FIRST AID AFRICA
Syllabus

2nd Edition

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Disclaimer

Every effort has been made to ensure that the information contained in this document is correct at the time of going to press. However, this document is designed for use overseas not the United Kingdom. First Aid Africa take no responsibility for the use of any of the information or techniques in this document.

If you have any enquiries about this syllabus, please contact scottclarke@firstaidafrica.com.

CONTENTS

SYLLABUS INTRODUCTION

The aim of this guide is to help you to adapt what you have learnt in your UK first aid course to teaching in overseas. It is not designed to replace your first aid manual but should be used alongside your manual when planning lessons.

If you have any questions or problems whilst using this guide, please contact scottclarke@firstaidafrica.com.

HOW TO USE THIS SYLLABUS

The next few pages provide information about the different levels of course that you can deliver.

The rest of the trainer's guide contains the syllabuses for each of the courses:

At the start of each section is a reference for the appropriate pages in the first aid manual and, where necessary, the important changes between the older and most up to date versions of the manual. You should make sure you read these sections before you plan your lesson so that you understand enough of the theory behind the subject to be able to teach it.

The learning objectives are given for each section. They are not designed to be given to your class but rather to guide your teaching.

Any adaptations or additions in technique for overseas are included. It is very important that you read this section to make sure your course is relevant.

Key, often lifesaving, points to be emphasised with your class are highlighted.

Any resources we have available to help you teach the topic are referenced at the end of each section.

TEACHING TIPS

Planning

- Read over the relevant sections of your manual and this guide before you try to plan your lesson
- It can take time to relax into teaching your classes - preparing well makes this a lot easier
- When planning your lessons it is important to think about:
  - Who are you trying to teach? age, language abilities, disabilities, number in the class, previous knowledge etc
  - What are you trying to teach? what do you want your class be able to do by the end of your session?
  - What do you need to help you? equipment, visual aids, number of trainers etc
  - How are you going to teach it? demonstration, class practice, scenarios etc
- First aid is a practical subject - give your class as much chance to practise the practical skills as possible and don't focus as much on theory

Teaching

- Be enthusiastic
- Try and vary how you teach - don't just stand at the front lecturing the whole time
- First aid is a practical subject - the more time your students spend practising the techniques the better
- Have fun...but remember you're the teacher, when teaching children especially, you need to earn their respect and maintain it
- Don't talk over the class, make sure they're quiet before you start
- Don't contradict each other in front of the class
- When telling a child off, don't threaten to do something you're not going to do...they learn quick!

Assessments

Assessment information is given in a separate document. It's a good idea to read up on how the course will be assessed before you plan your lessons, particularly in First Aid Aware. Assessments are competence based and you can continually assess your students rather than having to do specific assessments at the end of the course.

Remember, if you think things aren't going as well as they could, talk to your team leaders early on. We're here to help you and your students get the best out of the project!

FIRST AID AFRICA COURSES

First Aid Africa courses are based on courses that are currently offered by voluntary aid organisations in the UK but are adapted for overseas. The courses do not cover CPR as it is unlikely that the rest of the steps of the Chain-of-Survival will be in place.

The information below gives the suggested target audience for each course you can deliver as well as the teaching time needed for delivery. It is intended as a guide to help you decide which course is appropriate for your class rather than as a set rule of what you must teach and how long it should take.

FIRST AID AWARE

Pages: 7 - 17

Time: 3 hours / ½ day

Audience: Primary school students, people who just want to learn basic skills

First Aid Aware is designed to cover basic first aid and emphasises the need to get help from someone who knows more. It covers the life-saving, initial aspects of treatment for:

- an unconscious casualty,
- blood loss and shock;

and the initial treatments for:

- burns and,
- fractures.

It is similar to a UK Save-a-Life Course.
It is not designed to cover a large amount of theory. In order to pass this course, students do not need to be able to understand the principles behind treatment but they must be able to treat effectively.

INTIAL FIRST AID

Pages: 18

Time: Approx 2 days / 14 hours - 3 days including assessments

Audience: Teachers, secondary school students and community members who want to learn skills without learning a large amount of theory

Initial First Aid is designed to teach the skills needed to initially treat a casualty and arrange for an Advanced First Aider to come and help. It covers a similar amount of content to a UK Basic First Aid Course.
It is not designed to cover a large amount of theory. In order to pass this course, students do not need to be able to understand the principles behind treatment but they must be able to treat effectively.

ADVANCED FIRST AID

Pages: 19 - 66

Time: Approx 5 days / 28 hours - including assessments

Audience: Teachers, older students and community members who have a desire to learn First Aid - this course requires a reasonable level of English

Advanced First Aid is currently the most advanced course First Aid Africa run overseas. It covers a similar amount of content to a UK Standard First Aid Course.
The course covers everything from the initial treatment of a casualty through to the transport of the casualty to the hospital as well as covering some of the theory behind the treatments. Both local first aid equipment and improvised techniques are used throughout.
You should encourage teachers in your school to take this course.

5.1 INTRODUCTION TO FIRST AID

First Aid Manual

- 9th Edition - Chapters 1 & 2, p12 - 37
- 8th Edition - Chapter 1, p12 - 28

Learning Objectives

Protection from infection
By the end of this section, a learner should:

- understand the risk of cross infection involved with first aid
- understand the importance of using gloves to protect both the casualty and the first aider

Assessing danger
By the end of this section, a learner should:

- understand that the most important person at the scene is the first aider
- understand the importance of checking for danger
- be able to give examples of danger and how to deal with them including:
  - road traffic accidents
  - fire
  - electricity
  - muggings

Overseas

- Make sure you make it clear that GLOVES reduce the risk of infection
- Dangers you use as examples should be appropriate to the area - snakes and machetes rather than kettles and freezing lakes
- Do not be afraid to give HIV as an example of infection that can be transmitted - many older African children will know more about HIV than you
- Road traffic accidents are very common in Africa

Key Points

- The first aider is the most important person - you can not help someone else if you are injured - check for DANGER
- Wear GLOVES - *you should recap this at the start of every treatment you do!*

Resources

- Page 4 - Danger

5.2 THE UNCONSCIOUS CASUALTY

First Aid Manual

- 9th Edition - Chapters 4, p54 - 79; Chapter 3, p44 - 53, Chapter 13, p256 - 257
- 8th Edition - Chapter 3, p71 - 98; Chapter 13, p252 - 262

Learning Objectives

DRS ABC
By the end of this section, a learner should:

- be able to carry out the steps in DRS AB:
  - Check for **D**anger – using the knowledge from the previous section
  - Check for **R**esponse – shake and shout
  - **S**hout for Help
  - Open the **A**irway – using the head-tilt, chin-lift method
  - Check for normal **B**reathing – using the look, listen and feel method
  - **C**irculation - check for life threatening blood loss and treat

Recovery Position
By the end of this section, a learner should:

- understand the importance of the recovery position especially:
  - having the casualty on their side - in case they're sick
  - maintaining an open airway - without an airway they will die
  - having a casualty in a stable position - to keep them safe
- be able to carry out the steps of the recovery position

Getting Help
By the end of this section, a learner should:

- understand the importance of getting help to transport an unconscious casualty

Key Points

- Check for danger before helping any casualty
- If you do not open an unconscious person's airway and keep it open, they will die because they won't be able to breath
- Always re-open a casualty's airway after you have moved them, even if you have only moved them slightly
- The recovery position is the safest position for an unconscious casualty to be in
- Get help as quickly as possible

Resources

- Page 7 - DRS ABC
- Page 8 - Recovery Position

5.3 BLOOD LOSS AND SHOCK

First Aid Manual

- 9th Edition - Chapter 1, p16 - 19; Chapter 6, p106 - 109, 113 - 129; Chapter 13, p266 - 267; Chapter 5, p103
- 8th Edition - Chapter 5, p118 - 122, Chapter 6, p127 - 144; Chapter 13, p270; Chapter 4, p112 - 113

Learning Objectives

Personal Protection
By the end of this section, a learner should:

- understand the importance of wearing gloves to treat a wound

Types of Wounds
By the end of this section, a learner should:

- be able to distinguish between severe bleeding and minor wounds
- understand that major wounds lead to major blood loss which needs to be stemmed quickly

Severe Bleeding - Pressure
By the end of this section, a learner should:

- understand that you should be apply PRESSURE to a wound to stop the bleeding
- understand different methods of applying pressure, mainly,
  - by using the patient or first aider's gloved hands
  - by using a bandage
  - by using an improvised bandage

Severe Bleeding – Bandaging To Apply Pressure
By the end of this section, a learner should:

- be able to use a sterile ambulance dressing / local equivalent to bandage a severe wound to
  - the arms including the hands
  - the legs
  - the head
- be able to select and use an appropriate improvised bandage which should be
  - as clean as possible
  - able to produce sufficient pressure
  - large enough to cover the wound
- understand the importance of, and be able to check for, circulation beyond the bandage/improvised bandage
- understand what to do when blood soaks through a bandage

Severe Bleeding – Embedded Object
By the end of this section, a learner should:

- understand that you should not remove an embedded object
- understand why you should apply pressure either side of the object, not directly on top

5.3 BLOOD LOSS AND SHOCK

- be able to apply pressure either side of the embedded object using their hands
- be able to bandage around an embedded object

Shock

By the end of this section, a learner should:

- understand that shock can happen as a result of blood loss
- be able to recognise and understand the main signs and symptoms of shock, mainly
  - a rapid pulse
  - pale, cold, clammy skin
  - weakness and dizziness / tiredness and decreasing level of consciousness eventually leading to unconsciousness
  - thirst
  - nausea
  - feeling cold

Shock - Treatment

By the end of this section, a learner should:

- be able to treat a casualty for shock by
  - lying the patient down
  - keeping them warm
  - monitoring their level of consciousness and being ready to treat them for unconsciousness

Severe Bleeding and Shock - Getting Help

By the end of this section, a learner should:

- understand the importance of getting help to treat a casualty with a severe bleed and/or shock
- know where to get help

Minor Wounds - Treatment

By the end of this section, a learner should understand that:

- minor wounds should be seen by a more qualified first aider

Snake Bites

By the end of this section, a learner should:

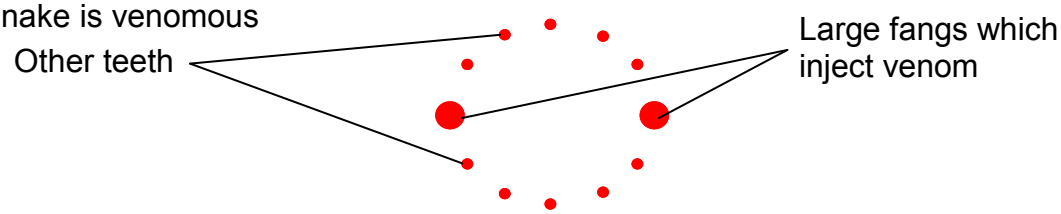
- be able to recognise a snake bite
- understand that a bite from a venomous snake is very dangerous
- be able to treat a snake bite by:
  - not approaching if the snake is still near the casualty
  - keeping the casualty as calm and still as possible

Overseas

- Emphasise using gloves
- Teach using both local and UK bandages

5.3 BLOOD LOSS AND SHOCK

- It is custom in Africa to wash the wound...if it is a minor graze or small cut, perfect! However, if it is a large cut or wound there is no need for it to be placed under the water as the blood would carry out any residues from inside the wound. The priority is to stop the bleed - PRESSURE
- Elevation is not taught in FAA overseas courses - an international review found that there is no evidence that pressure in conjunction with elevation is more effective than pressure alone and this is easier to teach
- Raising the patient's legs as part of the treatment for shock is not taught in FAA overseas courses – no studies have shown that there is any survival benefit over lying the casualty down alone and at least one study has shown that it worsens outcome. In addition, it is easier to teach that the treatment for shock is to lie the patient down and keep them warm
- Improvised bandages should be as clean as possible, non-fluffy, able to produce sufficient pressure and cover the entire wound. An example would be a clean t-shirt. The bandage should be replaced with a sterile dressing as soon as possible.
- Get help from a more advanced first aider as soon as possible
- Venomous snakes are more common in Africa. A bite from a venomous snake generally looks like the diagram below but any snake bite should be treated as if the snake is venomous



- Do not approach a casualty with a snake bite when the snake is still near the casualty
- Do not try and catch the snake
- Calm a casualty with a snake bite down as quickly as possible, make them lie down with their head and shoulders raised - get help
- Do not cut open the wound or try and suck out the venom - this puts the first aider in

Key Points

- Check for danger before helping any casualty
- Wear GLOVES
- The priority when treating severe wounds is to stop the bleeding
- Treatment for a severe bleed is PRESSURE
- Bleeding, both internal and external can lead to shock
- Shock is very dangerous and can cause death
- Someone who is shocked will be pale, cold, clammy, feeling weak/tired/dizzy/ nauseous, will have a decreasing level of consciousness and will have a rapid but weak pulse
- Treatment for shock is laying the casualty down, keeping them warm and stopping the bleeding with pressure - transport to HOSPITAL
- If someone has been bitten by a snake, make sure the area is safe before treating - do not approach a casualty when the snake is still near them
- The key parts of treating for a snake bite are: get the casualty to lay still with their head and shoulders raised, get help - don't let them walk
- Do not cut open the wound or try and suck out the venom - this puts the first aider in

5.3 BLOOD LOSS AND SHOCK

Resources

- Page 11 - Severe Bleeding
- Page 14 - Snake Bites

5.4 BURNS

First Aid Manual

- 9th Edition - Chapter 9, p176 - 189; Chapter 13, p274 - 275
- 8th Edition - Chapter 9, p189 - 200; Chapter 13, p277

Learning Objectives

Burns
By the end of this section, a learner should:

- understand that a burn is damage to the skin
- understand that blisters are part of the body's defence against burns and that you should not burst them
- understand that chemicals may still be burning, even if you can't see them
- understand that burns to the airway are very dangerous as they can stop you being able to breath

Cooling
By the end of this section, a learner should:

- understand that unless a burn is cooled and/or the chemical is fully washed off, damage will continue to be done to the skin
- understand that a normal burn has to be cooled until it no longer feels like it is burning and for a minimum of **10** minutes
- understand why clean, cold, running water is the best thing to cool a burn
- be able to cool a burn using
  - running, cold, clean liquids (not strong alcohol)
  - a basin of cold, clean liquid and a cup
  - running, unclean, cold liquid and something to cover the burn
  - a basin of cold, unclean liquid, a cup and something to cover the burn

Additional Treatment
By the end of this section, a learner should:

- understand that anything tight around a limb near a burn such as clothing or rings should be removed because of the risk of swelling
- understand why you should not remove anything that is stuck to the burn

Getting Help
By the end of this section, a learner should:

Overseas

- The English word 'burn' is not very commonly used in Africa. If you try explaining to someone in English what a burn is it can be quite hard so it's a good idea to have pictures of burns, or examples of things that can give you a burn, to help you

5.4 BURNS

The information below is not intended to be given to every class during the First Aid Aware course. It is intended to help you answer questions

- Burns are generally very badly treated by lay people in Africa because of the wide variety of local remedies used, such as putting rabbit hair on the burn to help it heal. Invariably, these increase the chance of infection and make the situation worse
- In many cases, local remedies are part of the traditions of local culture - do not rubbish the ideas but explain why they might not work as well as the treatment you are teaching them, in terms of lack of cooling and increased chance of infection - many local people will have stories of burns that have got worse after local treatment and these can help convince people
- Burns ALWAYS need to be cooled first - if the burn is not cooled, it will continue to cause damage deeper and deeper in to the skin even if you cannot see it doing so. Some local remedies are actually quite good BUT only if applied AFTER cooling - for example honey is a natural antiseptic and seals the skin preventing infection from entering. However, if you put honey on a burn which isn't cool, it's like adding a glaze to a cooking steak!
- The best thing to cool a burn is clean, cold, running water
  - clean to reduce the chance of infection
  - cold because you want to cool the burn
  - running because running water takes heat with it as it goes and stays cool where as standing water heats up if you put a burn into it

  You are almost guaranteed to be asked these questions:
  - What if I don't have water?
  - What if I don't have clean water?
  - What if I don't have much water?
  - What if I don't have running water?
  - combinations of the above!

  The priority initially is always to cool the burn

  If you do not have water, any cool clean liquid will do (except drinks with a high alcohol content such as Konyagi as it really hurts - beer is ok)

  If you only have unclean liquid, cover the burn very loosely with something clean and non-adherent/fluffy - preferably plastic - and pour water over the top. The cooling process will take longer

  If you don't have very much liquid or liquid is not running, place a big bowl underneath the area you are cooling to collect the liquid and then use a cup or a

Key Points

- Check for danger before helping any casualty - especially things that may have caused the burn
- Wear GLOVES
- Initial treatment of a burn is cooling to stop more damage
- A burn should ALWAYS be cooled first - cold, clean, running water is the best thing to cool a burn - if you don't have it, do the best you can!
- Most burns should be cooled until they no longer feel hot to the casualty - <u>at least 10 minutes</u> for most
- Get help from a more advanced first aider, doctor or nurse
- Bad burns can lead to shock

5.4 BURNS

Resources

- Page 16 - Burns (examples)
- Page 17 - Burns (treatment)

5.5 FRACTURES

First Aid Manual

- 9th Edition - Chapter 7, p130 - 158; Chapter 13, p268, p272
- 8th Edition - Chapter 7, p145 - 174, Chapter 13, p273, p276

The changes between the manuals are not relevant for this course.

Learning Objectives

Fractures
By the end of this section, a learner should:

- understand what a fracture is
- understand that a fracture can be open or closed
- be able to recognise a fracture
- understand that if you are not completely sure that something is NOT fractured, you should get help but treat it as a fracture until help arrives

Support and Protect
By the end of this section, a learner should:

- understand that the casualty will automatically adopt a position to support and protect the fracture
- understand that the aim of treating a fracture is to support and protect the fracture site

Open Fracture
By the end of this section, a learner should:

- understand the that you need to control the bleeding before treating the fracture
- be able to control the bleeding of an open fracture by treating the protruding bone as an embedded object
- understand that after you have controlled the bleeding, you should treat the fracture as normal

Upper Limb
By the end of this section, a learner should:

- be able to provide the initial treatment for a suspected fracture to an upper limb by:
  - asking the casualty to support and protect the area themselves
  - getting help from a more advanced first aider

Lower Limb
By the end of this section, a learner should:

- be able to provide the initial treatment for a suspected fracture to a lower limb by:
  - providing initial support above and below the fracture site using the first aiders hands

5.5 FRACTURES

Key Points

- Check for danger before helping any casualty - especially things that may have caused the fracture
- Wear GLOVES
- Types of fracture:
  - Closed
    - ⇒ skin is not broken
    - ⇒ bone ends may still have damaged nearby blood vessels and so risk of internal bleeding
  - Open
    - ⇒ bone poking through skin
    - ⇒ likely to be bleeding
    - ⇒ treating the bleed takes priority - treat as an embedded object
  - Both can be serious and lead to shock
- Always fully expose a fracture site to make sure there is no bleeding
- The principle behind treating all suspected fractures is to support and protect

Upper Body Fractures

- Allow the casualty to support the suspected fracture for themselves
- Get help from a more advanced first aider

Upper and Lower Leg Fractures

- Support above and below the suspected fracture site with your hands
- Get help from a more advanced first aider - don't let go send someone else - if you are on your own, get help first

Resources

- Page 23 - Leg Fracture

INITIAL FIRST AID

The Initial First Aid course is based on the Advanced First Aid Course. The differences are explained below.

For all of the sections, concentrate more on practical skills than theory.
Transport is not included - get help from a more advanced first aider or do the best they can.

UNIT	TITLE	ADVANCED FIRST AID UNIT	NOTES	RESOURCES
6.1	INTRODUCTION TO FIRST AID	7.1		Page 4
6.2	FIRST AID EQUIPMENT	7.2	Just make them aware of both UK and local bandages - not how to make Teach triangular bandage folding	Page 6
6.3	THE UNCONSCIOUS CASUALTY	7.3	Do not teach baby recovery position	Pages 7 & 8
6.4	BLOOD LOSS AND SHOCK	7.4	Do not teach abdomen or open chest wounds	Pages 11 & 14
6.5	BURNS	7.5	When teaching which burns go to hospital, emphasise that basically the bad, big and burns to delicate areas go to hospital, don't focus too much on all the different criteria - if in doubt send to hospital	Pages 16 & 18
6.6	FRACTURES	7.6	Only teach holding above and below a fracture to the lower limb, not bandaging - get help from a more advanced first aider	Pages 21, 22, 23
6.7	HEAD INJURY	7.7		---
6.8	MEDICAL CONDITIONS	7.8	Teach the initial treatment of seizures, diabetes, and asthma and how to recognise heart attack & stroke. For all other conditions - get help from a more advanced first aider	---
6.9	CHOKING	7.9		Pages 33 & 34
6.10	SPORTS INJURIES	7.10	Only mention bandaging briefly - no practise just demo	---
	MOVING, HANDLING & TRANSPORTING CASUALTIES	7.11	Do not teach - get help from a more advanced first aider / do their best	---

7.1 INTRODUCTION TO FIRST AID

First Aid Manual

- 9th Edition - Chapters 1 & 2, p12 - 37
- 8th Edition - Chapter 1, p12 - 28

Learning Objectives

Role of the first aider
By the end of this section, a learner should understand the aims of first aid including:
- Preserve life
- Prevent condition from worsening
- Promote recovery

Protection from infection
By the end of this section, a learner should:
- understand the risk of cross infection involved with first aid
- understand the importance of using gloves to protect both the casualty and the first aider
- understand the importance of safe disposal of contaminated equipment

Assessing danger
By the end of this section, a learner should:
- understand that the most important person at the scene is the first aider
- understand the importance of checking for danger
- be able to give examples of danger and how to deal with them including:
  - road traffic accidents
  - fire
  - electricity
  - muggings

First Aid Priorities
By the end of this section, a learner should:
- understand that priority is given to the injury most likely to kill the person first
- understand that in most cases, airway takes priority

First Aid Equipment
By the end of this section, a learner should:
- understand what equipment should be included in their first aid kit

Overseas

- Make sure you make it clear that GLOVES reduce the risk of infection
- Get details of local hospitals/dispensaries as contaminated materials can be safely disposed of in many African Hospitals - team leaders and teachers will be able to help you do this
- Dangers you use as examples should be appropriate to the area - snakes and machetes rather than kettles and freezing lakes

7.1 INTRODUCTION TO FIRST AID

- Do not be afraid to give HIV as an example of infection that can be transmitted - many older African children will know more about HIV than you
- Road traffic accidents are very common in Africa
- Making local bandages will be covered in your induction and information is also

Key Points

- The first aider is the most important person - you can not help someone else if you are injured - check for DANGER
- Wear GLOVES - *you should recap this at the start of every treatment you do!*
- The most important thing is to save the person's life - treat the injury that is most likely to kill them first - in most cases airway is the most important

Resources

- Page 4 - Danger

7.2 FIRST AID EQUIPMENT

First Aid Manual

- 9th Edition - Chapter 12, p249, 253
- 8th Edition - Chapter 2, p57, 62

Learning Objectives

Equipment Availability
By the end of this section, a learner should understand that:

- Important first aid equipment can be expensive and difficult to get hold of
- Alternatives can be made using readily available, cheaper, local materials
- If there is no proper equipment available, you should improvise and do the best that you can

Local Equipment
By the end of this section, a learner should be able to make equipment out of local materials:

- Triangular bandages - material cut to size
- 'Ambulance dressings' - material strip and sanitary pad

Triangular Bandages
By the end of this section, a learner should be able to fold triangular bandages into:

- Broad-fold
- Narrow-fold

Overseas

- First aid equipment imported from the Western World may be difficult to get hold of in overseas and is usually expensive
- Effective alternatives can be made from readily available local materials which are cheaper
- Triangular bandages can be made, simply by cutting a piece of material down to size - try and use a similar material to that which the UK triangular bandages are made out of
- Bandages which are similar to ambulance dressings can be made by sticking a sanitary pad to a strip of cloth
- Whilst sanitary pads may appear to be an odd choice, they are in fact made for purpose - they are designed for absorbing blood and are very clean. They are also readily available in African pharmacies relatively cheaply
- Making equipment out of local materials will be covered in your induction as well as in

Resources

- Page 5 - Local Bandages
- Page 6 - Triangular Bandages

7.3 THE UNCONSCIOUS CASUALTY

First Aid Manual

- 9th Edition - Chapters 4, p54 - 79; Chapter 3, p44 - 53, Chapter 13, p256 - 257
- 8th Edition - Chapter 3, p71 - 98; Chapter 13, p252 - 262

✓ Learning Objectives

Unconsciousness
By the end of this section, a learner should:
- understand what the term unconscious means
- be able to give example causes of unconsciousness

DRS ABC
By the end of this section, a learner should:
- understand the importance of DRS ABC
- be able to carry out the steps in DRS ABC:
  - Check for **D**anger – using the knowledge from the previous section
  - Check for **R**esponse – using 'Alert, Voice, Pain, Unresponsive'
  - **S**hout for Help
  - Open the **A**irway – using the head-tilt, chin-lift method
  - Check for normal **B**reathing – using the look, listen and feel method
  - **C**irculation - check for life threatening blood loss and treat

Recovery Position
By the end of this section, a learner should:
- understand the importance of the recovery position especially:
  - having the casualty on their side
  - maintaining an open airway
  - having a casualty in a stable position
- be able to carry out the steps of the recovery position

Head-to-toe Survey
By the end of this section, a learner should:
- understand the importance of sending someone to organise transport before starting a head-to-toe survey - the person needs to get to hospital quickly
- understand the reasons behind doing a head-to-toe survey
- be able to carry out a head-to-toe survey

Babies
By the end of this section, a learner should:
- understand the differences in treatment for an unconscious baby
- be able to put a baby in the modified recovery position

Safe Transport
By the end of this section, a learner should:
- understand the importance of transporting an unconscious casualty to hospital quickly

⇒ Transport of an unconscious casualty will be covered in section *7.10: Moving, Handling & Transporting Casualties*

7.3 THE UNCONSCIOUS CASUALTY

Overseas

- In the UK, we ring 999 and wait for an ambulance to arrive for an unconscious casualty - in Africa the first aider must arrange for transport to the nearest hospital as quickly as possible - see section *7.10: Moving, Handling & Transporting Casualties*
- If their conscious level improves they still need to go to the hospital

Key Points

- Check for danger before helping any casualty
- If you do not open an unconscious person's airway and keep it open, they will die because they won't be able to breath
- Always re-open a casualty's airway after you have moved them, even if you have only moved them slightly
- The recovery position is the safest position for an unconscious casualty to be in
- An unconscious casualty should be transported to hospital as quickly as possible

Resources

- Page 7 - DRS ABC
- Page 9 - Recovery Position
- Page 10 - Unconscious Baby

7.4 BLOOD LOSS AND SHOCK

First Aid Manual

- 9th Edition - Chapter 1, p16 - 19; Chapter 6, p106 - 109, 113 - 129; Chapter 13, p266 - 267; Chapter 5, p103
- 8th Edition - Chapter 5, p118 - 122, Chapter 6, p127 - 144; Chapter 13, p270; Chapter 4, p112 - 113

The treatment for a **snake bite** has changed in the 9th Edition:

1. Reassure and calm the casualty and lie them down with their head and shoulders raised - call 999/112 for emergency help
2. If there is no pain or the wound is deep, apply an ambulance dressing at the site of the bite. Do not remove clothing from around the site (can speed up venom absorption)
3. Apply another pressure bandage (crepe) from the bite, extending as far as possible up the limb (as per 8th Edition) - if possible mark the site of the bite
4. If the bite is on a limb, immobilise the affected limb, in a sling if it is an arm, or if it is a leg that is affected, secure it to the other leg with broad- and narrow- fold bandages
5. Monitor and record vital signs while waiting for help to arrive. The casualty needs to remain still

Take precautions to prevent others being bitten. DO NOT try to capture the snake - get help from someone who is qualified.

The 9th Edition emphasises the need to hold the bandage firmly against the wound when treating an abdominal wound. This reflects the difficulties in tying a bandage around the abdomen when the casualty is laying down and suggests simply holding a sterile dressing on with your gloved hands, in addition to securing the dressing

✓ Learning Objectives

The Importance of Blood
By the end of this section, a learner should:

- understand the importance of blood, including
  - its role in carrying oxygen and nutrients around the body
  - its role in removing waste materials from the body
  - its role in the transmission of disease

Personal Protection
By the end of this section, a learner should:

- understand the importance of wearing gloves to treat a wound

Types of Wounds
By the end of this section, a learner should:

- be able to distinguish between severe bleeding and minor wounds
- understand the implications of the type of wound on the priorities of treatment, mainly that:

  - major wounds lead to major blood loss which needs to be stemmed quickly
  - minor wounds are likely to become infected

Severe Bleeding - Pressure
By the end of this section, a learner should:

- understand the importance of pressure when treating a severe bleed, mainly, that it
  - improves clotting
  - stems the flow of blood
- understand different methods of applying pressure, mainly,
  - by using the patient or first aider's gloved hands
  - by using a bandage
  - by using an improvised bandage

Severe Bleeding – Bandaging To Apply Pressure
By the end of this section, a learner should:

- be able to use a sterile ambulance dressing / Tanzanian equivalent to bandage a severe wound to
  - the arms including the hands
  - the legs
  - the head
- be able to select and use an appropriate improvised bandage which should be
  - as clean as possible
  - able to produce sufficient pressure
  - large enough to cover the wound
- understand the importance of, and be able to check for, circulation beyond the bandage/improvised bandage
- understand what to do when blood soaks through a bandage

Severe Bleeding – Embedded Object
By the end of this section, a learner should:

- understand why you should not remove an embedded object
- understand why you should apply pressure either side of the object, not directly on top
- be able to apply pressure either side of the embedded object using their hands
- be able to bandage around an embedded object

Severe Bleeding - Tourniquet
By the end of this section, a learner should:

- understand that you should ONLY use a tourniquet for wounds to the limbs which were NOT controlled by pressure alone
- understand the potential complications of using a tourniquet and subsequent lack of blood flow past the point of application, mainly
  - temporary or permanent nerve damage
  - temporary or permanent muscle damage
  - temporary or permanent damage to blood vessels
  - loss of the limb
- understand that the longer it takes to get the patient to hospital, the more likely they are to suffer from one of the complications above
  - ≤ 2 hours - generally no permanent effects

7.4 BLOOD LOSS AND SHOCK

  - >6 hours requires amputation
- understand that you should tell the casualty that there is a chance they may lose their limb if they do not get to a hospital quickly
- understand the importance of recording the time that the tourniquet was applied and passing on the information to the hospital - ideally, by writing the time on the limb, above the tourniquet
- be able to make and apply an improvised tourniquet

Shock

By the end of this section, a learner should:

- understand what shock is, mainly that
  - it is the body's defence against blood loss, either external or internal
  - the blood supply to the peripheral tissues, such as the skin, shuts down to divert blood to the important internal organs such as the brain and the liver
  - blood pools in the muscles
- be able to recognise and understand the main signs and symptoms of shock, mainly
  - a rapid pulse
  - pale, cold, clammy skin
  - weakness and dizziness / tiredness and decreasing level of consciousness eventually leading to unconsciousness
  - thirst
  - nausea
  - feeling cold

Shock - Treatment

By the end of this section, a learner should:

- be able to treat a casualty for shock by
  - lying the patient down
  - keeping them warm
  - monitoring their level of consciousness and being ready to treat them for unconsciousness

Severe Bleeding and Shock - Safe Transport

By the end of this section, a learner should:

- understand the importance of transporting a casualty with a severe bleed or in shock to hospital quickly

⇒ Transport of a casualty with a severe bleed or showing signs of shock will be covered in section *7.10: Moving, Handling & Transporting Casualties*

Minor Wounds - Treatment

By the end of this section, a learner should:

- understand the importance of washing a minor wound with clean water, mainly that it cleans the wound reducing the risk of infection
- understand the importance of washing around the wound
- understand the need to cover a minor wound to prevent infection
- be able to cover a minor wound using a sterile gauze or sterile non-adhesive pad
- be able to cover a minor wound using an improvised dressing which should be

  - as clean as possible
  - large enough to completely cover the wound

Infection

By the end of this section, a learner should understand that:

- any wound can get infected
- infection is caused by bacteria contaminating the wound
- if an infected wound is not treated it can lead to serious illness

Infection - Recognition and Treatment

By the end of this section, a learner should:

- be able to recognise an infected wound
- understand the importance of carefully cleaning an infected wound
- understand that a badly affected wound needs to be treated by a doctor or nurse

Animal and Human Bites

By the end of this section, a learner should:

- understand the increased risk of infection from animal and human bites
- be able to treat a deep wound caused by a bite like a normal deep wound
- be able to treat a less severe bite by washing with soap and water and covering with a sterile dressing
- understand the importance of transporting a casualty with a bite to hospital

Snake Bites

By the end of this section, a learner should:

- be able to recognise a snake bite
- understand the risks of a bite from a venomous snake
- understand that the treatment of a venomous snake bite relies on trying to prevent the venom from spreading quickly
- be able to treat a snake bite by:
  - keeping the casualty as calm and still as possible
  - carefully lying the casualty down with their head and shoulders raised
  - applying compression bandages
  - immobilising an affected limb
  - arranging immediate transport to hospital with as little movement of the casualty as possible

Open Chest Wound

By the end of this section, a learner should:

- understand that an open wound to the chest can cause difficult breathing and why
- be able to treat an open chest wound by:
  - sitting the casualty up and leaning them towards the injured side

- applying a sterile dressing to the wound with a layer of plastic over the top, taped on three sides (leaving the lower side unattached)
- arranging immediate transport to hospital

Abdominal Wound

By the end of this section, a learner should:

- be able to treat an abdominal wound by:
  - lying the casualty down
  - loosening any tight clothing such as a belt or shirt
  - covering the wound with a sterile dressing and holding it firmly
  - gently raising and supporting the casualty's knees to ease the strain on the injury
  - transporting to hospital as quickly as possible
- understand that they should not touch any protruding intestine
- be able to cover any protruding intestine with a clean plastic bag or cling film

Eye Wound

By the end of this section, a learner should:

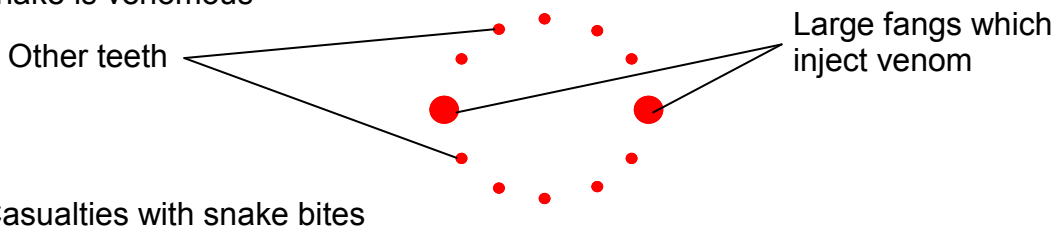
- understand that all eye injuries are potentially serious because of the risk to the casualty's vision
- understand that you should not try and remove anything sticking to or embedded in the eyeball

Overseas

- Emphasise using gloves
- Making local bandages will be covered in your induction and information is also included in section *7.2: First Aid Equipment*
- It is custom in Africa to wash the wound...if it is a minor graze or small cut, perfect! However, if it is a large cut or wound there is no need for it to be placed under the water as the blood would carry out any residues from inside the wound. The priority is to stop the bleed - PRESSURE
- Elevation is not taught in FAA overseas courses - an international review found that there is no evidence that pressure in conjunction with elevation is more effective than pressure alone and this is easier to teach
- Use of a tourniquet should be taught as treatment for a catastrophic bleed of a limb that pressure has failed to control – evidence from military and remote area studies suggest that these are generally safe, that most side effects are reversible and that severe side effects are rare. Whereas in the UK an ambulance crew will be on scene within minutes, in our project countries, first aiders must deal with everything and it is important to offer them an alternative treatment for such life threatening injuries
- Use of an improvised tourniquet will be covered in your induction and in the resources for this section
- When applying a tourniquet, make sure that you note the time of application and pass it on to the hospital
- When applying a tourniquet, warn the casualty that there limb may be damaged and that they may lose their limb - in areas where a hospital is nearby this risk is relatively low but much higher when transport times increase - after 6 hours almost all of the limb will have died

7.4 BLOOD LOSS AND SHOCK

- Raising the patient's legs as part of the treatment for shock is not taught in FAA overseas courses – no studies have shown that there is any survival benefit over lying the casualty down alone and at least one study has shown that it worsens outcome. In addition, it is easier to teach that the treatment for shock is to lie the patient down and keep them warm
- Improvised bandages should be as clean as possible, non-fluffy, able to produce sufficient pressure and cover the entire wound. An example would be a clean t-shirt. The bandage should be replaced with a sterile dressing as soon as possible.
- In the UK, we ring 999 and wait for an ambulance to arrive for a casualty with a severe bleed/showing signs of shock/open chest wound etc - in Africa the first aider must arrange for transport to the nearest hospital as quickly as possible - see section *7.10: Moving, Handling & Transporting Casualties*
- All animal and human bites should be seen by a doctor because of the increased risk of infection in Africa. Casualties should see a doctor as soon as possible and should be transported to hospital immediately if rabies (see first aid manual) is suspected
- Venomous snakes are more common in Africa. A bite from a venomous snake generally looks like the diagram below but any snake bite should be treated as if the snake is venomous



- Casualties with snake bites
  - should be transported to hospital as quickly as possible with as little movement as possible to slow movement of venom around the body
  - should be transported laying down with their head and shoulders raised
  - should be carried and should not be allowed to walk
- Do not cut open the wound from a snake bite or try and suck out the venom - this puts the first aider in danger

Key Points

- Check for danger before helping any casualty
- Wear GLOVES
- The priority when treating severe wounds is to stop the bleeding
- Treatment for a severe bleed is PRESSURE
- A tourniquet can be used ONLY when pressure has failed to control a major bleed from a limb
- When applying a tourniquet you MUST record the time of application and pass it on to the hospital
- When applying a tourniquet you must tell the casualty that they may suffer damage to, and may lose, their limb - the risk of damage increases the longer it takes to get to hospital - remember, in the case of a catastrophic bleed, it's still saving their life
- Bleeding, both internal and external can lead to shock
- Shock is very dangerous and can cause death
- Someone who is in shock will be pale, cold, clammy, feeling weak/tired/dizzy/ nauseous, will have a decreasing level of consciousness and will have a rapid but weak pulse

7.4 BLOOD LOSS AND SHOCK

- Treatment for shock is laying the casualty down, keeping them warm and stopping the bleeding with pressure - transport to HOSPITAL
- The priority when treating minor wounds is to prevent infection
- Treatment for a minor wound is washing the wound and covering it, ideally with something sterile
- Infected wounds can lead to severe illness
- Any wound that gets badly infected or if the casualty is generally unwell needs to seen by a doctor/nurse
- Other infected wounds need to be cleaned and covered
- Animal and human bites carry an increased risk of infection because of the bacteria in the mouth
- Severe bites should be treated as for a severe wound because the priority is stopping the bleeding
- Minor bites should be cleaned with soap and water and covered with a sterile dressing
- All bites should be seen by a doctor/nurse because of the increased risk of infection
- If someone has been bitten by a snake, make sure the area is safe before treating
- Treatment for a snake bite aims to slow the spread of poison spreading around the body
- The key parts of treating for a snake bite are: get the casualty to lay still with their head and shoulders raised, apply a compression bandage to the affected limb and transport to hospital with as little movement as possible (the casualty shouldn't walk)
- Do not cut open the wound from a snake bite or try and suck out the venom - this puts the first aider in danger
- A casualty with an open chest wound should be sat up and leaned towards the injured side, a sterile pad and plastic should be applied to the wound and taped on 3 sides. Transport arranged to hospital - initially they should be transported sitting up and leaning to the injured side and as normal if they become unconscious but rolled onto the injured side
- A casualty with an abdominal wound should be laid down, a sterile dressing firmly applied to wound and held firmly in place, the knees raised and supported and then transported to hospital. Any protruding bits of intestine should not be touched but should be covered with a clean, wet dressing. Transport immediately to hospital
- A casualty with an eye wound should be told to keep both eyes still. A sterile pad

Resources

- Page 12 - Severe Bleeding
- Page 13 - Tourniquet

7.5 BURNS

First Aid Manual

- 9th Edition - Chapter 9, p176 - 189; Chapter 13, p274 - 275
- 8th Edition - Chapter 9, p189 - 200; Chapter 13, p277

✓ Learning Objectives

Burns
By the end of this section, a learner should:

- understand that a burn is damage to the skin
- understand the different things that can cause a burn such as:
  - hot objects
  - hot liquids
  - radiation
  - chemicals
  - cold objects
  - electricity (2 burns - the entry and exit point)
- understand that burns can be different depths:
  - superficial
  - partial
  - full thickness
- be able to recognise a burn and identify its depth
- understand why burns progressively get worse unless treated
- understand why a burn is serious, mainly
  - that they can lead to infection because the skin is compromised
  - that they can lead to shock because fluid collects around the burn
  - that they swell and can compromise the blood supply to different areas of the body
- understand that blisters are part of the body's defence against burns and that you should not burst them
- understand that electrical burns can cause problems with your heart or brain
- understand that chemicals may still be burning, even if you can't see them
- understand that burns to the airway are very dangerous as they can stop you being able to breath

Treatment – Misunderstandings
By the end of this section, a learner should:

- know some of the misunderstandings local people have about treatment and the reasons behind them

Cooling
By the end of this section, a learner should:

- understand that unless a burn is cooled and/or the chemical is fully washed off, damage will continue to be done to the skin
- understand that a normal burn has to be cooled until it no longer feels like it is burning and for a minimum of **10** minutes
- understand that a chemical burn has to be cooled until it no longer feels like it is burning and for a minimum of **20** minutes

7.5 BURNS

- understand why clean, cold, running water is the best thing to cool a burn
- be able to cool a burn using
  - running, cold, clean liquids (not strong alcohol)
  - a basin of cold, clean liquid and a cup
  - running, unclean, cold liquid and something to cover the burn
  - a basin of cold, unclean liquid, a cup and something to cover the burn

Covering

By the end of this section, a learner should:

- understand that covering a cooled burn reduces the risk of infection
- understand that a cooled burn should be covered loosely, from end to end, with a clean, non-fluffy dressing
- be able to cover a cooled burn using
  - a plastic bag, washed in clean water
  - a triangular bandage
  - a non-adherent dressing and a loose bandage
  - appropriate improvised equipment

Additional Treatment

By the end of this section, a learner should:

- understand that anything tight around a limb near a burn such as clothing or rings should be removed because of the risk of swelling
- understand why you should not remove anything that is stuck to the burn

Further Treatment

By the end of this section, a learner should:

- understand which burns should go to hospital as quickly as possible, specifically
  - burns to the airway
  - all full thickness burns
  - large burns - superficial more than 5%, partial more than 1%
  - burns to the hands
  - burns to the feet
  - burns to the genitals
  - burns that go all the way around an arm or leg
  - electrical burns
  - chemical burns
  - if there is something stuck to the burn
  - if you are unsure if it is any of the above
  - burns to children especially babies or the elderly
- understand how to look after a burn that doesn't need to go to hospital, mainly
  - keep it covered until it is dry and at least for a day
  - keep it clean which may mean keeping it covered for longer with a non-adherent dressing until a scab has formed or the skin has healed

7.5 BURNS

Overseas

- The English word 'burn' is not very commonly used in Africa. If you try explaining to someone in English what a burn is it can be quite hard so it's a good idea to have pictures of burns, or examples of things that can give you a burn, to help you
- Burns are generally very badly treated by lay people in Africa because of the wide variety of local remedies used, such as putting rabbit hair on the burn to help it heal. Invariably, these increase the chance of infection and make the situation worse
- In many cases, local remedies are part of the traditions of local culture - do not rubbish the ideas but explain why they might not work as well as the treatment you are teaching them, in terms of lack of cooling and increased chance of infection - many local people will have stories of burns that have got worse after local treatment and these can help convince people
- Burns ALWAYS need to be cooled first - if the burn is not cooled, it will continue to cause damage deeper and deeper in to the skin even if you cannot see it doing so. Some local remedies are actually quite good BUT only if applied AFTER cooling - for example honey is a natural antiseptic and seals the skin preventing infection from entering. However, if you put honey on a burn which isn't cool, it's like adding a glaze to a cooking steak!
- The best thing to cool a burn is clean, cold, running water
  - clean to reduce the chance of infection
  - cold because you want to cool the burn
  - running because running water takes heat with it as it goes and stays cool where as standing water heats up if you put a burn into it

  You are almost guaranteed to be asked these questions:
  - What if I don't have water?
  - What if I don't have clean water?
  - What if I don't have much water?
  - What if I don't have running water?
  - combinations of the above!

  The priority initially is always to cool the burn
  If you do not have water, any cool clean liquid will do (except drinks with a high alcohol content such as Konyagi as it really hurts - beer is probably ok)
  If you only have unclean liquid, cover the burn very loosely with something clean and non-adherent/fluffy - preferably plastic - and pour water over the top. The cooling process will take longer
  If you don't have very much liquid or liquid is not running, place a big bowl underneath the area you are cooling to collect the liquid and then use a cup or a small bowl to scoop up the liquid and pour it back over the burn
- Burns need to be covered completely to prevent infection:
  - if the burn is being seen at hospital, ideally it should be covered with something plastic and sterile but if you don't have that, it can be covered with anything that is clean and non-fluffy/adherent
  - if the burn is not severe and does not require hospital - it should still be covered with something clean and non-fluffy and the dressing should be changed regularly (approx every 24 hours) until the skin has healed or a scab has formed
- Anything that you put on a burn should be loose because of the risk of swelling -

7.5 BURNS

Key Points

- Check for danger before helping any casualty - especially things that may have caused the burn
- Wear GLOVES
- Burns damage the body's defence, the skin, so there is a big risk of infection
- Treatment of a burn is cooling to stop more damage and covering to prevent infection
- A burn should ALWAYS be cooled before being covered
- Cold, clean, running water is the best thing to cool a burn - if you don't have it, do the best you can!
- Most burns should be cooled until they no longer feel hot to the casualty - at least 10 minutes for most burns and at least 20 minutes for chemical burns
- Cooled burns should be LOOSELY covered with something, CLEAN and NON-FLUFFY/ADHERENT
- All severe and large burns should be sent to hospital as well as those to delicate areas and children
- Chemical burns can continue to burn even if you can't see it or feel it so should be sent to hospital
- Electricity can cause problems with your heart or brain and so electrical burns should be sent to hospital (remember there will probably be 2 burns)
- Bad burns can lead to shock
- Any infected burns should be seen by a doctor as quickly as possible
- Minor burns which do not require hospital should still be covered with something clean and non-fluffy and the dressing should be changed regularly (approx every 24

Resources

- Page 19 - Burn Depth
- Page 20 - Burns (treatment)

7.6 FRACTURES

First Aid Manual

- 9th Edition - Chapter 7, p130 - 158; Chapter 13, p268, p272
- 8th Edition - Chapter 7, p145 - 174, Chapter 13, p273, p276

The 9th edition no longer includes the use of traction. A fractured leg at an angle may require a small amount of pulling in the line of the limb but this should only be enough to bring the limb carefully into line - the person straightening the leg from the ankle, must continue to hold the leg until all of the bandages are tied.

A recent update to the 9th edition recommends that the arm sling be used for injuries to the collar bone, upper arm and shoulder:

- The arm should be placed in a comfortable position and immobilised with an arm sling
- The hand should be slightly raised above the level of the elbow
- In the case of the suspected fractured collar bone care should be taken to make sure the knot is clear of the site of the injury

✓ Learning Objectives

Fractures
By the end of this section, a learner should:

- understand what a fracture is
- understand that there are different types of fracture:
  - open or closed
  - stable or unstable
- be able to recognise a fracture
- understand that if you are not completely sure that something is NOT fractured, you should treat it as if it was fractured until it has been seen by a doctor

Support and Protect
By the end of this section, a learner should:

- understand that the casualty will automatically adopt a position to support and protect the fracture
- understand that the aim of treating a suspected fracture is to support and protect the fracture site
- understand the importance of checking for circulation beyond a bandage
- be able to check for circulation beyond a bandage

Open Fracture
By the end of this section, a learner should:

- understand the importance of controlling the bleeding before treating the fracture
- be able to control the bleeding of an open fracture by treating the protruding bone as an embedded object
- understand that after you have controlled the bleeding, you should treat the

fracture as normal

Upper Limb

By the end of this section, a learner should:

- be able to use a triangular bandage to apply an elevation sling with padding to support and protect suspected fractured fingers or a hand injury
- be able to select and use an appropriate improvised object, to apply an elevation sling with padding, to support and protect suspected fractured fingers or a hand injury
- be able to use a triangular bandage to apply an arm sling with padding to support and protect
  - a suspected fractured upper arm
  - a suspected fractured lower arm
  - a suspected fractured collar bone or injured shoulder
  - a suspected fractured wrist
- be able to select and use an appropriate improvised object to apply an arm sling with padding, to support and protect
  - a suspected fractured upper arm
  - a suspected fractured lower arm
  - a suspected fractured collar bone or injured shoulder
  - a suspected fractured wrist
- be able to apply a broad fold triangular before safe transport to hospital

⇒ Transport of casualties with suspected fractures will be covered in section *7.10: Moving, Handling & Transporting Casualties*

Upper and Lower Leg

By the end of this section, a learner should:

- understand when to use the different techniques for immobilising suspected lower limb fractures based on availability of splints and the transport available
- be able to immobilise a suspected fracture to the lower or the upper leg against the uninjured leg using padding and 4 triangular bandages
- be able to immobilise a suspected fracture to the lower or the upper leg against the uninjured leg using padding, a splint and 7 triangular bandages
- be able to immobilise a suspected fracture to the lower or the upper leg against the uninjured leg using padding, two splints and 7 triangular bandages

Ankle

By the end of this section, a learner should:

- be able to place padding around a suspected fractured ankle and carefully keep it in place to support it

Pelvis

By the end of this section, a learner should:

- pelvic fractures can cause a large amount of internal bleeding leading to shock
- be able to provide support to a suspected fractured pelvis by immobilising the legs using padding, 2 triangular bandages (ankles and knees) and placing padding carefully under the knees

Improvisation

By the end of this section, a learner should:

- be able to immobilise a suspected fractured leg/ankle/pelvis against the uninjured leg using padding and improvised bandages

7.6 FRACTURES

⇒ Transport of casualties with suspected fractures will be covered in section *7.10: Moving, Handling & Transporting Casualties*

Skull Fracture

By the end of this section, a learner should:

- understand that skull fracture may be accompanied by a spinal injury
- understand the risk of infection associated with a skull fracture
- understand the importance of covering a skull fracture with something as clean as possible
- be able to cover a suspected skull fracture with a non-adherent pad or appropriate improvised dressing
- understand the importance of transporting a casualty with a suspected skull fracture to the hospital quickly

⇒ Transport of casualties with suspected fractures will be covered in section *7.10: Moving, Handling & Transporting Casualties*

Facial Fracture

By the end of this section, a learner should:

- understand the importance of not tying a bandage around the jaw
- be able to treat a fractured jaw
- be able to treat a fractured cheek bone
- understand the importance of transporting a person with a facial fracture to hospital quickly

⇒ Transport of casualties with suspected fractures will be covered in section *7.10: Moving, Handling & Transporting Casualties*

Spinal Injury

By the end of this section, a learner should:

- understand that airway still takes priority
- understand the importance of transporting a casualty with a possible spinal injury to the hospital with as little movement as possible

⇒ Transport of casualties with suspected fractures will be covered in section *7.10: Moving, Handling & Transporting Casualties*

Closed Rib Fracture

By the end of this section, a learner should:

- be able to protect and support a closed rib fracture using 2 triangular bandages to apply an arm sling and broad fold
- understand the importance of transporting a casualty with a broken rib to hospital

Overseas

- In the UK, we ring 999 and wait for an ambulance to arrive for a casualty with a leg fracture, open rib fracture or spinal injury - in Africa the first aider must arrange for transport to the nearest hospital - see section *7.10: Moving, Handling & Transporting Casualties*

7.6 FRACTURES

- To make transporting casualties easier, FAA overseas courses teach a number of different methods for immobilising a fracture to the upper or lower leg:
  - Ideally, the transport will be available that the casualty can lie down flat in, a splint will be available and there will be enough first aiders to lift the casualty - in this case the fracture should be treated as described in the first aid manual for a 'leg fracture with removal by first aider'
  - Where the transport will only allow for the casualty to be sitting up with their legs extended but there are enough first aiders to lift the casualty, or there is no splint available, standard immobilisation should be carried out
  - Where there is not enough first aiders to lift the casualty or there is a potentially dangerous situation where the casualty may need to help move them self quickly - 2 splints should be used to immobilise the injured leg
- The use of two splints will be covered in your induction and is included in the resources for this section
- To make transporting casualties easier, FAA overseas courses do not teach to treat a suspected fractured ankle by tying it to the other leg - most ankle fractures can be adequately supported by placing a large amount of padding around the injury, carefully keeping the padding in place with a loose bandage or tape - the casualty can then be assisted into a vehicle for transport to hospital
- The specialist equipment required to transport a spinal injury and the subsequent hospital treatment are unlikely to be available in Africa, therefore we are teaching that

Key Points

- Check for danger before helping any casualty - especially things that may have caused the fracture
- Wear GLOVES
- Types of fracture:
  - Closed
    - ⇒ skin is not broken
    - ⇒ bone ends may still have damaged nearby blood vessels and so risk of internal bleeding
  - Open
    - ⇒ bone poking through skin
    - ⇒ likely to be bleeding
    - ⇒ risk of infection
    - ⇒ treating the bleed takes priority - treat as an embedded object
  - Both can be serious and lead to shock
- Fracture recognition:
  - Pain
  - Deformity
  - Shortening/bowing
  - Swelling
  - Loss of use
  - Tender
  - Bruising
  - Grating
- Always fully expose a fracture site to make sure there is no bleeding
- The principle behind treating all suspected fractures is to support and protect the

fracture before sending to hospital
- Check for circulation after tying any bandage - if too tight, carefully undo then re-tie

Upper Body Fractures
- An elevation sling should be used to treat suspected fractured/crushed fingers or a hand injury and broken ribs that have penetrated the chest
- An arm sling should be used to treat a suspected fractured collar bone, injured shoulder, fractured upper arm, fractured lower arm, fractured wrist and closed rib fracture
- A broad fold should be used to provide more support before transporting to hospital

Upper and Lower Leg Fractures
- If the injured leg is bent, carefully bring the leg into line with one person supporting above and below the fracture site, whilst another holds at the ankle - the person at the ankle should not let go until the leg is fully immobilised
- The injured leg should be immobilised (stopped moving) with padding
- Where the casualty can lay down in the transport available and there is a splint:
  - place a splint with padding around it alongside the injured leg which is long enough to extend from the foot to the patient's armpit
  - place padding between the legs (especially at the fracture site and between the joints)
  - tie the injured leg to the uninjured leg and the splint using bandages tied in the following order:
    1. Ankles - narrow fold - figure of 8
    2. Chest - broad fold
    3. Hips - broad fold
    4. Knees - broad fold
    5. Above the fracture site - broad fold
    6. Below the fracture site - broad fold
    7. Floater - broad fold
- Where the casualty can only sit up, not lay down, in the transport available:
  - place padding between the legs (especially at the fracture site and between the joints)
  - tie the injured leg to the uninjured leg using bandages tied in the following order:
    1. Ankles - narrow fold - figure of 8
    2. Knees - broad fold
    3. Above the fracture site - broad fold
    4. Below the fracture site - broad fold
- Where there is not enough first aiders to lift the casualty or there is a potentially dangerous situation where the casualty may need to help move them self quickly:
  - place a splint with padding around it alongside the injured leg which is long enough to extend from the foot to the patient's armpit
  - place a splint with padding around it between the casualties legs which is long enough to extend from the top of their thigh to their feet
  - tie the injured leg to both splints using bandages tied in the following order:
    1. Ankles - narrow fold
    2. Chest - broad fold
    3. Hips - broad fold
    4. Knees - broad fold
    5. Above the fracture site - broad fold
    6. Below the fracture site - broad fold

7. Floater - broad fold

- The casualty should be transported to hospital

Ankle Fracture

- The injured leg should be supported by tying it to the other leg with three triangular bandages with padding in between the legs (especially at the fracture site and between joints)
- The bandages should be tied in the following order:
  1. Above the ankle - broad fold
  2. Knees - broad fold
  3. Around the feet - narrow fold
- The casualty should be transported to hospital

Pelvic Fracture

- Pelvic fractures can cause a large amount of internal bleeding leading to shock
- The pelvis should be supported by immobilising the pelvis with two triangular bandages - ankles (narrow fold) and knees (broad fold) - with padding in between the legs
- When the legs are immobilised, carefully raise the knees and slide padding underneath - this relieves pressure on the bladder
- The casualty should be transported to hospital

Skull Fracture

- Remember that anything which caused a skull fracture may have caused damage to the spine
- A skull fracture compromises the body's defence against bacteria reaching the brain
- You should cover a skull fracture with something as clean as possible as quickly as possible to reduce the chances of bacteria reaching the brain
- There are many complications associated with skull fracture so a casualty should be transported to hospital as quickly as possible

Facial Fractures

- Any fracture of the bones in the face can compromise the casualties airway, especially if they vomit, and so need to be transported to hospital quickly
- Always make sure the airway is clear - ask the casualty to spit out any blood or displaced teeth
- Gently apply a cold compress to reduce swelling
- Tying a bandage under the jaw and over the top of the head secures the mouth shut and will further compromise the airway, especially if the casualty becomes unconscious or vomits so it should not be done!
- If the lower jaw is injured, make sure the jaw is carefully supported by getting a casualty to hold a soft pad against it

Spinal Injury

- Airway still takes priority - if the casualty is unconscious, roll them into the recovery position
- Move the casualty as carefully as possible - see section *7.10: Moving, Handling & Transporting Casualties*

Closed Rib Fracture

⇒ Treatment for an open fractured rib is covered in section *7.4: Blood Loss & Shock*

7.6 FRACTURES

- A rib fracture should be treated using an arm sling and broad-fold applied to the injured side

Resources

- Page 21 - Arm Sling
- Page 22 - Elevation Sling

7.7 HEAD INJURY

First Aid Manual

- 9th Edition - Chapter 8, p165 - 167
- 8th Edition - Chapter 8, p179 -182

Learning Objectives

Head Injury
By the end of this section, a learner should:

- be able to recognise the differences between concussion and compression
- understand that a head injury may also suggest an injury to the neck

Concussion
By the end of this section, a learner should:

- understand how concussion causes a brief disturbance of normal brain activity
- be able to recognise the signs of concussion including
  - brief period of impaired consciousness following a blow to the head
  - dizziness or nausea
  - loss of memory of events leading up to or during the event causing the injury
  - mild, generalised headache, confusion
- be able to treat a casualty by
  - sitting them down
  - closely monitoring them whilst consciousness is impaired
- ensure a 'responsible adult' continues monitoring once casualty appears to recover
- be able to give advice on what to look out for suggesting that the head injury is more serious

Compression
By the end of this section, a learner should:

- understand that compression is a serious injury that requires urgent medical attention
- be able to recognise the signs of compression including:
  - deteriorating level of response – AVPU
  - history of recent head injury
  - intense headache
  - noisy, slow breathing
  - slow, yet full and strong pulse
  - unequal pupil size
  - weakness and/or paralysis down one side of the face or body
  - drowsiness
  - change in personality or behaviour
- understand that signs and symptoms of compression may appear a relatively long time after the initial injury
- be able to treat a casualty by
  - sitting them down
  - closely monitoring them whilst consciousness is impaired

7.7 HEAD INJURY

  - transporting them to hospital as quickly as possible - sitting whilst still conscious and then as usual if they become unconscious

Skull fracture

By the end of this section, a learner should:

- understand a serious blow to head can result in a fracture to the skull
- understand a blow of that force could cause an injury to the neck
- understand displaced bone may cause a compression injury to the brain
- be able to recognise a skull fracture by:
  - wound or bruise on head
  - soft area or depression on the scalp
  - bruising or swelling behind one ear
  - bruising around one or both eyes
  - clear fluid or watery blood coming from the nose or an ear
  - blood in the white of the eye
  - distortion or lack of symmetry to the head or face
  - signs of a compression injury
- understand that a skull fracture may compromise the brains' defences against infection
- be able to carefully apply a sterile pad - using the first aider's hand - to the affected area to limit the risk of infection
- understand this is a serious injury and the casualty needs to be transported as soon as possible

Overseas

- The casualty should be taken to hospital as quickly as possible - transport should be arranged

Key Points

- An injury to the head may alert you to an underlying brain injury
- Monitoring is key
- Improvement of symptoms suggests concussion, deterioration suggests compression
- Compression requires transport to hospital as quickly as possible
- Confusion/agitation, nausea/vomiting, severe headache in the hours/days following a head injury requires transport to hospital
- Clear fluid or watery blood leaking from the ears or nose, as well as bruising around the eyes or ears is a sign of serious injury. Casualty should be transported as soon as possible to hospital
- A blow to the head may also cause neck injury - be prepared to treat patient as a

7.8 MEDICAL CONDITIONS - DEHYDRATION, DIARRHOEA & VOMITING

First Aid Manual

- 9th Edition - Chapter 9, p190; Chapter 11, p227
- 8th Edition - Chapter 12, p247

For changes between the manuals, see 'Learning Objectives' and 'Africa'.

Learning Objectives

Dehydration, Diarrhoea and Vomiting
By the end of this section, a learner should:

- understand the complications of dehydration, diarrhoea and vomiting, mainly
  - that it can lead to shock
  - that you lose salts and sugars which are necessary to live
  - both of the above can lead to death
- be recognise dehydration, diarrhoea and vomiting
- be able to treat mild dehydration, diarrhoea and/or vomiting by encouraging the casualty to drink plenty of fluids
- be able to treat severe dehydration, diarrhoea and vomiting using a rehydration solution, ideally a ready made solution, otherwise a mixture of:
  - 1 litre of water
  - 5 teaspoons of sugar
  - 1 teaspoon of salt
- understand that severe or persistent dehydration, diarrhoea and/or vomiting requires hospital treatment

Overseas

- The latest edition of the first aid manual recommends the use of rehydration solution for the treatment of severe dehydration. Unfortunately, this is difficult to obtain or expensive in Africa. The 'recipe' above provides an alternative.
- Always remember that severe dehydration whether as the result of diarrhoea and vomiting or not, requires urgent medical attention as oral fluids may not be enough to treat the person effectively

Key Points

- Dehydration can be a severe, life threatening condition
- A person who is dehydrated requires salts and sugars as well as water
- Severe dehydration requires medical attention
- If the vomiting or diarrhoea is severe or persistent ,medical attention is required
- If there is any blood or mucus present in either the stools or vomit, medical attention is required

7.8 MEDICAL CONDITIONS - ASTHMA

First Aid Manual

- 9th Edition - Chapter 5, p100
- 8th Edition - Chapter 4, p115

Learning Objectives

Asthma

By the end of this section, a learner should:

- understand that asthma is a medical condition that causes periods of breathing difficulty due to narrowing of the airways
- be able to recognise the signs of an attack including:
  - wheezing when breathing out
  - difficulty speaking leading to short sentences and whispering
  - coughing
  - distress and anxiety
  - features of hypoxia such as grey/blue tinge to the lips, earlobes and nail beds
  - exhaustion in a severe attack
  - if attack worsens casualty may lose consciousness and stop breathing
- be able to treat someone with an asthma attack by:
  - sitting casualty down in position most comfortable for them, likely to be upright
  - assisting them to take their inhaler if available
  - encouraging slow deep breathing
  - if difficulty continues encourage them to take another dose

Overseas

- If the casualty is not improving, they should be transported to hospital - this should be in a sitting position unless they become unconscious

Key Points

- Asthma is a medical condition that causes difficulty breathing
- Keep casualty calm
- Assist them to take their inhaler if available
- If they are not improving, transport to hospital as quickly as possible

7.8 MEDICAL CONDITIONS - ANAPHYLAXIS

First Aid Manual

- 9th Edition - Chapter 11, p221; Chapter 13, p278 - 279
- 8th Edition - Chapter 5, p123; Chapter 13, p269

Learning Objectives

Anaphylaxis

By the end of this section, a learner should:

- understand what anaphylaxis is and why it is considered a medical emergency
- be able to recognise signs of an anaphylactic reaction including
  - features if an allergy such as red itchy rash, itchy and watery eyes and abdominal pain,
  - vomiting and diarrhoea
  - difficulty breathing, with the casualty wheezing and gasping for air
  - pale or flushed skin
  - visible swelling of tongue and throat with puffiness around eyes
  - feeling of terror
  - confusion and agitation
  - signs of shock leading to collapse and loss of consciousness
- be able to treat a casualty experiencing anaphylactic shock by
  - arranging transport to hospital as quickly as possible
  - assisting the patient to take any medication (adrenaline) they may have to relieve symptoms (from an auto-injector for example)
  - helping the casualty to sit in an upright position that best relieves their breathing difficulty
  - monitoring and recording vital signs, repeating doses of adrenaline (epinephrine) at 5 minute intervals

Overseas

- The casualty should be transported to hospital - this should be in a sitting position unless they show signs of severe shock or become unconscious

Key Points

- Get transport to hospital as soon as possible, as a person in anaphylactic shock needs urgent medical attention
- Do not administer medication unless you have been trained to do so (this course - including Initial First Aid - teaches students to administer adrenaline using an auto-injector)
- A casualty having difficulty breathing often finds sitting upright is the most comfortable position

7.8 MEDICAL CONDITIONS - ANAPHYLAXIS

- Be prepared to treat an unconscious casualty if their condition deteriorates

7.8 MEDICAL CONDITIONS - HEART ATTACK

First Aid Manual

- 9th Edition - Chapter 6, p110
- 8th Edition - Chapter 5, p125

Learning Objectives

Heart Attack
By the end of this section, a learner should:

- understand what a heart attack is and why it is seen as a medical emergency
- be able to recognise the signs and symptoms of a heart attack including:
  - cyanosis
  - profuse sweating
  - pale
  - breathlessness / extreme gasping for air
  - sudden fainting or dizziness
  - persistent, vice like central chest pain
  - sense of "impending doom"
- be able to treat someone suspected of having a heat attack by:
  - sitting the person down with their knees up in the broken W position
  - giving them 300 mg aspirin to chew
  - arranging transport to hospital as quickly as possible

Overseas

- The casualty should be taken to hospital as quickly as possible - transport should be arranged

Key Points

- Not all casualties will have all the symptoms of a heart attack (including chest pain) - if you suspect a heart attack transport the casualty to hospital to make sure
- A heart attack is a medical emergency and so the priority is to get the casualty to hospital
- Keep the casualty as calm as possible. Panic will cause the already strained heart to attempt to work harder as their pulse increases
- Ask the casualty to chew 300mg of aspirin but first of all ask them if they are allergic or have a stomach ulcer
- If untreated the casualty will likely lose consciousness, be prepared to treat as an unconscious casualty (DRS ABC)

7.8 MEDICAL CONDITIONS - FEVER

First Aid Manual

- 9th Edition - Chapter 11, p222
- 8th Edition - Chapter 12, p239 & p250;

Learning Objectives

Fever

By the end of this section, a learner should:

- understand that a fever is a sustained body temperature above the normal level of 37°C (98.6°F)
- understand that there are many different causes of a fever
- be able to treat a casualty with a fever by:
  - keeping the casualty cool and comfortable
  - giving the casualty plenty of cool drinks to replace body fluids lost through sweating
  - giving an adult with a fever the recommended dose of Paracetamol tablets
  - giving a child casualty with a fever the recommended dose of Paracetamol syrup
- understand that you should seek medical attention if:
  - the casualties' condition deteriorates
  - the fever is severe
  - the casualty does not recover quickly
  - the casualty has a headache, general weakness, joint pains OR

Overseas

- A fever can be a sign of many underlying illnesses - overseas this can include Malaria
- Malaria is a disease caused by a parasite spread by mosquitoes
- Malaria still causes many preventable deaths in overseas, especially in Africa and it is very important that anyone with the warning signs listed above (under 'should seek medical attention') seek medical attention as soon as possible

7.8 MEDICAL CONDITIONS - SEIZURES

First Aid Manual

- 9th Edition - Chapter 8, p168 - 170
- 8th Edition - Chapter 8, p184 - 186

Learning Objectives

Seizures
By the end of this section a learner should:

- understand that there are two types of seizures in adults
  - convulsion
  - absence
- understand children can also have febrile seizures, a type of convulsive seizure caused by fever

Convulsive
By the end of this section a learner should:

- be able to recognise signs of a convulsive seizure including:
  - sudden unconsciousness
  - rigidity and arching of the back
  - convulsive movements
  - cyanosis
  - clenched jaw
  - possible loss of bladder or bowel control
  - muscles then relax and within a few minutes casualty recovers consciousness
  - casualty is usually completely unaware of their actions during the fit
- be able to treat a convulsive seizure by:
  - creating space around the casualty, removing potentially dangerous objects items such as hot drinks or sharp objects
  - noting the time the seizure begins
  - protecting the casualty's head by putting padding underneath it and the neck
  - loosening tight clothes around the neck if necessary
  - when the casualty has stopped fitting, open the airway and check breathing, putting them into the recovery position if they are unconscious
  - monitor vital signs until he recovers, noting the duration of the seizure as well as time unconscious
- understand that you should transport a casualty who is unconscious following a seizure when:
  - it was their first ever seizure
  - they were seizing for longer than 5 minutes
  - they had another seizure before they were fully recovered from the previous one

- they are unconscious for longer than 5 minutes

Absence

By the end of this section a learner should:

- be able to recognise someone having an absence seizure
  - sudden "switching off," staring blankly ahead
  - slight or localised twitching of the lips, eyelids, head or limbs
  - odd "automatic" movements such as lip-smacking, chewing or making noises
- be able to treat an absence seizure by
  - helping the casualty to sit down in a quiet place
  - making space around the casualty, removing any hazards such as hot drinks or sharp objects
  - talking to the casualty in a calm and reassuring way
  - staying with the casualty until they have recovered
  - seeking further medical advice if they have no awareness or recognition of their condition

Febrile

By the end of this section a learner should:

- be able to recognise a febrile seizure
  - violent twitching with clenched fists and arched back
  - obvious signs of fever such as hot, flushed skin and profuse sweating
  - twitching of the face and squinting, fixed or upturned eyes
  - breath-holding
  - red puffy face and neck
  - drooling
  - loss or impaired consciousness
- be able to treat a febrile seizure
  - place padding and pillows around the child so that their violent movements will not cause them injury
  - cool the child by removing clothing, though you may have to wait until the seizure stops
  - arrange transport to hospital as soon as possible
  - once fitting has finished, open airway and check for breathing,

Overseas

- In the UK, we ring 999 and wait for an ambulance to arrive for a casualty who remains unconscious and requires medical attention following a seizure - overseas the first aider must arrange for transport to the nearest hospital as quickly as possible - see section *7.10: Moving, Handling & Transporting Casualties*

Key Points

- Do not move a casualty who is still seizing unless they are in immediate danger
- Do not restrain them or put anything into their mouth - make the area safe

7.8 MEDICAL CONDITIONS - SEIZURES

- Seizures can occur for a variety of reasons - the treatment of the seizure itself is the same but aftercare depends on the original cause
- Further medical attention is required if
  - this is the casualty's first ever seizure
  - they had another seizure before they were fully recovered from the previous one
  - the seizure continues for more than 5 minutes
  - the casualty is unconscious for more than 5 minutes
  - febrile seizures in children
- Transport once the casualty has finished seizing

7.8 MEDICAL CONDITIONS - STROKE

First Aid Manual

- 9th Edition - Chapter 8, p174
- 8th Edition - Chapter 8, p183

Learning Objectives

Stroke
By the end of this section, a learner should:

- understand what a stroke is and why it is seen as a medical emergency
- be able to recognise signs of a stroke including:
  - facial weakness - drooping eyes/mouth
  - weakness down one side of the body
  - slurred speech
  - dizziness, blurred vision
- be able to carry out FAST (face, arm, speech test) to confirm the casualty is experiencing a stroke:
  - Face - ask the person to smile showing their teeth. A positive test is lack of symmetry in facial movement
  - Arm - hold both arms out in front of the casualty and ask them to hold them there when you release them. Positive test is if one arm drifts back to casualty's side before the other
  - Speech - ask the casualty a direct question. A positive test is if response is slurred or the casualty does not appear to understand what is being said to them
  - Time for Transport - if any of the above tests are positive, the casualty requires transport to hospital as quickly as possible
- understand that a positive FAST requires immediate medical attention so

Overseas

- A casualty with a positive FAST test should be taken to hospital as quickly as possible - transport should be arranged
- 'T' stands for time for transport

Key Points

- If the casualty gets a positive test for any part of FAST, they require immediate medical attention - transport to hospital as quickly as possible
- Speed is important in recognition and arranging of transport - the longer the blood flow to part of the brain is disrupted, the greater the damage is likely to be
- Similar to a compression head injury, the casualty may show personality changes as well, depending on what area of the brain is affected

7.8 MEDICAL CONDITIONS - DIABETES

First Aid Manual

- 9th Edition - Chapter 11, p218 - 219
- 8th Edition - Chapter 12, p240 - 241

Learning Objectives

Diabetes
By the end of this section, a learner should:

- understand that there are two types of diabetes, both of which are long term medical conditions that affect a person's ability to process sugar
- understand that poor management of blood sugar levels can lead to either hypoglycaemia or hyperglycaemia

Hypoglycaemia
By the end of this section, a learner should:

- understand that this is a dangerously low level of sugar in the bloodstream
- be able to recognise someone who is hypoglycaemic by:
  - weakness, faintness or hunger
  - confusion or irrational behaviour
  - sweating, with cold clammy skin
  - rapid pulse
  - palpatations and muscle tremors
  - deteriorating level of response
- be able to treat someone who is hypoglycaemic by
  - encouraging initial sugar intake, offering sugary drink, snack or glucogel
  - ensuring once sugar levels are raised casualty gets a starchy meal (rice, bread, potatoes)
  - treat unconsciousness as normal
  - arranging transport to hospital as quickly as possible if the casualty does not improve

Hyperglycaemia
By the end of this section, a learner should:

- understand that hyperglycaemia is a dangerously high level of sugar in the bloodstream
- be able to recognise someone who is hyperglycaemic by
  - warm dry skin
  - rapid pulse and breathing
  - fruity sweet smelling breath
  - excessive thirst
  - drowsiness leading to unconsciousness if untreated

7.8 MEDICAL CONDITIONS - DIABETES

Overseas

- In the UK, we ring 999 and wait for an ambulance to arrive for a casualty who goes unconscious and requires medical attention with either hypoglycaemia or hyperglycaemia - overseas the first aider must arrange for transport to the nearest hospital as quickly as possible - see section *7.10: Moving, Handling & Transporting Casualties*

Key Points

- There are two types of diabetes, both of which can cause hyperglycaemia or hypoglycaemia
- For hypoglycaemia, give sugar - transport to hospital if unconscious or they do not improve rapidly
- For hyperglycaemia transport to hospital as quickly as possible
- If you are unsure if they are hypo- or hyperglycaemic - give sugar as for hypo and transport to hospital

7.8 MEDICAL CONDITIONS - FAINTING

First Aid Manual

- 9th Edition - Chapter 6, p112
- 8th Edition - Chapter 5, p126

Learning Objectives

Fainting
By the end of this section, a learner should:

- understand what a faint is
- be able to recognise signs of a faint including
  - brief loss of consciousness that causes the casualty to fall to the ground
  - a slow pulse
  - pale, cold, clammy skin
- be able to treat someone who feels faint by
  - advising them to lie down
  - kneeling down and raising their legs to rest on your shoulder
  - watching the casualty's face for signs of recovery
  - ensuring they have enough fresh air and space, asking bystanders to move away
  - reassuring the casualty as they recover, helping them to sit up slowly

Key Points

- Do not advise a person who feels faint to sit in a chair with their head between their knees as if they faint they will likely fall
- Lie a person who is feeling faint down and raise their legs
- If they are still feeling faint when they are getting up, encourage them to lie back down until they have recovered fully
- If the casualty does not respond quickly treat as unconscious - DRS ABC

7.8 MEDICAL CONDITIONS

Resources

7.9 CHOKING

First Aid Manual

- 9th Edition - Chapter 5, p88 - 94; Chapter 13, p260 - 263
- 8th Edition - Chapter 3, p99 - 102; Chapter 4, p104 -107; Chapter 13, p264 - 266

Learning Objectives

Choking
By the end of this section, a learner should:

- understand what choking is
- understand that there are two different types of choking
  - mild
  - severe
- be able to identify the type of choking by asking the casualty “Are you choking?”

Treatment
By the end of this section, a learner should:

- understand that the body’s defence against choking is coughing
- understand that treatment for choking is designed to simulate coughing and increase pressure in the chest
- understand that anyone who has been treated for severe choking should be sent to hospital and why
- understand that you should not practise treatment for choking on someone who is not choking and why

Treatment – Adults and Children
By the end of this section, a learner should:

- understand the sequence of treatment for choking adults and children
  - identify the type of choking
  - ask the patient to cough
  - give up to 5 back blows
  - give up to 5 abdominal thrusts
  - repeat the sequence of back blows and abdominal thrusts 3 times
  - continue repeating the sequence but prepare for unconsciousness
  - treat unconsciousness as normal
- understand the differences when treating children
  - kneel down if the child is small
  - use less force when giving back slaps and abdominal thrusts

Treatment – Babies
By the end of this section, a learner should:

- understand the sequence of treatment for choking babies
  - identify the type of choking
  - hold the baby, laid on your arm, face down with the head lowest
  - give up to 5 back blows
  - turn the baby over so it is laid on your arm, face upwards with the head lowest

  - give up to 5 chest thrusts
  - repeat the sequence of back slaps and chest thrusts until the baby goes unconscious
  - treat unconsciousness as normal
- understand that a choking baby can be treated in a vehicle on the way to hospital

Overseas

- In the UK, we ring 999 and wait for an ambulance to arrive for a casualty for a casualty who has been suffering from severe choking for three cycles of back blows. Overseas, after three cycles, transport to hospital should be arranged as quickly as possible
- Unconsciousness should be treated as usual
- An choking/unconscious baby can be treated on the way to hospital in a vehicle

Key Points

- Identify the type of choking by asking the casualty "are you choking?"
- If the casualty is able to respond with words, the choking is considered mild and you simply need to encourage them to cough
- If they are unable to speak or breathe at all, it is considered a severe obstruction and the casualty is in need of assistance
- For a choking adult give them up to 5 back blows by:
  - bending casualty forward, supporting their upper body
  - giving 5 sharp blows between shoulder blades with heel of hand
  - check mouth each time
- If the casualty continues to choke give them up to 5 abdominal thrusts by:
  - standing behind casualty
  - put both arms around them, placing one fist between the casualty's breastbone and navel
  - grasp fist with your other hand and pull sharply inwards up to 5 times
  - check mouth each time
- Repeat steps until obstruction is cleared or casualty loses consciousness
- If casualty loses consciousness - follow DRS AB
- After 3 cycles, arrange transport to hospital but continue back blows and abdominal thrusts until the person falls unconscious
- Objects in mouth should be removed by pinching them and pulling gently out (pincer movement). Do not do a 'finger sweep' inside the mouth
- The sequence is the same for treating choking children. However each movement is done with less force, adjusting to the size of the child. Kneeling down behind the child will make it easier to give abdominal thrusts.
- It is important to highlight that if someone receives abdominal thrusts and the obstruction is cleared, they should still go and get checked over as damage may have been done internally.
- These movements should not be practiced on others due to risk of injury
- For a choking infant, arrange transport immediately - a choking infant can be treated

7.9 CHOKING

whilst travelling in a vehicle

- For a choking infant give them up to 5 back blows by
  - laying them face down along your forearm with head lower than the body
  - giving up to 5 back blows between shoulder blades with heel of hand (gently!)
- Check the infants mouth by turning them over, laying them face up over your forearm and picking out any visible obstructions
- If the casualty continues to choke give them up to 5 chest thrusts by
  - putting two fingertips on the lower half of the infants breast bone
  - giving up to five sharp thrusts inwards and towards the baby's head at the rate of one every 3 seconds
  - check mouth each time

Resources

- Page 35 - Choking Adult/Child
- Page 36 - Choking Baby

7.10 SPORTS INJURIES

First Aid Manual

- 9th Edition - Chapter 7, p140 - 141; Chapter 12, p244 - 247
- 8th Edition - Chapter 7, p154 -155; Chapter 2, p54-55

- C in RICE stands for 'Comfortable support' NOT compression

Learning Objectives

Strains and Sprains
By the end of this section, a learner should:

- understand the difference between a strain and a sprain
- understand how to recognise the difference between these and a fracture/ dislocation
- understand if there is any doubt or the casualty is in significant pain, treat as a fracture

RICE
By the end of this section, a learner should:

- understand the treatment for a soft tissue injury is to
  - rest the injured part
  - apply ice or a cold pad
  - provide comfortable support (padding in a comfortable position)
  - elevate the injured part

Ankle Injury
By the end of this section, a learner should:

- be able to treat a sprained or strained ankle using a crepe or improvised rolling bandage by:
  - assisting the casualty to rest and support the ankle in the most comfortable position
  - applying a cold compress to the affected area to reduce swelling
  - applying comfortable support to the ankle and bandage with a support bandage from the base of the foot working up to the knee
  - checking circulation beyond point of bandaging
  - advising the casualty to sit with their ankle raised and avoid weight bearing too much whilst it is still sore

Elbow and Knee Injury
By the end of this section, a learner should:

- be able to treat a sprained or strained elbow or knee using a crepe or improvised rolling bandage by:
  - assisting the casualty to rest and support the joint in the most comfortable position with the joint partially flexed
  - applying cold compress to the affected area to reduce swelling
  - applying a roller bandage in a figure-of-eight pattern, starting at the joint and working up and down the limb

- checking circulation beyond point of injury
- advising casualty to rest the joint, keeping it raised

Wrist Injury

By the end of this section, a learner should:

- be able to treat a sprained or strained wrist using a crepe or improvised rolling bandage by
  - assisting the casualty to rest and support the wrist in the most comfortable position
  - applying a cold compress to the affected area to reduce swelling
  - applying a roller bandage in the following pattern
  - start at the wrist wrapping the end of the bandage around it twice
  - working from the inner side of the wrist underneath the thumb, pass the bandage diagonally across the back of the hand up to the nail of the little finger, and then across the front of the casualty's fingers
  - pass the bandage over the back of the hand to the outer side of the wrist, take the bandage underneath the wrist and then repeat the diagonal across the back of the hand towards the little nail of the little finger
  - repeat the sequence of figure-of-eight turns, working down the hand until it is completely covered and then continue with straight turns down the arm until significantly beyond the point of injury

Overseas

- Where ice is not available, use a cold compress
- Crepes are available in Africa but can be very expensive - make your students aware of crepe bandages and show them how to use them but this section should not take

Key Points

- For treatment of a sprain or strain, remember RICE - rest, ice, comfortable position and elevate
- After bandaging, always check circulation beyond point of injury. If the bandage is too tight, take off and start again!
- If there is any doubt - always treat as a fracture: protecting, supporting and

7.11 MOVING, HANDLING & TRANSPORTING CASUALTIES

First Aid Manual

- 9th Edition -
- 8th Edition -

Learning Objectives

Basic Principles
By the end of this section, a learner should:

- understand that you should assess the load before you lift
- understand that you should assess your own ability to complete the work before you lift
- understand that you should assess the route you will take and make sure that it is free of dangers
- understand that you should keep the load as close as possible to your centre of gravity
- understand that you should lift with the legs as much as possible
- understand that, as much as possible, you should keep your spine inline
- Understand that you should use '1...2...3…' but should say 'Ready to lift...lift' and 'Ready to lower…lower'

Two-man Arms Carry
By the end of this section, a learner should:

- understand that you can use this lift to carry a conscious or unconscious casualty a short distance i.e. onto a stretcher or into the back of a vehicle
- be able to carry out a two-man arms carry (see Overseas notes)

Two-hand Seat Carry
By the end of this section, a learner should:

- understand that you can use this lift to carry a conscious casualty for a short distance
- be able to carry out a two-hand seat (see Overseas notes)

Four-hand Seat Carry
By the end of this section, a learner should:

- understand that you can use this lift to carry a conscious casualty who can help support himself for a moderate distance
- be able to carry out a four-hand seat carry (see Overseas notes)

Carry Sheet / Stretcher
By the end of this section, a learner should:

- understand that you can use this lift to carry a conscious or unconscious casualty for any distance
- understand that this technique is especially useful if the casualty is heavy, the distance you want to travel is further or you have more people to help lift
- be able to carry a casualty using a carry sheet or stretcher (see Overseas

7.11 MOVING, HANDLING & TRANSPORTING CASUALTIES

notes)

Unconscious Casualty

By the end of this section, a learner should:

- be able to lift an unconscious casualty into a vehicle safely
- be able to transport a casualty in a position as close as possible to the recovery position, mainly:
  - on their side
  - with an open airway
  - in a stable position

Blood Loss and Shock

By the end of this section, a learner should:

- understand the importance of transporting a casualty in shock lying down whilst keeping them warm
- understand the importance of not allowing a person with a snake bite to walk to transport
- be able to lift a casualty into a vehicle safely and transport them in an appropriate position

Fractures

By the end of this section, a learner should:

- understand the importance of immobilising the suspected fracture limb before transporting to the hospital
- understand the importance of transporting a casualty with a suspected spinal injury as carefully as possible
- be able to lift a casualty with a fractured lower limb into a vehicle safely and transport them
- be able to lift a casualty with a suspected spinal injury into a vehicle carefully and drive carefully to the hospital

Breathing Difficulties (e.g. asthma, open chest wound)

By the end of this section, a learner should:

- understand the importance of transporting a casualty with breathing difficulties sitting up unless they are unconscious
- be able to lift a casualty/assist a casualty into a vehicle safely and transport them in an appropriate position

Head Injury

By the end of this section, a learner should:

Overseas

Two-man Arms Carry

- Both bearers kneel on one knee
- The bearer at the casualty's chest slips one arm beneath the casualty's shoulders and the other arm beneath his waist
- The bearer at the casualty's thighs slips one arm beneath the casualty's hips and the other arm beneath his knees

7.11 MOVING, HANDLING & TRANSPORTING CASUALTIES

- Both bearers shift their weight backward in unison and lift the casualty to knee level, keeping the casualty as level as possible

To move the casualty:

- Both bearers bring the casualty's front close to their chests
- Both bearers rise to their feet in unison
- Both bearers move forward, carrying the casualty high on their chest to lessen fatigue

Two-hand Seat Carry

- Position the casualty on his back
- Bearers position themselves on opposite sides of the casualty's hips and kneel
- Each bearer passes one arm under the casualty's back and the other arm under the casualty's thigh
- The bearers grasp each other's wrists securely
- Both bearers rise in unison, lifting the casualty
- Both bearers move forward, carrying the casualty

Four-hand Seat Carry

- This carry is especially useful in transporting a person with a head or foot injury for a moderate distance
- Both bearers position themselves behind the casualty
- Bearers face each other
- Each bearer grasps his own left wrist with his right hand and grasps the other bearer's right wrist with his left hand
- The bearer's forearms form the seat for the casualty

To move a casualty using the four-hand seat carry:

- The casualty stands on his own or person helps the casualty to a standing position
- Both bearers lower their bodies so the seat is about even with the casualty's knees
- The casualty sits on the bearers' forearms and places his arms around the bearers' shoulders for balance and support
- Both bearers stand erect in unison, lifting the casualty
- Both bearers move forward

Carry Sheet

- This technique is especially useful for transporting a conscious or unconscious person over longer distances, with the help of more people
- Half of the carry sheet is rolled up along the length
- The casualty is rolled on to their side using the log roll technique (see first aid manual)
- Place the rolled up edge of the blanket as close into the casualty as possible
- Roll the casualty back on to their back
- Roll the casualty slightly on to the other side and pull out the rolled up part of the sheet
- With the casualty now positioned in the middle of the sheet, roll the blanket up to the casualty’s side on both sides
- Each bearer kneels on one knee facing another bearer on the casualty’s other side
- With their palms facing upwards, bearers grasp the roll of sheet
- The person closest to the end gives the command to lift
- In unison, the bearers lift to standing

7.11 MOVING, HANDLING & TRANSPORTING CASUALTIES

- Always face the direction you're travelling when moving with the casualty

Unconscious Casualty

- Ideally, transport would be on the back of a flatbed truck but anything where you can lie a casualty down, such as across the back seat of car, will do in an emergency
- The casualty should be transported on their side (as close as possible to the recovery position) with their airway open and they should be carefully supported to make sure they will not fall (i.e. if laid across the back seats of a car)
- They should be rechecked throughout the journey to make sure their airway is still open, that they're still breathing and to see if their conscious level has changed
- If their conscious level improves they still need to go to the hospital

Blood Loss and Shock

- Ideally, transport would be on the back of a flatbed truck but anything where you can lie the casualty down and keep them warm will do such as the back seat of a car

Key Points

- The commands to use are 'Ready, steady, *action*' e.g. 'Ready, steady, lift'
- Make sure that everyone is ready to move before the command
- Assess the load (i.e. the casualty), your own ability, the route you need to take including any potential problems before you lift
- When lifting:
  - Lift with the legs
  - Keep the spine inline
  - Keep the load as close to your centre of gravity as possible
- If you have to move a casualty a long distance, use a carry sheet or stretcher if possible
- An unconscious casualty should be transported in a position as close as possible to the recovery position, mainly:
  - on their side
  - with an open airway
  - in a stable position
- No matter what the cause - including blood loss/shock - if a casualty becomes unconscious they should be transported using the above method
  - A casualty with a severe bleed or shock should be transported lying down whilst being kept warm
- Do not let a casualty who has been bitten by a snake, walk
- Immobilise a suspected fractured limb before transport
- Transport a suspected spinal injury as carefully as possible
- Transport a casualty with breathing difficulties sitting up unless they are unconscious
- Transport a casualty with a head injury with their head and shoulders raised unless

Resources

- Pages 37-39

CHANGE LOG

Date	Changed by	Nature of change