PARTICIPANT GUIDE

HLTAID006 Provide advanced first aid



Item Code: 4543

This document is protected by copyright and may not be reproduced or copied either in part or in whole; nor used for financial gain without the express approval in writing by the owner, St John Ambulance Western Australia Ltd. (St John)

St John Ambulance Western Australia Ltd
209 Great Eastern Highway
BELMONT WA 6104
Telephone: (08) 9334 1222
Web: www.stjohnambulance.com.au

St John operates as a Registered Training Organisation under the name of
The College of Pre-Hospital Care
National No. 0392
Web: http://training.gov.au

Modification History

Superseded Version	New Version	New Version Date	Changes
	2.1	May 2017	Reference to Anapen® removed
Version 1	2	June 2016	Updated Template and amended errors
Not Applicable	1	September 2015	Document Created
Document Location:	G:\13 Participant Guides\HLTAID001-HLTSS00027\Archive\2017\HLTAID006 Participant Guide R5 June 2016 V2.1.docx		

Contents

Welcome 7

Part 1 – Unit of Competency 9

HLTAID006 Provide advanced first aid 10

Part 2 – First Aid Topics 13

1. What is First Aid 16

1.1 Principles of First Aid 17

1.2 First Aiders Code of Conduct 18

1.3 The DRSABCD St John Action Plan 19

2. First Aid Legislation 20

2.1 Consent 21

2.2 Duty of Care 22

2.3 Respectful Behaviour 23

2.4 Own Skills and Limitations 24

2.5 Australian Resuscitation Council (ARC) Recommendations 25

2.6 Privacy and Confidentiality 26

2.7 Confidentiality of First Aid Records 27

2.8 Medication: Legal Requirements and First Aider's Responsibilities 28

2.9 Australian Peak Bodies – Guidelines 29

3. Dealing with Minor and Major Accidents in the Workplace 30

3.1 Evacuation Procedure and Contingency Planning 34

3.2 Safe Work Practices to Minimise Risks and Potential Hazards 36

3.3 Safe Practices When Dealing With Hazardous Substances, Dangerous Goods and Chemicals 38

4. Infection Control and Standard Precautions 40

5. Safe Manual Handling 41

6. Basic Life Support – Chain of Survival 42
6.1 Cardiopulmonary Resuscitation (CPR) 43
6.2 Cardiopulmonary Resuscitation (CPR) - Infants 44
6.3 Cardiopulmonary Resuscitation (CPR) Chart ..... **Error! Bookmark not defined.**
6.4 Automated External Defibrillator (AED) 45
6.5 Defibrillation 46
6.6 Defibrillation - Adults and Children (Over 8 Years) 47
6.7 Defibrillation- Children 1 - 8 Years 48
6.8 Defibrillation - Infants 49
6.9 Priorities and Life Threatening Situations 50
7. First Aid Management of Asphyxia 53
7.1 First Aid Management in Case of Regurgitation and Vomiting 54
7.2 First Aid Management of Bleeding (External) 55
7.3 First Aid Management of Bleeding (Internal) 58
7.4 First Aid Management of Choking – Adult, Child and Infant 60
6.5 First Aid Management of Asthma 63
7.6 First Aid Management of Allergic Reaction 66
7.7 First Aid Management in Anaphylaxis 68
7.8 Using Autoinjectors in First Aid 70
7.9 First Aid Management of Shock 72
7.10 First Aid Management of Cardiovascular Emergencies: Angina 74
7.11 First Aid Management of Cardiovascular Emergencies: Chronic Heart Failure 75
7.12 First Aid Management of Cardiovascular Emergencies: Heart Attack 76
7.13 First Aid Management of Cardiovascular Emergencies: Sudden Cardiac Arrest 78
7.14 First Aid Management of Stroke 79
7.15 First Aid Management of Envenomation 81
7.16 First Aid Management of Fractures Using Arm Slings and Roller Bandages 86
7.17 First Aid Management of Sprains, Strains and Soft Tissue Injuries 88

7.18 First Aid Management of Dislocations....90
7.19 First Aid Management of Abdominal Injuries....91
7.20 First Aid Management of Burn Injuries....93
7.21 First Aid Management of Crush Injuries....97
7.22 First Aid Management of Diabetes....98
7.23 First Aid Management in Case of Drowning....101
7.24 First Aid Management of Environmental Impacts: Hypothermia, Hyperthermia and Dehydration....103
7.25 First Aid Management of Eye and Ear Injuries....109
7.26 First Aid Management of Head, Neck and Spinal Injuries....113
7.27 First Aid Management of Minor Skin Injuries and Basic Wound Care....116
7.28 First Aid Management of Needle Stick Injuries and Exposure to Blood and Bodily Fluids....117
7.29 First Aid Management of Poisoning and Toxic Substances....119
7.30 First Aid Management of Epilepsy, Seizures and Febrile Convulsions....122
8 Visual and Verbal Assessment....125
8.2 Vital Signs: Respiration, Pulse and Temperature....127
8.3. Visual and Verbal Secondary Survey....131
9. Post Incident Debrief and Evaluation....132
9.1 Verbal Report....134
9.2 Written Report - Incident Report Form....135
8.3 Stress Management....136
9.4 Effective Communication with First Aid Team....138
10. Capabilities of Emergency Management Services....139
11. Basic Anatomy and Physiology Relating to the Chest....141
11.1 Human Skeleton....142
11.2 The Heart....144
11.3 The Lungs....145

11.4 Joints 146
11.5 Muscles and Tendons 147
11.6 Breathing 149
11.7 Consciousness and Response 151
12. Dealing with the Aged and Infirm 152
12.1 Providing First Aid to Children 154
13. Use of Bag-Valve-Mask and Complications 158
14. Emergency Childbirth 160
15. Substance Misuse 165

Part 3 – Quick Guides 168

1. DRSABCD St John Action Plan 169
2. Perform Cardiopulmonary Resuscitation (CPR) – Child and Adult 171
3. Perform Cardiopulmonary Resuscitation (CPR) - Infant 173
4. Perform Cardiopulmonary Resuscitation (CPR) with an AED Adult and Child Over 1 Year 174
5. Recovery Position 177
6. Bag-Valve-Mask 178
7. How to Take a Radial Pulse 179
8. Taking a Temperature 180
9. Visual and Verbal Secondary Survey Assessment 181

Part 4 – Relevant Forms and Documents 183

1. Incident Report Form 184
2. Risk Assessment Matrix 186
3. Hierarchy of Control 188
4. Reference Guide to Envenomation 189

Welcome

Welcome to HLTAID006 Provide advanced first aid Participant Guide.
The Guide is designed in a way to provide simple, relevant and useful first aid information. It will not only meet the requirements of this unit of competency, but also assist you beyond this course as your own quick reference guide to first aid.

The Guide has four (4) main parts:
Part 1 - Unit of Competency
Part 2 - First Aid Topics
Part 3 - Quick Guides
Part 4 - Relevant Forms and Documents

Part 1 – Unit of Competency

This part of the Guide presents a Unit of Competency in terms of performance criteria in a simple and easy to understand way. It is a quick overview before you go into detail.

Part 2 – First Aid Topics

The topics are presented in an easy to follow and user friendly format, so you **understand**, **remember** and **find** first aid information quickly.

Each topic is presented in traffic light colours:

1. **RED** section explains what you need to remember/know.
2. **AMBER** section explains what you need to do/manage.
3. **GREEN** section explains your Plan “B”/contingency.

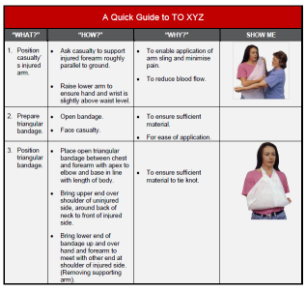


Part 3 – Quick Guides

Quick Guides are useful step by step pictorial instructions of the first aid management process.

Quick Guides:

- Explain what you need to do;
- Explain how you need to do it;
- Explain why you need to do it; and
- Provide pictures of each step for greater understanding.



A Quick Guide to TO XYZ

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
1. Position casualty's injured arm.	• Ask casualty to support injured forearm roughly parallel to ground. • Raise lower arm to ensure hand and wrist is slightly above waist level.	• To enable application of arm sling and minimise pain. • To reduce blood flow.	
2. Prepare triangular bandage.	• Open bandage. • Face casualty.	• To ensure sufficient material. • For ease of application.	
3. Position triangular bandage.	• Place open triangular bandage between chest and forearm with apex to elbow and base in line with length of body. • Bring upper end over shoulder of uninjured side, around back of neck to front of injured side. • Bring lower end of bandage up and over hand and forearm to meet with other end at shoulder of injured side. (Removing supporting arm).	• To ensure sufficient material to tie knot.	

Part 4 – Relevant Forms and Documents

This section presents useful information about first aid documentation that you come across when providing first aid.

Relevant first aid forms and documentation may be in the form of but not limited to:

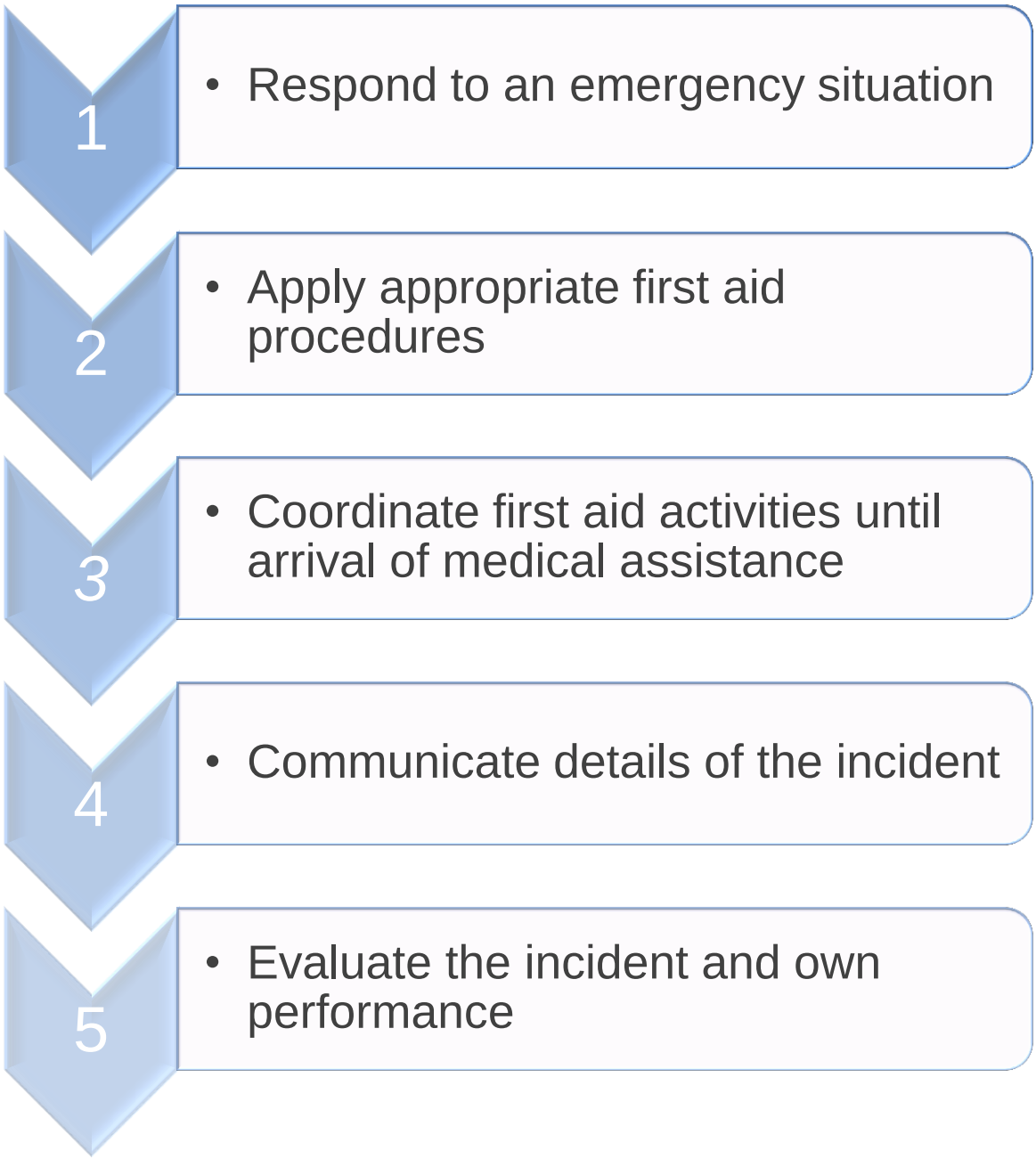
- First aid workplace check list;
- Hazard report;
- Equipment checklist; and
- First aid written report and so on.

Part 1 – Unit of Competency

HLTAID006 Provide advanced first aid

HLTAID006 Provide advanced first aid

To provide advanced first aid you will be required to:



DRSABCD St John Action Plan



D — DANGER

Ensure area is safe to you, others and the casualty



R — RESPONSE

NO RESPONSE	RESPONSE
Send for help	Check for injuries, make comfortable, monitor



S — SEND

Send for help: Call or ask someone to call Triple Zero (000) for an ambulance.
If on your own place casualty in Recovery Position before making a call.





A — AIRWAY

Open mouth:

NO FOREIGN MATERIAL	FOREIGN MATERIAL
Leave on the back	Place in Recovery Position and clear airway



B — BREATHING

Check for breathing: look, listen and feel

NOT BREATHING NORMALLY	BREATHING NORMALLY
Place on back, start CPR	Place in Recovery Position and monitor



C — CPR

30 compressions **2** breaths

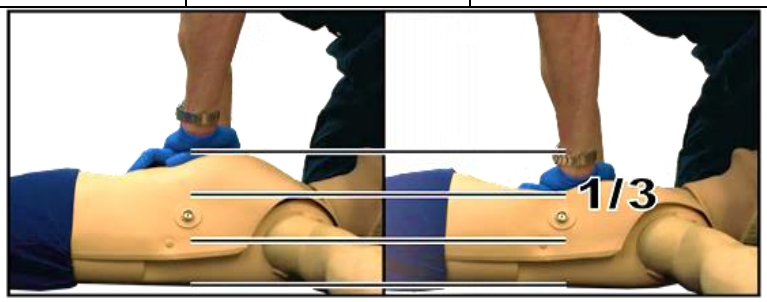


D — DEFIBRILLATION

Apply defibrillator and follow the prompts



Cardiopulmonary Resuscitation (CPR) Chart

CPR	Adult	Child (1-8)	Infant (up to 1)
Opening the Airway - Chin Lift, Head Tilt	Full 	Slight 	Neutral to slight 
Ratio Compressions to Breaths	30:2 30 compressions and 2 breaths	30:2 30 compressions and 2 breaths	30:2 30 compressions and 2 breaths
Compressions	1/3 chest depth	1/3 chest depth	1/3 chest depth
			
	Should be smooth Controlled - the same time to compress and release the chest. The First Aider should minimise interruptions of chest compressions, CPR should not be interrupted to check for response or breathing. Interruptions to chest compressions are associated with lower survival rates.		
Pressure	**Adult** Heels of 2 hands 	**Child (1-8)** Heels of 2 hands 	**Infant (up to 1)** 2 fingers 
Hand Positioning	Lower half of breastbone in the centre of the chest	Lower half of breastbone in the centre of the chest	Lower half of breastbone in the centre of the chest

Part 2 – First Aid Topics

1. Cardiopulmonary Resuscitation (CPR) Chart
2. What is First Aid
3. Principles of First Aid
4. First Aiders Code of Conduct
5. The DRSABCD St John Action Plan
6. First Aid Legislation
7. Consent
8. Duty of Care
9. Respectful Behaviour
10. Own Skills and Limitations
11. Australian Resuscitation Council (ARC) Recommendations
12. Privacy and Confidentiality
13. Confidentiality of First Aid Records
14. Medication: Legal Requirements and First Aider's Responsibilities
15. Australian Peak Bodies – Guidelines
16. Dealing with Minor and Major Accidents in the Workplace
17. Evacuation Procedure and Contingency Planning
18. Safe Work Practises to Minimise Risk and Potential Hazards
19. Safe Practices When Dealing with Hazardous Substance, Dangerous Goods and Chemicals
20. Infection Control and Standard Precautions
21. Safe Manual Handling
22. Basic Life Support – Chain of Survival
23. Cardiopulmonary Resuscitation (CPR)
24. Cardiopulmonary Resuscitation (CPR) - Infants
25. Automated External Defibrillator (AED)
26. Defibrillation
27. Defibrillation – Adults and Children (Over 8 Years)
28. Defibrillation – Children 1 - 8 Years
29. Defibrillation - Infants
30. Priorities and Life Threatening Situations
31. First Aid Management of Asphyxia
32. First Aid Management in Case of Regurgitation and Vomiting
33. First Aid Management of Bleeding (External)
34. First Aid Management of Bleeding (Internal)
35. First Aid Management of Choking – Adult, Child and Infant

36. First Aid Management of Asthma
37. First Aid Management of Allergic Reaction
38. First Aid Management in Anaphylaxis
39. Using Autoinjectors in First Aid
40. First Aid Management of Shock
41. First Aid Management of Cardiovascular Emergencies: Angina
42. First Aid Management of Cardiovascular Emergencies: Chronic Heart Failure
43. First Aid Management of Cardiovascular Emergencies: Heart Attack
44. First Aid Management of Cardiovascular Emergencies: Sudden Cardiac Arrest
45. First Aid Management of Stroke
46. First Aid Management of Envenomation
47. First Aid Management of Fractures Using Arm Slings and Roller Bandages
48. First Aid Management of Sprains, Strains and Soft Tissue Injuries
49. First Aid Management of Dislocations
50. First Aid Management of Abdominal Injuries
51. First Aid Management of Burn Injuries
52. First Aid Management of Crush Injuries
53. First Aid Management of Diabetes
54. First Aid Management in Case of Drowning
55. First Aid Management of Environmental Impacts: Hypothermia, Hyperthermia and Dehydration
56. First Aid Management of Eye and Ear Injuries
57. First Aid Management of Head, Neck and Spinal Injuries
58. First Aid Management of Minor Skin Injuries and Basic Wound Care
59. First Aid Management of Needle Stick Injuries and Exposure to Blood and Bodily Fluids
60. First Aid Management of Poisoning and Toxic Substances
61. First Aid Management of Epilepsy, Seizures and Febrile Convulsions
62. Visual and Verbal Assessment
63. Vital Signs: Respiration, Pulse and Temperature
64. Visual and Verbal Secondary Survey
65. Post Incident Debrief and Evaluation
66. Verbal Report
67. Written Report – Incident Report Form
68. Stress Management
69. Effective Communication with First Aid Team
70. Capabilities of Emergency Management Services
71. Basic Anatomy and Physiology Relating to the Chest
72. Human Skeleton
73. The Heart
74. The Lungs

75. Joints
76. Muscles and Tendons
77. Breathing
78. Consciousness and Response
79. Dealing with the Aged and Infirm
80. Providing First Aid to Children
81. Use of Bag-Valve-Mask and Complications
82. Emergency Childbirth
83. Substance Misuse

1. What is First Aid

WHAT
is it?



First aid is the initial treatment given to the ill or injured until the medical treatment arrives or is available.

REMEMBER
Know

First aid is usually provided by First Aiders, people who are trained to provide the very first lifesaving treatment to someone who is ill or injured.

The aims of first aid are to:

- Promote a safe environment;
- Preserve life;
- Prevent injury or illness from becoming worse;
- Help promote recovery; and
- Provide comfort to the ill or injured.

DO
Manage

A First Aider should:

1. Assess the situation quickly.
2. Identify the nature of the injury or illness as far as possible.
3. Arrange for emergency services to attend.
4. Manage the casualty promptly and appropriately.
5. Stay with the casualty until handing over to emergency services.
6. Give further help if necessary.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.
- Learn first aid.

1.1 Principles of First Aid

WHAT
is it?



Principles of first aid rely on the fact that any attempt to provide first aid is better than no attempt on first aid at all.

REMEMBER
Know

First aid knowledge and skills will prepare you to manage a casualty who becomes ill or has been injured.

The benefits of first aid:

- Saves lives, by knowing what to do;
- Reduces pain, disability and discomfort by giving correct first aid management;
- Increases safety awareness at home, work and on the road;
- Reduces accidents by increasing your awareness of safety procedures and equipment; and
- Reduces compensation.

The four (4) aims of first aid are to:

1. **PRESERVE LIFE.**
2. **PREVENT FURTHER INJURY.**
3. **PROMOTE RECOVERY.**
4. **PROTECT THE UNCONSCIOUS.**

DO
Manage

1. When faced with a first aid situation the formula to follow is:
2. Assess the situation quickly.
3. Decide on first aid management.
4. Arrange medical aid if required.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.

1.2 First Aiders Code of Conduct

WHAT
is it?



Code of conduct is a set of rules outlining the norms, rules and responsibility of a First Aider.

REMEMBER
Know

As a First Aider you should always treat a casualty with respect regardless of their race, age, religion or gender.

The casualty may be feeling anxious and scared about what has happened to them, always give reassurance to calm them by giving emotional support to help reduce their anxieties.

If the casualty is a child, always ensure that they feel safe, secure and supported. You can do this by talking to them in an age appropriate way with a gentle calm tone to your voice. Reassurance is very important when dealing with children. Use a calm voice, make eye contact (if culturally appropriate) and inform them of your actions.

The Unconscious Casualty
An unconscious casualty cannot communicate to tell you what is wrong. Depending on the level of consciousness you may be able to develop an idea of what is wrong by the casualty's reactions to a stimuli or movement.

Unconscious casualty(s) should be treated as if they are conscious, they may still be able to hear what you are saying. Tell them what you are going to do, but do not discuss anything that you would not discuss if the casualty were conscious, for example comments about their injuries or appearance.

DO
Manage

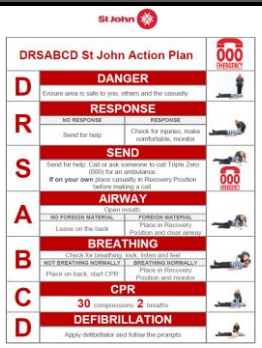
1. Be respectful and empathetic (understanding), provide reassurance.
2. Develop a rapport with them.
3. Always tell the casualty what you are doing and your plan of action.
4. Ask for permission before entering their personal space.
5. Enlist their assistance and tell them how they can help.
6. Treat the casualty how you would wish to be treated yourself.

PLAN "B"
Contingency

- There is no plan "B" in this case – always adhere to the First Aiders Code of Conduct.

1.3 The DRSABCD St John Action Plan

WHAT
is it?



The DRSABCD St John Action Plan is an acronym of seven (7) letters that represents an action plan for a First Aider to manage a casualty in an emergency situation.

REMEMBER
Know

D – Danger

R – Response

S – Send for help

A – Airway

B – Breathing

C – Cardiopulmonary Resuscitation (CPR)

D – Defibrillation

DO
Manage

D – Check for danger to you, bystanders and the casualty: by looking, listening and using your sense of smell.

R – Check for response: ask their name and squeeze their shoulders.

S – Send for help: call Triple Zero (000) for an ambulance or ask a bystander to make the call.

A – Open mouth. Check for foreign materials. If YES – place in recovery position and clear the airway with fingers. If NO – leave on back.

B – Open airway with a head tilt and chin lift. Check for breathing: look, listen and feel. If breathing place or leave in the recovery position.

C – If not breathing. Start **CPR**: **30** chest compressions: **2** breaths. Continue until help arrives.

D – Defibrillation: apply defibrillator and follow voice prompts.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.

2. First Aid Legislation

WHAT
is it?



First Aid Legislation is a set of laws and rules made by the government which will apply to you when providing first aid.

REMEMBER
Know

First aid is regulated by the law on three (3) levels:

- Workplace level – by your employer.
- State level (Western Australia) – by the state legislation:
  - Code of Practice: First Aid Facilities & Services, Workplace Amenities & Facilities and Personal Protective Clothing & Equipment 2002;
  - Occupational Safety and Health Act; and
  - Occupational Safety and Health Regulations.
- National level (Australia) – by the federal law:
  - First Aid in the Workplace Code of Practice, March 2015.

DO
Manage

You need to know where to **access** these documents and **familiarise** yourself with the content of the legislation documentation.

Links:
www.safeworkaustralia.gov.au
www.worksafe.wa.gov.au
www.slp.wa.gov.au

Always:

1. Act in a reasonable manner.
2. Adhere to your level of training.
3. Follow your company's policies and procedures.
4. Ensure that your first aid certification is maintained and current.
5. Gain consent prior to helping casualty.
6. Document the incident and first aid management.
7. Act under the relevant legislation.
8. Act under codes of practice.

PLAN "B"
Contingency

- There is no plan "B" in this case - always obey the law.

2.1 Consent

WHAT
is it?



Consent is permission or agreement by your casualty to be treated by you.

REMEMBER
Know

In first aid, consent should always be obtained from a casualty where possible prior to applying first aid. Treatment given without the person's consent may constitute as an assault.

There are two (2) different types of consent:

1. Implied; and
2. Expressed.

Implied (taken as given) consent is when the casualty is unconscious (or when the casualty is speaking a language you don't understand) and is unable to give you their expressed consent.

Expressed consent - when oral or written permission is given by a conscious casualty requiring first aid treatment.

NOTE:

- If the casualty is under 18 years it is considered to be implied consent, but where possible obtain the consent of a parent or legal guardian;
- In the case of a child care or education centre, parental/caregiver consent is usually given in a written form when the child is enrolled;
- When a casualty cannot verbally communicate, body language and other nonverbal cues are used instead. In other words, if the casualty doesn't let you help, that means "**NO**"; and
- A person has the right to REFUSE treatment.

DO
Manage

1. **Obtain** consent from a casualty where possible before applying first aid.
2. **Obtain** consent of a parent or legal guardian, if the casualty is under 18 years of age.
3. **Implied consent** applies to the unconscious casualty.

PLAN "B"
Contingency

- There is no plan "B" in this case – obtain consent where possible.

2.2 Duty of Care

WHAT
is it?



Duty of care is a legal obligation for you as a First Aider to protect yourself and your casualty when providing first aid.

REMEMBER
Know

When a First Aider has made the decision to provide first aid to a casualty and they have commenced the treatment, this means that they are committed to provide a duty of care to the casualty.

Duty of care in first aid means that you will provide reasonable treatment to the casualty to the best of your ability and to the level of training you have had.
The First Aider is committed to providing duty of care until:

- Another or more experienced First Aider takes over;
- Medical aid arrives;
- You are physically unable to continue to provide first aid; or
- The situation becomes unsafe to do so.

NOTE:
A duty of care can be breached by either action or inaction (for example; if you do nothing and the person in your care gets worse).

In the workplace the employer has a duty of care to ensure that appropriate numbers of First Aider(s) have been appointed.

DO
Manage

1. When giving first aid, stay within the scope of your training.
2. Once you commence giving first aid, you automatically take on a duty of care.
3. Complete required documentation and keep it confidential.
4. Maintain your skills and knowledge.
5. Maintain first aid kits and equipment in the workplace.

PLAN "B"
Contingency

- There is no plan "B" in this case – always provide a duty of care to your casualty.

2.3 Respectful Behaviour

WHAT
is it?



Respectful behaviour is the morally correct conduct by a person providing first aid.

REMEMBER
Know

As a First Aider you will need to act in a professional and respectful way at all times.

This basically means - treat others as you would like to be treated, by:

- Obtaining consent and introducing yourself;
- Treating them with dignity and respect;
- Being compassionate;
- Using a calm voice;
- Protecting their privacy and confidentiality; and
- Establishing a rapport.

Respectful behaviour also includes culturally appropriate behaviour. A person who is culturally aware can communicate sensitively and effectively with people who have different languages, cultures, religions, genders, ethnicities, disabilities, ages and sexualities. Cultural awareness and considerations may include:

- Appropriate communication;
- Body language;
- Eye contact; and
- Treatment by male or female person and so on.

Respectful and culturally aware First Aiders build trust which leads to improved outcomes in establishing good rapport with their casualty.

DO
Manage

1. Treat your casualty with dignity and respect at all times.
2. Treat your casualty in a culturally appropriate way at all times.

PLAN "B"
Contingency

- There is no plan "B" in this case – always be respectful toward your casualty.

2.4 Own Skills and Limitations

WHAT
is it?



Limitation is a form of restriction where you provide first aid within the scope of your first aid training.

REMEMBER
Know

The first aid you provide as a First Aider will be restricted by:

- Scope of your training – this means what you have learnt in terms of procedures, actions and processes you will be able to deliver. If you have not learned how to use, for example, oxygen equipment you would not be able to administer oxygen to a casualty;
- Your level of confidence – this means the more confident you are in providing first aid the more proficient you become;
- Your company's policies and procedures – this means you always need to know and apply your company's policies and procedures. At any point in time when providing first aid you need to be within the boundaries of your company's policies and procedures; and
- Law – this means the law is very strict in what you can and can't do as a First Aider. Ensure you fully understand the law.

DO
Manage

1. Maintain your skills and knowledge – keep your first aid certification current by refreshing your CPR skills every twelve (12) months and volunteering.
2. Always stay within the skills, knowledge and limitations of your training and manage a casualty to a standard of care that is appropriate to your level of training.

PLAN "B"
Contingency

- Seek assistance from health professionals.
- Expand your skills and knowledge.
- Enrol into a St John first aid course.

2.5 Australian Resuscitation Council (ARC) Recommendations

WHAT
is it?

The Australian Resuscitation Council (ARC) is a voluntary co-ordinating body which represents all major groups involved in the teaching and practice of resuscitation.

REMEMBER
Know

"The Australian Resuscitation Council produces Guidelines to meet its objectives in fostering uniformity and simplicity in resuscitation techniques and terminology. Guidelines are produced after consideration of all available scientific and published material and are only issued after acceptance by all member organisations. This does not imply, however, that methods other than those recommended are ineffective." *ARC website.*

The First Aider should always provide first aid within the ARC recommendations and guidelines.

10.1 Basic Life Support - ARC Guideline recommends for cardiopulmonary resuscitation (CPR) training to be refreshed every twelve (12) months for those who do not perform CPR on a regular basis.

DO
Manage

1. Access ARC website: http://resus.org.au/.
2. Read the Australian Resuscitation Council Guidelines:
   No.10.1 - Basic Life Support.
   No.5 – Breathing.
   No.6 – Compressions.
   No.7 – Defibrillation.
   No.8 - Cardiopulmonary Resuscitation.
3. Link: http://resus.org.au/guidelines/.
4. Enrol into a HLTAID001 Provide cardiopulmonary resuscitation course next year.

PLAN "B"
Contingency

- Become a St John volunteer to stay current in your first aid skills.

2.6 Privacy and Confidentiality

WHAT
is it?



Privacy and confidentiality are legal terms that relate to your casualty being free from intrusion; as well as your restriction from releasing any information about your casualty to a third party.

REMEMBER
Know

Your casualty, as any other person, has a right to privacy and confidentiality. It is your duty and legal responsibility to protect your casualty's privacy at all times. When providing first aid, your unconscious casualty may be in a position when they are most vulnerable due to the nature of the injuries as well as their circumstances.

In today's world, almost everyone uses their mobile phones to take pictures in public.

Do not:

- SMS information of the casualty to any third party;
- Verbalise information of the incident and the casualty to any third party;
- Take personal pictures of the casualty; and
- Leave your casualty exposed.

Any information and documentation you have obtained about a casualty whilst rendering first aid should remain confidential.

DO
Manage

1. At the scene – protect your casualty's privacy at all times.
2. Maintain casualty's privacy – do not release information to a third party.
3. Follow your company's policy and procedures.
4. Familiarise yourself with the legislative requirements governing privacy.
5. Access "Freedom of Information Act 1992 (WA)" http://www.austlii.edu.au/au/legis/wa/consol_act/foia1992222/.
6. Access "The Privacy Act 1988". This site provides an overview of the act: http://www.oaic.gov.au/privacy/privacy-act/the-privacy-act.

PLAN "B"
Contingency

- There is no plan "B" in this case – always maintain privacy and confidentiality of your casualty.

2.7 Confidentiality of First Aid Records

WHAT
is it?



Confidentiality is a legal rule that restricts you from releasing information about your casualty to a third party or to be careless with the first aid records.

REMEMBER
Know

Legislation varies with respect to who can have access to first aid records, the extent of access and what incidents have to be reported. However, the following people have the right to access casualty and incident information: ambulance paramedics/officers or a treating Doctor; those investigating workplace illness or injury such as police, coroner, workplace inspection authority, the courts and employer.

With the casualty's agreement, access can also be given to: the insurance company handling the claim; union representatives or occupational health and safety committees.

Despite legitimate access by many people to first aid records, the privacy of the casualty should always be respected to the greatest extent possible. The person controlling the records has a responsibility: to ensure records are only released to people with appropriate authority; that all records are stored in a secure location: for example; in a locked filing cabinet or if electronically stored protected by password and a range of IT security measures. The casualty should be informed if access has been given to a third party. A record should be kept of anyone who has had access to particular documents, when and why.

Individual records should be retained at the workplace for the period specified by relevant legislation. States and Territories have a limitation period after which a case cannot be brought to court. Generally this ranges from three (3) to seven (7) years in Western Australia; in the case of personal injury or death action for damages must commence within three (3) years of the incident.

DO
Manage

1. Securely store first aid documentation.
2. Follow your company's policy and procedures.
3. Familiarise yourself with the legislative requirements governing privacy.

PLAN "B"
Contingency

- There is no plan "B" in this case – always maintain privacy of your casualty and first aid documentation.

2.8 Medication: Legal Requirements and First Aider's Responsibilities

WHAT
is it?



Medication is a drug or other form of medicine that is used to treat or prevent disease.

REMEMBER
Know

Medication, including analgesics such as paracetamol and aspirin, should not be included in First Aid kits because of their potential to cause adverse health effects in some people including asthmatics, pregnant women and people with medical conditions.

The supply of these medications may also be controlled by drugs and poisons laws. Workers requiring prescribed and over-the-counter medications should carry their own medication for their own personal use as necessary. This is stated in the First Aid in the Workplace, Code of Practice July 2012.

Some types of workplaces may require additional items in their first aid kits/boxes to treat specific types of injuries or illnesses. Some Scheduled Medications used by First Aiders will require a Poisons Licence.

DO
Manage

1. Follow DRSABCD St John Action Plan.

Have a clear and current understanding of:

2. Who holds the Poisons Licence for Scheduled Medications?
3. The different types of medications accessible to the First Aider in the workplace.
4. The legal requirements when administering medications.
5. The rights and responsibilities of the First Aider specific to the individual workplace/company policy.

PLAN "B"
Contingency

- Keep up to date with the workplace/company policy on medications in the workplace.
- Do not administer medications if in doubt.
- Keep up to date with the First Aid in the Workplace, Code of Practice July 2012: https://www.comlaw.gov.au/Details/F2012L02522/Html/Volume_2.
- Visit Safe Work Australia for information on the Model Code of Practice March 2015: http://www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/first-aid-in-the-workplace .

2.9 Australian Peak Bodies – Guidelines

WHAT
is it?



The Guidelines from various Australian Peak Bodies are an essential resource. The guidelines provide the principles recommended to meet objectives in fostering uniformity in terminology and how first aid is performed

REMEMBER
Know

St John RTO follows the guidelines and principles sourced from Australian Peak Bodies such as:

- The Australian Resuscitation Council:
  Link: http://resus.org.au/
- Asthma Foundation:
  Link: http://asthmaaustralia.org.au/
- Australasian Society of Clinical Immunology and Allergy (ASCIA):
  Link: http://www.allergy.org.au/
- Heart Foundation:
  Link: http://www.heartfoundation.org.au/Pages/default.aspx
- Stroke Foundation:
  Link: https://strokefoundation.com.au/
- Diabetes Association:
  Link: http://asthmaaustralia.org.au/

DO
Manage

1. The Australian Resuscitation Council (ARC) recommends that those trained in CPR should refresh their CPR skills every 12 months (annually).
2. If in doubt on any first aid skill it is best to refer to the Australian Peak Bodies for current information.

PLAN "B"
Contingency

- Keep your first aid skills up to date and current.
- Refer to the Peak Body website for additional information or queries.

3. Dealing with Minor and Major Accidents in the Workplace

WHAT
is it?



Minor Accidents are accidents of lesser importance, seriousness or significance, such as slipping on wet surfaces.
Major Accidents are accidents having the potential to cause multiple injuries or fatalities of persons, such as a building collapse.

REMEMBER
Know

A workplace accident or accident at work is an occurrence at work that leads to physical or mental occupational injury. Examples of work accidents include but are not limited to:

- Hand injuries;
- Burns - chemical, electrical and thermal;
- Slips and falls on stairs or pavements;
- Machinery incidents leading to amputations;
- Falling from heights leading to head/neck/spinal injuries, fractures and internal bleeding;
- Entrapment or engulfment - from confined spaces ;
- Incorrect manual handling/lifting;
- High pressure injection injury;
- Crush Injuries;
- Eye injuries; and
- Ear injuries, such as bleeding from the ear.

People working in different types of jobs obviously face a range of exposure to different hazards, for example an office worker is at much less risk from burns then a chef.

In all workplaces it is essential that safety is at the foremost of an employer's concern, creating a safe working environment for all employees being of upmost importance.

REMEMBER Continued
Know

In the event of a workplace accident occurring, companies/businesses must have Policies, Procedures and Action Plans (such as Emergency Evacuation, Emergency Response, and First Aid), in place before the operation of the business commences. Information can be found at http://www.worksafe.com.au and http://www.safeworkaustralia.gov.au/sites/swa/about/pages/about.
First Aiders in the workplace have a responsibility and duty of care to protect both the individual employees; and also a responsibility to the employer to manage minor/major accidents and conduct first aid in accordance with the company/business's workplace policy and procedures.

Major Accidents
When a First Aider is faced with a multiple casualty incident, calling the emergency services and giving as much information to them as possible is vital. This information should include the overall details of what has happened and the number of casualties involved. The First Aider will only need to manage the situation and the casualties until the arrival of the emergency services.

When dealing with a multiple casualty situation the **principles of triage** are applied. Triage is: "A process in which a group of casualties is sorted according to their need for care, the type of illness or injury, the severity of the problem and the facilities that are available".
Mosby's Dictionary of Medicine, Nursing and Health Professionals 2nd Edition

The principles of triage are:

- To minimise congestion at accident sites: a disaster area must be cleared of casualties, bystanders and vehicles not needed, as soon as possible;
- To do the most good for the largest number of people:
  - Saving lives takes precedence over limbs; and
  - Function takes precedence over appearance.

DO
Manage

1. Follow DRSABCD St John Action Plan.
2. Call Triple Zero (000) for an ambulance, if required.
3. Follow your workplace/company's policy and procedures.
4. Follow your workplace Emergency Action Plan and First Aid Action Plan.
5. Stay within your scope of training.
6. Identify available resources and deploy them.

Minor Accidents

1. Manage the injury according to first aid principles.
2. Refer the casualty to workplace Doctor, if required and an ambulance has not be called.
3. Dispose of contaminated waste according to First Aid in the Workplace, Code of Practice July 2012.
4. Report verbally the incident/accident to the workplace supervisor.
5. Accurately document the accident and sustained injury/ies.
6. Store documents in a secure locked cabinet or as per workplace procedure.
7. Maintain confidentiality and privacy of the casualty.

Major Accidents

1. Prioritise casualties as per the Principles of Triage and manage accordingly. Remember that having a clear and open airway takes priority over everything else. Open a casualty's airway and check for breathing, if the casualty is still not breathing, then you will need to move on to the next casualty, your job is to do the most good for the largest number of people. Remember:
   - Preserve life;
   - Prevent further harm;
   - Reduce pain and shock; and
   - Be clear, calm and concise.
2. Continue first aid until medical aid arrives and takes over.
3. Assist medical aid as directed.
4. Dispose of contaminated waste according to First Aid in the Workplace, Code of Practice July 2012.
5. Report verbally the incident/accident to the workplace supervisor.

DO Continued Manage	**6.** Accurately document the accident and sustained injury/ies. **7.** Store documents in a secure locked cabinet or as per workplace procedure. **8.** Maintain confidentiality and privacy of the casualty. **9.** Participate in debriefing for all concerned individuals, including you as the First Aider. **10.** Participate in evaluation of the incident. **11.** Recognise the psychological impact on individuals involved in the incident and refer to support services, such as counselling or chaplain when required. Be aware Post Traumatic Stress Disorder can occur sometime after the incident.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Remember in any situation "You did your best". • Learn first aid or increase your skills further and learn Occupational First Aid.

3.1 Evacuation Procedure and Contingency Planning

WHAT
is it?



At their simplest level, contingency planning answers some basic questions about a potential situation. These include:

- What could happen?
- What would be needed to alleviate the situation?
- How would action be taken?
- What materials, supplies and staff would be needed?
- What preparation is necessary?

An evacuation plan addresses the safest possible route to vacate a building or premises.
This is done in preparation of a potential situation such as fire, bomb threat or hazardous substance. It may include a risk management plan.

REMEMBER
Know

Sometimes emergency situations are unavoidable, how the organisation responds in those situations can make all the difference. It is normal practice to create an emergency evacuation plan in a workplace.

When developing the emergency evacuation plan be sure to include the workplace security procedures as well, to ensure consistency.
The structure of the evacuation and contingency plan itself needs to be simple and clear.

It must address the following

- Scope and statement of purpose;
- Details about the purpose and arrangement of the emergency planning committee;
- Details about emergency features of the premises; and
- Details regarding the facilities infrastructure.

Emergency plans should include the following

- Outcomes of emergency identification;
- Response procedures for emergencies;
- An emergency evacuation plan diagram;
- Specified hours of occupancy, and of operation, of the facility; and
- The period of validity for this emergency plan.

DO Manage	**1.** Follow or develop an emergency evacuation plan as it is absolutely necessary to protect the lives and health of other employees. **2.** Follow DRSABCD St John Action Plan at all times. **3.** Have adequate first aid supplies and be trained in their use. **4.** Know and follow workplace safety procedures. **5.** Ensure you follow safe manual handling techniques when utilising equipment. **6.** Use warning signs to mark danger areas and dangerous equipment. **7.** Wear protective clothing appropriate for the task.
PLAN "B" Contingency	• Follow all of your workplace policies and procedures. • Familiarise yourself with your workplace evacuation plan and designated evacuation point. • Be aware of the risk management plan and raise any risks or hazards with your supervisor.

3.2 Safe Work Practices to Minimise Risks and Potential Hazards

WHAT
is it?



Safety is the condition of being protected from harm; freedom from the occurrence or risk of danger, injury or loss.
Hazard is anything in the workplace that has the potential to harm people.

REMEMBER
Know

Risk assessment
In the workplace, all employees including employers are required to apply safe work practices at all time. The evidence that the workplace is safe is demonstrated in conducting regular workplace Risk Assessments. Risk Assessments identify risks to safe working environment.

The results of a risk assessment should enable employers to make decisions about establishing appropriate prevention and control measures.

The risk assessment is performed in accordance with occupational health and safety legislation and relevant Commonwealth/State/Territory regulations or approved codes of practice for the control of hazardous substances in the workplace.

Hazards can include objects in the workplace; for example machinery and dangerous chemicals used in a person's job. A risk arises when it is possible that a hazard is likely to cause harm. The level of risk will depend on factors such as how often the job is done, the number of workers involved and the seriousness of any injuries that may result.

Some examples of potential hazards in the workplace are:

- Incorrect storage of materials;
- Wet or uneven floor surfaces;
- Blocked exits;
- Lack of access to fire extinguishers;
- Badly maintained equipment or improper use of equipment;
- Faulty/overloaded electrics; and
- Inappropriate noise levels.

REMEMBER Continued
Know

Eliminating/minimising risks

If a risk assessment suggests there is a risk factor within the workplace, employers are obliged to establish appropriate procedures to minimise or eliminate the hazard/risk. These could include:

- Employee training;
- Establishing first aid facilities including safety showers and eye wash stations;
- Provision of personal protection equipment; and
- Developing and communicating emergency procedures and evacuation procedures for the workplace.

WorkSafe

WorkSafe is a division of the Department of Commerce, the Western Australian State Government agency responsible for the administration of the Occupational Safety and Health Act 1984. The principal objective of the Occupational Safety Act 1984 is to promote and secure the safety and health of people in the workplace.

DO
Manage

1. Access WorkSafe website: http://www.commerce.wa.gov.au/worksafe/.
2. Familiarise yourself with the content on the website.

PLAN "B"
Contingency

- There is no plan "B" – safety is your priority.
- Call Triple Zero (000) in case of an emergency in the workplace.

3.3 Safe Practices When Dealing With Hazardous Substances, Dangerous Goods and Chemicals

WHAT
is it?



Hazardous substances may have harmful effects on people either directly through toxic effects or indirectly in the form of a liquid, solid or gas.

A SDS or a Safety Data Sheet is a document that provides information about a hazardous substance and how to safely use it in the workplace. It must contain the information outlined in the National Code of Practice for the Preparation of Safety Data Sheets.

REMEMBER
Know

When dealing with hazardous substances, dangerous goods and chemicals certain protocols and rules must be adhered to. The health and safety of personnel at a workplace is paramount.

It is a requirement by law that workplaces adhere to the Occupational Safety and Health Act 1984.

The OSH Act places certain duties of care for safety and health at the workplace on:

- Employers;
- Principal/main contractors, sub-contractors, people involved in labour hire employees;
- Self-employed people;
- Manufacturers;
- Designers;
- Importers; and
- Suppliers.

It also places emphasis on the duty of care for the prevention of accidents and injury or harm.

REMEMBER Continued
Know

Dealing with Hazardous Substances, Dangerous Goods and Chemicals:

- Requires knowledge of the substances, goods or chemicals used or potentially exposed to.
- Requires knowledge on the safe practices. These can be found on:
- Safety Data Sheets;
- Workplace Policies and Procedures; and
- Supplier instructions.

Safety Data Sheets (SDS)

Guidance on the information required in a SDS is given in the national code of practice for the preparation of Safety Data Sheets.

- http://www.commerce.wa.gov.au/sites/default/files/atoms/files/preparationofmaterialsafetydatasheet.pdf;
- http://www.commerce.wa.gov.au/sites/default/files/atoms/files/msds_dec07.pdf ; and
- Can be found on www.msdssearch.com.

These sheets should be accessible at all times and stored where all employees know where they are.

Further information on hazardous substances can be obtained by:

- By contacting the supplier;
- From these websites:
  - www.worksafe.wa.gov.au; and
  - www.safeworkaustralia.gov.au.

DO
Manage

1. Follow DRSABCD St John Action Plan.
2. Call Triple Zero (000) for an ambulance in the case of an emergency.
3. Strictly follow workplace policy and procedures.
4. Refer to Safety Data Sheets.
5. Handle hazardous substances, dangerous goods and chemicals with care and according to SDS and supplier instructions.

PLAN "B"
Contingency

- In the absence of information, it is safer to assume there is a hazard and take precautions to avoid skin contact, inhalation or ingestion of the chemical.
- Always refer to the Safety Data Sheet.

4. Infection Control and Standard Precautions

WHAT
is it?



Infection is an invasion of body tissues by disease causing agents (for example; bacteria); their multiplication and the reaction of body tissue to them. **Infection control** is the discipline of preventing a health related spread of infection.

REMEMBER
Know

Infection control in first aid is very important both to the First Aider and the casualty. It is used to help prevent transmission of infections when managing a casualty. The basic principle of infection prevention and control is hygiene. Infection may be transmitted via breathing, coughing, touching, eating or body penetration.

Infection control is achieved by protecting both the casualty and the First Aider from the transmission of:

- Blood and bodily fluids such as saliva, vomit, pus, urine and faeces;
- Direct contact such as scabies and fungal infections;
- Infected hypodermic needles and other sharps; and
- Droplets from nasal, throat or airway secretions.

Standard precautions are the best practices to achieve infection control. These include good hygiene, wearing of personal protective equipment and correct disposal of sharps and clinical waste.

DO
Manage

1. Wash hands with soap/water.
2. Wear personal protective equipment (PPE); for example, gloves, facemask and eye protection goggles and cover exposed cuts with water proof dressings.
3. Disinfect/wash blood splashed clothing, contaminated surfaces and equipment.
4. Dispose of waste and sharps carefully.

PLAN "B"
Contingency

- If water is not available use alcohol based gels or wipes.
- If your gloves tear while giving first aid, take them off straight away, wash and dry your hands or use alcohol gel, put on a new pair of gloves.
- Use disposable gloves and if available a face mask and eye protection goggles.

5. Safe Manual Handling

WHAT
is it?



The term 'manual handling' is used to describe a range of activities including lifting, lowering, pushing, pulling, carrying, moving or holding an object or person.

REMEMBER
Know

In an incident where you are required to provide Cardiopulmonary Resuscitation (CPR), you may have to lift or move the casualty to a suitable position or location. A casualty should only be moved if there is an immediate danger; for example an explosion, collapsing structure, traffic hazards, fire or poisonous fumes and so on. An awareness of safe manual handling techniques can prevent injury to yourself.

Most of the reported accidents involving manual handling tasks cause back injury, although hands, arms and feet are also vulnerable. Up to one third of all work injuries in Australia occur during manual handling.

Some general principles for reducing risks associated with manual handling are to:

- Minimise the lifting and lowering forces exerted;
- Avoid the need for bending, twisting and reaching movements;
- Reduce pushing, pulling, carrying and holding;
- Consider the size, surface characteristics, stability and weight of objects;
- Reduce the vertical and horizontal movements involved;
- Redesign the workplace layout; and
- Consider work postures and space requirements from the Worksafe WA.

DO
Manage

1. Always follow your organisational policies and procedures.
2. Follow DRSABCD.
3. Bend at the knees, keep your back straight and head up.
4. Stay balanced: keep your centre of gravity low.
5. Hold the weight close to your body for stability.
6. Take small steps.

PLAN "B"
Contingency

- Do not move unless absolutely necessary (it can lead to further injury).
- Use help for lifting, by working in a team.

6. Basic Life Support – Chain of Survival

WHAT
is it?



The aid provided to maintain airway, breathing and circulation, in the hope that the natural function of the lungs and heart will be restored.

REMEMBER
Know

In an emergency situation, immediate action needs to be taken to maximise a casualty's chances of survival, particularly when there are no signs of life: no breathing, movement or response. **Time is of the essence!**

The Chain of Survival consists of four (4) links:

1. **Early Recognition and Call for Help** - The ambulance must be called immediately to ensure that early defibrillation and advanced life support can commence without delay.
2. **Early CPR** - If CPR is started within four (4) minutes of the heart stopping, oxygenation of the vital organs (such as the brain) is maintained.
3. **Early Defibrillation** - If CPR is given within four (4) minutes and defibrillation within eight to twelve (8-12) minutes, there is a significantly improved chance of survival.
4. **Post Resuscitation Care** - Definitive treatment by the ambulance service, such as giving medication and stabilising the airway may increase chances of survival even further.

DO
Manage

1. Follow DRSABCD St John Action Plan.
2. Full step-by-step instructions are available in the Quick Guide at the end of this booklet.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.

6.1 Cardiopulmonary Resuscitation (CPR)

WHAT
is it?



Cardiopulmonary Resuscitation or commonly known as CPR is an emergency procedure performed in an effort to manually **preserve brain functions** until further measures are taken to restore spontaneous **blood circulation and breathing** in a person.

REMEMBER
Know

Cardiopulmonary Resuscitation (CPR) includes **chest compressions** and **inflation of lungs** by breathing into the casualty's mouth. It is designed to pump the heart to get blood circulating and deliver oxygen to the brain until the treatment can stimulate the heart to start working again. When the heart is starved of oxygen and stops pumping – it is known as a cardiac arrest.

CPR is most effective when administered as quickly as possible.

IMPORTANT: CPR is given to a casualty when there are no signs of life:

- Not breathing normally;
- Not responding; and
- Not moving.

NOTE: Compressions on a casualty should be performed on a firm surface.
CPR is stopped when:

- The casualty is revived and starts breathing on their own;
- Medical help such as ambulance paramedics arrive to take over; and
- The person performing the CPR is forced to stop from physical exhaustion.

DO
Manage

1. **30:2** - Give thirty (30) compressions and two (2) breaths aiming to achieve five (5) sets of compressions in two (2) minutes.
2. Full step-by-step instructions are available in the Quick Guide at the end of this booklet.
3. Please access Guideline No. 6 – Compressions from ARC Link: http://resus.org.au/guidelines/.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.
- Learn first aid – enrol into a St John first aid course.

6.2 Cardiopulmonary Resuscitation (CPR) - Infants

WHAT
is it?



Cardiopulmonary resuscitation or commonly known as CPR is an emergency procedure performed in an effort to manually **preserve brain functions** until further measures are taken to restore spontaneous **blood circulation and breathing** in an infant under one (1) year.

REMEMBER
Know

Providing Cardiopulmonary Resuscitation (CPR) to infants will be slightly different to CPR provided to an adult person due to the delicate nature of an infant's body.

An infant's airways are smaller and more prone to blockage and the trachea is shorter and softer so over extension of the head and neck will compress the airway.

Chest compressions on infants are lighter than on adults and/or children and are performed with two **(2) fingers** only.

DO
Manage

1. Provide chest compressions using your fingers (index and middle) over the lower half of the sternum.
2. **30:2** - Give thirty (30) compressions and two (2) breaths aiming to achieve five (5) sets of compressions in two (2) minutes.
3. Full step-by-step instructions are available in the Quick Guide at the end of this booklet.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.
- Learn first aid – enrol into a St John first aid course.

6.3 Automated External Defibrillator (AED)

WHAT
is it?



Some examples of AED's

Automated External Defibrillator or AED is a device used in the treatment of cardiac arrest to deliver a therapeutic dose of electrical energy to the heart for the purpose of re-starting and stabilising heartbeat rhythm.

REMEMBER
Know

An AED is a portable external device that automatically diagnoses the potentially life threatening cardiac rhythm anomalies in a casualty and delivers an electric shock to the heart through the chest. This shock helps restore the heart to a regular, healthy rhythm. The electrical impulse that this device produces makes the heart contract, pumping the needed oxygen around the body. In the normal beating heart, this process repeats itself.

The device is a kit that consists of:

- A power control unit;
- Paddle electrodes; and
- Accessories.

Once turned on, an AED provides verbal instructions over a speaker which is inbuilt into the device.

AED is a battery operated device and is readily available in our community, workplaces and public facilities. **NOTE:** When conducting Occupational Safety and Health (OHS) audits in the workplace always check if the battery is fully charged.

DO
Manage

1. Open the AED case and turn the device ON.
2. The automatic prompts will tell you what you need to do.
3. Place the pads on the casualty's chest.
4. AED will check and analyse the casualty's heart rhythm.
5. The automatic prompt will instruct you to administer the shock if required.
6. Full step-by-step instructions are available in the Quick Guide at the end of this booklet.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.
- Learn first aid – enrol into a St John first aid course.

6.4 Defibrillation

WHAT
is it?



Defibrillation is a treatment of delivering a therapeutic dose of electrical energy to the heart by using a device called a defibrillator (or Automated External Defibrillator – AED) for the purpose of re-starting and stabilising the heart rhythm.

REMEMBER
Know

CPR is provided to an unconscious and not breathing normally casualty, to maintain their blood flow and keep the blood oxygenated. While the chest compressions when performing CPR maintain the casualty's blood flow, as a First Aider you will also need to use an Automated External Defibrillator (AED). An AED is used to assist your casualty's heart to regain its normal rhythm by providing electric shocks in a sudden cardiac arrest situation. The electrical shocks delivered by the defibrillator may help re-establish normality in a heart's rhythm.

The greatest casualty survival results are when the interval between the start of the cardiac arrest and the delivery of defibrillation is as brief as possible.

The appropriate use of an AED is on a casualty who is assessed as being:

- Unresponsive and unconscious; and
- Not breathing normally.

It is crucial CPR continues except when a shock is being delivered or when instructed by the AED machine.
NOTE: Do not remove defibrillator pads even if the casualty is conscious.

DO
Manage

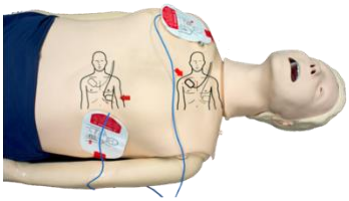
1. Follow DRSABCD St John Action Plan.
2. Turn the machine on, follow the machine's prompts and attach the defibrillator pads to the casualty as soon as possible.
3. Full step-by-step instructions are available in the Quick Guide at the end of this booklet.
4. Familiarise yourself with ARC Guideline 7 - Automated External Defibrillation (AED) in Basic Life Support (BLS): http://resus.org.au/guidelines/.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

6.5 Defibrillation - Adults and Children (Over 8 Years)

WHAT
is it?



Defibrillation is a treatment of delivering a therapeutic dose of electrical energy to the heart by using a device called a defibrillator (or Automated External Defibrillator – AED) for the purpose of re-starting and stabilising heartbeat rhythm in adults and children over eight (8) years of age.

REMEMBER
Know

The use of a defibrillator is a third link in the Chain of Survival:

1. Early access;
2. Early CPR;
3. **Early defibrillation**; and
4. Early advanced life support.

The time to defibrillation is a key factor that influences survival. For every minute defibrillation is delayed, there is approximately 10% reduction in survival if the casualty is in cardiac arrest.

Defibrillation for children aged eight (8) years or older and adults are the same.

If you are alone with the casualty follow DRSABCD St John Action Plan.

If two First Aiders are present, one should go for help and collect a defibrillator (if available), while the other should begin CPR on the casualty.

DO
Manage

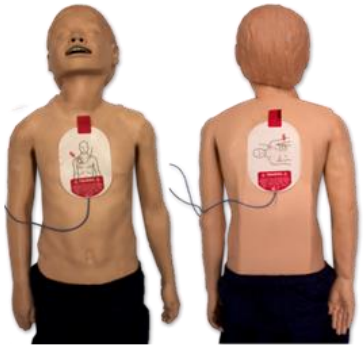
1. Follow DRSABCD St John Action Plan.
2. Expose the casualty's chest.
3. Check for a pacemaker device or implant scars (place pads away from the device site).
4. Remove jewellery and medication patches.
5. Apply the pads to a casualty's bare chest:
   - 1st pad to right chest wall, below the collarbone;
   - 2nd pad to left chest wall, below the left nipple; and
   - Ensure both pads adhere to the skin.
6. Follow automated instructions.
7. Full step-by-step instructions are available in the Quick Guide at the end of this booklet.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

6.6 Defibrillation - Children (1 - 8 Years)

WHAT
is it?



Defibrillation is a treatment of delivering a therapeutic dose of electrical energy to the heart by using a device called a defibrillator (or Automated External Defibrillator – AED) for the purpose of re-starting and stabilising heartbeat rhythm in children between one (1) and eight (8) years of age.

REMEMBER
Know

Defibrillation for children between one (1) and eight (8) years of age is slightly different to those of adults.

Defibrillation for children between one (1) and eight (8) years is performed using a defibrillator with **a paediatric mode** or **paediatric pads**.

Paediatric pads are positioned one pad in the centre of the chest between the nipples and the second pad on the back between the shoulder blades.
If the AED does not have a paediatric mode or paediatric pads, then the standard AED and adult AED pads can be used.

If the child is large enough the pads can be placed as per the adult pads. Ensure the pads do not touch each other on the child's chest. If the pads are too large place them on the child as per the paediatrics pads (chest between the nipples and on the back between the shoulder blades).

It is recommended that both adult and paediatric pads are stored with the defibrillator.

DO
Manage

1. Follow the steps in Section 5.5 of this Guide.
2. Full step-by-step instructions are available in the Quick Guide at the end of this booklet.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

6.7 Defibrillation - Infants

WHAT
is it?



Defibrillation is a treatment of delivering a therapeutic dose of electrical energy to the heart by using a device called a defibrillator (or Automated External Defibrillator – AED) for the purpose of re-starting and stabilising the heart rhythm.

REMEMBER
Know

Infant is a child of up to twelve (12) months of age.

Should First Aiders defibrillate infants? The short answer is **NO**.

Infants are not just small versions of adults; they have many body system differences. The differences between infant and adult reduce as the infant becomes older.

NOTE: Only experienced health practitioners should defibrillate infants.

DO
Manage

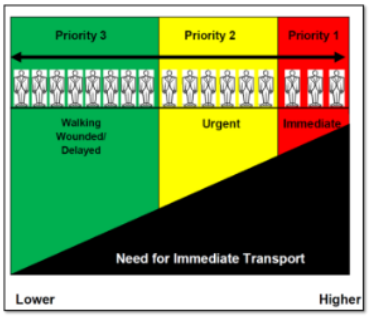
1. Do not defibrillate an infant.

PLAN "B"
Contingency

- Provide CPR.
- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

6.9 Priorities and Life Threatening Situations

WHAT
is it?



Priorities and Life Threatening Situations is a process of managing a situation where there are more casualties than the personnel able to manage them, for example in natural disasters, multiple car crash, and workplace incidents.

REMEMBER
Know

When a First Aider is faced with a multiple casualty incident, calling the emergency services and giving as much information to them as possible is vital. This information should include the overall details of what has happened and the number of casualties involved. The First Aider will only need to manage the situation and the casualties until the arrival of the emergency services.

When dealing with a multiple casualty situation the **principles of triage** are applied. Triage is: “A process in which a group of casualties is sorted according to their need for care, the type of illness or injury, the severity of the problem and the facilities that are available”.
Mosby’s Dictionary of Medicine, Nursing and Health Professionals 2nd Edition

The principles of triage are:

- To minimise congestion at accident sites: as soon as possible, clear casualties, bystanders and vehicles not needed;
- To do the most good for the largest number of people:
  - Saving life takes precedence over limb; and
  - Function takes precedence over appearance.

Triage Procedure
The SMART Triage Card system is the most common approach to triage and is used throughout Australia; this system groups the injured into 4 main categories:

- Priority 1 (Red);
- Priority 2 (Yellow);
- Priority 3 (Green); and
- Dead (Black).

REMEMBER Continued
Know

Priority 1 (Red card)

The casualties classified as Priority 1 require immediate transportation to hospital. Some might require urgent surgery or complex treatment to survive, for example:

- Casualties with asphyxia;
- Severe chest injury, obstructed airway - throat wounds, facial and jaw fractures with 'gurgling' breathing;
- Casualties with abdominal injuries or severe bleeding;
- Internal injuries - with signs of shock;
- External injuries - open fractures, amputations, crush injury; and
- Severe burns (greater than 30% of the body).

Priority 2 (Yellow card)

Casualties classified as Priority 2 require urgent transportation to hospital. Some might require surgery within few hours:

- Large wounds – bleeding controlled;
- Less severe burns (10% - 30% of body surface);
- Spinal injury, closed fractures or dislocation of major joints; and
- Facial injury (without airway obstruction), eye injuries.

Priority 3 (Green Card)

- Priority 3 casualties are those that have injuries and would benefit from some medical treatment but do not need immediate hospitalisation such as sprains, large bruises, abrasions, back strain etc.;
- Casualties with minor injuries probably do not need medical aid at this stage such as minor bruises, slight headache, abrasions, fright and so on; and
- These casualties may be instructed to leave the accident area by the police.

Priority 3 casualties must still receive the appropriate first aid treatment prior to being sent away. However, they should not be allowed to crowd an accident site or delay attention to the more urgent casualties.

Any casualties released into the care of a friend or relative, or allowed to go home should be registered first, leaving their name, address and a contact number for the police to follow up after the incident if necessary.

REMEMBER Continued
Know

Clinically Dead

- This group is normally the last group to be evacuated; casualties in this group should still be treated with dignity.

Triage with Children

The principles of triage do not change, however there are some considerations when performing triage on children:

- Airway: Children have a smaller airway and disproportionately sized heads so they are more prone to airway obstruction when unconscious;
- Bones: Children's bones are more flexible and subject to less fractures, however they are more susceptible to internal organ injuries;
- Thermoregulation: Children are more prone to dehydration or hypothermia, they are much more susceptible than adults; and
- Blood Loss: Children have less blood volume so what appears to be a minor bleed could lead to shock.

DO
Manage

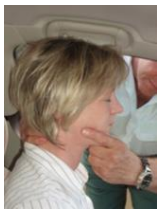
1. Follow DRSABCD St John Action Plan.
2. Call Triple Zero (000) for an ambulance. If other emergency services are required, a St John Ambulance Operator will contact the required service.
3. Apply the SMART Triage principle.
4. If a First Aider is alone with multiple casualties it will be a very stressful situation. Prioritise - just remember that having a clear and open airway takes priority over everything else. Open a casualty's airway and check for breathing, if that casualty is still not breathing, then you will need to move on to the next casualty, your job is to do the most good for the largest number of people. Remember:
   - Preserve life;
   - Prevent further harm;
   - Reduce pain and shock; and
   - Be clear - concise - remain calm.
5. Remember the casualty's condition may change suddenly. Constant observation is necessary.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Think outside the box – use what is around or near you as resources, and improvise. Remain calm.
- Learn first aid.
- Ask bystanders to help: they can direct traffic, assist in providing first aid and offer comfort.

7. First Aid Management of Asphyxia

WHAT
is it?



Respiratory distress is a potentially life threatening medical condition where the lungs cannot provide enough oxygen for the rest of the body. The effect of respiratory distress is asphyxia.

REMEMBER
Know

Positional Asphyxia - a form of asphyxia which occurs when someone's body/ head position prevents them from breathing normally.

Caused by:

- Airway obstructions - tongue, vomit and position of the body;
- Head injuries - no nerve messages from brain about breathing;
- Heart conditions – no blood supply to carry oxygen from lungs to vital organs;
- Chest conditions – bronchospasm; for example ineffective exchange of gases; and
- Lack of oxygen - poisonous gases, smoke, drowning, suffocation, and strangulation.

Signs and Symptoms:

- Breathlessness;
- Blue tinge to lips and skin; and
- Air hunger.

Complications:

- If the casualty becomes unconscious and is not breathing normally then perform CPR.

DO
Manage

Conscious Casualty:

1. Follow DRSABCD St John Action Plan.

Unconscious Casualty:

2. DRSABCD St John Action Plan.
3. Remove cause and position casualty to maintain airway.
4. Resuscitate if necessary.
5. Urgent medical aid.

PLAN "B"
Contingency

- If you cannot physically move the casualty, for example; unconscious in a car with their head slumped forward, if safe to do so, manually hold the casualty's head so that the airway is open.

7.1 First Aid Management in Case of Regurgitation and Vomiting

WHAT
is it?



Regurgitation is the forceful expulsion of undigested food in the stomach through the mouth. Vomiting is the forceful ejection of the stomach content through the mouth.

REMEMBER
Know

Causes:

- Head injury;
- Stomach flu;
- Dehydration;
- Overeating;
- Flu;
- Acid Reflex and so on; and
- Intestinal, kidney, liver and other diseases.

Signs and Symptoms:

- Nausea.

Complications:

- Choking.

DO
Manage

1. Clear the airway before performing CPR.

PLAN "B"
Contingency

- No plan "B" – you must clear the airway to allow the casualty to breath or to perform CPR.

7.2 First Aid Management of Bleeding (External)

WHAT
is it?



Bleeding is defined as loss of blood. The loss can range from minor bleeding through to severe external and internal bleeding.

REMEMBER
Know

Caused by:

- Anything that cuts or damages a blood vessel;
- Injury to blood vessel; and
- Amputation.

Signs and Symptoms:

- Pain;
- Tenderness;
- Pallor;
- Sweating;
- Faintness or dizziness;
- Thirst; and
- Visible blood loss, oozing, flowing or spurting.

Complications:

- Severe blood loss; and
- Cardiac arrest.

Types of bleeding/wounds:

- **Abrasion -** a superficial wound where the skin is rubbed or scraped across a hard surface for example road or footpath and part of the epidermis (top layer of skin) is lost;
- **Laceration -** open wound from machinery, barbed wire, teeth or claws. Skin, soft tissue and muscle may be damaged and have irregular edges;
- **Incision -** open wound from knife or glass. The wound is cut cleanly with regular edges;
- **Avulsion** (tear) **-** caused by severe force by things such as animal bites, accidents involving motor vehicles, guns and explosives. Note in elderly people the skin becomes very thin and fragile and can tear easily, handle with care;
- **Puncture -** wounds from blunt, pointed instrument or gunshot wound, results in damage to skin, soft tissue, muscle, and any underlying organs**;**

REMEMBER Continued
Know

- **Amputation -** Part of the body is cut or torn off for example finger, toe, hand, leg. Priority is to minimise blood loss and shock and preserve the injured part; and
- **Nose Bleed –** Bleeding usually occurs from just inside the nose, on the central partition usually due to the nose being hit or banging into something.

DO
Manage

Nose Bleed

1. Sit the casualty up, lean their head forward and make them comfortable.
2. Apply firm pressure with thumb and index finger over lower half of the nose (just below the bridge) for at least ten (10) minutes.
3. Instruct the casualty to breathe through their mouth.
4. Tell the casualty not to blow their nose – it will dislodge any clots that may have formed.
5. Seek medical aid if bleeding is not controlled in twenty (20) minutes. On a hot day, or after exercise it may take much longer to stop the bleeding.

DO – CONSCIOUS CASUALTY:

1. Wear gloves to prevent infection.
2. Follow DRSABCD St John Action Plan.
3. Help the casualty to lie down. Remove or cut their clothing to expose the wound.
4. Squeeze the wound edges together if possible.
5. Apply direct pressure over the wound using a pad or your hands (use gloves if available). Ask the casualty to do this if possible.
6. Raise and support the injured part above the level of the casualty's heart. Handle gently if you suspect a broken bone.
7. Apply a pad over the wound if not already in place.
8. Secure the pad by bandaging over the padded wound.
9. If bleeding is still not controlled, leave the initial pad in place and apply a second pad and secure with the bandage.
10. If bleeding continues through second pad, replace the second pad (only) and bandage.
11. Check every fifteen (15) minutes that the bandages are not too tight and that there is circulation below the wound.
12. Continue to check the casualty's breathing and pulse.
13. Observe and treat the casualty for shock if necessary.

DO Continued Manage	**DO – UNCONSCIOUS CASUALTY:** **1.** Wear gloves to prevent infection. **2.** Follow DRSABCD St John Action Plan. **3.** Control bleeding as for a conscious patient. **4.** Seek urgent medical aid. **Bleeding - Amputations:** **1.** Follow DRSABCD St John Action Plan. **2.** Apply direct pressure to the wound and raise limb to control blood loss. **3.** Apply a sterile dressing and bandage. **4.** Wrap the amputated part in a gauze or material, for example bandage, and place in a water-tight container. **5.** Place the sealed container in cold water which has had ice added to it (if available). The severed part should not be in direct contact with the ice. **6.** Send the amputated part to hospital with the casualty. **AMPUTATION DO NOT:** **1.** Wash or soak the amputated part in water or any other liquid. **SEVERE BLEEDING DO NOT:** **1.** Apply a tourniquet. **2.** Give the casualty anything to drink or eat.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • If an object is embedded in or protruding from a wound, apply pressure on either side of the wound and place pads around the object before bandaging. • Ask bystanders to assist if they are trained First Aiders.

7.3 First Aid Management of Bleeding (Internal)

WHAT
is it?



Internal bleeding is also loss of blood caused by trauma and severe injuries from internal organs.

REMEMBER
Know

Mild internal bleeding can be seen as bruising (capillary damage).

Severe internal bleeding involves veins and arteries and can be the result of violent blunt force such as car accident or penetration by an object like a knife, which can damage internal organs.

A broken thigh bone (femur) can lose one (1) to one and a half (1.5) litres of blood into surrounding tissue.

Caused by:

- Blunt force trauma from for example a car accident or a fall from a height;
- Object penetrates the skin for example a knife and damages internal structures; and
- Medical conditions for example stomach ulcer or complications of pregnancy**.**

Signs and Symptoms:

- Weak, rapid pulse;
- Pale, cool, moist skin;
- Pallor;
- Sweating;
- Rapid, gasping breathing, restlessness;
- Bruising;
- Nausea;
- Thirst;
- Faintness, dizziness;
- Confusion;
- Loss of consciousness; and
- Distension (swelling) of the abdomen.

Complications:

- Severe blood loss; and
- Cardiac arrest.

REMEMBER Continued – Know

Bleeding – Abdominal Injury DO NOT:

- Try to push organs back into the abdomen;
- Apply direct pressure to the wound;
- Give anything to drink; and
- Remove any impaled objects.

DO – Manage

Abdominal Injury:

1. Follow DRSABCD St John Action Plan.
2. Place the casualty on their back with knees slightly raised and supported.
3. Loosen clothing.
4. Cover protruding organs with aluminium foil or a large non-stick sterile dressing soaked in sterile saline or clean water.
5. Bandage the wound securely with a broad bandage (not tightly).
6. Treat for shock, if required.

Penetrating Chest Wound:

1. Follow DRSABCD St John Action Plan.
2. Place the casualty in a seated position with the affected side down.
3. Cover the wound using the casualty's or your own hand to stop air flow in and out of the chest cavity.
4. Dress the wound with a dressing such as plastic sheet, bag or aluminium foil. If not available use sterile dressing or pad.
5. Seal with tape on three (3) sides – NOT the bottom side.
6. Treat for shock, if required.

Bleeding – Crush Injury:

1. Follow DRSABCD St John Action Plan.
2. Remove the crushing object if safe to do so and as soon as possible.
3. Control bleeding then manage other injuries.
4. Treat for shock, if required.

PLAN "B" – Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.
- Use plastic cling (food) wrap if aluminium foil not available.

7.4 First Aid Management of Choking – Adult, Child and Infant

WHAT
is it?





Choking is severe difficulty in breathing due to obstruction of the airway or lack of air.

REMEMBER
Know

Caused by:

- Airway partially or completely blocked by food;
- Airway partially or completely blocked by small objects or foreign materials;
- Eating too quickly; and
- Not chewing food sufficiently.

Signs and Symptoms:

- Clutching the throat;
- Coughing, wheezing or gagging;
- Having difficulties breathing, speaking or swallowing;
- Trying to cry but making strange or no sounds at all;
- Making a whistling or “crowing” sounds;
- Face, neck, lips, ears or fingernails turning blue; and
- Becoming unconscious.

Complications:

- Lack of oxygen to vital organs;
- Unconscious; and
- Cardiac arrest.

DO
Manage

Under one (1) Year (Infant):

1. Immediately call Triple Zero (000) for an ambulance.
2. Follow DRSABCD St John Action Plan.
3. Give up to five (5) sharp back blows:
   - Position infants with head pointing downwards on forearm;
   - Support the infant's head and shoulders on your hand and forearm. Hold infant's mouth open with your fingers;
   - Give up to five (5) sharp blows between shoulders with heel of one hand;
   - Check if obstruction has been relieved after each back blow; and
   - If obstruction relieved remove any foreign material that may have loosened with your little finger.
4. If unsuccessful, give up to five (5) chest thrusts:
   - Place the infant on their back on a firm surface;
   - Place two (2) fingers in the CPR position;
   - Give five (5) chest thrusts – slower but sharper than CPR compressions;
   - Check if the obstruction has been relieved after each chest thrust; and
   - If obstruction relieved, position infant with head pointing downwards on forearm, and remove any foreign material that may have loosened with your little finger.
5. If blockage does not clear after five (5) chest thrusts continue alternating with five (5) back blows and five (5) chest thrusts until medical aid arrives.

Over one (1) Year (Child and Adult):

1. Follow DRSABCD St John Action Plan.
2. Encourage the casualty to relax, breathe deeply and encourage coughing to remove object.
3. If coughing is unsuccessful, call Triple Zero (000) for an ambulance.
4. Position casualty leaning forward with head and chest low and give up to five (5) sharp back blows between the shoulder blades with heel of one hand.
5. Check after each back blow to see if the obstruction has been cleared.
6. If back blows are unsuccessful, give up to five (5) chest thrusts.
7. For chest thrusts, place the heel of the hand in the same compression point as you would for CPR. Then place the other hand flat between the shoulder blades to support.
8. Give up to 5 chest thrusts; Chest thrusts are similar to chest compressions but sharper and delivered at a slower rate.
9. Remember to check to see if the obstruction has cleared after each thrust. If the blockage has not cleared after five (5) chest thrusts, continue to alternate between back blows (step 4) and chest thrusts (step 7).
10. Continue until airway is cleared or until medical aid arrives to take over.

PLAN "B" Contingency	• If the blockage has not cleared after the initial management, then try asking the casualty to bend further forward when giving back blows, this will assist gravity in the expulsion of the blockage. • Consider removing dentures if they are loose fitting. • Call Triple Zero (000) for an ambulance.

7.5 First Aid Management of Asthma

WHAT
is it?



Asthma is a respiratory condition that causes difficulty in breathing. It is usually linked to allergic reaction or other forms of hypersensitivity.

REMEMBER
Know

Caused by:

- Exercise/activity;
- Respiratory infections;
- Inhaled allergens such as pollen;
- Changes in temperature and weather, especially cold air;
- Environmental factors such as dust, pollution or wood smoke;
- Emotional factors such as anxiety, stress or laughter;
- Smoke such as cigarettes or fire;
- Certain medications such as aspirin;
- Chemicals and strong smells such as perfumes or cleaning products; and
- Some foods and food preservatives such as flavourings and colourings (uncommon).

Signs and Symptoms:

- Increasing wheeze;
- Persistent cough;
- Difficulty breathing, shortness of breath;
- Only able to speak in short sentences; and
- Chest tightness.

Complications:

- Symptoms worsen very quickly;
- Little or no relief from inhaler;
- Severe shortness of breath, focused only on breathing;
- Unable to speak normally;
- Pallor, sweating;
- Progressively more anxious, subdued or panicky;
- Blue lips, face, earlobes and fingernails;
- Loss of consciousness; and
- Respiratory cardiac arrest.

REMEMBER Continued
Know

There are a number of different inhalers available. The most common being the blue **Ventolin** inhaler.

Some casualties may have a **turbuhaler** which has the medication inside in the form of a dry powder. The device is breath activated, which means the powder is sucked from the device rather than fired.

An **Asthma Action Plan** is developed with the casualty's doctor to help the ongoing management of the casualty's asthma and reduce their need for urgent medical aid, improve their lung function and reduce the number of sick days taken off from school or work.

In an education and child care setting, each person's individual Asthma Action Plan should be known to all relevant staff and be easily accessible to them.

The Asthma Action Plan covers:

- What medication to take every day (even when the person is feeling well);
- How to tell if the person's asthma is getting worse;
- What to do if the person's symptoms become worse; and
- What to do if the person has an asthma attack.

Note: This information is obtained from Asthma Australia, a peak clinical body for asthma in Australia. http://www.asthmaaustralia.org.au.

IMPORTANT:

- Most people are aware of their asthma and should have an Action Plan and medication, usually in the form of an inhaler. They may wear a medical alert device; for example a bracelet.
- If the casualty's inhaler is not available, in an emergency use another person's inhaler or one from a first aid kit if possible.
- If the casualty is having difficulty breathing but has not previously had an asthma attack, you can use another person's inhaler or one from a first aid kit.

DO Manage	**Unconscious casualty:** **1.** Follow DRSABCD St John Action Plan. **2.** If CPR is required it may be more difficult to get a breath into the casualty's lungs. **Conscious casualty:** **1.** Help the casualty to sit down in a comfortable position. Stay with the casualty. **2.** Reassure the casualty. **3.** Help the casualty with their Action Plan. **4.** If necessary, help the casualty to use an inhaler (their own if available; if not, then for a severe attack use another person's or one from a first aid kit). **How to give medication:** **1.** Shake the inhaler before giving. **2.** Give four (4) puffs: one (1) puff at a time with four (4) breaths after each puff. **3.** Wait four (4) minutes. If no improvement, give four (4) more puffs with four (4) breaths after each puff. **4.** If the casualty still cannot breathe normally, call Triple Zero (000) for an ambulance. **5.** Keep giving four (4) puffs every four (4) minutes until medical aid arrives.
PLAN "B" Contingency	• Use a spacer if available. • Call Triple Zero (000) for an ambulance. • Ask bystanders to assist if they are trained First Aiders. • Resuscitate if necessary.

7.6 First Aid Management of Allergic Reaction

WHAT
is it?



An allergic reaction is the body's reaction to a foreign substance by triggering the immune system to react.

REMEMBER
Know

An allergy occurs when a person's immune system reacts to substances in the environment that are harmless for most people.

Depending on the allergen and where it enters the body, different symptoms may appear. For example, pollen, when breathed in through the nose, usually causes symptoms in the nose, eyes, sinuses and throat (allergic rhinitis). Allergy to foods usually causes stomach or bowel problems, and may cause hives (urticaria). Allergic reactions can also involve several parts of the body at the same time. In some cases, anaphylaxis is preceded by signs of a mild to moderate allergic reaction. - Australasian Society of Clinical Immunology and Allergy (ASCIA).

Caused by:

- Dust mites;
- Pollen;
- Foods such as peanuts, cow's milk, soy, seafood and eggs;
- Cats and other furry or hairy animals such as dogs, horses, rabbits and guinea pigs;
- Insect stings;
- Moulds; and
- Medicines.

Signs and Symptoms:

- Swelling of the lips, face and eyes;
- Hives or welts;
- Tingling mouth; and
- Abdominal pain and/or vomiting which can be a sign of a severe allergic reaction to insects.

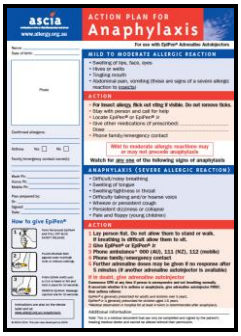
Complications:

- Signs and symptoms become more severe – anaphylaxis.

DO Manage	**1.** Follow DRSABCD St John Action Plan. **2.** For insect allergy, remove the trigger: • Sting: scrape the sting out sideways with a fingernail and wash the area. • Do not remove ticks, disturbing the tick can result in the injection of allergen and this can trigger an allergic reaction. **3.** Place in a position of comfort. **4.** Stay with the casualty and call for help. **5.** Locate adrenaline Autoinjector and Action Plan, if available, in the event of anaphylaxis. **6.** Watch for any signs of anaphylaxis. **7.** Give medications if prescribed. Whilst antihistamines may be used to treat mild to moderate allergic reactions, if these progress to anaphylaxis then adrenaline is the only suitable medication. **8.** Mild to moderate allergic reaction may or may not precede anaphylaxis.
PLAN "B" Contingency	• Make the casualty as comfortable as possible either sitting or lying down, apply a cool compress over any areas of redness/rash. Monitor the casualty closely for signs of deterioration.

7.7 First Aid Management in Anaphylaxis

WHAT
is it?



Anaphylaxis is the most severe form of allergic reaction and is potentially life threatening when a person becomes sensitised to food, medication, insect venom or even latex rubber. In some cases, anaphylaxis is preceded by signs of a mild to moderate allergic reaction.

REMEMBER
Know

Caused by:

- Food: Nuts, cow's milk, eggs, fish, shellfish and soy products;
- Medications: Penicillin is the most common, but that is still rare and usually occurs during IV use. Other medications include: Sulphur, antibiotics, Aspirin, Ibuprofen, Pethidine, Codeine or Morphine; and
- Venom: Bites from ticks. Stings from bees, most common source, wasps and ants.

Signs and Symptoms:

- Difficult and /or noisy breathing;
- Wheeze or persistent cough;
- Swelling of the face and tongue;
- Swelling/tightness of the throat;
- Difficulty talking and/or hoarse voice;
- Persistent dizziness or collapse;
- Young children may become pale and floppy;
- Abdominal pain and vomiting; and
- Hives, welts and body redness.

Anaphylaxis Action Plans

Action Plans are developed for individuals with their doctor when it has been confirmed that they have a food, insect or medication allergy and are at risk of developing anaphylaxis if exposed to a trigger allergen.

NOTE: An anaphylactic reaction is likely to occur within twenty (20) minutes of exposure to the trigger and can rapidly become life threatening.

Complications:

- The casualty may go into respiratory arrest and then cardiac arrest. If the casualty is not responding (unconscious) and not breathing normally commence CPR.

DO Manage	**1.** Follow DRSABCD St John Action Plan. **2.** For insect allergy, scrape out sting if visible. Do not remove ticks, disturbing the tick can result in the injection of an allergen, and this can trigger an allergic reaction. **3.** If food is the trigger: ask the casualty to spit out if any remaining in the mouth and rinse mouth with water. **4.** Lay the casualty flat. Do not allow them to stand or walk. If breathing is difficult allow them to sit. **5.** Administer appropriate adrenaline autoinjector - EpiPen® child or adult and follow Anaphylaxis Action Plan if available. **6.** Call for urgent medical aid. **7.** In a child care situation: Ask someone to phone parent, guardian or emergency contact. **8.** Monitor breathing and circulation. **9.** Further adrenaline autoinjector doses may be given if no improvement in condition after 5 minutes. **10.** Give asthma medication for respiratory symptoms; and **11.** Commence CPR at any time if the casualty is unconscious and is not breathing normally. **12.** If in any doubt, give an adrenaline autoinjector as recommended by The Australian Society of Clinical Immunology and Allergy (ASCIA). **13.** Adrenaline is life saving and must be used promptly. Withholding or delaying the giving of adrenaline can result in deterioration and death. **14.** Transient (temporary) side effects of adrenaline such as increased heart rate. Trembling and paleness are to be expected.

PLAN "B"
Contingency
	• If no adrenaline autoinjector is available (may be the first time the casualty has had a reaction):
	  • Lay the casualty flat. Do not allow them to stand or walk. If breathing is difficult, allow them to sit;
	  • Follow DRSABCD St John Action Plan and monitor airway and breathing until arrival of medical aid; and
	  • If the casualty is not responding and not breathing normally, commence CPR.
	• Access ASCIA website and familiarise yourself with the action plans: http://www.allergy.org.au.

7.8 Using Autoinjectors in First Aid

WHAT
is it?



The EpiPen® autoinjector is a disposable drug delivery system that is designed for self-administration of a single dose of adrenaline for severe allergic emergencies (anaphylaxis).

REMEMBER
Know

There is one brand of an adrenaline autoinjector available in Australia.

- EpiPen®

The autoinjector is available in two sizes:

EpiPen® Autoinjector Dosage:

- 0.3 mg (Yellow) for adults and children over 5 years; and
- Junior 0.15 mg (Green) for children aged 1- 5 years.

The adrenaline contained within the autoinjectors rapidly constricts the blood vessels, relaxes the muscles in the airway and lungs, reverses swelling, and stimulates heartbeat, thereby reversing the most dangerous effects of an anaphylactic reaction. However, it does not replace medical help.

Before use, check the expiry date, and ensure that the liquid in the pen is clear. If the expiry date has passed or the liquid is a brownish colour do not use the autoinjector. Shelf life is approximately 12 months. Store in a cool, convenient and accessible location, away from direct sunlight, ensure that the appropriate persons are aware of the location such as child's teacher. The adrenaline is administered via the autoinjectors through the outer thigh, remove clothing if possible but do not waste time, it will penetrate clothes if necessary without any problem.

DO
Manage

EpiPen®

1. Form a firm fist around the EpiPen® and pull off the **BLUE SAFETY RELEASE**.
2. Place **ORANGE END** against outer mid-thigh at a 90° angle (with or without clothing).
3. Push down hard until a click is heard or felt and hold in place for ten (10) seconds.
4. Remove EpiPen® and dispose of it safely.
5. Massage injection site for ten (10) seconds.

PLAN "B"
Contingency
	• If no adrenaline autoinjector is available (may be the first time the casualty has had a reaction):
	  • Lay the casualty flat. Do not allow them to stand or walk. If breathing is difficult, allow them to sit.
	  • Follow DRSABCD St John Action Plan and monitor airway and breathing until arrival of medical aid.
	  • If the casualty is not responding and not breathing normally, commence CPR.
	• Access ASCIA website and familiarise yourself with the action plans: http://www.allergy.org.au.

7.9 First Aid Management of Shock

WHAT
is it?



Shock is defined as a collapse of the circulatory system which results in insufficient oxygen reaching the vital organs and tissues. Shock can be life threatening.

REMEMBER
Know

Shock is caused by a lack of circulating blood volume. The volume is too low to meet the body's needs and to remove waste products.

Caused by:

- Heart failure;
- Bleeding;
- Vomiting and diarrhoea;
- Burns;
- Pain;
- Trauma;
- Major or multiple fractures;
- Infections;
- Allergic reactions; and
- Severe sweating and dehydration.

Signs and Symptoms:

- Weak, rapid pulse;
- Cold, clammy skin;
- Rapid breathing;
- Faintness, dizziness, nausea; and
- Pale face, fingernails, lips.

Complications:

- Cardiac arrest.

NOTE: In any first aid situation, there is a potential for shock.

DO Manage	**1.** Follow DRSABCD St John Action Plan. **2.** Lie the casualty down and reassure. **3.** Raise the casualty's legs above the level of heart, with head flat on the floor. **DO NOT** raise the legs if casualty has suspected fractured legs or pelvis, neck/spinal injury or snake bite. **4.** Treat any other injury such as bleeding, wounds, burns and immobilise fractures. **5.** Maintain the casualty's body warmth. Cover with blanket, coat or similar but **DO NOT** use any source of direct heat. Loosen any tight clothing. **6.** Give small amounts of water frequently to the conscious casualty without abdominal trauma or is unlikely to require an operation in the immediate future. **7.** Monitor the casualty regularly. Do not leave them alone. **8.** Ensure Triple Zero (000) for an ambulance is called.

PLAN "B"
Contingency
	• Place casualty into the Recovery Position if:
	  • There is difficulty breathing.
	  • The casualty becomes unconscious.
	  • The casualty is likely to vomit.

7.10 First Aid Management of Cardiovascular Emergencies: Angina

WHAT
is it?



Angina is pain caused by narrowed arteries in the heart due to low oxygen.

REMEMBER
Know

Caused by:

- Atherosclerosis (narrowing of the arteries); and
- Causes include a diet high in saturated fats, smoking, and high blood pressure.

Signs and Symptoms:

- Pale and clammy;
- Tight, gripping or squeezing pain or discomfort;
- Pain can vary from mild to severe; felt in the centre of the chest, which may spread to either or both shoulders, the back, neck or jaw or down the arm;
- Shortness of breath; and
- Feeling nauseous.

Complications:

- Cardiac arrest.

DO
Manage

1. Follow DRSABCD St John Action Plan.
2. Advise casualty to immediately stop any activity and rest.
3. Provide reassurance. Ask the casualty to describe their symptoms.
4. Assist the casualty in taking their prescribed dose of angina tablets if rest alone does not bring rapid or effective relief of symptoms if already diagnosed with angina.
5. Give three hundred (300) mg of Aspirin (one (1) tablet) in water, unless the casualty is allergic to aspirin or advised by their doctor not to take aspirin.
6. If symptoms are not relieved within five (5) minutes, assist the casualty to take another dose of angina medication.
7. Call Triple Zero (000) for an ambulance if: pain or discomfort is not completely relieved by rest and medication within ten (10) minutes; any of the symptoms are severe or worsen quickly. Stay on the phone. Wait for advice from the operator. It is not recommended that you drive the casualty to the hospital yourself. You may need to perform CPR.

PLAN "B"
Contingency

- Perform CPR if casualty unconscious.
- Ask bystanders to assist if they are trained First Aiders.

7.11 First Aid Management of Cardiovascular Emergencies: Chronic Heart Failure

WHAT
is it?



Chronic heart failure is an ongoing condition in which the heart muscle is weakened and can't pump as well as it normally does.

REMEMBER
Know

Caused by:

- Atherosclerosis (narrowing of the arteries):
  - Narrowing of the arteries occurs when fatty deposits (called cholesterol plaques) build up on the inner walls of arteries; and
  - As an artery gets narrower, less and less blood can get through;
- Causes include a diet high in saturated fats, smoking, and high blood pressure.

Signs and Symptoms:

- A general feeling of tiredness;
- Breathlessness when exercising, lying flat or even resting;
- Swollen feet, ankles, legs and abdomen; and
- Coughing and wheezing.

Complications:

- Sudden cardiac arrest.

DO
Manage

Conscious casualty:

1. Follow DRSABCD St John Action Plan.
2. Help the casualty to a sitting position.
3. Reassure and loosen tight clothing.
4. Stay with the casualty until medical aid arrives.

If the casualty becomes breathless and collapses:

1. Follow DRSABCD St John Action Plan.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

7.12 First Aid Management of Cardiovascular Emergencies: Heart Attack

WHAT
is it?



Heart Attack is pain caused by complete blockage of an artery that supplies blood to the heart and causes damage or death of the heart muscle.

REMEMBER
Know

Caused by:

- Atherosclerosis (narrowing of the arteries):
  - Narrowing of the arteries occurs when fatty deposits (called cholesterol plaques) build up on the inner walls of arteries; and
  - As an artery gets narrower, less and less blood can get through.
- Causes include a diet high in saturated fats, smoking, and high blood pressure; and
- Heart attack and causes of heart attack.

Signs and Symptoms:

- Discomfort or pain in the centre of the chest;
- Comes on suddenly or increases slowly over minutes;
- Described as tightness, heaviness, fullness or squeezing;
- Severe, moderate or mild;
- Spreads to the neck and throat, jaw, shoulders, the back and one or both arms;
- Shortness of breath;
- Choking feeling in the throat;
- “Heavy” arms;
- Nauseous;
- A cold sweat; and
- Faint or dizzy.

IMPORTANT: Presence of one or more of the warning signs of a heart attack means this is a LIFE-THREATENING emergency.

Complications:

- Cardiac arrest.

DO Manage	**Unconscious Casualty:** **1.** Follow DRSABCD St John Action Plan. **2.** Place the casualty in the Recovery Position. **3.** Call Triple Zero (000) for an ambulance. Stay on the phone. It is not recommended that you drive the casualty to the hospital yourself, as you may need to perform CPR. **4.** Stay with the casualty until medical aid arrives. **5.** Continue to check the casualty's breathing and pulse. Be prepared to give CPR if symptoms worsen. **Conscious Casualty:** **1.** Follow DRSABCD St John Action Plan. **2.** Encourage the casualty to immediately stop what they are doing and sit down to rest. **3.** If the casualty has been prescribed medication such as tablets or oral spray to treat episodes of chest pain or discomfort associated with angina, assist them to administer as directed. **4.** Ask them to describe their symptoms. **5.** If any of the symptoms are severe, worsen quickly or have lasted ten (10) minutes call Triple Zero (000) for an ambulance. Stay on the phone. Wait for advice from the operation centre. It is not recommended that you drive the casualty to the hospital yourself, as you may need to perform CPR. **6.** Give three hundred (300) mg of Aspirin (one (1) tablet) unless the casualty is allergic to aspirin or their doctor has warned them against taking aspirin. **7.** Stay with the casualty until medical aid arrives. **8.** Continue to check breathing and pulse (if trained to do so). Be prepared to give CPR if symptoms worsen.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Ask bystanders to assist if they are trained First Aiders.

7.13 First Aid Management of Cardiovascular Emergencies: Sudden Cardiac Arrest

WHAT
is it?



Cardiac arrest is an electrical malfunction of the heart that causes the heart to beat irregularly or stop beating unexpectedly.

REMEMBER
Know

Caused by:

- Heart attack and causes of heart attack.

Signs and Symptoms:

- Unexpected collapse;
- Abnormal or no heart beat;
- Unresponsiveness;
- Signs of no circulation (pale or blue lips, face, earlobes, fingernails); and
- Not breathing normally.

IMPORTANT: It can occur to anyone young or old, male or female, anywhere at any time. Many casualties have no warning signs or symptoms. The **MOST EFFECTIVE** treatment for cardiac arrest is good quality CPR and using an automated external defibrillator (an **AED**) to deliver a shock to the casualty's heart quickly whilst awaiting medical aid.

Complications:

- Death.

DO
Manage

1. Follow DRSABCD St John Action Plan.
2. Start CPR.
3. Defibrillate as soon as possible.
4. Continue CPR while the AED is being collected.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

7.14 First Aid Management of Stroke

WHAT
is it?



A stroke occurs when an artery taking blood to the brain becomes blocked with a blood clot or plaque or the artery bursts or leaks.

REMEMBER
Know

As a result of a stroke, brain cells are damaged and functions controlled by that part of the brain are paralysed. Partial paralysis of the body and/or speech problems are common.

A Transient Ischaemic Attack (TIA) happens when there is a temporary interruption to the blood supply to the brain. It causes the same symptoms as a stroke, but these go away completely within 24 hours.

Even though symptoms may go away it is also important to get the casualty hospital treatment as quickly as possible.

Caused by:
- Blocked arteries;
- Blood clots; and
- Haemorrhaging.

Signs and Symptoms:
- Sudden decrease in level of consciousness;
- Weakness or paralysis on either one or both sides of the body;
- Feeling of numbness in face, arm or leg;
- Difficult speaking or understanding;
- Dizziness, loss of balance, unexplained fall;
- Disturbed vision; and
- Confusion.

Complications:
- Unconsciousness;
- Breathing difficulties; and
- Swallowing difficulties.

DO Manage	**Unconscious casualty:** **1.** Place in recovery position. **2.** Call Triple Zero (000) for ambulance. **Conscious casualty:** **1.** Follow DRSABCD St John Action Plan. **2.** Reassure the casualty. **3.** Support head and shoulders on pillows. Loosen tight clothing. Maintain body temperature. Wipe away secretions from mouth. **4.** Ensure airway is clear and open.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Recognise signs of a Stroke: THINK FAST- ACT FAST: **F**acial weakness, **A**rm weakness, **S**peech difficulty and it's your **T**ime to act fast.

7.15 First Aid Management of Envenomation

WHAT
is it?







Envenomation is the process by which venom (poison) is injected into the body by sting, spine, bite or other venom apparatus usually by insects, reptiles and fish.

Pressure Immobilisation is a technique of applying force to the affected part of the body to stop the envenomation spread to the rest of the body.

REMEMBER
Know

Redback Spider

The redback spider is approximately one (1) cm in length and has a characteristic red /orange stripe on its back. They are common in dry places around buildings, outdoor furniture, machinery and stacked materials. In the bush, they nest under logs and rocks. A redback spider bite can be life threatening to a child or the elderly and infirmed but apart from the pain it is rarely serious for an adult. A rash can also develop around the bite site. The bites usually occur due to disturbing the spider.

Caused by:

- A bite.

Signs and Symptoms:

- Immediate pain at the bite site which becomes hot, red and swollen;
- Intense local pain which increases and spreads;
- Nausea, vomiting and abdominal pain;
- Profuse sweating especially at the bite site; and
- Swelling of glands in the groin or armpit of the limb that was bitten.

Complications:

- Altered conscious state;
- Severe pain; and
- Allergic reaction.

REMEMBER Continued
Know

Snake

Snakes are elongated, limbless reptiles that inhabit tropical and temperate areas and are capable of envenomation. Snakes have forked tongues which they use to “taste” the air for scent particles. They have fixed transparent scales that cover their eyes. Snakes do not have ears and as such are unable to hear air borne sounds, however they are very sensitive to vibrations.

Snakes produce venom in modified salivary glands. Snakes force venom out under pressure through paired fangs in the upper jaw. Snake venom is a complex mixture of many toxic substances which can cause a range of effects in human victims. The life-threatening early effect of an Australian snake bite is neurotoxic muscle paralysis, which kills by causing respiratory failure.

The spread of snake venom depends on its absorption through the lymphatic system.

Caused by:

- A bite.

Signs and Symptoms:

- Visible in an hour or more after the person has been bitten. **Note:** In children signs and symptoms may appear within minutes;
- Puncture marks or scratches, may bleed;
- Nausea, vomiting and diarrhoea;
- Headache, drowsiness, giddiness or faintness;
- Double or blurred vision, drooping eyelids;
- Voice changes, trouble speaking or swallowing;
- Pain or tightness in the throat, chest or abdomen;
- Breathing difficulties, respiratory weakness or arrest; and
- Dark urine.

Complications:

- Paralysis; and
- Life threatening outcome (for venomous snakes only).

REMEMBER Continued
Know

Box Jelly Fish

Box Jelly Fish are cube-shaped medusas which produce very potent venom. The stings from these are painful and can be fatal to humans. They are particularly dangerous during the wet season in tropical Australia from November to April. Box Jelly Fish belong to the class Cubozoa and they are not a true jellyfish (Scyphozoa) although they have very similar characteristics. A fully grown Box Jelly Fish measures twenty (20) cm long and thirty (30) cm in diameter. The tentacles can grow up to three (3) metres in length and they can reach a weight of two (2) kilograms.

The multiple stings from a jellyfish are caused by the simultaneous discharge of many thousands of microscopic stinging capsules called nematocysts. These are located on the surface of the tentacles and in some species on the body of a jellyfish.

Upon contact, the nematocysts 'discharge' their tubules into the casualty's skin like mini-harpoons. The more tentacles make contact with the skin, the more venom is injected.

Potentially fatal envenomation is caused by two jellyfish types in tropical Australian waters; they are the Box Jellyfish and the Irukandji.

Caused by:

- Tentacles sting.

Signs and Symptoms:

- Severe immediate pain; and
- Whip like marks on the skin.

Complications:

- Respiratory and cardiac arrest in minutes; and
- Life threatening outcome.

DO
Manage

Redback Spider:

1. Follow DRSABCD St John Action Plan.
2. Lay the casualty down, rest and reassure.
3. Monitor the casualty constantly.
4. Apply a cold compress/cold pack to lessen the pain (no longer than twenty (20) minutes).
5. Seek medical aid promptly, urgent if:
   - A young child, or elderly and infirmed;
   - The casualty collapses; and/or
   - Pain is severe.

Snake:

1. Follow DRSABCD St John Action Plan.
2. Lay the casualty down, rest and reassure.
3. If the bite is on a limb, apply a broad pressure bandage over the bite site as soon as possible.
4. Then apply a further elasticised (preferred) or firm heavy crepe bandage - start at fingers or toes and move up the limb as far as can be reached. Apply tightly but without stopping blood flow. The bandage should be firm and tight, you should be unable to easily slide a finger between the bandage and the skin.
5. Splint the limb including the joints on either side of the bite.
6. Ensure the casualty does not move.
7. Urgent medical aid.
8. Write down the time that the casualty was bitten and when the bandage was applied.
9. **DO NOT** wash the venom off the skin (may aid in identification).
10. **DO NOT** cut the bitten area and try to suck venom out of the wound.
11. **DO NOT** use an arterial tourniquet.
12. **DO NOT** try and catch the snake.

DO Continued Manage	**Box Jelly Fish:** **1.** Follow DRSABCD St John Action Plan. **2.** Remove the casualty from the water; be aware of danger from tentacles to the rescuer. **3.** Urgent medical aid. **4.** Calm the casualty. **5.** Flood the stung area with vinegar for at least thirty (30) seconds (neutralises stinging cells). **6.** If vinegar is unavailable, pick off remaining tentacles and rinse well with seawater (NOT freshwater, this will cause further stinging cell discharge). **7.** Apply a cold pack. **8.** Remain with the casualty. **9.** Provide CPR if necessary. **10.** Keep casualty at rest.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Ask bystanders to assist if they are trained First Aiders. • Check the Reference Guide to Envenomation at the back of this guide. • Purchase the Australian First Aid book for more information about this topic.

7.16 First Aid Management of Fractures Using Arm Slings and Roller Bandages

WHAT
is it?





A fracture, also referred to as a bone fracture, is a medical condition when the continuity of the bone is broken due to: a high force impact or stress; or as a result of a medical condition which weakens the bones.

REMEMBER
Know

Types of Fractures:

- **Closed** - Bone is broken with skin intact;
- **Open** - Broken bone protrudes through skin or there is a wound leading up to the break; and
- **Complicated** - Both open and closed fractures may be complicated when there is an associated injury to a major nerve, blood vessel, or vital organ(s).

Caused by:

- Direct force at site of impact; for example, hit by falling object/cricket ball;
- Indirect forces; for example, fall landing on feet and as a result break a spinal bone; and
- Abnormal muscle contractions, which may result from a seizure or sporting injury, such as a sudden change of direction.

Signs and Symptoms:

- Pain/tenderness at or near site of injury - especially if moved;
- Swelling or bruising;
- Loss of function;
- Deformity - it looks wrong;
- Shortening of a limb such as in the event of a fractured upper leg;
- Crepitus - sound as bone ends “grate” against each other (do not try to see if it happens); and
- Broken bone penetrating skin.

Complications:

- Open fracture – gently and loosely cover to help prevent contamination;
- Severe blood loss from large bone fracture; and
- Nerve, organ and muscle damage.

DO Manage	**1.** **DO NOT** pull on fractures. **2.** **DO NOT** give anything to eat or drink. **3.** **DO NOT** force or straighten fractures or joints. **4.** Follow DRSABCD St John Action Plan – Remember care of the unconscious casualty and control bleeding; then fracture management. **5.** Rest and reassure, ask casualty to remain still. **6.** Handle gently, so as not to increase pain or further damage. **7.** Immobilise the fracture in the most comfortable position with broad bandages, padding, splints and/or slings. **8.** Splint, then bandage above and below the fracture site leaving a five (5) cm gap either side of the break: do not bandage over the fracture. **9.** The casualty may be able to support the fracture themselves. **10.** If you have to move a broken bone, support both sides of the break. **11.** Fracture to the lower leg: carefully remove the shoe and sock from the injured leg if possible. **12.** Check blood flow and watch for signs of circulation loss. **13.** Monitor the casualty. **14.** Medical aid.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Ask bystanders to assist if they are trained First Aiders.

7.17 First Aid Management of Sprains, Strains and Soft Tissue Injuries

WHAT
is it?



A sprain is a severe wrench or twist of the ligaments (such as an ankle, wrist or other joint), so as to cause pain and swelling but not dislocation.
A strain is a force tending to pull or stretch muscles or tendons causing damage.
Soft tissue is tissue that connects, supports or surrounds other body structures and organs in the body.

REMEMBER
Know

Sprains and Strains
A sprain occurs when a joint is forced beyond its normal range, stretching or tearing the supporting ligaments. A strain is the result of over-stretching or tearing of the muscles or tendons.

Many things can cause a sprain - falling, twisting, or impact can force a joint out of its normal position. This can cause ligaments around the joint to stretch or tear. Sprains happen most often in the ankle. Sometimes when people fall and land on their hand, they sprain their wrist. A sprain to the thumb is common in sports.

Soft tissue includes muscles, tendons, ligaments, fascia, nerves, fibrous tissues, fat, blood vessels, and synovial membranes. The most common soft tissue injury is a bruise. A bruise can be caused by a blow from a blunt object or knocking into an object, such as the edge of a table.

Caused by:
- Falls, trips and slips;
- Falls and landing on arm/hand;
- Falls on the side of their foot; and
- Twisting of a knee.

REMEMBER Continued
Know

Signs and Symptoms Sprains or Strains:

- Pain;
- Swelling;
- Bruising;
- Loss of power;
- Tenderness; and
- Muscle spasm.

Signs and Symptoms Soft Tissue Injury:

- Pain;
- Swelling and bruising;
- Loss of power;
- Tenderness; and
- Muscle spasm.

Complications:

- Severe bruising; and
- Dislocations.

DO
Manage

1. Follow DRSABCD St John Action Plan.
2. Follow **RICE:**
   Rest the person and injured part.
   Ice pack (cold compress) – fifteen (15) minutes.
   Compression bandage after ice pack – apply firmly and extend well beyond the injury.
   Elevate the limb.
3. Medical aid if necessary.

Rules When Using Ice Packs:

1. Wrap ice in a damp cloth (a cloth placed in cold water and wrung out).
2. Fifteen (15) minutes on the injury site, then reapply every two (2) hours for the first twenty-four (24) hours.
3. For the next twenty-four (24) hours – fifteen (15) minutes on every four (4) hours.
4. Never apply ice directly onto the skin, skin is too thin and may freeze.
5. Never put ice onto an open wound, such as burns or cuts.

PLAN "B"
Contingency

- If no ice is available use a cloth wrung out in cold water – this will need replacing every ten (10) minutes.
- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

7.18 First Aid Management of Dislocations

WHAT
is it?



A dislocation occurs when one or more bones are displaced at a joint, this is most often at the shoulders, elbow, kneecap and fingers.

REMEMBER
Know

Dislocations usually occur following a blow, fall, or other trauma.

Caused by:
- Sudden impact on the joint; and
- Tearing of ligaments.

Signs and Symptoms:
- Pain at or near the site of injury;
- Difficult or impossible to move the joint;
- Loss of power;
- Deformity or abnormal mobility;
- Tenderness;
- Swelling; and
- Discoloration and bruising.

Complications:
- Fracture; and
- Damage to nerves and blood vessels.

DO
Manage

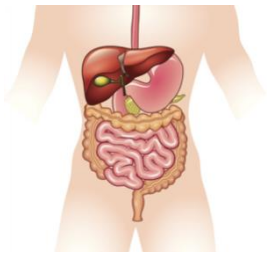
1. Follow DRSABCD St John Action Plan.
2. Do not attempt to reduce (put back into position).
3. If injury is to a limb:
   - Check blood flow – if absent move limb gently to try and restore it, call Triple
   - Zero (000) for an ambulance;
   - Apply icepacks if possible, directly over the joint; and
   - Rest and support the limb with padding and bandages.
4. Shoulder:
   - Support arm in position of least discomfort.
5. Wrist:
   - Apply a sling in a position of comfort.

PLAN "B"
Contingency

- If no bandages, padding or splints are available improvise with clothing, rolled newspaper, or household items.
- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

7.19 First Aid Management of Abdominal Injuries

WHAT
is it?



Abdominal injuries are injuries to the abdominal cavity and the organs within it.

REMEMBER
Know

Organs of the abdominal cavity include the stomach, liver, gallbladder, spleen, pancreas, small intestine, kidneys, large intestine, and adrenal glands.

Organs in the abdomen can be easily injured because there is no bone structure to protect them. Abdominal injuries can be life threatening as the abdominal organs tend to bleed easily and profusely.

Caused by:

- **Open wound** - from stabbing injury, abdominal organs such as the bowel, can protrude through the skin; and
- **Closed injury** - from blunt trauma, causing ruptured organ/s, internal bleeding and shock.

Signs and Symptoms:

- Severe pain;
- Nausea/vomiting;
- Bruising and tenderness around the wound;
- Pallor (pale skin);
- External bleeding;
- Blood in urine;
- Distension / swelling;
- Protrusion of intestines through a wound;
- Muscle rigidity; and
- Shock.

Complications:

- Shock; and
- Cardiac arrest.

DO Manage	**1.** **DO NOT** Give anything to drink or eat. **2.** **DO NOT** Try and push organs back into the abdomen. **3.** **DO NOT** Apply direct pressure to the wound. **4.** Follow DRSABCD St John Action Plan. **5.** Position casualty on their back with knees slightly raised and supported – if available place a pillow under the head. **6.** Loosen clothing. **7.** Cover protruding organs with aluminium foil/plastic wrap or a large non-stick dressing soaked in sterile saline/clean water. **8.** Secure with a broad bandage, ensuring it is not too tight. **9.** Urgent medical aid.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Ask bystanders to assist if they are trained First Aiders.

7.20 First Aid Management of Burn Injuries

WHAT
is it?



Burns are injuries to the skin and underlying tissues caused by heat, chemicals, electricity and friction.

REMEMBER
Know

Burns are extremely painful, and are a high risk for infection. Burns result in fluid loss, loss of temperature control and damage to underlying tissues and nerves. Burns can also affect the respiratory system and the eyes.

Children: An infant or child's skin is much thinner and has a smaller surface area than an adults; therefore the skin will burn quicker and deeper even at lower temperatures.

Elderly: Can be more at risk due to associated illnesses such as diabetes, respiratory, or cardiac problems and age related degenerative problems.

SAFETY NOTE

Where children are located (childcare centres, schools, home) hot water should be set at a temperature of 45°C or lower. At temperatures above 45°C hot water can seriously burn a child in seconds.

Electrical burns caused by electricity may be more serious than it appears. The burn may be deep and can cause damage to the internal organs as the current travels through the body. There may also be both an entry and exit burn/wound. Current flow through the heart may also cause cardiac arrest or cardiac arrhythmias (imbalance of the hearts rhythm).

Types of Burns

Superficial:

- Skin is red and painful, may blister and swell for example sunburn.

Deep:

- Skin is white, dark red or charred.
- No pain where nerve endings have been destroyed; and
- Usually surrounded by superficial burns.

REMEMBER Continued
Know

Caused by:

- Heat (thermal);
- Fire;
- Radiant heat such as an electric cooker;
- Scalds such as hot liquid and steam;
- Radiation from the sun;
- Chemicals - corrosive substances;
- Electricity; and
- Friction such as a rope burn.

Signs and Symptoms

Superficial:

- Skin is red and painful, may blister and swell for example sunburn.

Deep:

- Skin is white, dark red or charred;
- No pain where nerve endings have been destroyed; and
- Usually surrounded by superficial burns.

Complications:

- Respiratory distress from smoke inhalation;
- Respiratory arrest – airway burn;
- Shock; and
- Cardiac arrest.

DO
Manage

1. **DO NOT** Peel off clothing that is stuck to the skin.
2. **DO NOT** Use ice or iced water to cool a burn as further tissue damage may result.
3. **DO NOT** Apply lotions, ointments or creams.
4. **DO NOT** Break blisters.
5. Follow DRSABCD St John Action Plan.
6. Ensure that the scene is safe and no risk to the First Aider.
7. Extinguish burning clothing.
8. Cool burn with copious amounts of cool water for up to twenty (20) minutes on the burnt area only – observe the casualty and ensure that they do not become too cold.
9. Scald - remove wet clothing from affected area.
10. Cover burn after cooling for at least twenty (20) minutes with a clean non-adherent burns dressing or loosely applied cling wrap. This will help prevent infection. **Note:** Cling wrap must only be applied after twenty (20) minutes of cooling.
11. Rest and reassure the casualty.
12. Urgent medical aid if:
    - Burns involving airway, hands, feet, face or genitals.
    - Deep burn.
    - Superficial burn larger than twenty (20) cent piece on an adult or ten (10) cent piece on a child.

If clothing is on fire: STOP-DROP-ROLL-MANAGE

1. **Stop** the casualty from running around.
2. **Drop** the casualty to the ground and wrap a blanket, rug or coat around them, wool is best, (do not use synthetic materials as they could melt).
3. **Roll** the casualty along the ground until flames are smothered.
4. **Manage** burns, cooling for at least twenty (20) minutes.
5. Seek urgent medical aid.

DO Continued
Manage

Thermal Burns (in addition to burn management):

1. Do not remove clothing that is stuck to the skin.
2. Remove jewellery if possible. Burns cause swelling, if a ring is left on the casualty it can act as a tourniquet and restrict blood flow.

Sunburns (in addition to burn management):

1. Cool the sunburn with cool, running water.
2. Stay out of the sun.
3. Give cool fluids.
4. Medical aid for infants and casualties with blisters.

Chemical Burns (in addition):

1. Follow DRSABCD St John Action Plan.
2. If on the skin – wash off for twenty (20) minutes.
3. Remove contaminated clothing and footwear – avoiding contaminating yourself.
4. Do not pick off contaminants that stick to the skin.

If Chemical in the Eye:

1. Tilt casualty's head back and turn to the affected side.
2. Protect uninjured eye.
3. Gently flush with cool water for twenty (20) minutes.
4. Cover eye with dressing.
5. Urgent medical aid.

Electrical Burns:

1. Follow DRSABCD St John Action Plan – Complete a risk/hazard assessment.
2. Check for danger and ensure the power is turned off wherever possible.
3. Remove casualty from electrical supply. Do not directly touch the casualty, use dry non-conductive materials such as a broom handle.
4. Urgent medical aid.

PLAN "B"
Contingency

- If running water is not available soak a dressing or cloth in saline or water and apply it to the burn, keep as wet and cool as possible. Replace regularly so that the dressing can absorb the heat.
- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

7.21 First Aid Management of Crush Injuries

WHAT
is it?



Crush injuries are injuries to the body by an object that causes compression of the body.

REMEMBER
Know

Crush injuries may result from a variety of situations, including vehicle entrapment, falling debris, an industrial accident or by prolonged pressure to a part of the body due to their own body weight in an immobile casualty**.**

Crush injuries may also cause: Internal bleeding, fractured bones, ruptured organs and impaired blood supply.

Caused by:
- Pressure of a heavy object.

Signs and Symptoms:
- Bleeding;
- Fractures; and
- Bruising.

Complications:
- Extensive tissue damage;
- Shock; and
- Toxic substances released into the circulation which can lead to kidney failure.

DO
Manage

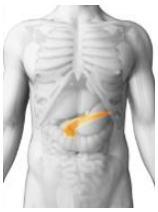
1. Follow DRSABCD St John Action Plan – Ensure that the scene is safe and no risk to the First Aider.
2. Urgent medical aid.
3. If safe, remove the crushing object as soon as possible.
4. Control bleeding.
5. Manage other injuries.
6. Keep warm, comfort, and reassure the casualty.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

7.22 First Aid Management of Diabetes

WHAT
is it?





Diabetes is a condition of the body not maintaining healthy levels of glucose in the blood. Glucose is a form of sugar which is the main source of energy for our bodies.

REMEMBER
Know

Our bodies need to convert glucose (sugar) from food into energy in order to function properly. The hormone insulin is essential for the conversion of glucose into energy. The organ in the body called the pancreas produces insulin. Diabetes occurs when the pancreas is unable to produce enough insulin, or the body becomes resistant to insulin, or both.

When people with diabetes eat glucose, which is in foods such as breads, cereals, fruit and starchy vegetables, legumes, milk, yoghurt and sweets, it cannot be converted into energy. Instead of being turned into energy the glucose stays in the blood. This is why blood glucose levels are higher in people with diabetes.

There are two types of diabetic emergencies which are caused by:

- **Low blood sugar** - Hypoglycaemia (hypo) is a deficiency of glucose in the bloodstream.
- **High blood sugar** - Hyperglycaemia (hyper) is an excess of glucose in the bloodstream.

If you are unsure whether the attack is caused by low or high blood sugar, give a drink containing sugar. **Do not use "diet" drinks**. Giving any form of sugar can save a person's life if blood sugar is low and will not cause harm if blood sugar is high.

NOTE: People suffering from diabetes often wear a medic alert chain or bracelet. Remember to check for these when dealing with an unresponsive casualty.

REMEMBER Continued
Know

LOW Blood Sugar

Caused by:

- Not enough food;
- Too much insulin;
- Excessive exercise; and
- Alcohol – affects blood sugar levels.

Signs and Symptoms:

- Hunger;
- Fatigue; and
- May appear aggressive or mimic a stroke.

Complications:

- Unconsciousness.

HIGH Blood Sugar

Caused by:

- Severe dehydration and build-up of acids in the blood;
- Causes in a known diabetic, stress of another illness such as chest infection, failing to take insulin correctly; and
- Undiagnosed diabetes, high blood sugar develops slowly over days or weeks.

Signs and Symptoms:

- Feeling excessively thirsty;
- Frequently passing large volumes of urine;
- Feeling tired;
- Blurred vision;
- Infections such as thrush, cystitis, wound infections; and
- Breath can have a sweet/strange odour.

Complications:

- Unconsciousness; and
- Cardiac arrest.

DO Manage	**Low Blood Sugar:** **1.** Follow DRSABCD St John Action Plan. **2.** Give sugar, glucose or a sweet drink (such as soft drink or cordial) every fifteen (15) minutes until recovered. **3.** **DO NOT** give diet soft drinks or diabetic cordials. **4.** Follow up with a sandwich or other food. **5.** If no improvement call Triple Zero (000) for an ambulance. **High Blood Sugar:** **1.** Follow DRSABCD St John Action Plan. **2.** Call Triple Zero (000) for an ambulance. **Unconscious (low and high blood sugar):** **1.** Follow DRSABCD St John Action Plan. **2.** Place casualty in Recovery Position. **3.** Give nothing by mouth. **4.** Call Triple Zero (000) for an ambulance.
PLAN "B" Contingency	• If conscious and help is delayed, encourage the casualty with the **LOW** blood sugar to take sugary products such as lollies, chocolate, honey, jam, fruit juice. • If conscious and help is delayed, encourage the casualty with the **HIGH** blood sugar to drink sugar-free clear fluids. • Call Triple Zero (000) for an ambulance. • Ask bystanders to assist if they are trained First Aiders.

7.23 First Aid Management in Case of Drowning

WHAT
is it?





Drowning is respiratory impairment from submersion/immersion in liquid.

REMEMBER
Know

When drowning, a person gasping for air while trying to stay afloat may inhale only a small amount of water. The casualty usually has little water in their lungs because the muscles of the larynx close the airway to stop water entering.

The spasm which prevents water going in also stops air, a mucous plug forms and as a result the casualty suffocates and becomes unconscious. In minor incidents, removal from the water is often followed by coughing and spontaneous resumption of breathing.

Caused by:

- Immersion of the face in water/liquid;
- Inability to swim;
- Panic in the water;
- Leaving children unattended near bodies of water;
- Falling through thin ice;
- Alcohol consumption while swimming or on a boat;
- Concussion or seizure while in water; and
- Suicide attempt.

Signs and Symptoms:

- Blue tinge to face and lips;
- Cold, pale skin;
- Not breathing or breathing difficulties;
- Shallow rasping respirations;
- Vomiting, especially during recovery;
- Confusion;
- Unconscious; and
- Be aware of spinal injury, but airway takes priority.

Complications:

- Unconsciousness;
- Life threatening outcome; and
- Breathing and airway problems up to twenty-four (24) hours after drowning.

DO Manage	**1.** Follow DRSABCD St John Action Plan. **2.** Assess airway and breathing while the casualty is on their back or in the position that they were found. Only place the casualty into the recovery position if the airway is obstructed, then clear and open the airway. **3.** If unconscious and breathing normally place into the Recovery Position. **4.** If unconscious and not breathing normally commence CPR (compression only CPR is not recommended). **5.** Apply AED and follow prompts. **6.** Give oxygen if trained and available. **7.** Monitor the casualty closely. **8.** Ensure the casualty goes to hospital even if they recover, as airway and breathing difficulties can develop or redevelop up to twenty-four (24) post drowning.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Ask bystanders to assist if they are trained First Aiders. • Learn first aid.

7.24 First Aid Management of Environmental Impacts: Hypothermia, Hyperthermia and Dehydration

WHAT
is it?



Hypothermia is the condition of having an abnormally low body temperature. **Hyperthermia** is the condition of having a body temperature greatly above the normal. **Dehydration** is a condition that occurs when the loss of body fluids, mostly water, exceeds the amount that is taken in.

REMEMBER
Know

The body works efficiently only as long as it remains at a constant temperature. If the body's temperature drops more than a few degrees below the normal of approximately 37ºC, or rises significantly, it cannot function properly.

Hypothermia is the body's reaction to cold to try and conserve body heat. It does this by shutting down blood vessels in the skin to prevent the body's core body heat escaping and this action affects the fingers and toes first. Hypothermia occurs when the body's warming mechanisms fail or is overwhelmed and the body temperature drops below 35ºC. If not recognised in the early stages, it has the potential to develop into a serious condition.

Hyperthermia or heat induced illnesses consist of three stages: heat cramps, heat exhaustion and heat stroke.

Risk groups for heat induced illness include:

- Overweight, unfit persons performing work or exercise they are not accustomed to;
- Persons not acclimatised, athletes;
- The elderly – deterioration of body systems make the elderly less able to cope with temperature changes; and
- Children – immature body systems less able to cope with temperature changes.

Dehydration is the loss of water and essential body salts. Vital organs like the kidneys, brain and heart are all affected by dehydration. Dehydration occurs when there is less than the normal amount of water in the body due to insufficient fluid intake, increased output (for example vomiting and diarrhoea), fever, heat exhaustion or heat stroke.

REMEMBER Continued
Know

HYPOTHERMIA

Caused by:

- Body temperature drops below 35°C.

Signs and Symptoms:

- Feeling cold, shivering;
- Clumsiness and slurred speech; and
- Apathy and irrational behaviour.

When body temperature drops:

- Shivering usually ceases;
- Pulse may be difficult to find;
- Heart rate may slow; and
- Level of consciousness continues to decline.

Around 30°C body temperature:

- Unconsciousness is likely; and
- Heart rhythm is likely to change.

Complications:

- Frostbite;
- Chilblains, damage to nerves and small blood vessels in the hands or feet after prolonged exposure to above-freezing temperatures; and
- Cardiac arrest.

REMEMBER Continued
Know

HYPERTHERMIA – HEAT STROKE

Caused by:

- Excessive heat absorption from a hot environment;
- Excessive heat production from physical activity; and
- Failure of the body's cooling system.

Signs and Symptoms:

- High body temperature of 40°C or more;
- Heat cramp, painful muscle cramps in legs and abdomen due to losing too much water and salt through sweating;
- Feeling hot, exhausted and weak;
- Persistent headache;
- Thirst and nausea;
- Giddiness and faintness;
- Rapid breathing and shortness of breath;
- Pale, cool clammy skin;
- Rapid, weak pulse; and
- Flushed hot, dry skin;
- Initially a pounding, rapid pulse which gradually weakens;
- Headache, nausea and/or vomiting;
- Dizziness and visual disturbances;
- Irritability and mental confusion;
- Altered mental state which may progress to seizures and unconsciousness/death.

Complications:

- Organ failure;
- Severe dehydration; and
- Cardiac arrest.

REMEMBER Continued
Know

DEHYDRATION

Caused by:

- Insufficient fluid intake (normal minimum 1.7 litres of water per day, in hot climates and physical work/exertion up to fifteen (15) litres per day may be required).

Signs and Symptoms Adults:

- Thirst and dry mouth;
- Decreased urine output;
- Urine becomes concentrated;
- Sweating may stop, muscle cramps;
- Nausea and vomiting; and
- Heart palpitations; light-headedness and weakness.

Signs and Symptoms Children:

- Dry or sticky mouth;
- Few or no tears when crying;
- Eyes that look sunken into the head;
- Soft spot (fontanelle) on top of baby's head that looks sunken;
- Lack of urine or wet nappies for six (6) to eight (8) hours in an infant (or only a very small amount of dark yellow urine);
- Lack of urine for twelve (12) hours in an older child (or only a very small amount of dark yellow urine);
- Dry, cool skin; and
- Lethargy or irritability; fatigue or dizziness in an older child.

Complications:

- Shock; and
- Cardiac arrest.

DO
Manage

Hypothermia (cold induced condition):

1. Follow DRSABCD St John Action Plan.
2. Remove the casualty to a warm, dry place.
3. Protect the casualty and yourself from wind, rain, sleet, cold or wet ground.
4. Handle the casualty as gently as possible and avoid excess activity or movement.
5. Keep the casualty in a horizontal position.
6. Remove wet clothing.
7. Warm the casualty by:
   - Placing between blankets, in a sleeping bag, or wrap in a thermal/emergency rescue blanket or similar and cover the head to maintain body heat; and/or
   - Hot water bottles, heat packs may be applied to the casualty's neck, armpits and groin.
8. Aim to stabilise core temperature rather than attempt rapid rewarming:
   - Do not use radiant heat such as fire or electric heater; and
   - Do not rub affected areas.
9. Give casualty warm drinks if conscious – NOT alcohol.
10. Urgent medical aid.

Hyperthermia (heat induced condition):

1. Follow DRSABCD St John Action Plan.
2. Stop any activity and rest the casualty in a cool place with circulating air.
3. Loosen tight clothing and remove unnecessary garments.
4. Give cool fluids to drink - frequent sips.

Heat Cramp (in addition):

1. Gently stretch the affected muscle.
2. Massage gently if it assists with pain relief.
3. Apply a cool pack to the site.

DO Continued
Manage

Urine Colour should be a clear, pale watery yellow but may range through to dark amber. The intensity of the colour generally indicates the concentration of the urine; pale or colourless urine indicates that it is dilute and the person is hydrated and deep yellow urine indicates that it is concentrated = dehydration. Note: some medications and foods can also affect the colour of urine.



Normal Signs of dehydration Very dehydrated

Heat Exhaustion (in addition):

1. Sponge with cool water, stop when they feel cool to the touch. Ensure that the casualty does not get too cold.
2. Seek medical aid if casualty vomits or does not recover promptly.

Heat Stroke (in addition):

1. Apply cool packs or ice to areas of large blood vessels (neck, groin and armpits) to accelerate cooling.
2. Cool down - cover with a wet sheet/towel, fan to increase air circulation (stop cooling when body cold to touch). Ensure that the casualty does not get too cold.
3. Give sips of cool fluids if fully conscious and able to swallow.
4. Urgent medical aid.

Dehydration:

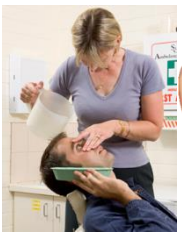
1. Follow DRSABCD St John Action Plan.
2. Rehydrate casualty by giving small frequent sips of cool water.
3. Medical aid.

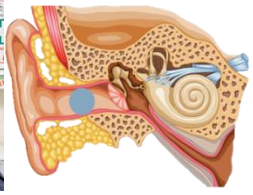
PLAN "B"
Contingency

- If water is limited for example in a remote area, consider conserving water – a little at a time.
- If no sheet available sponge the casualty down with water to cool.
- If no other form of warming the casualty is available then use direct body-to-body contact.
- If no cool packs available improvise with covered frozen food stuffs.
- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

7.25 First Aid Management of Eye and Ear Injuries

WHAT
is it?





An eye injury is trauma or damage to the eye caused by a direct blow to the eye.
An ear injury trauma or the outer ear, ear canal or eardrum.

REMEMBER
Know

The Eye
The eye is a round shaped organ approximately twenty-four (24) millimetres in diameter that allows us to see. The eyes are paired structures and they move in the same direction at the same time. The eyes allow us to see three-dimensional images due to its binocular vision. The eyes are the most sensitive and delicate organs in the body and are easily injured and is the organ of vision.

An eye injury always results in pain and watering of the eye, as a result the white part of the eye (sclera) becomes red, and the casualty may not be able to open the eye. If the casualty is wearing contact lenses as they can be removed easily, ask the casualty to remove them before you manage the eye injury. The First Aider must not remove the casualty's contact lenses themselves. Never remove a contact lens if the eye is badly damaged.

Injury Caused by:
- Impact with objects, such as fist, ball, stones or tree branches;
- Small foreign objects, such as dirt, slivers of wood/metal or sand;
- Chemicals, such as acid, caustic soda, lime; and
- Flames, flash burns, smoke or lasers.

Signs and Symptoms:
- Pain;
- Redness;
- Photophobia - abnormal visual intolerance to light;
- Watering;
- Bleeding; and
- Pupil distortion, impaired vision.

Complications:
- Loss of sight; and
- Shock.

REMEMBER Continued
Know

The Ear

The ear is the organ that detects sound and also aids in balance and body position. The ear has both external and internal components to it comprising of:

- The outer ear;
- The middle ear; and
- The inner ear.

Injury Caused by:

- Falls;
- Sports injury; and
- Insertion of foreign objects or insects.

Signs and Symptoms:

- Bleeding - internal or external;
- Thin watery fluid from within the ear;
- Object or insect lodged in the ear; and
- Pain.

Complications:

- Infection; and
- Loss of hearing.

DO
Manage

Eye - General

1. Follow DRSABCD St John Action Plan.
2. Wash hands thoroughly, put on gloves then wash the powder from the gloves.
3. **DO NOT** touch the eye or any contact lens.
4. **DO NOT** allow the casualty to rub their eye.
5. **DO NOT** try to remove any object which is penetrating the eye; and
6. **DO NOT** apply pressure when bandaging the eye.
7. Wash out the eye gently with a generous stream of water or normal saline from the corner closest to the nose outwards.
8. If unsuccessful, pad eye and seek medical aid.

Eye - Major

1. Follow DRSABCD St John Action Plan.
2. **DO NOT** remove any embedded object.
3. Lay casualty flat on their back.
4. Gently cover injured eye - fix gaze of uninjured eye on distant point. Never apply direct pressure to the eyeball.
5. Penetrating eye injury – very carefully place pads around the object or place a paper cup over the eye and bandage in place. **DO NOT** place pressure on the eye.
6. Immobilise head with blankets/towels.
7. Reassure casualty, they will be anxious.
8. Urgent medical aid.

Eye – Flash or Radiation Burn

1. Follow DRSABCD St John Action Plan.
2. Cover eye(s) with a pad.
3. Medical aid.

Eye – Chemical or Heat Burn

1. Follow DRSABCD St John Action Plan.
2. Open eyelids gently.
3. Flush eye with cool water for twenty (20) minutes, tilt head back and turn to the affected side, protect the uninjured eye.
4. Pad eye with sterile or clean non-adherent dressing.
5. Urgent medical aid.

DO Continued
Manage

Ear - Bleeding

1. Follow DRSABCD St John Action Plan.
2. **DO NOT** plug the ear canal.
3. **DO NOT** administer drops of any kind.
4. Allow fluid to drain freely.
5. Place casualty on their side with affected ear downwards.
6. Place a sterile pad between the ear and the ground.
7. Urgent medical aid.

Ear – Foreign Object

1. Follow DRSABCD St John Action Plan.
2. Look in the ear to identify the object and to see how deeply it is lodged.
3. **DO NOT** attempt to remove object.
4. Seek medical aid.

Ear – Small Insect

1. Follow DRSABCD St John Action Plan.
2. Gently pour some vegetable oil (or water if oil not available), warmed to body temperature, into the ear canal.
3. The vegetable oil can then be poured onto the teaspoon and poured gently into the casualty's ear canal.

Note: Gently heat the oil by warming a teaspoon under warm water first.

4. Ensure that the casualty's head is positioned sideways with affected ear facing upwards.
5. Wait thirty (30) seconds for the insect to be engulfed by the oil and then tip the casualty's head in the opposite direction so the insect will float out of the ear with the oil. If the insect does not float out with the oil, it should stop any movement of the insect inside the ear.
6. If the insect does not float out, seek medical aid for removal.

Ear – Wound to the External Ear

1. Follow DRSABCD St John Action Plan.
2. Control bleeding.
3. Pad the wound and seek medical aid.

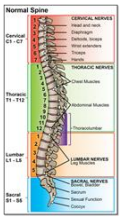
PLAN "B"
Contingency

- For an insect in the ear: If oil is not available to float an insect from the ear use water.
- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.
- Learn first aid.

7.26 First Aid Management of Head, Neck and Spinal Injuries

WHAT
is it?





Head Injuries are any injuries that result in trauma to the skull, scalp or brain.
Neck and Spinal Injuries is damage to the structures of the neck and spine including soft tissues, bones, spinal column and nerves.

REMEMBER
Know

As the brain is the controlling organ for the body, injuries to the head are potentially dangerous and always require medical attention.

With a serious head injury, there is always the potential for neck and spinal injuries. Take extreme care to maintain spinal alignment and immobilise as soon as possible.

HEAD INJURIES

Caused by:

- Skull fracture from direct force such as a blow to the head or indirect force such as a fall from a height;
- **Concussion:** altered state of consciousness, from a blow to the head; and
- **Compression:** excess pressure on part of the brain, such as a depressed skull fracture.

Signs and Symptoms:

- Change in conscious level;
- Headache, nausea, vomiting;
- Loss of memory;
- Altered or abnormal responses to commands or touch, such as irritability, confusion;
- Twitching, noisy breathing;
- Wounds to the scalp or face;
- Blood or fluid from the ear;
- Dizziness; and
- Blurred vision.

Complications:

- Unconsciousness;
- Traumatic brain injury;
- Memory loss; and
- Sensory effects, such as loss of taste or smell.

REMEMBER Continued
Know

The spine is made up of thirty three (33) separate bones, known as vertebrae, extending from the base of the skull to the coccyx (tailbone). Each vertebra surrounds and protects the spinal cord (nerve tissue). Fractures or dislocations to the vertebral bones may result in injury to the spinal cord.

The direct mechanical injury from the traumatic impact can compress or sever the nerve tissue. This is followed by secondary injury caused by ongoing bleeding into the spinal cord, as well as continued swelling at the injured site and surrounding area.

Spinal injury is very traumatic as it may be permanent, resulting in loss of function such as paralysis in the legs or arms and if the injury is very high up the spine, breathing can be affected as no nerve messages are received below the injury.

NECK AND SPINAL INJURIES
Caused by:

- Traffic related accidents;
- Workplace related accidents;
- Sporting accidents;
- Falls, hit by falling objects;
- Significant blows to the head; and
- Severe penetrating wound, such as a gunshot.

Signs and Symptoms:

- Head or neck in an abnormal position;
- An associated head injury;
- Altered conscious state;
- Breathing difficulties, nausea, headache or dizziness;
- Change in muscle tone, either flaccid or stiff;
- Loss of function in limbs;
- Loss of bladder or bowel control;
- Priapism (erection in males).
- Tingling, numbness in the limbs and area below the injury;
- Weakness or inability to move the limbs (paralysis); and
- Altered or absent skin sensation.

Complications:

- Shock and unconsciousness.

DO
Manage

Head Injuries:

1. Follow DRSABCD St John Action Plan.
2. If conscious and NO suspected neck or spinal injury, place casualty with head and shoulders slightly raised. Support to stop movement, improvise using rolled towels, blankets or clothing.
3. If unconscious, place in the Recovery Position.
4. Support casualty's head and neck in neutral alignment during movement to avoid any twisting action.
5. If any blood or fluid from the ear, place injured side down to allow fluid to drain, place pad between ear and ground.
6. Ensure airway is kept clear and open.
7. Control bleeding, but do not apply direct pressure to the skull.
8. Observe for any changes in signs, symptoms and level of consciousness.
9. Urgent medical aid – even if only momentary loss of consciousness. Seek medical aid for all head injuries.

Neck and Spinal Injuries – Conscious Casualty:

1. Follow DRSABCD St John Action Plan - **DO NOT** move unless in a dangerous situation such as fire.
2. Rest and reassure.
3. Loosen tight clothing.
4. Support and hold head and neck in a neutral position, place hands on either side of the casualty's head until other support is applied.
5. If medical aid only minutes away (urban area), place support such as an article of clothing, padded rock) on either side of the casualty's head to prevent movement of the neck.
6. If medical aid is delayed apply a cervical collar if available and trained.
7. Keep warm or protect from elements.
8. Urgent medical aid.
9. Monitor casualty.

Neck and Spinal Injuries – Unconscious Casualty:

1. Follow DRSABCD St John Action Plan.
2. Place into the Recovery Position, support head and neck in the neutral position at all times. Maintain a clear and open airway.
3. Hold head and spine in neutral position to prevent twisting or bending movement.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.
- If medical aid is delayed, apply a cervical collar if available and trained.

7.27 First Aid Management of Minor Skin Injuries and Basic Wound Care

WHAT
is it?



A minor skin injury is injury to the skin tissue that causes minor bleeding.

REMEMBER
Know

Skin is the body's largest organ, it protects the body against infection, acts as a shield against injury, regulates body temperature and alerts the brain to changes in the environment (heat and cold).

When the skin is injured, first bleeding must be controlled and then wound care can take place to help prevent infection.

Caused by:
- Skin cuts, lacerations; and
- Abrasions.

Signs and Symptoms:
- Bleeding; and
- Pain, tenderness.

Complications:
- Severe bleeding, infection and shock.

DO
Manage

1. Follow DRSABCD St John Action Plan - clean hands and wear gloves.
2. Care of the unconscious casualty.
3. Control bleeding with direct pressure.
4. If a laceration or cut, pinch wound edges together to help control bleeding if required.
5. Raise the injured part.
6. Clean wound thoroughly with sterile gauze soaked in saline.
7. Apply non-adherent sterile dressing or cleanest dressing available.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

7.28 First Aid Management of Needle Stick Injuries and Exposure to Blood and Bodily Fluids

WHAT
is it?



Needle stick injuries are injuries to the body caused by a sharp object such as a needle. **Exposure to blood and bodily fluids** is direct contact of the casualty's blood/bodily fluids to the First Aiders open wound, eyes, mouth and genitals.

REMEMBER
Know

Correct management of exposure to blood, or body fluids contaminated with blood and needle stick or 'sharps' injuries will reduce any potential for infection with Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV) or other blood-borne infectious agents. Any item such as blood, body fluid, or 'sharps' considered as being a potential source of infection should be safely contained. The contaminated item should be kept for testing, if required. Blood contaminated clothing should be removed. Seeking medical attention as soon as possible (within hours) of such an exposure is important as some medications and vaccinations work best if taken soon after exposure.

Caused by:
- A needle stick; and
- Exposure to bodily fluids.

Signs and Symptoms:
- Puncture wound from a used needle or sharps; and
- Blood or body fluids in contact with broken skin, mouth, eyes.

Complications:
- Infection; and
- Disease.

DO Manage	**1.** Follow DRSABCD St John Action Plan. **2.** **Skin:** Wash area with soap and water for at least thirty (30) seconds as soon as possible. **3.** Apply an antiseptic and dressing/Band-Aid. **4.** **Eyes:** if contaminated or splashed with blood or body fluids, the eyes should be irrigated gently but thoroughly with copious amounts of running water or normal saline. At least five (5) minutes washing is advised. The eyes must be kept open during this process. **5.** **Mouth:** Contaminated fluid should be spat out and the mouth rinsed thoroughly with water several times. **6.** Medical aid as soon as possible.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Ask bystanders to assist if they are trained First Aiders. • A health practitioner should also give advice on the possible need and timing of HIV, Hepatitis B or Hepatitis C testing if required.

7.29 First Aid Management of Poisoning and Toxic Substances

WHAT
is it?





Poisoning is a process of inhalation, ingestion, absorption or administration of poisons either deliberately or accidentally.
A poison is a substance that is harmful to your health if ingested, inhaled or absorbed through the skin.
A toxic substance is defined as a substance that causes injury, illness, or death, especially by a chemical.

REMEMBER
Know

Poisoning can occur from many different forms such as fire fumes, alcohol, drugs, common plants and using household items such as bleach and fertilisers.

Poisoning can be:
- Accidental; or
- Intentional.

Routes of Poisoning – poison can be:
- Inhaled;
- Ingested;
- Injected; and
- Absorbed.

Children
Most child poisonings involve medicines such as pain killers, contraceptive pill, iron tablets, vitamins, and common household chemicals such as weed killer or detergent. Some garden plants are also dangerous for a small child if eaten, for example an Azalea can cause nausea, vomiting, breathing difficulty and loss of consciousness.

The greatest cause of poisoning in children is carelessness; adults should ensure that all potential poisons are stored out of sight and out of reach, in a child resistant cabinet. Medications kept in a refrigerator should be locked in a child proof container.

REMEMBER Continued
Know

St John Ambulance recommends management advice for all poisonings be obtained from an expert such as **Poisons Information Centre** which is a twenty- four (24) hour advisory line, call **13 11 26;** or use the instructions on the container label.

Caused by:

- Toxic fumes; and
- Toxic substances.

Signs and Symptoms:

Dependent on the nature of the substance:

- Confusion, drowsiness, delirium, seizures, unconsciousness;
- Burns to skin, lips and throat;
- Irritation to eyes and skin;
- Respiratory distress, such as slow breathing or airway blockage;
- Effected heart function;
- Abdominal pain, nausea/vomiting, diarrhoea;
- Blurred vision; and
- Headache.

Complications:

- Burns;
- Respiratory distress; and
- Cardiac arrest.

DO Manage	**General** **1.** Follow DRSABCD St John Action Plan - remove yourself and the casualty from any danger if possible. **2.** Urgent medical aid. **If conscious:** **1.** Listen to the casualty and give reassurance. **2.** Determine the nature of the substance and record. **3.** Call Poisons Information 13 11 26 and/or follow instructions on container. **Indigested** **1.** **DO NOT** induce vomiting. **2.** **DO NOT** give anything by mouth. **3.** Wash any corrosive substance off the mouth and face with water, or wipe off. **Absorbed** **1.** Protect yourself (if possible) use protective clothing such as gloves, goggles and so on. **2.** Wash off immediately. **3.** Ask the casualty to remove any contaminated clothing and save. **4.** Flush the casualty's skin with running water. **Injected** **1.** Follow DRSABCD St John Action Plan - avoid needle stick injuries to yourself/casualty. **2.** Urgent medical aid. **3.** Treat any other signs and symptoms. Send any empty syringes, bottles, vials and handle all materials carefully using tongs or gloves with the casualty to hospital.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Call 13 11 26. • Ask bystanders to assist if they are trained First Aiders.

7.30 First Aid Management of Epilepsy, Seizures and Febrile Convulsions

WHAT
is it?





Epilepsy is a disorder of the brain characterised by a tendency to have recurrent seizures and is defined by two or more unprovoked seizures.
Seizure is a sudden attack of illness such as a stroke or an epileptic fit.
Febrile Convulsion is a fit or a seizure that occurs in children aged six (6) months to six (6) years when they have a high fever.

REMEMBER
Know

An epileptic person is a person who has shown a tendency to have recurring seizures. This means that if a person has a single seizure it does not necessarily mean that they have epilepsy. It is estimated that approximately fifty percent (50%) of people who have one seizure go on to have more seizures. For people at risk of recurring seizures, approximately seventy percent (70%) can expect seizure control with medication – from Epilepsy Australia website: http://www.epilepsyaustralia.net/

Seizures may vary from the briefest lapses of attention to severe and prolonged convulsions.

Febrile convulsions in infants and children may be due to fever, infection, epilepsy or other conditions. A rapid rise in body temperature, to even 1.5ºC above the norm (37ºC) can cause convulsions.

Seizure and Epilepsy Management Plans
The plans contain information that can assist the First Aider and medical aid. Information such as personal details, seizure information, triggers and management, warning signs, recovery time, medication being taken, first aid requirements and medical contact.

A seizure plan is extremely important for the person with epilepsy and others around them, such as childcare workers, medical personal, employers and colleagues.

REMEMBER Continued
Know

Caused by:

- Not all seizures/convulsions are epilepsy. They can be caused by a lack of oxygen, onset of cardiac arrest, a head injury, low blood sugar, low blood pressure, high fever, brain tumour, poisoning, drug overdose, withdrawal from alcohol and other substances of dependence, stroke, or serious infection; and
- In Western Australia, at least 20,000 people have active Epilepsy with at least a further 1,400 new people presenting with a seizure each year. One in 20 children will have a seizure at some time during childhood and adolescence and Epilepsy is increasingly common after the age of fifty (50) years.

Signs and Symptoms:

- Sudden spasm of muscles producing rigidity. If standing, the casualty will fall which may result in injury;
- Suddenly cry out;
- Jerking muscular spasms;
- Shallow breathing or breathing may temporarily stop, leading to pale, blue tinged lips and face;
- Excessive saliva (frothing) from the mouth;
- Temporary incontinence;
- Changes in conscious state from being fully alert to confused, drowsy, or loss of consciousness;
- Changes in behaviour where the victim may make repetitive actions like fiddling with their clothes; and
- Person may be extremely tired, confused or agitated after the seizure.

Signs and Symptoms of Febrile Convulsions:

- Fever (can be as low as 38.5°C);
- Muscle stiffening;
- Twitching or limb jerking;
- Eyes rolling upwards; and
- Blue tinge to face and lips.

Complications:

- Unconsciousness; and
- Respiratory problems.

DO Manage	**Seizure/Epilepsy** **1.** Follow DRSABCD St John Action Plan. **2.** **DO NOT** restrain the casualty or restrict movement. **3.** **DO NOT** put anything in the casualty's mouth. **4.** **DO NOT** move the casualty unless they are in danger. **5.** Protect casualty from environment, by moving furniture, cushion head and shoulders. **6.** Ensure that the airway is maintained. **7.** If in place follow the casualty's Seizure Management Plan. **8.** Record the duration of the seizure. **After seizure** **1.** Follow DRSABCD St John Action Plan - Recovery Position, ensure that the airway is clear and open. **2.** Rest and reassure. **3.** Manage any injuries. **4.** Seek medical aid. **5.** Do not disturb if casualty falls asleep, but continue to monitor breathing and response. **Convulsion** **1.** Place the child on their side. **2.** **DO NOT** restrain. **3.** Remove child's excess clothing or wrapping to cool them down - do not cool by sponging or bathing. **After Convulsion** **4.** Follow DRSABCD St John Action Plan – Recovery position. **5.** Rest and reassure. **6.** Monitor and keep cool. **7.** Medical aid.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • If medical aid is delayed, monitor the casualty and keep them warm and give reassurance. • Ask bystanders to assist if they are trained First Aiders. • Familiarise yourself with information on the Epilepsy Foundation website: http://www.epinet.org.au . • Familiarise yourself with information on the Epilepsy Action Australia websites: http://www.epilepsy.org.au and http://www.epilepsyaustralia.net/.

8. Visual and Verbal Assessment

WHAT
is it?



A visual assessment is your initial assessment of what you observed about the casualty when you approached them.
A verbal assessment is assessment of the casualty's condition by asking the casualty verbal questions.

REMEMBER
Know

Visual Assessment
When you first approach the casualty after checking for danger you will almost certainly complete an initial visual assessment without even thinking about it. A visual assessment requires you to observe the casualty carefully and pay attention to the visual signs of their injuries and cues about their condition without touching them.

You may observe the casualty:

- To see if they are conscious or have they just lost consciousness, note the time;
- Bleeding from a wound;
- Acting in a strange manner;
- Do they have a medical bracelet or necklace;
- Do they have any medication in their hands or in the vicinity and so on; and
- Are they visibly short of breath?

Verbal Assessment
A verbal assessment is achieved by asking questions and noting the answers. You will need to ask the right questions to determine the extent of the injuries. It accompanies your visual assessment of the casualty.

DO Manage

Visual Assessment

1. Is the person conscious or have they just lost consciousness? Note the time.
2. Check the casualty for a medical alert bracelet or necklace:
   - A Medic Alert bracelet or necklace contains the casualty's key medical condition or vital details. Membership number and a twenty-four (24) hour hotline number for health professionals to call for more information on the casualty's condition.
3. Check if the casualty has any medication, drugs or poisons in their possession or in close proximity:
   - Examples may include angina medication, an adrenaline autoinjector or illegal substances.
4. Observe for obvious injuries, such as bleeding.
5. Observe for obvious medical conditions such as respiratory distress or allergic reaction.

Verbal Assessment

Ask the casualty:

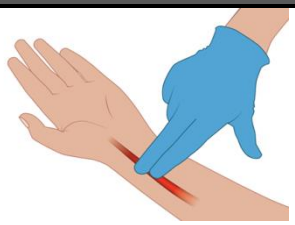
1. Introduce yourself and ask the casualty their name, the year and if they know where they are and ask consent to perform first aid.
2. If they are experiencing any pain, quantify it on a scale from 1 to 10, with 10 being the worst pain that the casualty has ever felt.
3. Do they know what happened?
4. If they are experiencing any numbness or tingling in the hands, arms or legs or anywhere in the body: this could indicate a heart condition or a stroke.
5. Are they experiencing nausea?
6. Are they taking any medication, and do they have any allergies to food or medications?
7. When did they last eat or drink?

PLAN "B" Contingency

- Call Triple Zero (000) for an ambulance.
- Ask bystanders to assist if they are trained First Aiders.

8.1 Vital Signs: Respiration, Pulse and Temperature

WHAT
is it?



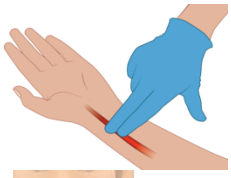
Vital signs are measurements which indicate how the casualty's body is functioning. This includes:

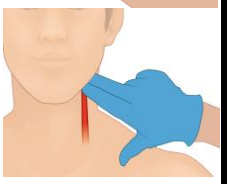
- Pulse rate;
- Respirations; and
- Temperature.

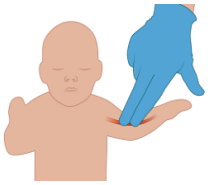
REMEMBER
Know

PULSE

The pulse is the name for the regular expansion and contraction of an artery. It is produced by a wave of pressure each time the left ventricle of the heart contracts, ejecting blood into the circulatory system.









The pulse may be easily measured by feeling the:

- Radial artery, found on the palm side of the forearm, thumb side, approximately 2cm from the crease in the wrist joint, normally used for a conscious casualty;
- Carotid artery, found either side of the trachea on the neck, used on an unconscious or very shocked casualty;
- Brachial pulse use for infants and felt in the inner crease of the elbow; and
- The pedal pulse in the foot may also be used.

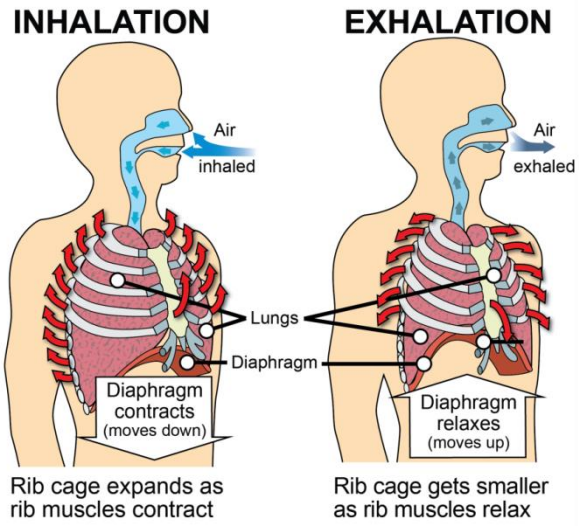
Normal Range of a Pulse

Rate – Pulse/Heart beats per minute	Adult	Child 1-12 Years	Infant 0-1 Year
	60-90	70 -110	Up to 120

REMEMBER Continued
Know

RESPIRATIONS

Respiration is the ability to breathe in oxygen into the lungs and breathe out (remove) carbon dioxide.



The Normal Range of Respirations:

Rate – respirations/ breaths per minute	Adult	Child 1-12 Years	Infant 0-1 Year
	10-20	15-35	30-40

TEMPERATURE

Temperature is the degree or intensity of heat present in the human body. It can be measured by a thermometer or perceived by touch. The rise and fall of body temperature indicates a change in bodily function.

Body Temperature

The normal range is approximately 36-37°C, but this can vary amongst individuals.

DO
Manage

Checking a Pulse:

For step by step instructions please refer to Part 3 – Quick Guides.

If possible when taking a pulse the casualty should have been at rest or not had any distressing treatment for 10 minutes to avoid outside influenced on the pulse. This may not be possible in an emergency situation.

When checking the pulse, take particular note of:

1. Rate (fast, normal or slow);
2. Rhythm (regular or irregular); and
3. Strength (normal, strong or weak).

When assessing the respiration's (breathing):

1. Do not inform the casualty that you intend to take their respirations as it is difficult to breathe normally when we are aware of being watched;
2. Monitor the respirations when assessing the casualty's pulse;
3. Look for:
    - Rate – counted by watching the rise and fall of the chest (one count for each rise and fall);
    - Depth
    - Normal – quiet, even and effortless;
    - Shallow – small short breaths; and
    - Deep – strenuous breathing.
    - Rhythm – the regularity of respirations, which should occur at regularly spaced intervals.
1. Any abnormalities should be noted and recorded: Examples of abnormalities of respiration include, emotional disorders, head injuries, shock, drug overdoses, pain, anxiety and fear;
2. Slow respirations may be associated with a brain injury or condition, or narcotic drug overdose:
    - Rapid respirations for example from respiratory tract infections, diabetic coma or anxiety;
    - Shallow respirations for example when deep breathing causes pain as in pleurisy or abdominal pain;
    - Stertorous or noisy breathing – usually due to an obstruction in the airway also after a seizure or head injury. Position the airway to improve breathing;
    - Wheezing associated with respiratory infection or asthma – occurs when breathing out; and
    - Sighing respirations – long slow inspirations, possibly indicating shock or an emotional disorder.

DO Continued
Manage

Taking a Temperature Using a NexTemp®

The NexTemp® Clinical Thermometer is disposable and is for single casualty use only. The NexTemp® can be used either in the mouth or in the armpit for children using the under arm method is recommended.

Instructions on taking a temperature:



For step by step instructions please refer to Part 3 – Quick Guides.

When checking the casualty's temperature

- A high temperature may be an indication of infection, such as a urinary tract infection.
- A low temperature could be an indication of hypothermia.

When assessing the casualty's vital signs:

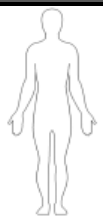
- Explain the procedure to the casualty first, if conscious.
- Sit or lay the casualty down, keep the casualty calm and reassured. Movement and talking can affect the readings.
- Record the findings immediately.

PLAN "B"
Contingency

- Follow DRSABCD St John Action Plan.
- Take pulse and respirations only if time is of the essence.

8.2 Visual and Verbal Secondary Survey

WHAT
is it?



The Visual and Verbal Survey is a head to toe examination of a casualty and is necessary to ensure the First Aider is able to locate any further injuries and manage accordingly.

REMEMBER
Know

The Visual and Verbal Secondary Survey is performed on a casualty:

- When it is necessary to find injuries or conditions, which are not immediately obvious; and
- To determine the first aid management required, according to the severity of injuries before they have the potential to become life threatening.

If any injuries are found, assess the level of seriousness and manage accordingly.

When performing the Visual and Verbal Secondary Survey start at the head and face then move down through the body to ensure nothing is missed.
When assessing movement in a conscious casualty, record whether there is movement of all limbs, unrestricted by pain or paralysis (unable to move).
The First Aider should be especially sensitive to the age, gender and race of the casualty being examined.

DO
Manage

How to Conduct a Visual and Verbal Secondary Survey
For step by step instructions please refer to Part 3 – Quick Guides.

1. Follow DRSABCD St John Action Plan.
2. Call Triple Zero (000) for an ambulance, if required.
3. Manage life-threatening injuries, such as bleeding; remember airways always come first.
4. Assess the casualty's vital signs.
5. Manage non-threatening injuries, such as fractures, sprains/strains.
6. Perform a Visual and Verbal Secondary Survey Assessment.
7. Manage injuries found.
8. Continue to monitor the casualty, taking vital signs every two (2) minutes initially and then every ten (10) minutes if vital signs have stabilised.
9. Stay with the casualty until medical aid arrives.
10. Complete the required documentation.

PLAN "B"
Contingency

- Follow DRSABCD St John Action Plan.
- Call Triple Zero (000) for an ambulance.

9. Post Incident Debrief and Evaluation

WHAT
is it?



Debrief is a process of obtaining information from a person after an incident. **Evaluation** is a process of making judgement about the value of first aid provided.

REMEMBER
Know

A major incident can be very traumatic experience for a First Aider. Following an incident, it is important that a debriefing session is held and followed up by an evaluation of the outcomes of that incident.

In a First Aid situation, once you have handed a casualty over to medical aid, there are a number of events that need to be addressed:

- Cleaning up;
- Occupational Health and Safety (OHS) issues;
- Reporting requirements; and
- Post incident debriefing.

Everyone will react differently after an incident. Reactions will vary according to the individual and the incident and a post incident debrief is an important part of the incident management process.

The purpose of the post incident debrief is:

- Primarily to look after the individuals involved in the incident and their welfare, giving them the opportunity to discuss the emotions that they might have about the incident;
- Bring the incident to a close;
- Allows the provision of support to the First Aider;
- To provide information to prevent a similar incident from occurring in the future; and
- Identification of any shortfalls in the emergency action.

The debrief may involve:

- Gathering and documenting all relevant details regarding the incident and effectiveness of incident management process and first aid given;
- Document any information relayed by the individuals involved; and
- Providing advice on further assistance available; for example, counselling.
- Remember not to lose sight of those who were involved in the incident, including yourself; and bear in mind the need for professional services.

REMEMBER Continued Know	All those involved in the incident should be present at the debriefing session and be encouraged to discuss the process and outcomes. It is equally important, to ensure that following the debriefing session(s), appropriate referrals are made to counsellors, mediators or the industry chaplain. The role of the First Aider not only encompasses employee's physical health requirements, but should also include concerns for their own psychological wellbeing. **Evaluating an incident** Part of the process of continuous improvement and development for any organisation and individual is evaluation. Evaluation can form part of the formal and informal debriefing process. Evaluation of an incident can look at options or strategies that can be adapted to better workplace conditions. This can then prevent future stress and provide ways to eliminate or further reduce risks. Most organisations will have procedures in place within their various departments; for example, First Aid Action Plan, Emergency Action Plan and Risk Management Plan and so on. These plans can be evaluated for their effectiveness on an ongoing basis. All plans should be compliant with: • Established first aid principles; • Australian Resuscitation Council (ARC) Guidelines; • Organisational policies and procedures; • Australian national peak bodies; • Industry standards; and • State/Territory legislation and regulations.
DO Manage	**1.** Be empathetic (understanding). **2.** Provide advice on further support/assistance available. **3.** Gather and document all relevant details regarding the incident. **4.** Document any information relayed by the individuals involved. **5.** Remember not to lose sight of those who were involved.
PLAN "B" Contingency	• **NOTE:** At the time you did the best you could do.

9.1 Verbal Report

WHAT
is it?



Verbal reporting is a quick verbal report to a supervisor or medical aid when handing over.

REMEMBER
Know

In the event of an emergency a quick verbal report may be required to be given to your supervisor and or medical aid, for example Paramedic.

When giving a verbal report or handover to medical aid or a supervisor, ensure that the information that you give is factual, concise, relevant and clear.

This verbal report should cover:

- What happened (events leading up to the incident)?
- How long ago did it happen?
- The first aid management given?
- The condition of the casualty now?
- Has the casualty improved or deteriorated in the first aiders care?
- Casualty's personal details (if known).

DO
Manage

ASSESS:

1. **History** - What has happened? When did it happen? Has the casualty got an existing condition; for example, diabetes? You may get the history from the casualty themselves, a bystander or family member.
2. **Signs** - Signs are what you see and feel; for example, bleeding and a broken bone (fracture). Look at the casualty, what is wrong with them? Listen to what the casualty may say (if conscious), listen to their breathing, are they breathing? Are they breathing normally?
3. **Symptoms** - What the casualty complains about such as pain and nausea.

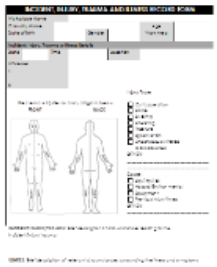
You can get the history, signs and symptoms by using our senses, we look, listen and feel.

PLAN "B"
Contingency

- Provide a written report.

9.2 Written Report - Incident Report Form

WHAT
is it?



Incident Report is a written document that is a full account of an incident from the casualty's perspective.

REMEMBER
Know

It is important that the First Aider fully documents all incidents when personnel seek advice or treatment relating to first aid and or social problems.

All documentation should adhere to the following:

- Be accurate & legible;
- Be written at time of treatment;
- Be written in ink and never erased;
- If a mistake has been made, cross it out with a single line so that the original writing can still be read;
- Sign and date the correction and then add the correct record; and
- DO NOT use correction fluids.

When completing documentation ensure that:

- Facts are recorded as stated by the casualty/employee;
- Opinions or hearsay are not recorded and documented; and
- Incident report forms also include the provision of first aid and medications.

NOTE:
An incident report form needs to contain all the information required to satisfy statutory requirements. If possible ensure that records concerning accidents are validated and signed by the casualty/employee involved.

DO
Manage

1. Fully complete written report.

PLAN "B"
Contingency

- Provide a verbal report.

9.3 Stress Management

WHAT
is it?



Stress is our way to respond to pressure, a feeling we have when we think we are in a situation we cannot manage. **Stress management** is a technique or a number of techniques which control our level of stress for the purpose of improving it.

REMEMBER
Know

Providing care in a high pressure emergency situation, can be draining and cause stress especially when children are involved. Even experienced First Aiders or personnel attending an emergency situation can experience unpleasant effects. People react differently and may display a variety of responses to an emergency situation, often not until after the event or sometime later. Some people handle stresses by talking, some people withdraw, while others prefer to physically work it off. Reactions of colleagues, bystanders and so on; will vary according to the individual and the nature of the incident. A post incident debrief is an important part of the incident management process.

Signs and symptoms of stress:

- Feelings of guilt, fear, shame;
- Sweating;
- Anxiety;
- Increased heart rate; and
- High blood pressure.

First Aider's **Stress Management** may include:

- Debriefing post incident for the purposes of individual welfare;
- Evaluation post incident to identify shortfalls in the Emergency Action Plan;
- Access to professional services such as: counsellors, Doctor, a help line, or the clergy. How this is organised will depend on individual organisations and the strategies (if any) that they have in place. Not all cases will require an individual to receive professional assistance and an initial debrief may be sufficient; and
- Peer support.

REMEMBER Continued Know	• Self-Care • Self-Care includes maintaining a healthy diet, eating regular meals, getting enough sleep and exercising. Avoid the use of alcohol and other drugs to either relax or keep going. • Any organisation you work for should have clear policies and procedures in place that ensure a safe, risk free environment. It is the responsibility of both the employer and employees to ensure all members of staff work together to create a workplace environment that is pro-active and strives to recognise potential causes of stress so immediate action can be taken to reduce or eliminate stress and harm.
DO Manage	**1.** Familiarise yourself with the stress related issues. **2.** Seek assistance. **3.** Look after your health and wellbeing.
PLAN "B" Contingency	• Seek professional help.

9.4 Effective Communication with First Aid Team

WHAT
is it?



Effective communication could be the difference between life and death. The more effective communication can be to get help and coordinate the First Aid Team to assist will ensure a swifter outcome for casualty/ies.

REMEMBER
Know

While there is no magical formula or set of rules governing every situation, there are principles and actions to apply that may help to stabilise the situation. In the case where a person has been seriously injured or has become seriously ill, these principles and actions may contribute to saving their life.

Verbal Communication and an effective First Aid team

- Use communication devices such as phone, radio or face to face;
- Follow the St John Action Plan DRSABCD;
- Communicate with the First Aid Team for the best management of the situation;
- Leadership is the key and a team always needs a person to take charge;
- Delegate jobs such as:
  - Watch traffic;
  - Wait for the ambulance to guide them in; and
  - Retrieving specific equipment.

DO
Manage

1. Assess the situation - consider safety and wellbeing of yourself and casualty.
2. Decide on management - follow the instructions and protocols given.
3. Work as a team not against each other - arrange for medical aid (000). Complete a verbal handover to medical aid. Assist medical personnel if requested.
4. Provide a verbal report - about the casualties to medical aid, and complete records about the history of the incident and the casualties involved.
5. After the incident - complete a written report and always debrief with the rest of the group. Advise medical personnel of the condition of all members of your group, both physically and psychologically.

PLAN "B"
Contingency

- Always follow the DRSABCD St John Action Plan principles.
- If in doubt always follow the safest path.

10. Capabilities of Emergency Management Services

WHAT
is it?



Emergency Management Services refers to organisations that maintain public safety and health by responding and assisting in emergency situations.

REMEMBER
Know

Emergency Management is the process of creating and implementing strategies to manage emergencies or disasters. Much of the effectiveness of emergency management lies in the ability to quickly and ably respond to a situation. Creating a strong response plan is vital and includes clear, concise instructions for how emergency responders are to act in a crisis. Emergency responders include the fire, rescue and state emergency services, police, and ambulance.

The Department of Fire and Emergency Services (DFES)
DFES is the Hazard management agency in WA whose capabilities include:

- Structural fires;
- Bushfires;
- Hazmat incidents; and
- Natural disasters such as flood, cyclone, storm, earthquake.

Support Services

- Marine, land, and air search and rescue;
- Urban search and rescue;
- Cliff, cave and confined space rescue;
- Road and rail transport emergencies; and
- Animal disease outbreaks.

State Emergency Management

- Development of State policy and plans; and
- Management of the Western Australian Disaster Relief and Recovery Arrangements.

DFES also provide advice and support on emergency management issues. Fire or life-threatening emergencies call Triple Zero (000):

- State Emergency Service assistance 132 500; and
- Emergency information 1300 657 209.

REMEMBER Continued
Know

Western Australian Police

The role of the police is wide and varied; in a first aid context they would be called for:

- Any situation where life or serious injury is threatened;
- A car accident where people are trapped or seriously injured;
- A serious air, rail or water incident;
- Any incident which poses an immediate threat of danger to people or property;
- An explosion or bomb incident or threat; and
- Control of the scene of the major incident.

Contact Numbers

- Emergency or life-threatening situations, when urgent police assistance is needed Triple Zero (000);
- For all other situations 131 444, when connected:
  - Press 1 for immediate police attendance;
  - Press 2 to report an incident that does not need immediate police attendance; and
  - Press 3 for general information and other matters.

St John Ambulance Western Australia – Ambulance Service

The ambulance service provides pre-hospital ambulance care for the sick and injured, and transports patients to and from medical facilities.

The paramedics and ambulance officers constantly monitor and manage the patient's condition at all times and apply advanced life support and medications when required. They also triage multiple casualty scenes.

Contact Numbers

- Urgent Medical aid call Triple Zero (000); and
- Non-emergency ambulance bookings call 9334 1234.

DO
Manage

In the event of an emergency situation a First Aider must:

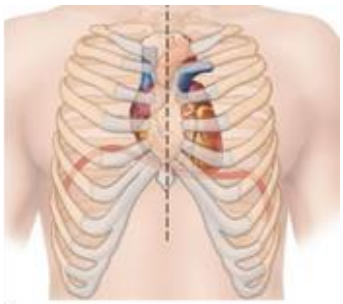
1. Follow DRSABCD St John Action Plan.
2. Continue first aid until paramedics/ambulance officers arrive and take over.
3. Provide a verbal handover to paramedics when directed.
4. Comply with all directions from the Emergency Services.

PLAN "B"
Contingency

- Learn more about Emergency Management by visiting http://www.ag.gov.au/EmergencyManagement/Pages/default.aspx.
- Learn first aid skills.

11. Basic Anatomy and Physiology Relating to the Chest

WHAT
is it?



Anatomy is part of biology that study the structure of organs and their parts. **Physiology** is the scientific study of the normal functioning in a living system. **The Chest (or thorax)** is part of anatomy of humans (and some animals) located between the neck and abdomen.

REMEMBER
Know

The chest or thorax extends from the neck to the diaphragm. The chest is made of the thoracic cavity and the thoracic wall (rib cage).

- The rib cage (twelve (12) pairs of ribs) protects major organs such as heart, lungs and liver. It consists of sternum, ribs and thoracic vertebrae. The chest contains the following main organs: the heart; lungs; thymus gland and muscles.
- The body needs a constant supply of oxygen to function. The act of breathing not only supplies this oxygen to the body but also expels waste gases such as carbon dioxide from the body. Respiratory distress syndrome is a potentially life-threatening medical condition where the lungs cannot provide enough oxygen for the rest of the body.
- A child's airway is narrower than an adult and is more prone to blockage by blood or secretions. Children prefer to breathe through their nose so a nasal obstruction can cause respiratory distress. A child's primary response to respiratory distress is to increase the rate and effort of breathing.
- In infants the trachea is shorter, softer and more pliable and may be distorted by excessive backward head tilt (over extension) so when opening the airway (in CPR), an infant's head should be kept in a neutral position, the lower jaw supported at the point of the chin, with the mouth maintained open.

DO
Manage

1. Research basic anatomy and physiology topics.
2. Apply your knowledge when providing first aid.

PLAN "B"
Contingency

- Consult a medical practitioner.

11.1 Human Skeleton

WHAT
is it?



Skeleton is an internal or external framework of bone, cartilage, or other rigid material supporting or containing the body of an animal or plant.

REMEMBER
Know

The skeleton is the supporting structure that gives the human body its general shape and provides a strong framework to which muscles are attached. It serves six (6) major functions:

- Support;
- Movement;
- Protection;
- Production of blood cells;
- Storage of ions; and
- Endocrine regulation (secretion of hormones).

It is composed of 270 bones at birth which decreases to 206 bones by adulthood after some bones have fused together. The human skeleton can be divided into the axial skeleton and appendicular skeleton.

Axial Skeleton
Formed by the:

- Rib cage;
- Vertebral column; and
- Skull.

Appendicular Skeleton
Is attached to the axial skeleton and is formed by the:

- Pectoral girdle;
- Pelvic girdle; and
- Bones of the Upper and Lower limbs.

REMEMBER Continued
Know

It also protects many of the organs such as:

- The brain, protected by the skull;
- The heart and lungs, protected by the rib cage; and
- The spinal cord, protected by the vertebrae of the spine.

Injuries sustained to the skeleton are:

- Fractures; and
- Dislocations.

DO
Manage

1. Follow DRSABCD St John Action Plan.
2. Call Triple Zero (000) for an ambulance if urgent medical aid is required.
3. Care of the unconscious casualty and control bleeding.
4. Rest and reassure, ask casualty to remain still.
5. Handle gently, so as not to increase pain or further damage.
6. Check blood flow and watch for signs of loss of circulation.
7. Monitor the casualty until medical aid arrives.

Fracture Management

For step by step instructions please refer to Part 3 – Quick Guides.

Neck and Spinal Injury Management

1. Do not move unless in a dangerous situation, such as fire.
2. Rest and reassure.
3. Loosen tight clothing.
4. Support and hold the head and neck in a neutral position, place hands either side of the casualty's head until other support is applied.
5. If medical aid is only minutes away (urban area), place support such as a padded rock, clothing or even your knees on either side of the casualty's head to prevent movement of the neck.

PLAN "B"
Contingency

- Check for any skeletal damage during the visual and verbal secondary survey.

11.2 The Heart

WHAT
is it?



Heart is a muscular organ in humans and animals which pumps blood through the blood vessels and the circulatory system.

REMEMBER
Know

The heart is located in the chest cavity just behind and slightly to the left of the sternum (breastbone).

The heart is a muscular organ around the size of an adult's clenched fist. It is a two sided pump that contracts and relaxes to pump blood into the circulatory system.

The circulatory system enables blood to circulate throughout the body, transporting oxygen and nutrients to cells and removing waste products from the body.

DO
Manage

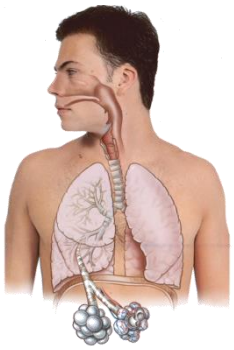
1. Research basic anatomy and physiology topics.
2. Apply your knowledge when providing first aid.

PLAN "B"
Contingency

- Consult a medical practitioner.

11.3 The Lungs

WHAT
is it?



The lungs are essential respiratory organs in humans and most breathing animals.

REMEMBER
Know

The lungs are located on either side of the heart. The lungs are part of the respiratory system which supplies a constant supply of oxygen to the body. When a person inhales oxygen is taken from the mouth or nose, down the trachea and into two tubes (bronchi) that then branches into smaller tubes (bronchioles) which end in air sacs (alveoli) within the lungs.

From the lungs, oxygen crosses into the blood to be transported to all parts of the body.

DO
Manage

1. Research basic anatomy and physiology topics.
2. Apply your knowledge when providing first aid.

PLAN "B"
Contingency

- Consult a medical practitioner.

11.4 Joints

WHAT
is it?



A joint is an area where two or more bones are in contact with each other. Joints allow movement. The bones forming the joint are held together by ligaments.

REMEMBER
Know

There are two types of joints:

- Immovable or fused such as the skull, sacral, and pelvic bones;
- Moveable:
  - Slightly moveable such as vertebrae; and
  - Freely moveable such as the knee; and ball and socket joints such as the hip and shoulder.

Common injuries to joints are:

- Fractures;
- Dislocations;
- Sprains to the surrounding ligaments; and
- Strains to the surrounding tendons and muscles.

DO
Manage

1. Follow DRSABCD St John Action Plan.
2. Call Triple Zero (000) if urgent medical aid is required.
3. Manage life-threatening injuries such as airway and bleeding first.
4. Manage joint injury.

Management of Joint Injuries

1. For step by step instructions please refer to Part 3 – Quick Guides.

PLAN "B"
Contingency

- If concerned do not move casualty; keep them comfortable until medical aid arrives.

11.5 Muscles and Tendons

WHAT
is it?



A muscle is a band of fibrous tissue that has the ability to contract and relax. It produces movement and maintains the position of parts of the body.

A tendon is fibrous connective tissue which connects the muscle to the bone.

REMEMBER
Know

- Muscles are mainly (but not all) attached to bones via tendons. Tendons are made up of strong fibrous tissue;
- Movement is achieved by the contraction and relaxing of muscles which move the bones, which in turn cause the limbs and digits to move; and
- Muscles account for up to 50% of a person's body weight.



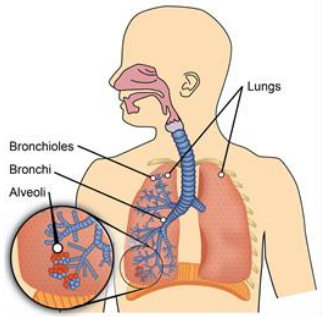
Common injuries of muscles and tendons

- Strained muscles or tendons; and
- A partial or full tear of muscles or tendons.

DO Manage	**1.** Follow DRSABCD St John Action Plan and only move casualty if it is safe to do so. **Management** **1.** Following RICE principle: **R**est, **I**ce, **C**ompression and **E**levation. **2.** For step by step instructions please refer to Part 3 – Quick Guides. It is best to avoid: **1.** Heat (direct or creams) which increases bleeding and swelling. **2.** Alcohol which increases bleeding and swelling. **3.** Running or exercising as it may exacerbate the injury. **4.** Massage in the first twenty-four (24) to forty-eight (48) hours which may increase bleeding and swelling.
PLAN "B" Contingency	• Seek medical aid if in doubt or if injury doesn't improve.

11.6 Breathing

WHAT
is it?



Breathing is the process that moves air in and out of the lungs or oxygen through other respiratory organs. Breathing is also called ventilation which includes both inhalation and exhalation.

REMEMBER
Know

The body needs a constant supply of oxygen to function. The act of breathing not only supplies this oxygen to the body but also expels waste gases such as carbon dioxide from the body.

The diaphragm and intercostal muscles expand the chest to draw air into the lungs. The air then crosses to the blood for transportation to the body. As the diaphragm and intercostal muscles relax, air is forced out of the lungs.

Normal breathing is essential to maintaining life. Persons who are gasping or breathing abnormally and are unresponsive require resuscitation.

Breathing can be categorised as:
- Effective; and
- Ineffective breathing.

Breathing may be absent or ineffective as a result of:
- Direct depression of/or damage to the breathing control centre of the brain;
- Upper airway obstruction;
- Paralysis or impairment of the nerves and/or muscles concerned with breathing;
- Problems affecting the lungs;
- Drowning; and
- Suffocation.

There is a high incidence of abnormal gasping (agonal gasps) after cardiac arrest.

The First Aider should:
1. **LOOK** for movement of the upper abdomen or lower chest;
2. **LISTEN** for the escape of air from nose and mouth; and
3. **FEEL** for movement of the chest and upper abdomen.

REMEMBER Continued
Know

Movement of the lower chest and upper abdomen does not necessarily mean the casualty has a clear airway. Impairment or complete absence of breathing may develop before consciousness is lost by the casualty.

Absence of normal breathing
Respiratory distress syndrome is a potentially life-threatening medical condition where the lungs cannot provide enough oxygen for the rest of the body. There are many causes /conditions that come under the umbrella of respiratory distress; for example, asthma, airway obstruction, hyperventilation, croup and epiglottitis. It manifests as a difficulty in breathing and the psychological experience associated with such difficulty.

Signs and symptoms may include: rapid shallow breathing, sharp pulling in the chest below and between the ribs with each breath, grunting sounds, flaring of the nostrils, increased sweat on the forehead with skin feeling cool and clammy and wheezing when breathing.

Anatomic and physiological differences between adults and children (airway)
A child's airway is narrower than an adult and is more prone to blockage by blood or secretions. Children prefer to breathe through their nose so a nasal obstruction can cause respiratory distress. A child's primary response to respiratory distress is to increase the rate and effort of breathing.

In infants the trachea is shorter, softer and more pliable and may be distorted by excessive backward head tilt (overextension); so when opening the airway (in CPR), an infant's head should be kept in a neutral position, the lower jaw supported at the point of the chin with the mouth maintained open.

DO
Manage

1. **LOOK** for movement of the upper abdomen or lower chest.
2. **LISTEN** for the escape of air from nose and mouth.
3. **FEEL** for movement of the chest and upper abdomen.
4. Familiarise yourself with ARC Guideline No. 5 - Breathing http://resus.org.au/guidelines/.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.
- Provide CPR.
- Ask bystanders to assist if they are trained First Aiders.

11.7 Consciousness and Response

WHAT
is it?



Consciousness is the state of awareness by being aware of surroundings.

REMEMER
Know

Unconsciousness is a state of unarousable or unresponsiveness, where the casualty is unaware of their surroundings and no purposeful response can be obtained.

The causes of unconsciousness can be classified into four broad groups:

- Low brain oxygen levels;
- Heart and circulation problems (for example fainting, abnormal heart rhythms);
- Metabolic problems (for example overdose, intoxication, low blood sugar); and
- Brain problems (for example head injury, stroke, tumour, epilepsy).

Combinations of different causes may be present in an unconscious casualty: for example, a head injury casualty under the influence of alcohol.

Before loss of consciousness, the casualty may experience yawning, dizziness, sweating, change from normal skin colour, blurred or changed vision, or nausea.

Assess the collapsed casualty's response to verbal and tactile stimuli ('talk and touch'), ensuring that this does not cause or aggravate any injury. This may include giving a simple command such as, "open your eyes; squeeze my hand; let it go". Then grasp and squeeze the shoulders firmly to elicit a response.

A casualty who fails to respond or shows only a minor response such as groaning without eye opening, should be managed as if unconscious.

DO
Manage

1. Follow DRSABCD St John Action Plan.
2. Familiarise yourself with ARC Guideline No. 3 – Recognition and First Aid Management of the Unconscious Victim http://resus.org.au/guidelines/.

PLAN "B"
Contingency

- Call Triple Zero (000) for an ambulance.

12. Dealing with the Aged and Infirm

WHAT
is it?



Aged means having lived or existed for a specific length of time.

Infirm is the state of not being physically or mentally strong, especially through age or illness.

REMEMBER
Know

Older adults are defined as persons 65 years of age and older. Older adults do experience age-related changes, both physical and cognitive which affect how they look, how they function and how they respond to daily living.

Overall, the changes in the later life span involve a general slowing down of all organ systems due to a gradual decline in cellular activity.

Age related changes to the body include:

Skin

Becomes thin, loss of elasticity, broken blood vessels and dryness, this causes an increased susceptibility to cold (hypothermia), bruising, and bedsores. There is also a reduction in the ability to perspire due to deterioration of sweat glands, making the individual more susceptible to heat (hyperthermia).

Cardiovascular System

Reduced blood flow from deterioration of the heart muscle and valves, arteriosclerosis or "hardening of the arteries". Reduced blood flow also affects the kidneys and the liver. It can cause loss of energy, increases susceptibility to drugs, and reduces healing rate. Increased risk of strokes and heart attacks.

Respiratory System

The airways and lung tissue become less elastic, with a decreased oxygen uptake and exchange, this causes shortness of breath.

Musculoskeletal System

Loss of muscle tone and strength causes loss of balance and falls.

Skeletal System

Loss of calcium causes thinning and weakening of the bones, which can in turn cause an increased risk of fractures.

Nervous System

Loss of cells affects nerve transmission which causes slower response time and effects coordination.

Vision and Hearing

Problems seeing in low light lost or diminished hearing.

DO Manage	**1.** Follow DRSABCD St John Action Plan. **2.** Call Triple Zero (000) if an ambulance is needed. **Fractures:** **1.** Common fractures are the hip and legs; be very gentle, as bones may be fragile. Due to nerve damage the casualty may not even know that they have a fracture. **Bleeding:** **1.** The fragile veins and skin of an elderly person may bleed profusely from even a small cut or laceration, prolonged gentle pressure may be required to stop or control bleeding. **Wound Care:** **1.** Elderly skin is very dry and fragile and can tear easily. Try and use a non-stick dressing when managing a wound. **2.** If the casualty is on any medication the hospital will require an accurate list of the names and dosages being taken or gather the medication(s) so that the paramedics can take them to the hospital with the casualty. **3.** Always be respectful and gentle with an elderly casualty, they may be confused and require continued reassurance.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Learn first aid.

12.1 Providing First Aid to Children

WHAT
is it?



A child is biologically defined as a human between the stages of birth and puberty; a person 14 years and under.

REMEMBER
Know

Illness in Children

Illnesses in children are very common as their immune systems are immature and delicate in nature. Whilst children are immunised against highly infectious diseases, such as measles, whooping cough and mumps they are exposed to more common childhood illnesses on a day-to-day basis. Exposure to classmates, friends and other family members who are carriers of infectious diseases is inevitable.

Common illnesses in children are:

- Allergies – will show in the form of rashes, hayfever, asthma and anaphylaxis. The discomforts caused by a rash, runny nose and sneezing associated with hayfever are much less serious than asthma and anaphylaxis.
- Chickenpox;
- Common cold;
- Diarrhoea;
- Ear Infections;
- Croup;
- Flu/Influenza;
- Gastroenteritis; and
- Fever.

Most of the simple illnesses just need to “run its course”; this can take up to two (2) weeks for a simple cold. Most pharmacy medications are used to mask the symptoms rather than treat the cause and a visit to the GP may result in merely being advised to take the child home to rest and drink plenty of fluids.

REMEMBER Continued
Know

Injuries in Children

In the year 2013/2014 Princess Margaret Hospital (PMH) Emergency Department attended to 19,645 children. Of the children seen:

- 28% were injuries;
- 40% of those injuries were children under the age of five (5) years of age and 23% occurred in the home;
- Over 4,500 children are injured during a sporting activity; and
- The most common causes in all age groups are falls (7,566 casualties) and blunt trauma (5,014 casualties).

Injuries are common in children as they learn to explore the world and learn to move their body, whether it is learning how to walk, riding a bike or climbing a tree. The most common injuries are bruises, strains, sprains, dislocations and fractures.

A child's age tends to determine the circumstances of the injuries:

- Children aged zero (0) to four (4) years tend to fall from one level to another for example down stairs, out of a chair or off a bed;
- Children aged five (5) to nine (9) years tend to be playground accidents for example trampoline, climbing; and
- Children aged ten (10) to fourteen (14) years tend to be from sport or recreational activities.

Communicating with Children

It can be difficult when trying to provide first aid to children as the child maybe too distressed to talk or cooperate, or too young to talk.

The best way to communicate with children is to:

- Use language on their level;
- Allow them to cry and express their fear;
- Explain everything to the child before you do it;
- Be gentle and kind;
- Talk to the child at eye level; get down onto the floor/knees. Looking down at a child can make the child uncomfortable; and
- Collaborate with parents/guardians if available.

DO
Manage

1. Follow DRSABCD St John Action Plan.
2. Call Triple Zero (000) for an ambulance if urgent medical aid is required.
3. Seek consent from a parent or guardian where possible. If no parent is present consent is implied.

Illness in children

1. If a child is showing signs of an illness:
2. Keep cool, hydrated and rested.
3. Wash hands regularly to stop the spread of infection.
4. Seek medical advice from a GP if uncertain or illness progresses as antibiotics maybe required.

If your child displays any of the following symptoms in conjunction with an otherwise simple illness, immediate medical advice is recommended:

1. A fever that lasts more than 48 hours or a fever that reaches 39.5ºC or higher at any time.
2. Difficulty breathing or sudden wheezing.
3. Excessive sleepiness or confusion.
4. A seizure, especially one that is related to any possible ingestion of poison. Febrile convulsions sometimes happen when very young children have a high temperature but it's always best to see a doctor to confirm the reason for the fever.
5. Severe vomiting and/or diarrhoea that continues for longer than 24 hours as it could possibly lead to dehydration.
6. Rashes that appear suddenly and spread quickly and occur in tandem with any of the above.
7. The presence of blood such as coughing up blood or blood in your child's urine or vomit which is more than a few streaks, such as large clots or an ongoing, steady flow of blood.

DO Continued Manage	**Injuries in children** **1.** Manage injuries according to First Aid principles. **2.** Children have a smaller airways and disproportionately sized heads so they are more prone to airway obstruction when unconscious. **3.** In infants, the trachea is soft and pliable and may be distorted by excessive backwards head tilt so when opening the airway (in CPR), an infant's head should be kept in a neutral position, the lower jaw supported at the point of the chin with the mouth maintained open. **4.** Children have less blood volume so what appears to be a minor bleed could lead to shock. **5.** Bones are softer and more pliable (still developing).
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Learn first aid.

13. Use of Bag-Valve-Mask and Complications

WHAT
is it?



A Bag-Valve-Mask or BVM is a hand held "self-inflating" device used to provide ventilation to casualties who are not breathing or not breathing adequately.

REMEMBER
Know

A Bag-Valve-Mask (BVM) force feeds air or oxygen into the casualty's lungs in order to inflate them.

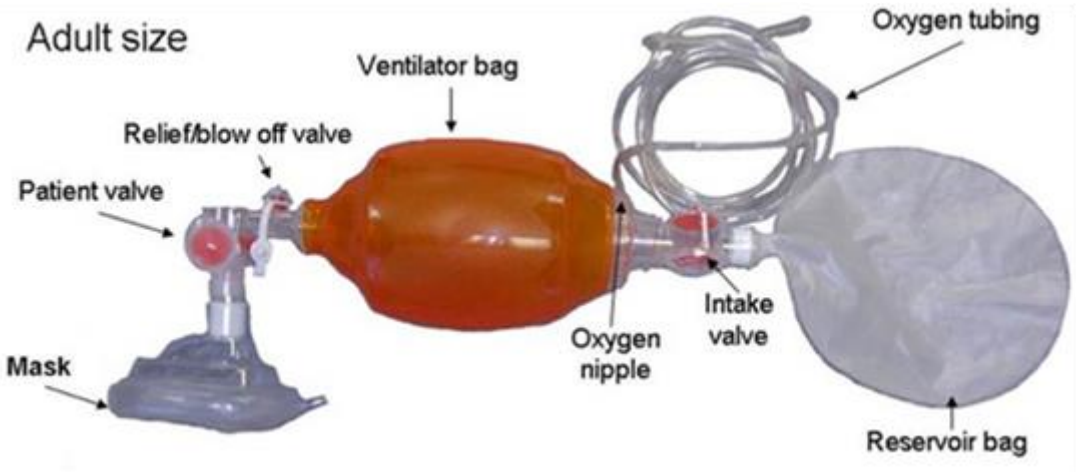
The bag-valve-mask can be used with or without oxygen:

- Without oxygen the BVM delivers twenty one percent (21%) of oxygen drawn from normal atmospheric air; and
- Oxygen attached to the ventilation bag provides ninety (90) to one hundred (100) percent of oxygen.

Choose right equipment

The Bag Valve Mask comes in three (3) sizes:

- Adult (casualty twenty (20) kg and above);
- Child (casualty between ten (10) – twenty two (22) kg); and
- Infant (between three (3) – twelve (12) kg).



DO Manage	**Using a Bag-Valve-Mask:** **1.** Choose the appropriate size mask to fit the casualty's face and create a good seal. **2.** Use the claw grip to apply the mask and ensure a good seal. **3.** Airway must be open to ensure oxygen is forced into the lungs. This is created by: • Chin lift and head tilt; and • Oropharyngeal adjunct device. **4.** Check the blow off cap valve as it must remain off the valve at all times to prevent over inflation (barotrauma) of the lungs. **5.** Check for effectiveness chest rise and fall and good airway position. **6.** Watch for secretions; vomit under the mask: suction or turn onto side to clear. **DO:** **1.** Open the airway correctly to avoid compromising the airway. **2.** Insert the correct size Oropharyngeal adjunct is used as an incorrect size will compromise the airway. **3.** Choose the correct size mask as an incorrect size may not create a proper seal. **DO NOT** use on casualties under ten (10) kg if spontaneously breathing.
PLAN "B" Contingency	• Always revert back to the DRSABCD St John Action Plan. • Call Triple Zero (000) for an ambulance. • Do not delay applying CPR; ask a bystander to retrieve oxygen equipment.

14. Emergency Childbirth

WHAT
is it?



;

Emergency Childbirth is a birth that occurs accidentally or hastily in or out of the hospital environment, without standard obstetric preparations or procedures.

REMEMBER
Know

Childbirth is a natural process and the majority of babies are born without complications. First aid assistance may be required if the baby starts to come before its due time (premature or preterm), if the woman lives in a remote area or if an emergency which threatens the life of the mother or the baby occurs.

Parents who are expecting their first child or mothers-to-be who have gone into labour unexpectedly need special support. Remaining calm and reassuring the expectant mother will help her to stay calm.

These items are desirable when preparing for the birth, however are unlikely to be available in an emergency so improvise:

- Sheets;
- Towels;
- Blankets (mother and infant);
- Plastic bags for soiled linen;
- 3 sterile or clean cord ties such as string or linen tape;
- Scissors (sterilised in boiling water);
- Gauze swabs/clean cloths;
- Sanitary pads;
- Nappies;
- Disposable gloves; and
- Strong plastic bag or bucket for the placenta.

REMEMBER Continued
Know

The Three Stages of Childbirth

First Stage:

- The first stage of labour begins with regular painful cramp like contractions; the early contractions occur every 2 to 15 minutes and last for approximately 30 to 60 seconds. The contractions will become more frequent;
- A “show” of bloodstained mucous from the vagina may occur up to a few days before the onset of labour; this is the plug that seals the cervix during the pregnancy;
- The “waters breaking” indicates the sac containing the baby has broken. There may be a rush of amniotic fluid(the fluid that surrounds the baby) or a trickle, note the colour and consistency and document it; and
- Prepare for the second stage by ensuring that the mother is as comfortable as possible and remove any clothing that may restrict the birth. Be mindful of the mother’s privacy and keep her covered with a sheet or blanket when possible.

Second Stage:

- The second stage begins with full dilation of the cervix (the neck of the womb) and ends with the birth of the baby;
- Contractions are more intense and become more frequent and the mother may feel the need for a bowel movement; and
- The mother may also feel the need to bear down and push, the baby will start to present (crowning - the head showing).

Third Stage:

- The third stage begins immediately after the birth of the baby and ends with delivery of the placenta; this may take 20 minutes or more.

DO
Manage

A First Aider should:

1. Calm and reassure the mother.
2. Call Triple Zero (000) for an ambulance. Stay on the phone as the Ambulance Communications Officer will talk you through the childbirth process.
3. Minimise the risk of infection by: washing hands, nails and forearms thoroughly with soap and water; wear disposable gloves; and prepare a clean covered surface for the mother to lie on.
4. Collect the first aid resources as required.
5. Prepare the mother by assisting into a position of comfort suitable for childbirth and removing her undergarments.
6. Wash the area from the entrance of the vagina towards the anus with soap and water, using clean swabs or clothes with each wipe.
7. When the head is crowning encourage the mother to stop pushing and ask her to keep her mouth open and pant (fast, shallow breaths), as the baby head is delivering.
8. Encourage her to rest between contractions.

Normal delivery with the head presenting first

1. Control the baby's head with gentle but steady pressure from the direction of the mother's pubic area downwards. The baby's head will normally appear with the face towards the mother's anus, but will then rotate to one side.
2. Check whether the umbilical cord is around the baby's neck – if yes:
   - Free the cord by carefully easing it over the baby's head (NEVER PULL the cord). If not possible; or
   - Try to slip the cord over the baby's shoulder and deliver the baby through the cord. If that is not possible (because the cord is too tight – very rare) it will be necessary to tie the cord firmly with sterile string or similar in two places (approximately 3cms apart) and cut the cord with sterile scissors.
3. Support the baby's head in the palms of your hands and wait for the next contraction.
4. When the top of the shoulders are visible, guide the head downwards to clear the upper shoulder from under the pelvic bone.
5. During the next contraction, both shoulders will be delivered.
6. When both shoulders are out, encircle the baby's chest with your hands to guide the baby out – allow the baby to deliver itself, do not pull it.

DO Continued
Manage

7. Stimulate baby to induce crying by very gently rubbing the baby's back with a towel.
8. Lift the baby up towards the mother's stomach.
9. Note the time of the delivery.

Immediate Care of the Baby

1. Take care when handling the baby as it will be wet and slippery.
2. Leave the umbilical cord intact.
3. Place the baby's head downwards to drain secretions from the head and nose.
4. Dry the baby gently and quickly, with a warm, clean, soft towel.
5. If no resuscitation is necessary, place the baby on the mother's stomach, cover with a blanket and encourage breastfeeding if the mother wishes. Breastfeeding aids in keeping the baby warm, maternal bonding and assists in the delivery of the placenta. Monitor the baby regularly for normal breathing and colour and document it.
6. If the baby is not breathing immediately, stimulate by rubbing its back.
7. If not breathing after 1 minute, clear the airway and perform rescue breaths at a rate of 30 per minute – do not give chest compressions. Chest compressions on a newborn should only be performed by persons who have been specifically trained. The Ambulance Communications Officer will be able to guide you through chest compressions if they determine it is appropriate.

Third Stage Management

1. After the delivery of the placenta – place this in a plastic bag for medical inspection.
2. DO NOT cut the cord unless there is a long delay for medical aid; Seek advice from emergency services if required.
3. Place a sanitary pad over the mother's vagina, normal bleeding will fill a sanity pad every 10-15 minutes for the first hour or more after the birth. Change the sanity pad as required.

DO Continued Manage	**Care of the mother** **1.** Once the mother has given birth she will be exhausted; look after her and make her feel as comfortable as possible until the arrival of the ambulance. **2.** Retain all blood soaked material for medical inspection. **3.** Clean the mother's pubic area with clean towels or pads; ensure that the area is washed from the front to the back. **4.** Clean her face arms and legs and assist her to change out of any soiled clothing. **5.** Cover with a blanket and ensure that she is kept warm; Give a drink and a light snack (only give if the placenta has been delivered). **6.** Check her pulse, respirations and temperature regularly and document it; **7.** Check blood loss regularly and document it. If blood loss is excessive gently massage the lower abdomen to control excessive bleeding. **8.** Encourage rest until arrival of medical aid; ensure that you monitor both the baby and the mother. **9.** Handover to medical aid, give a verbal and written report to the ambulance crew with the placenta and any blood soaked pads.

PLAN "B"
Contingency
	• Call Triple Zero (000) for an ambulance.
	• Ask bystanders if they are trained First Aiders.
	• Learn first aid.
	• Complication that may arise:
	  • Mother has uncontrolled bleeding; and
	  • Infant not breathing or responding. Be prepared to resuscitate the baby, if required.

15. Substance Misuse

WHAT
is it?



Substance Misuse is the harmful use of substances such as drugs and alcohol for non-medical purposes. Substance misuse is a form of poisoning from drugs and alcohol.

REMEMBER
Know

The term 'drugs' describes substances which when taken cause some specific or abnormal change to the way that the human body functions.

Drugs include legal substances such as alcohol, tobacco and prescribed or over the counter medication as well as those which are illegal.

Illegal drugs come in many forms and names.

Common street drugs include:

- **Uppers:** cause intense euphoria, increase the heart rate, blood pressure, body temperature and metabolism;
- **Hallucinogens:** cause hallucinations, altered states of perception and feelings, increased body temperature, heart rate and blood pressure;
- **Downers:** cause euphoria and relaxation. Slow down the nervous system functions and affect blood pressure and breathing; and
- **Mixtures:** potent combinations and drugs that work on different pathways within the body and have differing effects.

Causes

People misuse drugs and alcohol for many reasons:

- Some may use substances to relax, have fun, cope with or escape
- from a problem or dull emotional/physical pain;
- Legal prescription drugs are sometimes taken in overdose to achieve effects other than the therapeutic effects for which they were intended; and
- Illegal substances such as cocaine, ice, ecstasy and heroin can lead to dependency and addiction and affect the person psychologically and physically.

REMEMBER Continued
Know

Signs and Symptoms

Effects of substance misuse are varied, but immediate effects may include:

- Nausea;
- Vomiting;
- Diarrhoea;
- Erratic and irrational behaviour;
- Abnormal breathing;
- Irregular heartbeat; and
- Unconsciousness.

Long term effects include damage to the:

- Kidneys;
- Liver;
- Lungs; and
- Brain.

Complications

- Permanent damage to organs;
- Respiratory distress;
- Cardiac arrest; and
- Death

.

Casualties who are under the influence of drugs or alcohol may be at risk of harming themselves or others through dangerous or violent behaviour.

Risk factors

- Dangerous environment – high crime area;
- Volatile or frightened casualty;
- Volatile bystanders; and
- Infection control – Needlestick injuries.

DO Manage	**1.** DRSABCD St John Action Plan: • Danger - risk management, violence, beware of 'sharps' / needlestick injuries; • Send for help - call Triple Zero (000) for an ambulance; • Response - what is the level of consciousness? Manage for shock; • Airway - be mindful of danger to airway from vomiting; • Breathing – monitor for changes in the rate or effectiveness ; • CPR - if required; and • Defibrillation - if required. **2.** Be calm, reassuring and act professionally; quietly move the casualty to safety if necessary. **3.** Be aware of the possibility of infectious diseases; follow standard precautions to avoid infection. **4.** Remove any potential missiles and weapons from the vicinity if possible. **5.** Seek information – history: what, when, and how much has the casualty taken or used? **6.** Monitor airway, breathing and conscious level frequently. **7.** Check for other injuries - give appropriate first aid. **8.** Take vital signs – pulse, respirations and temperature. **9.** Attempt to keep vomit, or at least a sample, to send with casualty to hospital. **10.** Keep drugs or containers for identification, send with casualty to hospital.
PLAN "B" Contingency	• Call Triple Zero (000) for an ambulance. • Ask bystanders to assist if they are trained First Aiders. • Learn first aid. • If the casualty will not allow you to apply any first aid management, then try and reassure and calm them until the arrival of medical aid. • DO NOT put yourself at risk. • DO NOT approach the casualty if you do not feel it is safe. • DO NOT be judgemental (you could provoke hostility).

Part 3 – Quick Guides

1. DRSABCD St John Action Plan
2. Perform Cardiopulmonary Resuscitation (CPR) – Child and Adult
3. Perform Cardiopulmonary Resuscitation (CPR) – Infant
4. Perform Cardiopulmonary Resuscitation (CPR) with an AED
5. Recovery Position
6. Bag-Valve-Mask
7. How to Take a Radial Pulse
8. Taking a Temperature
9. Visual and Verbal Secondary Survey Assessment

1. DRSABCD St John Action Plan

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
D	**DANGER** **1.** Check for danger **by:** • Observing; • Listening; and • Using your sense of smell. **2.** Danger **from:** • Hazards and obstacles; • Traffic; • Fuel; • Electrical wires; • Poisonous gas fumes ; and • Fire and so on. **IF SAFE PROCEED**	For safety to: • **YOU** (if not safe you can get injured and become a casualty). • **OTHERS** (if not safe more casualties). • **CASUALTY** (if not safe the condition can worsen).	
R	**RESPONSE** **1.** Ask for **NAME**. **2.** **Squeeze** shoulders.	• Determining if the casualty is **CONSCIOUS.**	
S	**SEND FOR HELP** **1.** Call Triple Zero (**000**) for an ambulance. **2.** If on your own place casualty in **RECOVERY** position before making a call. **3.** Or ask bystander to make the call.	• You may not know the extent of the injuries medical help extends the chances of survival.	 

DRSABCD St John Action Plan continued

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
A	**AIRWAY** 1. Open mouth by gently pulling chin down. 2. Check mouth for foreign materials. 3. If **YES** - place in **RECOVERY** position. 4. Clear airway with fingers. 5. If **NO** - Leave on back. 6. Open airway by tilting head and lifting chin.	• To find obstructions to breathing. • In order to survive, casualty must breathe.	
B	**BREATHING** • Look. • Listen. • Feel. Do this for ten **(10) seconds** only! • Place in **RECOVERY** position if breathing normally	• Without breathing brain will not get oxygen.	
C	**CPR 30:2** 1. Start with thirty (30) compressions and two (2) breaths 2. Continue until help arrives	• To pump oxygen to brain • To increase chance of survival	
D	**DEFIBRILLATION** 1. Open defibrillator case and turn device **ON** 2. Automatic prompts will instruct you what to do 3. Place pads in correct position 4. You will be instructed when to give shocks	• To re-start heart • To establish normal heart rhythm	

2. Perform Cardiopulmonary Resuscitation (CPR) – Child and Adult

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
1. Action Plan	• Follow DRSA from DRSABCD St John Action Plan.	• To preserve life.	
2. Breaths Mouth to Mouth Breaths	• Thirty (30) chest compressions two (2) breaths. • Tilt the head back, lift the chin (adult), child - slight, infant – neutral. • Blow for one (1) second into casualty's mouth. • Take a clear breath of fresh air. • Blow a 2nd breath for one (1) second, the first aider is to turn their head and watch for the chest to begin to fall.	• To provide oxygen to the brain. • So the chest rising is visible.	
Mouth to Nose	It may be used when: • Jaw and/or teeth are broken. • Jaw is tightly clenched. • Deep water resuscitation. • Resuscitating an infant or child.	• If casualty is severely injured in head area. • To provide oxygen to the brain. • So the chest rising is visible.	
Mouth to Mask	Mouth to Mask (Avoids mouth-to-mouth contact): • Note: Resuscitation should not be delayed by attempts to obtain a mask.	• Especially appropriate if the casualty has blood in their mouth, a facial injury, is inebriated or has vomited. • So the chest rising is visible.	
3. Chest Compressions	• Give thirty (30) chest compressions at a rate of about two (2) compressions a second. • Should be smooth and controlled.	• To pump oxygen to the brain.	

2. Perform Cardiopulmonary Resuscitation (CPR)– Child and Adult Continued

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
4. Hand position	• **Adult:** Heels of two (2) hands. • Lower half of sternum (breastbone) in the centre of the chest • **Child 1-8:** Heels of two (2) hands. • Lower half of sternum (breastbone) in the centre of the chest	• For the best outcome	
5. Ratio	• 30:2	• As per ARC Guidelines	

3. Perform Cardiopulmonary Resuscitation (CPR) - Infant

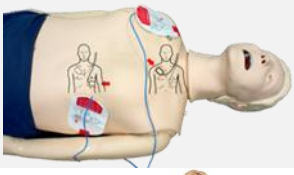
"WHAT?"	"HOW?"	"WHY?"	SHOW ME
1. Action Plan	• Follow DRSA from DRSABCD St John Action Plan.	• To preserve life.	
2. Breaths	• Clear the mouth of foreign material with your little finger. • Place on the back on firm surface. • Tilt head back very slightly to open airway. • Lift chin to bring tongue from the back of the throat. • Avoid pressure on the soft tissue under the chin.	• Due to delicate anatomy of an infant – small airway.	 
3. Compressions	• Two (2) fingers (index and middle).	• Due to delicate anatomy of an infant. • Soft bones.	
4. Hand position	• Two (2) fingers. • Lower half of breastbone in the centre of the chest.	• Due to delicate anatomy of an infant. • Soft bones.	
5. Ratio	• 30:2.	• As per ARC Guidelines.	

4. Perform Cardiopulmonary Resuscitation (CPR) with an AED Adult and Child Over 1 Year

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
1. Action Plan	• Follow DRSA from DRSABCD St John Action Plan.	• To preserve life.	
2. Breathing	• Look for the rise and fall of the chest - Normal? • Listen for sounds of breathing - Normal? • Feel for breathing and rise and fall of the chest – Normal?	• Greater chances of survival if breathing.	
3. CPR	• Casualty is Not Responding and Not Breathing Normally - Commence CPR. • Give thirty (30) chest compressions at a rate of about two (2) compressions a second approximately one hundred (100) a minute given on the lower half of the breastbone in the centre of the chest, followed by two (2) breaths each lasting for one (1) second.	• Not breathing – the brain is not receiving oxygen (without oxygen brain damage/death).	
4. Defibrillation	• If the casualty is wearing a bra, remove it before applying the defibrillator pads. • Remove any medication patches. • Check for any pacemaker/defibrillation implanted devices (scar will be between the collar bone and the top of the breast – either left or right). Pads should be placed at least 8cm from these devices.	• Removal of clothing - to attach pads properly so an AED can read the heart rate and rhythm. • Defibrillation to restart normal heart rate and rhythm.	

4. Perform Cardiopulmonary Resuscitation (CPR) with an AED Adult and Child Over 1 Year continued

"WHAT?"	"HOW?"	"WHY?"	SHOW ME

4. Defibrillation	Apply pads to the casualty's bare chest:
	• **Adults and children over eight (8) years:**
	  • 1st pad to right chest wall, below the collarbone; and
	  • 2nd pad to left chest wall, below the left nipple.
	• **Children 1-8 years:**
	  • a defibrillator with paediatric mode or paediatric pads should be used
	  • Pads should be placed one pad in the centre of the chest between the nipples and the second pad on the back between the shoulder blades; and
	  • If only an AED without paediatric mode or pads is available, then it may be used. Adult pads are positioned as per the adult placement. Ensure the pads do not touch each other on the child's chest. If the pads are too large place as per paediatric (front and back).
	• Ensure both pads adhere to the skin.
			
			
			
			

4. Perform Cardiopulmonary Resuscitation (CPR) with an AED Adult and Child Over 1 Year continued

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
5. Stop CPR	• Follow voice prompts • If no shock advised, continue with CPR when prompted. If shock advised: • Ensure that it is safe to defibrillate. • Ensure that no one is touching the casualty • When advised by the defibrillator. press the "shock" button; and follow prompts.	• To commence defibrillation using an AED device.	 
6. If no Response	• Continue with CPR until the casualty regains consciousness or it is clear that there are signs of life, or medical aid arrives and takes over. • Do not remove defibrillator pads even if the casualty is conscious. • If the casualty starts breathing, regains consciousness then place into the Recovery Position and closely monitor the casualty's airway and breathing. • Be prepared for the casualty to rearrest.	• To re-establish the heart rhythm. • To monitor the heart rhythm.	

When performing CPR and another person is available to assist, complete a seamless change over every two (2) minutes, this will help stop the First Aiders suffering from exhaustion as CPR can be very physical and tiring.

To watch a video of how to perform CPR use this QR code.

To obtain the QR Code Reader:
Android: http://goo.gl/toajD, Apple: http://goo.gl/WYfd4Z

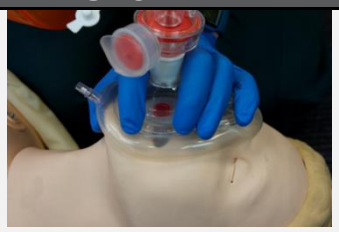
5. Recovery Position

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
1. Position Arms	• Kneel beside the casualty. • Position the casualty's furthest arm out at a right angle to the body. • Place the other arm across the chest with fingers pointing to the shoulder. • Support the arm with your knee/leg.	• Ensuring unconscious casualty airway remains clear and open. • Any vomit and fluid will not cause them to choke. • To stop the arm falling back to the floor.	
2. Position Legs	• Lift the nearest leg at the knee; ensure that it is fully bent upwards.	• For easier lifting.	
3. Prepare to Roll	• Place your hand on the casualty's knee. • Support the head and neck; place your palm along the neck and support the back of the head with your fingers. • Position your forearm under the casualty's shoulder blade.	• Ensuring unconscious casualty airway remains clear and open. • Any vomit and fluid will not cause them to choke.	
4. Roll	• Roll casualty away from you minimising head and neck movement, until their knee is on the ground.	• Safe way to move casualty.	
5. Recovery Position	• Slide casualty's hand, palm down under the side of their face, without moving their head. • Ensure that the casualty's airway is clear and open.	• Airway remains clear and open.	

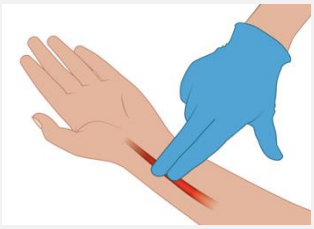
To watch a video of how to place a casualty into the Recovery Position: use this QR code.

To obtain the QR Code Reader:
Android: http://goo.gl/toajD, Apple: http://goo.gl/WYfd4Z

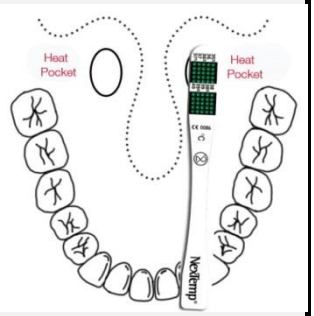
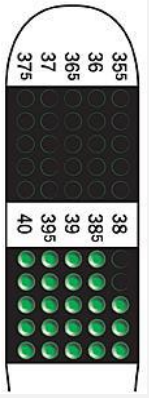
6. Bag-Valve-Mask

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
1. Application of the BVM	• Connect oxygen tubing to oxygen source (therapy outlet nipple) • Attach oxygen tubing to BVM oxygen nipple • Turn oxygen on and adjust oxygen flow rate to 10-15L/min and allow the reservoir bag to fill completely before and between ventilations • Position casualty on their back • Kneel by the side of casualty • Place the apex of the mask over the bridge of the casualty's nose and then seal the mask over the casualty's chin using the claw grip • Open airway with the head tilt and chin lift and keep maintained • Ensure blow off valve cap remains off at all times	• To provide advanced resuscitation	 

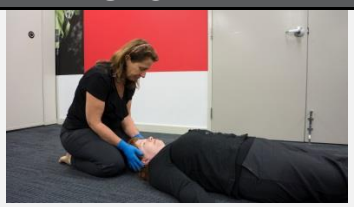
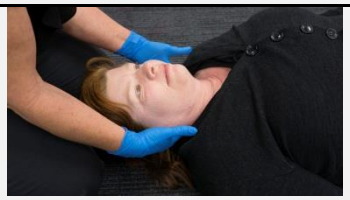
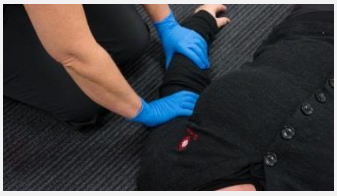
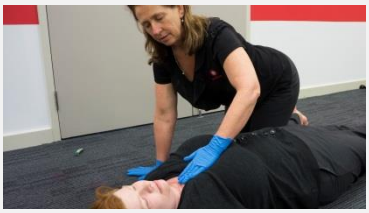
7. How to Take a Radial Pulse

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
1. Radial Pulse	• Bring the casualty's arm into a comfortable position with the elbow straight and place your index and middle fingers over the radial artery • Apply light pressure until you feel a pulse • Count the pulse for one minute • Record all results • When re-taking pulse, look for marked changes in rate, rhythm and strength	• Too hard a pressure cuts of the blood circulation a pulse will not be felt • This will give the pulse rate, also note the rhythm and strength • Determines any changes in the casualty's condition	

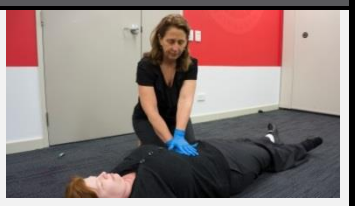
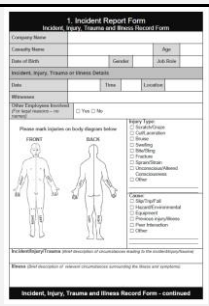
8. Taking a Temperature

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
1. Using a NexTemp® thermometer	• Wash hands and put on gloves • Remove from the wrapper by peeling back the top layer via the end indicated by the arrow **Oral (Mouth):** • Place the grid end far back under the tongue into the heat pocket • Ensure that the casualty fully closes their mouth and that they are breathing through their nose • Instruct the casualty to press their tongue down against the thermometer • Wait at least 60 seconds before removing, 60-90 seconds is optimal • Read the temperature scale immediately (the thermometer will begin to reset within 10-20 seconds when removed from the mouth) • Read and note the last black dot on the grid end tip of the thermometer. Note: Each green dot represents a specific temperature and turns black when that temperature is reached • Record the temperature on relevant documentation **Under Arm:** • Place the dot end against the casualty's torso, under the armpit, with the handle pointing towards the casualty's feet parallel to the body ensure that it is not placed in a hollow space • Instruct the casualty to close their arm to hold the thermometer in place • Wait at least 3 minutes • Remove and read immediately • Record on relevant documentation	• Infection Control and standard precautions • Normal atmospheric air cannot affect the reading • Will help the thermometer to quickly warm to the body temperature • To obtain optimal reading	 

9. Visual and Verbal Secondary Survey Assessment

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
1. Examine the head	• Ensure that the head is not moved if a spinal injury is suspected • Check the face • Check for eye trauma, if no trauma and the eyes are closed check pupil size and the reaction to light	• Movement can create further injury • For possible fractures, injuries • Can indicate head injury or potential conditions	
2. Check the neck	• Gently touch the soft tissues of the neck • Feel across the collarbones	• For injuries; fractures, bruising, cuts and swelling	 
3. Observe shoulders, arms and hands	• Visually observe the limbs to see if there is any spontaneous movements, if the casualty is conscious ask them to wriggle their fingers • Ask the casualty to squeeze your hand with each of their hands • Pat down the limbs to check for wetness, deformities such as swelling, crooked limb or a protruding bone. Note the area of injury	• Ascertain conscious level • Ascertain potential of spinal injury • Ascertain potential for stroke • May suggest bleeding	 
4. Check the chest	• Check for movement – the rise and fall, slow or fast breathing, gasping for breath and noisy breathing • Check for penetrating injuries; (do not remove any penetrating objects) • Press gently against the chest with flat palm of your hand	• Is the casualty breathing normally • To assess response to pain	

9. Visual and verbal Secondary Survey Assessment continued

"WHAT?"	"HOW?"	"WHY?"	SHOW ME
5. Check the abdomen	• Press gently against the abdomen with flat palm of your hand	• To assess response to pain	
6. Check the pelvis and buttocks	• Visually check the genital area, pelvis and buttocks without moving the casualty • Push tops of hips (unless obvious injury) towards each other – pain	• For evidence of urination and/or blood, and injury • Assessing for pain.	
7. Check the legs, ankles and feet	• Visually observe to see if there is any spontaneous movements, if the casualty is conscious ask them to wriggle their toes • Pat down the limbs to check for wetness, deformities such as swelling, crooked limb or a protruding bone. Note the area of injury	• Ascertain conscious level • Ascertain potential of spinal injury • May suggest bleeding	
8. Note (record) all clinical findings and monitor	• Manage any injuries found, remember that the airway always comes first • Record all findings and continue to monitoring the airway, breathing, circulation and mental state	• Casualty's condition may change • Reporting purposes	

Part 4 – Relevant Forms and Documents

Examples

1. Incident Report Form (Incident, Injury, Trauma and Illness Record Form)
2. Risk Assessment Matrix
3. Hierarchy of Control
4. Reference Guide to Envenomation

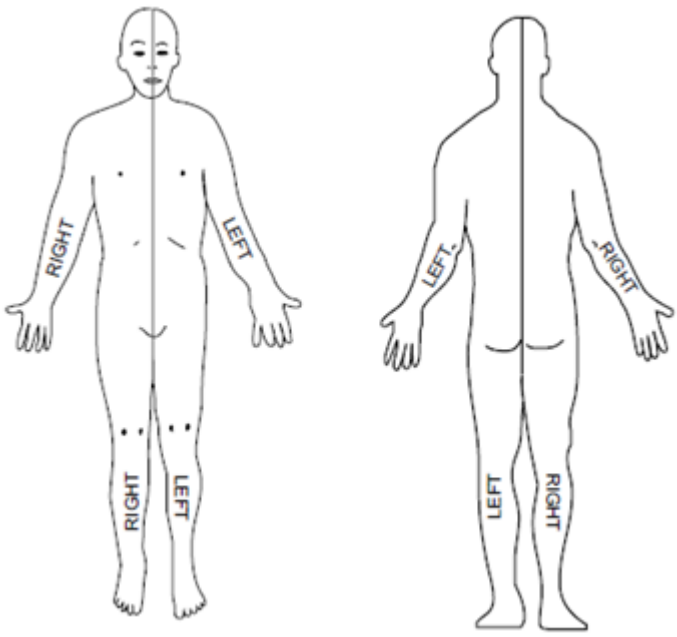
1. Incident Report Form

Incident, Injury, Trauma and Illness Record Form

Company Name					
Casualty Name				**Age**	
Date of Birth		**Gender**		**Job Role**	
Incident, Injury, Trauma or Illness Details					
Date		**Time**		**Location**	
Witnesses					
Other Employees Involved *(For legal reasons – no names)*	☐ Yes ☐ No				

Please mark injuries on body diagram below

FRONT **BACK**



Injury Type:

- ☐ Scratch/Graze
- ☐ Cut/Laceration
- ☐ Bruise
- ☐ Swelling
- ☐ Bite/Sting
- ☐ Fracture
- ☐ Sprain/Strain
- ☐ Unconscious/Altered Consciousness
- ☐ Other

_____

_____

Cause:

- ☐ Slip/Trip/Fall
- ☐ Hazard/Environmental
- ☐ Equipment
- ☐ Previous injury/illness
- ☐ Peer Interaction
- ☐ Other:

_____

_____

Incident/Injury/Trauma (*Brief description of circumstances leading to the incident/injury/trauma)*

Illness *(Brief description of relevant circumstances surrounding the illness and symptoms)*

Incident, Injury, Trauma and Illness Record Form - continued

Treatment Details

First Aid Provided	Medication Given
☐ Ice Pack ☐ Wound cleaned ☐ Dressing applied ☐ Bandage applied ☐ Autoinjector ☐ Inhaler/Puffer ☐ CPR/AED ☐ Splint ☐ Spinal/Neck Collar ☐ Ambulance Called ☐ Other: _____	List all medications used in the management of the casualty and the dosage/amount given: _____ _____ _____ _____ _____ _____ _____ _____

Notification of Incident, Injury, Trauma or Illness

Who	Name of Person Notified	Time and Date Notification Given
Supervisor/Manager ☐ Written ☐ Verbal		
Organisation(s) Notified: such as: Health Department /WorkSafe. Not Applicable ☐ Written ☐ Verbal		

Notifier Name		Signature	

Signatures

First Aid Provider		Signature	
First Aid Qualified	☐ Yes ☐ No	Other Qualification	
Manager/Supervisor		Signature	
Casualty (if able)		Signature	

2. Risk Assessment Matrix

RISK ASSESSMENT MATRIX					
LIKELIHOOD / *MOST LIKELY* CONSEQUENCE	Almost Certainly Will Occur	Good Chance it Could Occur	Likely to Occur	Unlikely to Occur	Extremely Unlikely to Occur
	Consequence expected to occur on a weekly basis or more frequently	Consequence expected to occur more than once in 3 months, but less than once a week	Consequence expected to occur more than once a year, but less than once in 3 months	Consequence expected to occur more than once in 3 years, but less than once a year	Consequence has not occurred and is expected to occur less then once in 3 years
Disastrous Fatality/Extensive damage	HIGH 25	HIGH 24	HIGH 22	MODERATE 19	MODERATE 15
Critical Amputation/ Major damage	HIGH 23	HIGH 21	MODERATE 18	MODERATE 14	MODERATE 13
Serious More than 1 week off normal duties/serious damage	HIGH 20	MODERATE 17	LOW 12	LOW 9	VERY LOW 6
Significant Less than 1 week off normal duties/negligible damage	MODERATE 16	LOW 11	LOW 8	VERY LOW 5	VERY LOW 3
Minor First Aid Injury / No damage	LOW 10	LOW 7	VERY LOW 4	VERY LOW 2	VERY LOW 1

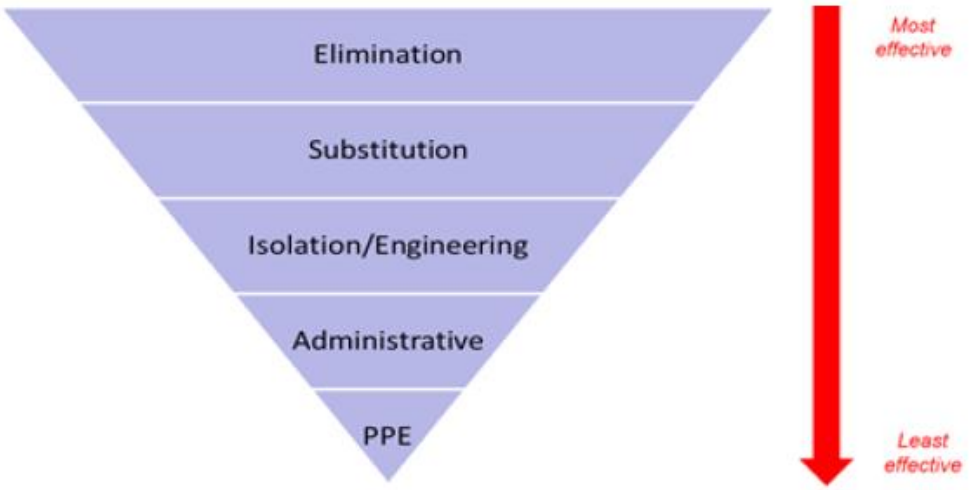
Consequence Assessment

CONSEQUENCE	PERSONAL EFFECT	PROPERTY
Disastrous	Fatality and / or multiple people sustained severe irreversible disabilities.	Extensive damage
Critical	Extensive injury or impairment. Contraction of non-recoverable disease / illness. *E.g. amputation, contracted meningococcal with irreversible affect.*	Major damage
Serious	More than 1 week off normal duties; Short term disability; Exposure to non-recoverable illness *i.e. hepatitis or injury requiring surgery, fracture*	Serious damage
Significant	Significant medical treatment Less than 1 week off normal duties; Exposure to recoverable illness i.e. chickenpox e.g. blood tests, physiotherapy treatments	Negligible damage
Minor	First aid treatment; Minor medical treatment; Injury requiring RICE, common cold symptoms	No damage

Likelihood Assessment

CONSEQUENCE	PERSONAL EFFECT
Almost certain will occur	Consequence expected to occur on a weekly basis or more frequently.
Good chance it could occur	Consequence expected to occur more than once in 3 months, but less than once a week.
Likely to occur	Consequence expected to occur more than once a year, but less than once in 3 months.
Unlikely to occur	Consequence expected to occur more than once in 3 years, but less than once a year.
Extremely unlikely to occur	Consequence has not occurred and is expected to occur less than once in 3 years.

3. Hierarchy of Control



Control	Description
Elimination	Eliminate the hazard. Completely remove the hazard from the workplace.
Substitution	Substitute the hazard with something safer. Change a work practice, substance or piece of equipment to provide a safer environment.
Engineering Isolation	Isolate the hazard from people or reduce the risk through engineering controls. Modify or isolate the design equipment or workplace.
Administration	Reduce the level of harm using administration. Develop procedures, work instructions and systems. Provide training.
PPE	Use personal protective equipment. Using personal protective equipment to prevent physical contact between the hazard and the person.

4. Reference Guide to Envenomation

<table>
<tr><th colspan="4">REFERENCE GUIDE TO ENVENOMATION</th></tr>
<tr><th>Pressure Immobilisation</th><th>Cold Pack</th><th>Hot Water</th><th>Vinegar</th></tr>
<tr><td>Funnel – web spider</td><td>Bees</td><td>Blue-bottle jellyfish</td><td>Box Jellyfish</td></tr>
<tr><td>Mouse spider</td><td>Wasps (European)</td><td>Bullrout fish</td><td>Irukandji Jellyfish</td></tr>
<tr><td>Blue-ringed Octopus</td><td>Ants</td><td>Catfish</td><td>Jimble Jellyfish</td></tr>
<tr><td>Cone shells</td><td>Ticks</td><td>Crown-of-Thorns Starfish</td><td>Tropical marine stings of unknown origins</td></tr>
<tr><td>Sea Snakes</td><td>Scorpions</td><td>Stingray</td><td rowspan="4"></td></tr>
<tr><td rowspan="3"></td><td>Centipedes</td><td>Stonefish</td></tr>
<tr><td>Redback Spider</td><td>Non-tropical jellyfish</td></tr>
<tr><td>All other spiders</td><td></td></tr>
<tr><th colspan="4">FIRST AID MANAGEMENT</th></tr>
<tr>
<td>1. DRSABCD.
2. Calm casualty.
3. Keep casualty still.
4. Apply pressure immobilisation.
5. Ensure Triple Zero (000) for an ambulance has been called.</td>
<td>1. Apply a cold pack directly over the bite site to relieve pain.
2. Seek medical aid if necessary.</td>
<td>1. DRSABCD.
2. Place casualty’s stung limb in hot water (as hot as you can tolerate).
3. Ensure Triple Zero (000) for an ambulance has been called.</td>
<td>1. DRSABCD.
2. Calm casualty.
3. Flood stung area with vinegar for at least thirty (30) seconds.
4. If vinegar not available, flick tentacles off using a stick or gloved fingers.
5. Ensure Triple Zero (000) for an ambulance has been called.</td>
</tr>
</table>

St John Ambulance Western Australia Ltd.
PO Box 183 Belmont, Western Australia 6984

Tel 08 9334 1222
info@stjohnambulance.com.au

stjohnambulance.com.au