialist national peak bodies, for example the National Asthma Council, Diabetes Australia, Allergy Australia and many others
- + Industry research (such as that conducted by the Queensland Ambulance Service Clinical Performance and Service Improvement Unit).

First aid practices change over time, and therefore it is vitally important that first aid providers maintain current knowledge and skills through regular training and in accordance with regulatory authority and industry requirements.



Chapter 2

Confidentiality, reporting and stress management

- 10** Confidentiality of information
- 10** Incident reporting
- 11** Stress management

Confidentiality of information

Personal information is information or an opinion about a person that, whether true or not, identifies or could identify the person. Personal information may include:

- + Name
- + Date and place of birth
- + Race or ethnicity
- + Religion
- + Financial details
- + Medical information/history.

Personal information about a casualty, whether health-related or not, is confidential. This information includes details of medical conditions, treatment provided and the results of tests. Disclosure of personal information, without the casualty's written consent, is unethical and in some cases may be illegal.

Incident reporting

The continuity of a casualty's care in a pre-hospital environment is critical to ensure the casualty is given every chance possible for a full recovery. The content and quality of the handover provided by the initial first aid provider to ambulance paramedics is a key aspect of this.

There are many documents that could be used to record the first aid treatment provided to a casualty, for example:

- + Incident report form
- + Specific workplace/hazard incident report
- + Diary notes/calendar entries
- + Treatment register/log
- + Ambulance report forms.

Incident report forms

Completed incident report forms are part of the casualty's health care record and serve to inform subsequent health professionals about the casualty's condition and treatment prior to arrival in hospital or other health care facilities. They may also need to be produced as evidence in court. Workplace first aid providers should ensure they also follow their internal workplace reporting procedures.

When recording information relating to first aid, consideration should be given to including the following in any record:

- + Name, address, date of birth and sex of injured or ill person
- + Contact phone number/s
- + Basis of employment (e.g. full time, part time, casual, visitor)
- + Occupation
- + Whether consent was obtained prior to treatment
- + Nature of injury or illness (e.g. fracture, burn, respiratory difficulties)
- + Body location of injury or illness
- + How the injury or illness occurred
- + Time and location of the incident which caused the injury or illness
- + Details of treatment (e.g. the first aid treatment given and/or referral to ambulance paramedics, doctor, hospital or elsewhere)
- + Subsequent injury/illness management
- + Any other relevant details such as witnesses to the incident, and
- + Name and signature of person completing the record.

Stress management

In the event of a major incident of a traumatic nature, the first aid provider may be invited or requested to participate in an incident debrief. Participating in an incident debrief provides an opportunity for the first aid provider and colleagues to discuss the effects of the event.

An incident debrief is different to an operational debrief as it focuses on human reactions to a major incident. The two primary goals of an incident debrief are:

- + To reduce the impact of the critical event
- + To accelerate the recovery of people who are suffering through the normal although painful reactions to abnormal events.

After an emergency incident

After responding to an emergency incident it is important to allow time to review the effectiveness of the emergency response, and also to allow time for the first aid provider to consider and respond to their emotional/physical reaction to the incident.

Operational debriefing focuses on evaluating the response to the incident and examining areas for improvement. When conducting an operational debriefing on how the incident was managed and what could be improved, it is important to ensure expectations remain realistic.

Time must also be allocated to the clean-up of the scene and equipment and to restock first aid supplies. The first aid provider should:

- + Take a break
- + Talk about the incident with peers
- + Try to relax as much as possible
- + Clean up the scene
- + Clean or safely dispose of any equipment used
- + Restock the first aid kit by replacing all items used and looking for any soiled, unopened items that will need to be replaced
- + Complete any documentation
- + Securely file documentation
- + Seek further assistance and support if emotionally affected by the incident.

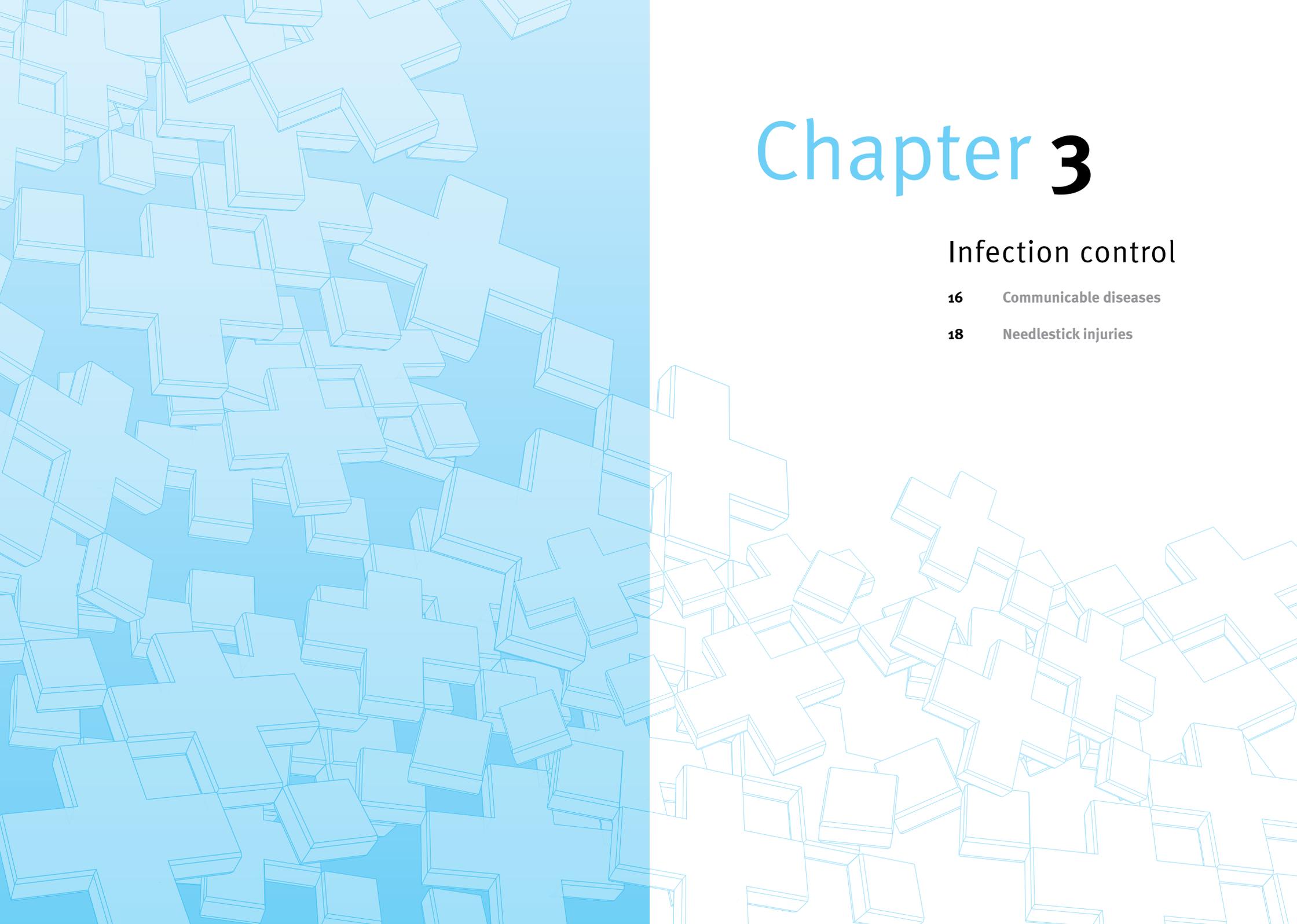
Responses to emergency incidents

After the initial response to any emergency, it is not uncommon for first aid providers to feel stress or be emotionally affected by it. Every person reacts differently to situations. Emotional responses to emergency incidents may become apparent immediately, or they may not be obvious until months after the incident. Understanding what you are feeling or experiencing and taking positive steps to seek assistance may help you cope with the incident.

Common responses to emergencies include:

- + Crying for 'no apparent reason'
- + Difficulty making decisions
- + Difficulty sleeping
- + Disbelief, shock, irritability, anger, disorientation, apathy, emotional numbing, sadness and depression
- + Excessive drinking or drug use
- + Extreme hunger or lack of appetite
- + Fear and anxiety about the future
- + Feeling powerless
- + Flashbacks
- + Headaches and stomach problems.

If the first aid provider has strong feelings that will not go away or if they are troubled for longer than four to six weeks, they may need to seek professional help. Medical practitioners can provide assistance and/or referral services, and there are numerous organisations that offer counselling and support such as Lifeline, BeyondBlue, Kids Helpline, religious and other support groups to name a few. Many workplaces also have staff support services available to employees and their families.



Chapter 3

Infection control

16 Communicable diseases

18 Needlestick injuries

Communicable diseases

Communicable diseases are diseases that can be spread from one person to another (or from one infected organism to another) through either fluid exchange or by vector-borne transmission. Some examples of communicable diseases include:

- + Colds and flu
- + Measles and mumps
- + Chicken pox
- + Various strains of hepatitis
- + HIV infection
- + Herpes, and
- + Some forms of meningitis.

Communicable diseases are transmitted by the transfer of body fluids and other body micro-organisms such as blood, saliva, vomit, urine and faeces. A first aid provider needs to protect themselves and casualties from communicable diseases by minimising contact with blood and other body fluids.

Mode of transmission

Fluid exchange:

- + Contact transmission occurs when an infectious agent is transferred either through direct contact (with skin, eyes or mucous membranes such as the inside of the mouth or nose), or indirect contact (with another object such as bandages, clothing or environmental surfaces).
- + Droplet transmission occurs when large respiratory droplets (such as from coughing, sneezing or talking) contact susceptible mucous membranes (such as the eyes, nose or mouth). This form of transmission occurs over shorter distances.
- + Airborne transmission occurs when infectious agents (such as small residue from respiratory droplets) remain suspended and are carried in the air for long periods of time.

Vector-borne transmission:

- + A vector is a carrier of diseases. Contaminated objects (e.g. hypodermic needles) and living micro-organisms (e.g. mosquitoes) fall into this category. Examples of vector-borne infections include malaria, dengue fever and Ross River fever.

Standard Precautions

There are standard precautions that can be taken to ensure safety. Standard precautions are based on the principle that all blood and body substances are potentially infectious. This principle is applied universally to all patients, regardless of their infectious status or perceived risk. A good rule of thumb is to treat all blood and body fluids as contaminated and act accordingly.

Below are some examples of work practices required for the basic level of infection control, and are recommended for the treatment and care of all patients. They include:

- + Wear personal protective equipment (PPE) such as gloves, boots, gowns, plastic aprons, masks, eye shields or goggles
- + Avoid contact with objects that may be contaminated
- + Appropriately handle and dispose of sharps and other contaminated or clinical waste
- + Use safe hygienic practices, particularly washing hands thoroughly with soap and drying hands before and after administering first aid
- + Appropriate reprocessing and sterilisation of reusable equipment and instruments
- + Use aseptic techniques where applicable
- + Cover their own exposed cuts and grazes with waterproof dressings
- + Avoid eating, drinking and other forms of hand-to-mouth contact whilst administering first aid
- + Change gloves before handling different casualties to minimise the possibility of cross-infection between casualties
- + Use environmental controls
- + Seek medical aid as soon as possible if contamination by infected blood or body fluids occurs.

Needlestick injuries

Needlestick injury is an accidental penetrating injury caused by a hypodermic needle or similar sharp medical item. Used needles and syringes can spread diseases such as hepatitis B, hepatitis C and HIV. People most at risk of needlestick injuries include health care workers. Any member of the public who finds discarded needles, syringes and other medical sharps in public places is also at risk of needlestick injuries.

Needlestick injuries can largely be prevented by:

- + Being alert for concealed needles
- + Avoiding placing hands into concealed places, such as behind toilet cisterns or into rubbish bins
- + Not compressing rubbish bags with hands
- + Wearing appropriate footwear
- + Using puncture-resistant gloves in risk-prone areas or when undertaking risk-prone duties.

If a discarded needle is found:

- + Do not recap the needle
- + Place it safely in a rigid-walled, puncture resistant container
- + Secure the container.

Treatment of needlestick injuries:

- + Stay calm
- + Wash the area with soap and water for at least 30 seconds
- + Contact a doctor or hospital in case medical treatment, vaccination or testing is needed
- + Report the incident to a supervisor or manager, if applicable.

Chapter 5

Secondary survey

- 20** Casualty history
- 21** Vital signs
- 24** Head-to-toe examination



Casualty history

The assessment of a casualty's history is a vital part of helping to understand or recognise a casualty's condition, and may assist in the management of the casualty. A casualty's history is best obtained directly from the casualty, but may also be obtained by questioning bystanders and witnesses.

To obtain a casualty's history use the acronym A-M-P-L-E:

Allergies	Does the casualty have any known allergies, or have they had an allergic reaction in the past? How bad/extensive were those reactions (localised or severe)?
Medication	Is the casualty currently on any medication (prescription or non-prescription)? If so, what is the medication, recommended dosage, frequency of dosage, how is it taken? When was the medication last used and what effect has it had? Is the casualty currently under the supervision of a doctor or hospital that may have relevant information on their medication?
Past medical history	Has the casualty experienced this illness or injury previously? If so, how does it compare to this current illness or injury episode in terms of duration and severity? Was there any medication or medical assistance provided previously? Does the casualty have a history of any other medical problems or family medical history? Is there anything that aggravates or alleviates the illness or injury?
Last eaten	Has the casualty eaten recently? If so, what did they eat and when did they eat it? This will assist paramedics or treating doctors if the casualty requires surgery. The contents of the casualty's last meal may also assist in identifying any allergies.
Events leading up to illness/injury	Is there a known or obvious cause of this illness or injury? What activities was the casualty engaged in prior to onset? Did they experience any pain or other indicators prior to onset?

During the assessment, use questions which are open ended and elicit information. Questioning should not make the casualty feel uncomfortable or uneasy, and those providing assistance should always speak at an appropriate level of understanding for the casualty. If the casualty is conscious always speak directly to them and do not allow bystanders to speak for the casualty.

Always observe the environment surrounding the casualty as there may be information in the environment that provides a more detailed understanding of the incident. For example, some things to look for may include used alcohol bottles, medications, drugs, general untidiness, animals or evidence of domestic violence.

Vital Signs

First aid providers need to pay close attention to vital signs, checking and recording them regularly until the paramedics arrive. Vital signs include:

- + Level of consciousness
- + Breathing
- + Pulse
- + Skin colour.

Level of consciousness

First aid providers should regularly check for any change to a casualty's level of consciousness which could indicate their condition is improving or declining. If a casualty becomes unresponsive and is not breathing normally, CPR should be commenced immediately.

Breathing

An adult breathes approximately 500 ml of air per breath. First aid providers need to regularly check for any change to a casualty's breathing which could indicate their condition is improving or declining:

- + Adults at rest breathe between 12–18 times per minute
- + Children at rest (one to eight years old) breathe between 15–30 times per minute
- + Infants at rest (under one year) can breathe between 25–50 times per minute.

Signs of abnormal breathing include:

- + Gasping
- + Noisy breathing, such as wheezing or gurgling
- + Breathing that is excessively fast or slow
- + Pain when breathing.

Pulse

Every time the heart contracts, it forces blood around the body through the circulatory system. This is referred to as a person's pulse. If a pulse is present, it may be felt by placing two fingers over one of the radial arteries in the wrist, or over the carotid artery in the neck. As a general rule, normal resting pulses are:

- + **Adults** – between 60 to 100 beats per minute
- + **Children** (one to eight years old) – between 70 to 140 beats per minute
- + **Infants** (under one year old) – between 90 to 160 beats per minute.

A change in someone's normal pulse rate could indicate an improvement or worsening of their condition and can be indicated by:

- + Irregularity
- + Weakness
- + A pulse that is too fast or too slow.

If the casualty is in shock, the radial (wrist) pulse might be hard to find as the body redirects blood from the extremities to vital organs. In this instance, feel for the carotid (neck) pulse first.

To check for a casualty's carotid (neck) pulse:

- + Gently tilt the casualty's jaw upwards
- + Move your fingertips gently downwards beside the windpipe (below the jawline)
- + Press down with your fingers until you feel the casualty's pulse. Do not press too hard, or you will not be able to feel the pulsation
- + Continue to feel the pulse for a full minute
- + Record this pulse rate and the time it was taken.



Checking the carotid pulse

To check for a casualty's radial (wrist) pulse:

- + Turn the casualty's hand palm-side up, and then place your first two fingers along the outer edge of the casualty's wrist, just above where their wrist and thumb meet
- + Slide your fingers toward the centre of the casualty's wrist. You should feel the pulse between the wrist bone and the tendon
- + Press down with your fingers until you feel the casualty's pulse. Do not press too hard, or you will not be able to feel the pulsation
- + Continue to feel the pulse for a full minute
- + Record this pulse rate and the time it was taken.



Checking the radial (wrist) pulse

Skin colour

Skin colour can give critical early clues about the casualty's condition. A casualty who is suffering shock may be sweaty and will have pale skin that is cool to touch. This is because the body redirects blood away from the skin's surface to support the functioning of the vital organs, whereas flushed (very red) skin could indicate high blood pressure or an allergic reaction. If the casualty has a darker skin colour and it is suspected they may be suffering from shock, the first aid provider should also check the inside of their bottom lip and gums for paleness.

Head-to-toe examination

The head-to-toe examination is a step-by-step search for any injuries that are yet to be identified. It prioritises the more serious injury locations. Injuries should be treated in the order in which they are found according to the sequence below:

1. Head
2. Neck
3. Chest/back
4. Abdomen
5. Pelvic area
6. Legs
7. Arms.

It will not always be necessary to carry out a head-to-toe examination. The types of injuries that may be identified through a head-to-toe examination include minor bleeds, bruising over internal organs that could indicate internal bleeding and deformities that could indicate fractures. It may also locate a medic alert tag that will help the first aid provider be aware of a casualty's existing medical condition. The first aid provider should avoid any unnecessary contact with obviously injured parts of the body. Watching a casualty's facial expressions is a good gauge for any discomfort they might be in. For thoroughness, check both left and right, front and back of the body.



Chapter 6

Respiratory emergencies

26 Asphyxia

26 Anaphylaxis

29 Asthma

Asphyxia

Asphyxia is a condition where the supply of oxygen to the tissues and organs of the body is deficient due to the inability of the casualty to breathe normally.

Common causes of asphyxia include:

- + Asthma
- + Foreign body airway obstruction (choking)
- + Immersion/drowning
- + Gas/smoke inhalation
- + Seizures.

Asphyxia can cause a casualty to go into an unconscious state which may lead to death if not treated appropriately.

Anaphylaxis

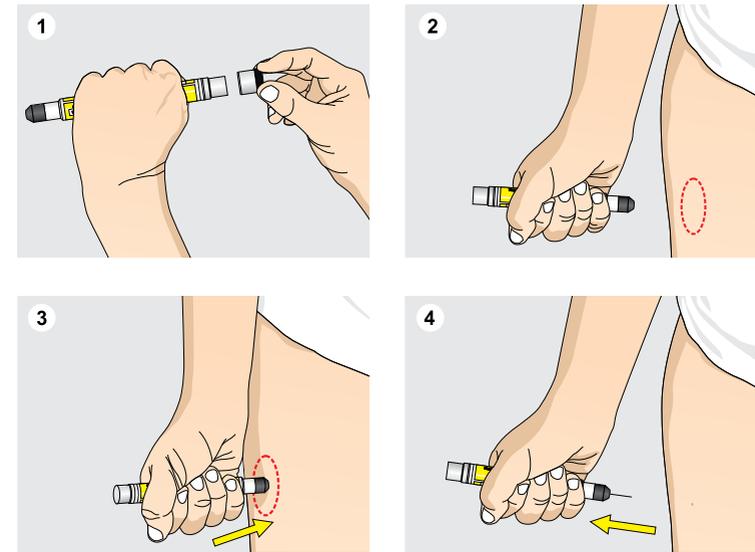
Anaphylaxis is the most severe form of allergic reaction and is potentially life-threatening. It must be treated as a medical emergency, requiring immediate medical attention. Anaphylaxis is a generalised allergic reaction, which often involves more than one body system. A severe allergic reaction usually occurs within approximately 20 minutes of exposure to the trigger. It is characterised by rapidly developing airway and/or breathing and/or circulation problems usually associated with skin and mucosal changes.

Some of the most common triggers are:

- + Foods, especially peanuts or other nuts, eggs, cows milk, sesame products, soy products, fish and shellfish
- + Certain drugs, such as penicillin
- + The venom of stinging insects, such as bees, wasps or ants
- + Substances or material containing latex
- + Animals (such as family pets).

People with diagnosed allergies should avoid all trigger agents/confirmed allergens and have a readily accessible anaphylaxis action plan and medical alert device. Whenever possible, this information should be sought and implemented during an anaphylactic emergency, provided this does not delay emergency treatment and seeking medical assistance.

People who have suffered a prior episode of anaphylaxis often have prescribed medication in the form of an adrenaline auto-injector. An injection of adrenaline is critical in the management of life-threatening anaphylaxis.



If the casualty is carrying an adrenaline auto-injector for the allergy it should be used immediately. For more information about anaphylaxis go to www.allergy.org.au.

There are two different adrenaline auto-injectors:

- + Adrenaline auto-injector for a casualty over 20 kilograms
- + Adrenaline auto-injector junior for a child between 10 and 20 kilograms (delivers half the dose of the adult adrenaline auto-injector).

Signs and symptoms of anaphylaxis are highly variable and may include:

- + Difficult/noisy breathing
- + Wheeze or persistent cough
- + Swelling of face and tongue
- + Swelling/tightness in throat
- + Difficulty talking and/or hoarse voice
- + Persistent dizziness/loss of consciousness and/or collapse
- + Pale and floppy (young children)
- + Abdominal pain and vomiting
- + Hives, welts and body redness.

Treatment of anaphylaxis includes:

- + Lay casualty flat – do not stand or walk. If breathing is difficult, allow the casualty to sit
- + Prevent further exposure to the triggering agent if possible. If the allergic reaction or anaphylaxis has occurred from an insect allergy or tick bite, immediately remove the sting or carefully remove the tick
- + Administer the casualty's prescribed adrenaline auto-injector (count 10 seconds before retracting the needle). Check the manufacturer's guidelines of the particular brand for instructions on how to administer
- + Once the injection has been administered, gently massage the injection site for approximately 10 seconds. Remember to record the time the adrenaline auto-injector was administered
- + Call triple zero (000) for an ambulance
- + Administer oxygen (if available and the first aid provider is trained to do so) and/or asthma medication for respiratory symptoms
- + Administer a second adrenaline auto-injector after five minutes if there has been no response
- + If breathing stops, follow the basic life support flow chart (D-R-S-A-B-C-D).

NOTE: The adrenaline auto-injector may be administered even though the person has lapsed into unconsciousness.

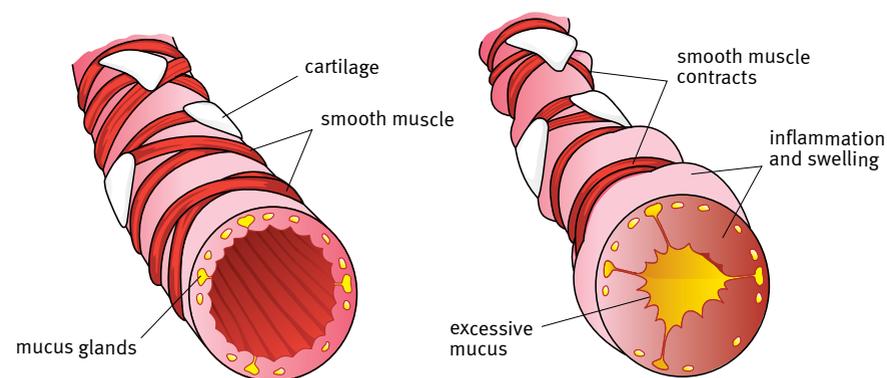


Asthma

Asthma is a disorder of the smaller airways of the lungs. People with asthma have sensitive airways which can narrow when exposed to a range of triggers, leading to difficulty in breathing. Asthma can be a life-threatening emergency.

Three main factors cause the airways to narrow:

- + The muscle around the airway tightens (bronchoconstriction)
- + The inside lining of the airways becomes swollen (inflammation)
- + Extra mucus (sticky fluid) may be produced.



Asthma triggers

Many things can trigger an asthma attack and each person will react differently to various triggers. Some known triggers are:

- + Colds and flu
- + Cigarette smoke
- + Exercise
- + Inhaled allergens (e.g. pollens, moulds, animal dander, dust mites)
- + Environmental factors (e.g. dust, pollens, wood smoke, bush fires)
- + Changes in temperature and weather conditions
- + Certain medications (e.g. aspirin)
- + Chemicals and strong smells (e.g. perfumes, cleaning products)
- + Emotional factors (e.g. laughter, stress)
- + Some foods and preservatives, flavourings and colourings (uncommon).

Asthma medication

There are several types of asthma medication:

- + Reliever medications provide relief from asthma symptoms within minutes of use by relaxing the tight muscles of the airways. These medications usually come in blue/grey devices.
- + Preventative medications help to reduce the inflammation in the airways, and are not useful in a sudden attack. This medication is usually taken even when there are no asthma symptoms, and is usually taken daily or as directed by a medical professional. These medications usually come in brown, orange or red devices.
- + Combination medications are a combination of preventer and reliever medications. These combination types of medications are also not very effective in a sudden asthma attack. These medications usually come in purple, red or white devices.
- + Symptom controller medications help to control asthma symptoms and should only be used by a casualty currently taking preventer medication and who is still experiencing asthma symptoms. These medications usually come in pale blue or green devices.



There are many different asthma medication delivery devices which are commonly known as:

- + Puffers
- + Spacers
- + Accuhalers
- + Autohalers
- + Turbuhalers.

Asthma Action Plan

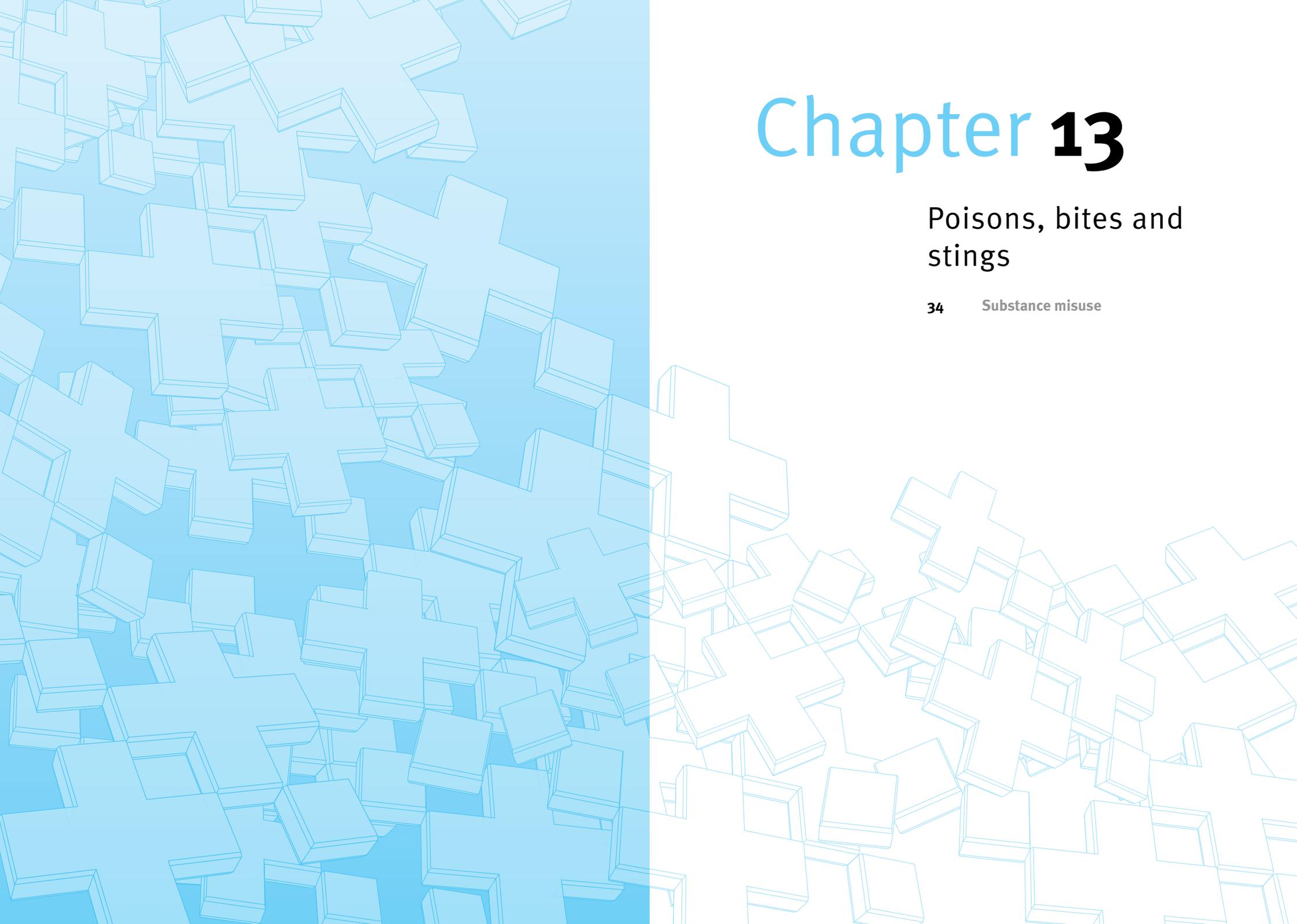
Chronic asthmatics should have an asthma action plan that has been developed in consultation with their doctor. Such a plan shows the best course of action to assist a casualty suffering from an asthma attack.

Signs and symptoms of asthma include:

An asthma attack can take anything from a few minutes to a few days to develop.

Indicators	Mild attack	Severe attack	Life-threatening attack
Speaking	+ No problem speaking	+ Speaking in short sentences only	+ Speaking in only one or two words per breath
Wheeze	+ Soft wheeze	+ Loud wheeze	+ Absence of wheezing/silent chest + Chest tightness
Breathing difficulty	+ Minor trouble breathing	+ Obvious difficulty breathing	+ Gasping for breath + Stress/anxiety + 'Sucking in' of the throat and rib muscles + Use of shoulder muscles or bracing with arms to help breathing
Cough	+ Occasional cough – dry irritating, particularly at night, early morning, with exercise or activity	+ Persistent cough – dry irritating, particularly at night, early morning, with exercise or activity	+ Variable cough
Skin colour	+ Sweating	+ Pale and sweating	+ Blueness around the lips + Pale and sweating
Medication	+ Improvement after using reliever medication	+ Little or no improvement after using reliever medication + Symptoms rapidly getting worse or using reliever more than every two hours	+ Little or no improvement after using reliever medication + Symptoms rapidly getting worse or using reliever more than every two hours

Young children appear restless, unable to settle or become drowsy. A child may also 'suck in' muscles around the ribs and may have problems eating or drinking due to shortness of breath. A child also may have severe coughing and vomiting.

The background of the page is a dense, overlapping pattern of 3D cubes and crosses. The left half of the page has a solid blue background with these shapes in a lighter blue color. The right half of the page is white with the same shapes in a light blue outline. The shapes are scattered and vary in size and orientation, creating a textured, geometric effect.

Chapter 13

Poisons, bites and stings

34 Substance misuse

Substance Misuse

Substance misuse is an overindulgence in or dependence on an addictive substance for mood-altering purposes. There are substances that can be abused for their mood-altering effects that are not drugs at all (e.g. inhalants and solvents) and there are drugs that can be abused that have no mood-altering or intoxication properties, such as anabolic steroids.

Illegal drugs are not the only substances that can be abused. Alcohol, prescription and over the counter medications, inhalants, solvents and even coffee and cigarettes can all be used to harmful excess, proving that almost any substance can be abused.

Treatment of substance abuse includes:

- + Check for danger. Ensure safety for yourself, any bystanders and the casualty. Be aware that some substances may cause the casualty to become aggressive
- + Check the casualty's response, airway and breathing
- + If unresponsive and not breathing normally, call triple zero (000) for an ambulance and commence CPR immediately
- + If unresponsive and breathing normally, place in recovery position and call triple zero (000) for an ambulance immediately
- + If conscious, call Poisons Information Centre on **13 11 26**. Reassure the casualty and try to maintain normal body temperature and keep the casualty calm
- + Do not leave the casualty unattended
- + If the casualty is having seizures, give appropriate seizure first aid treatment and monitor the casualty's vital signs until ambulance arrives
- + Where possible, try to determine what was taken, how much and when it was taken. Keep any pill bottles or other evidence and provide all available information to the paramedics on arrival.