St John
Ambulance
Australia

SKILLS MAINTENANCE PROGRAMME 1995

ST JOHN AMBULANCE AUSTRALIA
NATIONAL CARDIAC ARREST DATA COLLECTION - UTSTEIN STYLE

Division or District Duty.....

Location of Duty.....Location of Casualty Inside ❒ Outside ❒
Tick appropriate box

Date - Day - Month - Year.....

Weather at time.....

Age of Casualty.....years Accurate ❒ Guess ❒

Sex of Casualty Male ❒ Female ❒

Pre-existing cardiac disorder (if known) Yes ❒ No ❒

Drugs taken (e.g. Anginine) Yes ❒ No ❒

Smoker Yes ❒ No ❒

Alcoholic Odour Yes ❒ No ❒

Pre-arrest symptom (e.g. chest pain, pallor)

.....

Witnessed cardiac arrest Yes ❒ No ❒
Arrest after St John first aider arrived Yes ❒ No ❒
Arrest after Ambulance arrived Yes ❒ No ❒
Arrest after medical support arrived Yes ❒ No ❒

CALL RESPONSE INTERVAL.....minutes
(Period of time between receipt of call and arrival of St John first aider at casualty)

ASSESSMENT INTERVAL.....seconds
(Period from arrival of St John first aider till arrest assessed i.e. unresponsive, breathless, pulseless casualty)

TYPE of expired air resuscitation e.g. mouth to mask.....

.....

Time C.P.R. commenced.....hours and minutes (24 hour clock)

Time IF CIRCULATION restored.....hours and minutes (24 hour clock)

Time IF BREATHING restored.....hours and minutes (24 hour clock)

Time AMBULANCE CALLED.....hours and minutes (24 hour clock)

Time AMBULANCE ARRIVED.....hours and minutes (24 hour clock)

Time if C.P.R. ABANDONED.....hours and minutes (24 hour clock)

Time AMBULANCE DEPARTS WITH CASUALTY.....hours and minutes (24 hour clock]

Defibrillation performed Yes ❒ No ❒

Destination of Casualty (e.g. name of hospital).....

Complete as accurately as information available permits

TYPE OF ARREST

1. PRESUMED CARDIAC
(e.g. coronary occlusion; myocardial infarction; cardiac arrhythmia..... Yes ❒ No ❒

2. NON-CARDIAC e.g. Sudden Infant Death Syndrome..... Yes ❒ No ❒

Drug overdose..... Yes ❒ No ❒

Suicide..... Yes ❒ No ❒

Drowning..... Yes ❒ No ❒

Severe bleeding..... Yes ❒ No ❒

Or presumed cause

.....

If defibrillation used, what was the number of defibrillation shocks?.....

Who performed the defibrillation?.....

Were there any problems with the defibrillator?.....

What was the type of defibrillator used (e.g. brand name).....

Comments by first aider or duty officer to cover items not covered above or on the previous page

.....

.....

.....

.....

.....

Signature of person completing proforma.....

Printed name of person completing proforma.....

Add names, addresses and phone numbers of contacts - to assist in following up the casualty

.....

.....

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.....

Please return this form, together with a copy of the Casualty Report form OB12 completed for the casualty with the suspected or confirmed cardiac arrest, as soon as possible, to:

Dr J. Fred Leditschke
C/o Assistant Secretary (Operations)
St John Ambulance Australia
P.O. Box 3275, MANUKA, ACT 2603

St John Ambulance Australia

OPERATIONS BRANCH

Skills Maintenance Programme 1995

Name _____

Signature _____

Division _____

Date _____

St John Ambulance Australia
Canberra Avenue
Forrest ACT 2603

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Contents

Note:

'A.F.A.' refers to *Australian First Aid.* Volumes One and Two, 1989 (or combined volume, 1993).
'A.R.C.' refers to the Australian Resuscitation Council *Policy Statements.*

Welcome to Skills Maintenance Programme 1995

Greetings and salutations and welcome to the Skills Maintenance Programme for 1995. The Skills Maintenance Programme provides the method by which we ensure that members Australia wide are competent in first aid and thereby efficient under the General Regulations. Annual efficiency and completion of a member's record is vital not only for credit to be given towards the Service Medal of the Order at a personal level, but completion of the programme also carries with it responsibilities and recognition of competency in first aid.

Concern has been expressed that members are having modules signed as completed when their knowledge and skill in that module have not been obtained. Any person signing a module as completed has certain legal and moral obligations. If the member is not competent in the module, then the public are placed at risk, the member places him/herself at risk and our Organisation is also put in jeopardy.

Responsibility for standards in each district is delegated to the District Surgeon but it is obvious that he/she is not able to be everywhere all the time. Because of concerns about the standard and its legal implications, districts will be setting in place checks or random checks on quality to test or to assess both theoretical and practical knowledge.

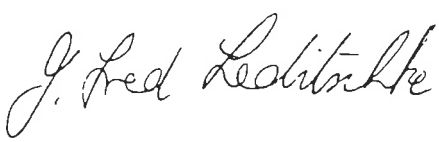
The Senior First Aid Certificate or equivalent is the basic requirement for a member of the public to join Operations Branch and to go on public duties. It is anticipated and expected of a member, however, that as soon as possible, and preferably within six months, the member will complete an Advanced First Aid course to ensure that on public duties their level of skill and knowledge is more appropriate to deal with the casualties and emergencies that may arise. The Advanced First Aid course may be obtained either through an Operations Branch course or a Training Branch course. For a member who has obtained the Advanced First Aid Certificate, satisfactory completion of the Skills Maintenance Programme over three years will ensure that the Advanced First Aid Certificate remains current.

The Casualty Report Form OB12 (old BF45) is being revamped into an A4 size divided into four quadrants to enable it to be folded up and placed in a member's pocket. Commencing in 1995, the top copy will be kept by the division or district attending the duty, the middle copy will be given to the casualty or those caring for the casualty, and the third copy will be retained by the member for a minimum of seven years in the event that a claim is lodged against him/her.

Fear of litigation should certainly not preclude us from delivering a high standard of first aid. This is the reason we are all members of St John Ambulance Australia.

Special thanks to those members who have forwarded to me the National Cardiac Arrest Data Collection - Utstein-style - proforma, having delivered cardio-pulmonary resuscitation to a casualty. It is very much appreciated that you stepped forward in these acute situations and it is only regrettable that the outcome is unfavourable in so many cases. But when a save occurs, it makes our training and efforts all worthwhile. Please keep up the good work.

All the best with this Programme. Thank you for your ongoing commitment and thank you on behalf of the public for the time and effort you give to St John.



J. Fred Leditschke
Chief Surgeon

National Skills Maintenance Programme Training Committee Members

Barbara Davis R.N.	Chief Nursing Officer
Mr Wayne Deakes	Corps Officer
Diana de Silva R.N.	Divisional Superintendent
Dr Nadine Fisher	Corps Surgeon
Mr Gavan Keane	Acting Corps Ambulance Officer
Andrew McMaster R.N.	Corps Nursing Officer
Correne Wassertheil R.N.	District Nursing Officer
Dr Jeff Wassertheil	District Surgeon - Reserve List

Procedure

A. St John Members

1. Each member, on receiving his/her own copy of the Programme, should sign and date the title page.

2. The Programme is divided into modules, with theory and practical skills components.

3. All the skills must be practised and, when mastery is obtained, be signed by the appropriate person as indicated.

4. Members who hold an Advanced Resuscitation Certificate, issued by their State/Territory, must sit the re-examination of that State/Territory every year to retain this qualification.

B. Officers/Training Personnel

1. Unless exempted under the General Regulations, all officers/members of Operations Branch shall complete the Skills Maintenance Programme to the standard prescribed.

2. The term ' training personnel' refers to all St John officers/members with a designated training function. If professional training personnel are unavailable within a division, then the officer-in-charge should communicate the name and qualifications of a nominee to fill the role to the District Surgeon for consideration. All such requests will receive written advice.

3. All officers and/or Training Branch accredited instructors are responsible and accountable for the modules of the training programme they have signed as being satisfactorily completed.

4. Practical skills items pertaining to the module being undertaken must be signed as satisfactory by one of the designated persons.

5. If, on conclusion of the training module, the member is found to be unsatisfactory, then further training will be given and another date and time for the assessment will be arranged.

6. On satisfactory completion of the module by the member, the programme is to be signed and dated in the space provided at the end of that module.

The Programme belongs to all officers and members of St John and its success depends on all working as a team. Your assistance and comments are always appreciated. Comments may be sent, in the first instance, to Assistant Secretary (Operations), St John Ambulance Australia, Box 3275, Manuka A.C.T. 2603. They will then be forwarded to the Training Committee.

Resuscitation

PRESCRIBED REFERENCES: *Australian First Aid*. Vol. 1 and 2, 1989, reprinted annually.
Australian Resuscitation Council *Policy Statements*.

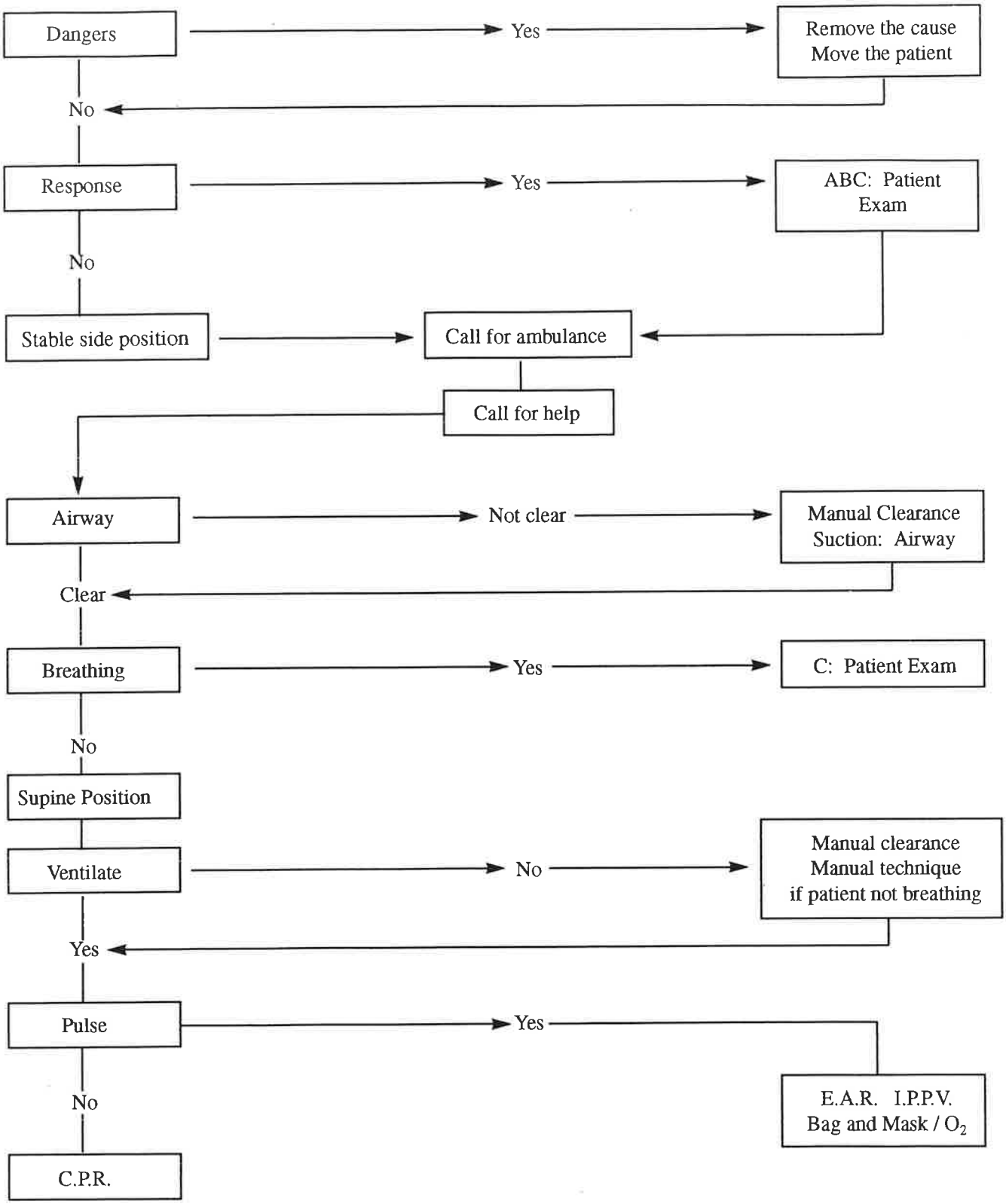
OBJECTIVE: On completion of the training period, and after practising the practical skill listed below (to the satisfactory performance level as per the module points/checklists) the St John member will be able to apply this skill to the section's practical incident.

Practical Skills

1.1 Perform effective cardio-pulmonary resuscitation for an adult.
(a) 1 person C.P.R.
(b) 2 person C.P.R.
1.2 Perform expired air resuscitation (E.A.R.) for children and infants.
1.3 Perform effective cardio-pulmonary resuscitation for children and infants.
1.4 Perform effective E.A.R. for a simulated patient with a laryngectomy stoma.

Practical Incident

You are on duty at the ANZAC Day Parade. You are called to an unconscious casualty. Examine and manage the casualty. Hand over to the ambulance officer who arrives. Try to note the time the call was received, the time of arrival at the casualty, the time taken to assess the casualty, the time C.P.R. is started and the time of any return of respiration and pulse. Complete Casualty Report form OB12 for the incident and the Utstein Cardio-pulmonary Resuscitation research form (see later in this module).



E.A.R. - expired air resuscitation. I.P.P.V. - intermittent positive pressure ventilation.

Fig. 1 Casualty Management Sequence

1.1 Perform effective cardio-pulmonary resuscitation for an adult

Checklist	Tick	
	2 person rescue	1 person rescue
D.R.A.B.C.		
Check for **D**angers.		
Check **R**esponse.		
Turn casualty onto side.		
Call for help and ambulance.		
Clear **A**irway.		
Check **B**reathing (nil).		
Roll casualty onto back.		
Ventilate casualty - manikin must inflate. - watch the chest rise.		
5 times over a period of 10 seconds.		
ONE OPERATOR C.P.R.		
Correct position of hands.		
Correct depth of compressions.		
Timing: number of breaths = 8/min.		
Check breathing after one minute (absent).		
Check **C**irculation after one minute (present).		
EXPIRED AIR RESUSCITATION		
Timing: 1 breath every 4-5 sec. = 12-15/min.		
Check breathing after two minutes (present).		
Check circulation after two minutes (present).		

Cycle and compression rates are currently being reviewed by international resuscitation councils, including A.R.C., and may be changed from year to year as new knowledge is acquired.

RESUSCITATION RATES

During C.P.R., allow equal time for compression of the chest and for relaxation.

	ADULT 5 initial breaths	CHILD 5 initial breaths	INFANT 5 initial breaths
E.A.R.	1 inflation every 4 seconds 15 cycles/min.	1 inflation every 3 seconds 20 cycles/min.	1 inflation every 3 seconds 20 cycles/min.
COMPRESSION SITE	Lower half of STERNUM	Lower half of STERNUM	Lower half of STERNUM
HOW	2 hands	1 hand	2 fingers
DEPTH	4-5 cms (1.5-2 ins)	2.5 cms (1 inch)	1.5 cms (0.5 inch)
ONE OPERATOR	15 cardiac compressions to 2 breaths in 15 seconds; 4 cycles/min.	15 cardiac compressions to 2 breaths in 10 seconds; 6 cycles/min.	15 cardiac compressions to 2 breaths in 10 seconds; 6 cycles/min.
TWO OPERATOR	5 compressions to 1 breath in 5 seconds; 12 cycles/min.	5 compressions to 1 breath in 3 seconds 20 cycles/min.	
REVIVAL CHECKS	PULSE BREATHING 1 minute; every 2 minutes thereafter	PULSE BREATHING 1 minute; every 2 minutes thereafter	PULSE BREATHING 1 minute; every 2 minutes thereafter

1.2 Filling in an Utstein-style form on cardiac arrest

The Chief Surgeon asks that you be prepared to assist in a research project related to cardiac arrest casualties. Consider the following practical incident:

You are on duty at Football Park when an elderly man is brought to the first aid room. You find on examination that he is short of breath and has severe chest pain. You give him two Anginine tablets under his tongue. He tells you that he has had recent heart surgery.

An example of how you could fill out an Utstein-style form is given in this module. **Now make up your own scenario concerning a cardiac arrest casualty. Use a photocopy of the Utstein-style form on the coloured paper at the beginning of this book.** On another photocopy, you can also complete it for the practical incident at the beginning of this module. Also fill out an OB12 form for your own scenario.

Retain the form at the beginning of the book, in blank form, so that you can use it if you are involved with an actual cardiac arrest. If that occurs, please send it to the Chief Surgeon, at the address shown, to assist with the research project.

ST JOHN AMBULANCE AUSTRALIA
NATIONAL CARDIAC ARREST DATA COLLECTION - UTSTEIN STYLE

Division or District Duty: DIVISION

Location of Duty: ANZAC STREET Location of Casualty — Inside ☐ Outside ☑ (Tick appropriate box)

Date - Day - Month - Year: SUNDAY 17 JULY 1994

Weather at time: COLD AND WINDY

Age of Casualty: 64 years	Accurate	☑	Guess	☐
Sex of Casualty	Male	☑	Female	☐
Pre-existing cardiac disorder (if known)	Yes	☑	No	☐
Drugs taken (e.g. Anginine)	Yes	☐	No	☑
Smoker	Yes	☐	No	☑
Alcoholic Odour	Yes	☐	No	☑

Pre-arrest symptom (e.g. chest pain, pallor)

.....

Witnessed cardiac arrest	Yes	☑	No	☐
Arrest after St John first aider arrived	Yes	☑	No	☐
Arrest after Ambulance arrived	Yes	☑	No	☐
Arrest after medical support arrived	Yes	☐	No	☑

CALL RESPONSE INTERVAL: 2 minutes
(Period of time between receipt of call and arrival of St John first aider at casualty)

ASSESSMENT INTERVAL: 30 seconds
(Period from arrival of St John first aider till arrest assessed i.e. unresponsive, breathless, pulseless casualty)
ARREST HAPPENED WHEN AMBULANCE PRESENT

TYPE of expired air resuscitation e.g. mouth to mask: SOFT BAG RESUSCITATOR WITH OXYGEN

Time C.P.R. commenced: 1410 hours and minutes (24 hour clock)

Time IF CIRCULATION restored: — hours and minutes (24 hour clock)

Time IF BREATHING restored: — hours and minutes (24 hour clock)

Time AMBULANCE CALLED: 1358 hours and minutes (24 hour clock)

Time AMBULANCE ARRIVED: 1408 hours and minutes (24 hour clock)

Time if C.P.R. ABANDONED: — hours and minutes (24 hour clock)

Time AMBULANCE DEPARTS WITH CASUALTY: 1415 hours and minutes (24 hour clock]

Defibrillation performed: Yes ☐ No ☑

Destination of Casualty (e.g. name of hospital): WARATAH HOSPITAL

Complete as accurately as information available permits

Fig. 2 Utstein-style Form

TYPE OF ARREST

1. PRESUMED CARDIAC
(e.g. coronary occlusion; myocardial infarction; cardiac arrhythmia ..... Yes ☑ No ☐

2. NON-CARDIAC e.g. Sudden Infant Death Syndrome ..... Yes ☐ No ☐

Drug overdose ..... Yes ☐ No ☐

Suicide ..... Yes ☐ No ☐

Drowning ..... Yes ☐ No ☐

Severe bleeding ..... Yes ☐ No ☐

Or presumed cause .....

If defibrillation used, what was the number of defibrillation shocks N.A.

Who performed the defibrillation .....

Were there any problems with the defibrillator .....

What was the type of defibrillator used (e.g. brand name .....

Comments by first aider or duty officer to cover items not covered above or on the previous page

CASUALTY HAD CHEST PAIN AND ASKED FRIEND TO CONTACT FIRST AID POST

SHORT OF BREATH

Signature of person completing proforma V. Smith

Printed name of person completing proforma NEVILLE SMITH

Add names, addresses and phone numbers of contacts - to assist in following up the casualty

DR. S. WALTERS, 3 MILL STREET, WARATAH
651 7733 (CASUALTY'S DOCTOR)
WARATAH HOSPITAL, MOUNTAIN ROAD, WARATAH
651 8171

Please return this form, together with a copy of the Casualty Report form OB12 completed for the casualty with the suspected or confirmed cardiac arrest, as soon as possible, to:

Dr J. Fred Leditschke
C/o Assistant Secretary (Operations)
St John Ambulance Australia
P.O. Box 3275,
MANUKA, ACT 2603

Perform effective expired air resuscitation for children and infants

References: A.R.C., 5.4 and 7.1.2 and *A.F.A.*, pp 51-2.

Definitions:

A child is defined as one to eight years of age.
An infant is defined as younger than one year.

Children

Clear the airway (this should take no more than 3-4 seconds)
- Quickly turn the child on one side.
- Clear mouth and nostrils of foreign materials.

Check for breathing

With the child lying on one side, check for breathing while supporting the jaw and maintaining the head in the neutral position. A slight head tilt may be necessary to achieve an open airway. Look carefully for movement of the lower chest and abdomen. Listen for escaping air from the nose and slightly open mouth.

If breathing, leave the child lying on his/her side. Support the jaw. Continue the assessment of the casualty.

If not breathing, 'blow and look'.
Quickly place the child on his/her back. Keep the head horizontal and support the jaw. Place your widely open mouth over the child's slightly open mouth and puff gently, using just enough pressure to cause the chest to rise.

If the chest does not rise, check for:
- obstruction in the airway (inadequate head tilt or jaw support, tongue or foreign material);
- not enough air being blown into the lungs;
- inadequate air seal.

Listen

After each inflation of the lungs, lift your mouth from the child's mouth and, with your ear about 2.5 cms from the casualty's mouth and nose, listen for air escaping from the lungs.

At the same time observe the fall of the chest. During repeated inflations, frequently look at the casualty's stomach. Make sure that it is not being distended. If distended, check again for obstruction of the airway.

Do not put pressure on the stomach. It may cause vomiting.

Rate

Inflation of the lungs should be repeated 20 times per minute. Check the pulse after the first minute and then every two minutes. When breathing recommences, the child should be placed on the side.

Note: The amount of head tilt needed to open the airway increases with the age of the child. Whether both mouth and nose need to be covered by your mouth will depend on the size of the child.

Infants

The technique is similar to that used for children.

The head is very unstable. It must be supported continuously. Avoid any pressure with the fingers on the soft tissues under the chin, as this may obstruct the airway.
During expired air resuscitation, place your slightly open mouth over the infant's mouth and nose. Gentle puffs may need to be from the rescuer's cheeks, using just enough pressure to

cause the child's chest to rise. Too much pressure may distend the infant's stomach and cause vomiting or regurgitation of the stomach contents.

If vomiting occurs, turn the child on his/her side. Clear the airway. Then resume resuscitation.

.3 Perform expired air resuscitation for children and infants

NCIDENT

'ou are attending a private function when you see a child about three years old being rescued from the swimming pool. 'he child is placed on its side, in a safe area adjacent to the pool. On approach, you establish there is no response to .hout and shake'. The child is blue, cold and limp.

:hecklist	Tick
.irway :heck for clear airway.)pen the mouth. Look carefully inside the mouth for foreign matter.	
Nothing apparent))pen the airway. 'lace one hand on the forehead or top of the head.)ther hand to support the jaw at the point of the chin. :ilt the **head back slightly** (not the neck). :nsure face slightly down to enable fluids to drain from the mouth.	
3reathing :heck if the casualty is breathing.	
No breathing))uickly place the child onto the back. :ilt head back slightly and support jaw.	
'lace your widely open mouth over the child's slightly open mouth. 'uff gently with just enough pressure to cause the chest to rise. .ook for fall of chest.	
.ook to ensure stomach has not been distended. .isten with your ear about 2.5 cms from the casualty's mouth and nose or the escaping air. 3ive initial 5 quick puffs, enough to make the chest rise with each puff)ut not hard enough to inflate the stomach.	
:irculation :heck for pulse.	
Pulse present) :ontinue E.A.R. at 20 times per minute.	

1.4 Perform single rescuer effective cardio-pulmonary resuscitation for children and infants

INCIDENT
In the scenario for practical skill 1.3, during E.A.R., when a vital sign check is made after one minute, the pulse is absent. Continue from that point.

Checklist	Tick
Circulation Check for presence of pulse.	
(Absent) Locate midpoint of sternum using caliper method.	
Children (to eight years) *A.R.C. 7.1.2 and A.F.A. Vol.1 pp.51-52* Because of the variability in size of children of the same age, the specification of eight years should be interpreted as a working guideline only for determination of the site of compression. Place heel of one hand over lower half of sternum. Depress 2.5 cms (1").	
Single rescuer: Give 15 compressions in 10 seconds. Give 2 inflations. Aim to achieve 12 inflations and 90-100 compressions per minute (6 cycles).	
Infants (to one year) The above criteria should be modified for infants as follows: Place 2 fingers over the sternum - lower half. Depress 1.5 cms (0.5 "). Continue using rates and ratios for children. Too little compression of chest will be ineffective.	
Recovery Check after one minute and then every two minutes for return of pulse and respiration.	

erform effective expired air resuscitation (E.A.R.) mouth to oma method

ference: A.R.C., 5.3.4.

A laryngectomee is a person who has had the larynx (voice box) removed. This may be part of the treatment of cancer, burns, injury or infection. Removal of the larynx, total or partial, results in the person breathing through a hole in the front of the neck (stoma). These people are known as neck breathers and require special care in an emergency. Some breathe only through the stoma (total neck breathers); others through stoma, mouth and nose (partial neck breathers).

A cravat, scarf or other fabric filter over the neck may alert the rescuer to the possible presence of a stoma. A stoma will be more obvious when the victim is on his/her back for expired air resuscitation and the head is put into backward tilt. If a tube is seen in the stoma, always leave it in place to keep the hole open for breathing and resuscitation.

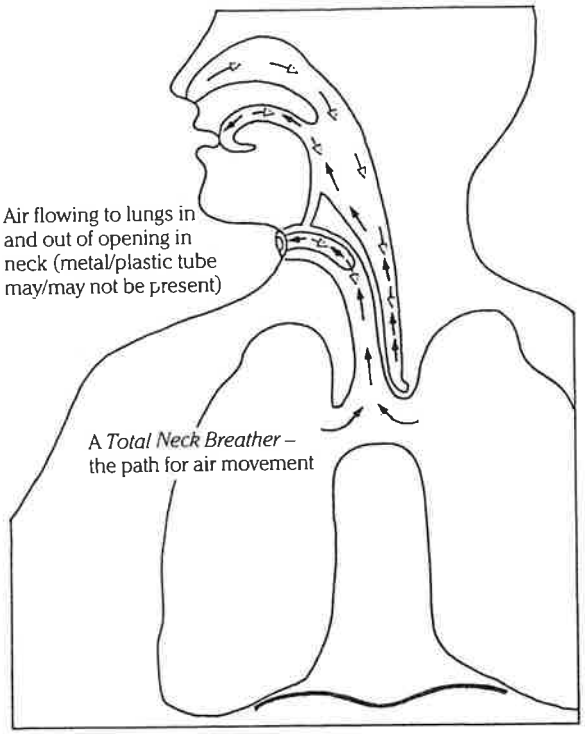


Fig. 3 Total Neck Breather

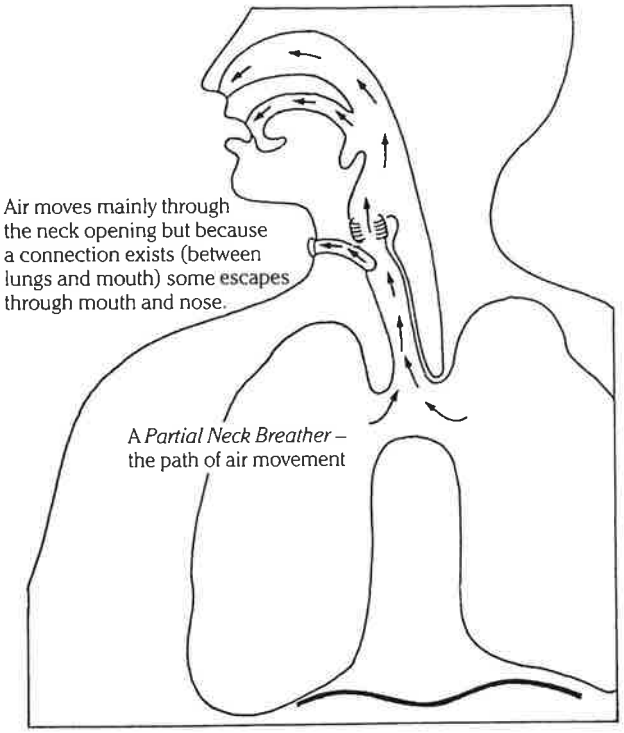


Fig. 4 Partial Neck Breather

Expired air resuscitation

Supporting the jaw with the head in backward tilt will make it easier for the rescuer to seal his/her mouth over the stoma.

If the chest fails to rise, this may be due to:

- a poor seal over the stoma;
- the victim being a partial neck breather and air is escaping from mouth and nose;
- a blocked stoma or tube; do not remove the blocked tube;
- use lateral upper chest thrust in an attempt to dislodge the obstruction.

Partial neck breathers

For a partial neck breather, the rescuer should place the palm of one hand over the victim's cheek, sealing the nostrils with index and middle fingers, using the thumb to press the chin upwards and backwards, sealing the lips. When the chest rises, lift the fingers sealing the nose and mouth and listen for the escape of air from nostrils and stoma.

You are strongly advised to contact your State association. Consult your most recent telephone directory as contact persons may change. In 1994 these were:

- A.C.T.:	Speech Pathology Department Woden Valley Hospital, GARRAN A.C.T. 2605;	06 244 2036
- N.S.W.:	Laryngectomee Association of N.S.W. C/- P.O. Box 58, RICHMOND NSW 2753;	045 781 415
- N.T.:	Speech Pathology Department Royal Darwin Hospital, CASUARINA N.T. 0811;	089 228 578
-QUEENSLAND:	Lost Chord Club of Queensland 106 Palmer Street, WINDSOR QLD 4030;	07 857 5646
- S.A.:	New Voice Association of South Australia 1a McArthur Avenue, WARRADALE S.A. 5046;	08 298 4129
- TASMANIA	Lost Chord Club of Tasmania P.O. Box 301, NORTH HOBART TAS 7002;	002 343 649
- VICTORIA	New Voice Association of Victoria P.O. Box 685, CRANBOURNE VIC 3977;	059 962 083
- W.A.	Laryngectomee Club of Western Australia 13 Ornum Place, INNALOO W.A. 6018;	09 446 2235

Ask for copies of their booklets, e.g.
ALAN DEAR: *You Can Say That Again*, Australian Cancer Society.

Request that a stomatee attend a meeting so that members can meet him/her and be aware of what the stoma looks like and the appliances used for speaking. Such a meeting will reduce the stress for a first aider when suddenly confronted with someone whose neck is covered with a scarf or has a gaping hole or a silicone tube with a one-way valve.

.5 *Perform expired air resuscitation - mouth to stoma method*

NCIDENT

ou are attending a private function when you see a middle aged person collapse. You observe a stoma at the neck. xamine the casualty and treat accordingly. There are no obvious dangers and the patient did not respond to shake and ıout.

hecklist	Tick
uickly turn the patient away from you onto the side. lace the farther arm at right angles to the body. lace the nearer arm across the chest. end the nearer knee to bring thigh at right angles to the body. lace your hand under casualty's neck and support head. oll the patient onto the farther side. urn the face slightly downwards to ensure drainage of fluids.	
irway heck for clear airway.	
pen the mouth. ook inside the mouth for foreign matter.	
eel inside the mouth, scooping with fingers, being careful not to ısh matter further in. emove dentures only if loose.	
ipe away any mucus or vomit from the tube or stoma using a nger or piece of cloth. Nothing apparent)	
pen the airway ackward head tilt. lace one hand on the forehead or top of the head.	
ther hand to support the jaw at the joint of the chin. ilt the head backwards (not the neck).	
nsure face turned slightly downwards to enable fluids to drain om the mouth.	
reathing heck if the casualty is breathing by: - observing for signs of respiration; - looking for movement of the lower chest and upper abdomen.	
No movement) isten and feel for the escape of air from the nose, mouth and stoma ith your hand or cheek.	
No expiration) eel, if necessary, for movement of lower chest and upper abdomen;	

however, movement here does not mean the casualty has a clear airway.	
(If checked, No movement) (No breathing)	
Quickly turn the casualty onto the back and commence expired air resuscitation. Kneel beside the casualty's head.	
Open the airway Backward head tilt. Support the jaw using hand nearest the head. Take a deep breath.	
Place your open mouth over the stoma or tube. Breathe out firmly until the chest rises.	
Give five quick, effective ventilations (full breaths) with expired air within ten (10) seconds.	
Remove your mouth. Turn your head to the side. Observe chest fall. Listen and feel for air being exhaled.	
Circulation Check for presence of pulse for 5 seconds.	
(Pulse present) Continue E.A.R. at 15 times per minute.	

The outcome of cardio-pulmonary resuscitation

Having completed the section on cardio-pulmonary resuscitation, you have the knowledge, and have maintained your skill, to perform effective and competent cardiac resuscitation. It is important that you realise that not every casualty needing cardio-pulmonary resuscitation can be salvaged. In many cases you may establish a pulse and, with artificial respiration, sustain the casualty until relieved by an ambulance crew. The ambulance officers may call upon you to assist during the transfer to hospital. It is not our place as first aiders to assume death has occurred; hence our efforts to re-establish life. Provided you know how to perform effective cardio-pulmonary resuscitation and have practised regularly on a manikin, you will be able to accept that, despite your best efforts, the casualty died.

If you have been involved in an unsuccessful resuscitation, please remember that not all cases of cardiac and respiratory arrest can be reversed and health restored. This may be due to the severity of the injury or to the irreversible nature of the illness or disease which caused the respiratory depression or the cardiac arrest. If you have trouble accepting your apparent failure, please seek advice and help to enable you to cope. Such feelings of helplessness, often manifested by irritability, failure of concentration, sleeplessness and depression, are not uncommon. It is not wrong to feel like this, nor to wonder if the outcome would have been different if you had done something else.

Successful resuscitation of a person back to a full and active life brings great satisfaction. Thank you for being an active member of St John with its long tradition of service to mankind. Thank you for being a volunteer to help those in need and giving cardio-pulmonary resuscitation.

Skills Mastered

	Satisfactory	Fail	Re-test
EXAMINER Please tick			
1.1	❐	❐	❐
1.2	❐	❐	❐
1.3	❐	❐	❐
1.4	❐	❐	❐
1.5	❐	❐	❐

Please sign and print name

Signed: _____ Date ____/____/1995.

Name: _____ Position: _____

Qualification: (Please tick where appropriate)

Doctor _____ Registered Nurse _____ Ambulance Officer _____

Training Branch Accredited Instructor: _____

Operations Branch Member (approved by District Surgeon): _____

Infection Control

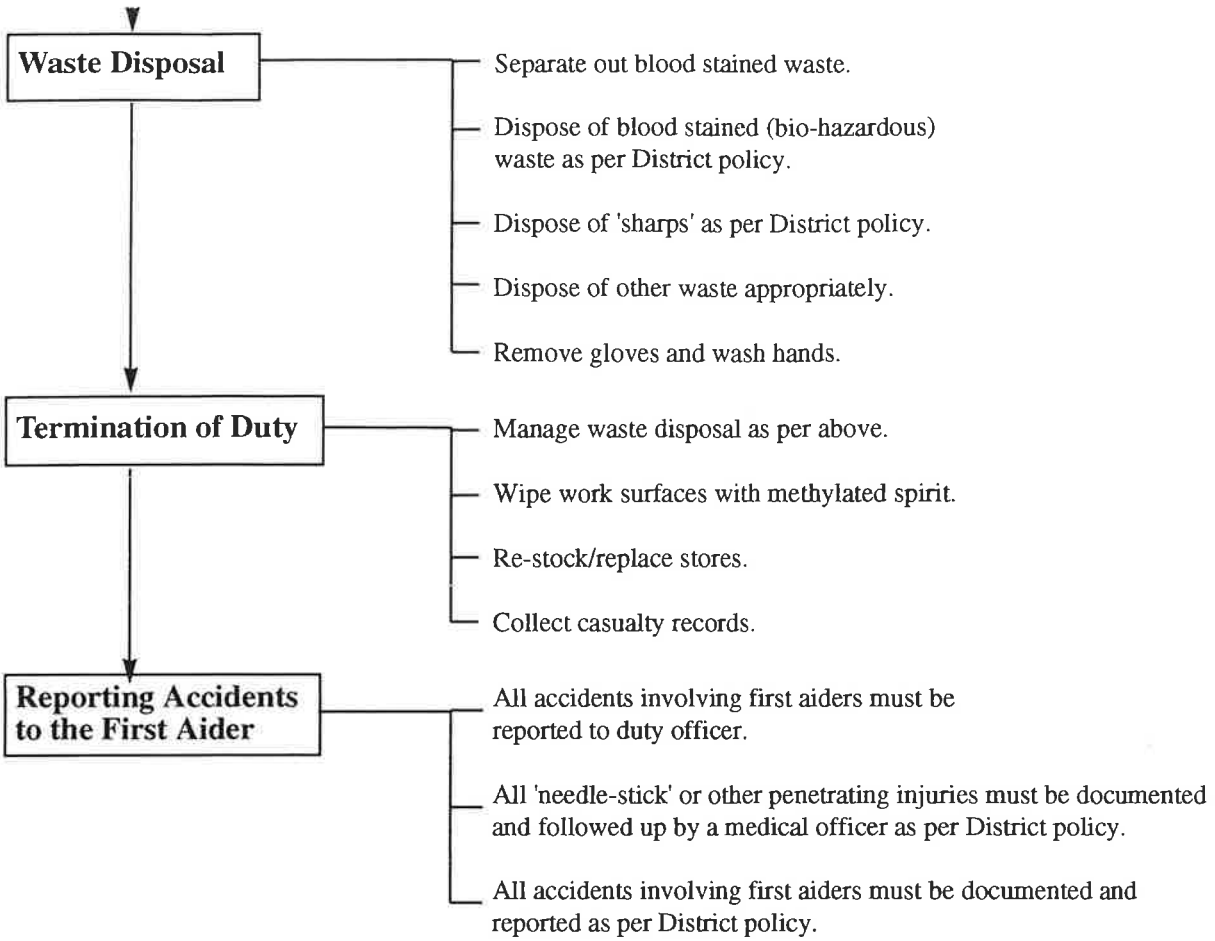
Infection Control Flow Chart

Before the Duty

- First-aiders are encouraged to receive vaccination for tetanus and hepatitis B.
- Members to cover any existing wounds with occlusive dressing.
- Ensure adequate supplies:
  - gloves, aprons, safety glasses where possible;
  - water and soap/liquid soap;
  - bleach;
  - first aid supplies;
  - rubbish containers.
- What do we know about duty/location?
  - pattern of injuries?
  - is there water?
  - are there toilets?
  - is there waste disposal?
    - blood and body fluid contamination?
    - 'sharps' container?
    - other waste?
- Set up duty:
  - separate clean/dirty work areas;
  - site away from ablutions (toilet block).

Managing the patient

- Treat all people equally, as if they are infectious.
- Wash hands before treatment.
- Wear gloves if body fluid contact likely.
- Change gloves for each patient.
- Dress open wounds.
- Clean up spills of vomit, blood, etc.
  - use bleach/water 1 in 10 (one part bleach to nine parts water).
- Use disposable equipment where possible.



Tetanus

(The following information is provided courtesy of the Department of Health and Community Services, Victoria)

What is tetanus?

Tetanus is a disease caused by the tetanus germ. This germ is very common in soil, dust and animal manure. It enters the body through wounds, burns, splinters, thorn pricks or any injury where the skin is penetrated.

Tetanus is a serious disease that can cause death even when treated. The only protection against tetanus is immunisation and this is easy to arrange. Your community health centre or doctor can arrange immunisation for you.

Who needs to be immunised?

Everyone should be immunised because we all, at some time, get a splinter, thorn prick or penetrating skin wound. So we are all at risk of getting tetanus.

How you are protected against tetanus

Active immunisation against tetanus is provided by several vaccines. Each one is used for different age groups.

- TA (Triple Antigen) is used for babies and children under the age of four years. Three injections are needed with two months between injections. The injections can begin as soon as the baby is two months old.
- CDT (Combined Diphtheria/Tetanus) is used for children who have some genuine contraindication to Triple Antigen.
- ADT (Adult Diphtheria/Tetanus) for people starting their course of vaccinations over the age of eight years.
- Tetanus Vaccine: any age.

NOTE: The full course for ADT or Tetanus Vaccine for those who have not been immunised against the disease before is three injections at two monthly intervals.

Remember that you need a complete course of vaccine for full protection. Ten years after the first course of injections you will need another injection and then another one every ten years after that to keep you safe from tetanus.

Hepatitis B

(The following information is provided courtesy of CSL Limited)

Hepatitis B is a worldwide scourge infecting about 5% of the world's population. It also presents a serious health problem to certain 'high risk' individuals and groups in Australia.

How is it spread?

The hepatitis B virus is usually spread by contact with infected blood in such ways as illicit injectable drug use, tattooing and ear piercing. The virus may also be found in other body fluids such as tears, saliva, urine, semen, vaginal secretions and breast milk. Thus, transmission of the disease can also result from close inter-personal contact, including sexual contact and the sharing of razors, toothbrushes or needles.

Because of the many ways it can be acquired, its ease of transmission and its potential for long term complications, hepatitis B cannot be taken lightly. Although most patients recover, in some it is very serious and even fatal.

Symptoms of hepatitis B

Many people infected with hepatitis B never have symptoms. However, if symptoms occur they can incapacitate a person for weeks or months. The symptoms themselves are initially flu-like and include fatigue, mild fever, muscle and joint aches, followed by nausea, loss of appetite, vague abdominal pain and occasional diarrhoea. Some people develop jaundice (a yellow cast to the skin and the whites of the eyes). Most patients fully recover.

Complications of hepatitis B

Five to ten percent of adults who become infected with hepatitis B become chronic carriers capable of spreading the disease to others for an indefinite period of time. This group usually has no symptoms but has the greatest potential for developing long-term complications such as chronic active hepatitis, chronic persistent hepatitis, cirrhosis and primary liver cancer. Carriers of hepatitis B have a risk of over 250 times greater than that of the general population of contracting liver cancer.

Carrier rate in Australia

The chronic carrier rate in Australia is estimated at 1 in 100 persons but varies significantly among the different ethnic groups. Carriers can be detected only by a blood test.

Responsibilities of chronic carriers

Hepatitis B carriers have special responsibilities towards others. If you have had hepatitis B and/or testing shows that you are a carrier, you can help prevent spread of the disease by following these guidelines:

- Discuss your carrier status and your responsibility to your family and other household members with your physician.
- Inform dentists, doctors, nurses, laboratory technicians and others who may draw blood or perform surgical procedures so that they can take the appropriate precautions. Avoid sharing personal items such as razor blades, scissors, nail files, needles, toothbrushes and eating utensils that may have come into contact with your blood or other body fluids.
- **Never** donate blood.
- Carefully cover cuts or weeping sores.
- Dispose of used personal items such as tissues, menstrual pads and tampons in closed bags.

Groups at greatest risk

Persons at increased risk of contracting the disease are those who frequently handle blood and other body fluids in the course of their work or who live in crowded conditions, have poor hygiene or have many sexual contacts. Persons at increased risk of contacting hepatitis B include:

- Health care and related workers such as physicians, surgeons, nurses, dentists, blood bank and paramedical personnel and residents and staff of institutions for the mentally disabled.
- Persons from certain ethnic groups such as Aborigines and Torres Strait Islanders, Asians and people of Mediterranean background.
- Sexually active people especially persons who repeatedly contact sexually transmitted diseases, homosexually active males and female prostitutes.
- Users of illicit injectable drugs.

- People who have household and other intimate contact with carriers.
- Prisoners and other institutionalised persons.

In addition to the high risk groups mentioned, two other groups are susceptible to hepatitis B infection:
- Infants born of carrier mothers are at special risk.
- Children in some kindergartens and primary schools where a significant number of pupils are from populations with a high carrier rate.

Vaccines to help prevent hepatitis B

There are vaccines available that provide active immunity against hepatitis B. If you are a member of one or more of the listed high risk groups or believe yourself to be at increased risk, ask your doctor for information on vaccination and whether it may be appropriate for you.

Note: The hepatitis B virus is over 100 times more infectious than the AIDS virus. Unfortunately, unlike the AIDS virus, the hepatitis B virus is quite stable and can survive for several days on environmental surfaces.

Hepatitis C

(The following information is provided courtesy of the Vivian Bullwinkel Education Centre, Fairfield Hospital, Victoria)

Hepatitis C is one of several viral infectious diseases which cause inflammation of the liver.

What causes the disease?

A newly identified virus, now known as hepatitis C virus (HCV), was previously included in a group of viruses called 'non-A non-B hepatitis viruses'.

How is it spread?

There is still much to learn about Hepatitis C and research is continuing. In Australia, a lot of people infected with hepatitis C have contracted it through injecting drug use by sharing fits/injecting equipment or solution. Other people appear to have been infected through transfusion with infected blood or blood products. There is also a number of people for whom a risk factor has not yet been identified.

Since February 1990 Australian blood banks have been screening donated blood for hepatitis C virus. Only blood that has no detectable antibodies to the virus is used for transfusion.

Unprotected sexual intercourse (i.e. without using a condom) may be a risk but this risk appears to be much lower than for other viruses such as hepatitis B or HIV. Spread from mother to baby is rare and there is no evidence that babies are infected by being breastfed.

If you are concerned that you may have been in contact with infected blood, consult your doctor for advice about a blood test.

How it is not spread

Hepatitis C cannot be passed on by ordinary social contact, e.g. hugging, kissing, shaking hands, or sharing crockery or shower or toilet facilities.

What are the signs and symptoms?

Some people who become infected will not feel ill. Other people with hepatitis C will have the same signs and symptoms as for other hepatitis diseases. These are:
- Tiredness.
- Pain on the right side below the ribs.
- Loss of appetite.
- Nausea (feeling sick in the stomach).
- Headaches.

Less common symptoms include dark urine, pale stools, jaundice - most noticeable as yellowing of the whites of the eyes and skin - and memory or concentration problems.

How is someone with hepatitis C cared for?

Rest and plenty of fluids to drink are needed. Almost all infected people will be well enough to rest at home, under the watchful eye of their general practitioner. Sometimes, if the symptoms are severe or the person cannot rest at home, hospitalisation is needed.

Chronic infection

Some people will develop immunity to hepatitis C and not remain infectious. These people will not be carriers.

However, the majority of people fail to clear the virus from their blood. They will become chronic carriers and may continue to be infectious. More serious liver inflammation and permanent liver damage (cirrhosis) may develop in some of these people after many years. This is a serious condition. If you are concerned, discuss this in detail with your doctor.

Treatment for chronic infection

There is no vaccine for hepatitis C infection. The Australian government has approved a drug called 'alpha interferon' as a treatment for chronic carriers of hepatitis C. Researchers at Melbourne hospitals, including Fairfield, are investigating this treatment with selected patients. It is believed that this drug benefits a proportion of patients.

How is hepatitis C prevented?

- Do not share needles/fits/injecting equipment or solution.
- Do not share any items that may carry blood from one person to another, e.g. toothbrushes, razors.

A vaccine against hepatitis C has not yet been developed. Since this is a recently identified virus, ongoing research will provide more information on this subject.

Bibliography

1. Health Department Victoria: *Guidelines for the Control of Communicable Diseases*, Health Department Victoria, Melbourne, 1993.

2. Victorian Government: *Protection in Practice - Infection Control Guidelines on HIV and Hepatitis for Health Care and Emergency Service Workers*, AIDS/STD Unit, Melbourne, 1993.

Topic Mastered

	Satisfactory	Fail	Re-test
EXAMINER Please tick	❒	❒	❒

Please sign and print name

Signed: _____ Date ____/____/1995.

Name: _____ Position: _____

Qualification: (Please tick where appropriate)

Doctor _____ Registered Nurse _____ Ambulance Officer _____

Training Branch Accredited Instructor: _____

Operations Branch Member (approved by District Surgeon): _____

Management of Choking

PRESCRIBED REFERENCES: *Australian First Aid*, Vol. 1, pp. 157-158, 1989, reprinted annually.
A.R.C. Policy 4.3.6., March 1988.

Conscious Victim

The choking victim who is conscious should be encouraged to relax and breathe deeply, and to remove the foreign material by coughing. If the conscious victim shows signs of partial airway obstruction, e.g. wheezing or stridor and/or laboured breathing, arrange transport to hospital without delay, preferably by ambulance.

Attempts to dislodge the foreign body may result in complete airway obstruction. The victim will then cease breathing and become unconscious.

Non-Breathing Victim

Airway obstruction by foreign material may not be suspected until expired air resuscitation is attempted, e.g. by resistance to inflation and failure of the chest to rise despite correct head tilt and jaw support. Check and re-check by looking or feeling for the foreign body, in the back of the throat.

Where possible, position the victim with the head lower than the body to increase the effect of gravity in getting rid of the obstruction:

- give 3-4 sharp blows between the shoulder blades;
- increase your expired air pressure to the blocked airway to partially or completely dislodge the foreign material;
- if still unable to inflate the lungs, try to dislodge the foreign material by lateral chest thrusts. Apply sudden pressure to the chest wall close to both armpits. This delivers more sustained pressure to the blocked air passage and may dislodge the foreign material. This method poses minimal risk to internal organs e.g. heart and lungs. Immediately resume resuscitation.

Fig. 1 Lateral chest thrust method of managing choking

Explanation

Abdominal thrusts, using forcible pressure over the abdomen, should be avoided because:

- they may damage internal organs, especially liver, spleen or stomach;
- they may cause regurgitation of stomach contents;
- they can be particularly dangerous in pregnancy.

Topic Mastered

	Satisfactory	Fail	Re-test
EXAMINER Please tick	❒	❒	❒

Please sign and print name

Signed: _____ Date ____/____/1995.

Name: _____ Position: _____

Qualification: (Please tick where appropriate)

Doctor _____ Registered Nurse _____ Ambulance Officer _____

Training Branch Accredited Instructor: _____

Operations Branch Member (approved by District Surgeon): _____

MODULE 4

Burns

PRESCRIBED REFERENCES: *Australian First Aid*, Vol.1, 1989, reprinted annually.
Supplementary Training Material.

OBJECTIVE: After studying the training programme and the appropriate references, the St John member will be able to describe the various types and causes of burns, estimate the percentage area affected and state the treatment that would be applied in given situations.

Practical Skills

4.1 Give examples of how different types of burns may be caused. Describe the differences among the effects of each type.

4.2 Using diagrams, estimate the percentage of surface area burned (Rule of Nines). Using the 'casualty's hand' technique, estimate the percentage area of scattered burns. The casualty's hand (palm and extended fingers) equals approximately 1% of his/her body surface.

4.3 Describe the differences between partial-thickness and full-thickness burns.

4.4 State the dangers associated with burns.

4.5 Describe how to treat:
- small thermal burns;
- large-area thermal burns.

4.6 Describe the dangers to the airway from facial burns and burns sustained from fires in closed spaces.

4.7 Demonstrate the treatment of a burns casualty. Use the three B's and three C's checklist.

Supplementary Training Material

A **burn** is damage to skin and underlying tissue usually by heat, but also by chemicals, radiation or friction.

TYPES:

1. **Flame** with dry heat, e.g. fire.

2. **Scalds**: contact with moist heat, e.g. hot liquids, steam.

3. **Chemical burns**: contact with corrosive acids, alkalis, combustible chemical powders, e.g. sulphuric acid, caustic soda, phosphorus.

4. **Electrical burns**: contact with live power points or high voltage cables, e.g. faulty socket or plug, faulty appliance.

5. **Electrical flash burns and explosions**: contact with flash from high voltage electrical apparatus or cables.

6. **Friction**: caused by two skin surfaces rubbing together; it can be caused by clothing, shoes and other objects rubbing against skin.

7 **Radiation**: sunburn, radiotherapy for malignant disease such as cancer.

8. **Contact:** contact with heat conducting material, e.g. hot metal or exhaust pipe.

9. **Super heated atmosphere**, e.g. steam from boiler room explosion.

Complications

INFECTION - SHOCK

Burn injuries affect both the integrity of the skin and the circulation. The risk of infection is increased and one reason for this is the loss of plasma (blister fluid) from the circulating system. If sufficient plasma is lost, shock will develop. To estimate the severity of a burn, two important factors must be assessed.

1. The **depth of the burn**:

(a) Superficial, partial-thickness and deep partial-thickness

The epidermis and dermis of the skin are damaged to varying depths from sunburn to almost full skin thickness.

- sign: skin is pink to dark red and blistering;
- symptoms: severe pain if superficial but reduced pain if deep partial.

If the burn heals within 14 days, there is usually no scarring. Deep partial burns may take several weeks to heal and will result in scarring.

(b) Full-thickness

The full thickness of skin is destroyed; there may be damage to underlying muscle and tissue in varying depths.

- sign: dead white or area brownish-black in colour, scarring of the deeper part like over-cooked joint of meat. Wound may be black around edges. Dry 'parchment'-like feel.
- symptoms: there is little or no pain as the nerve endings have been damaged or destroyed.

Healing is slow and will produce scarring. If a limb is involved, partial loss of function or deformity may result.

2. The **area of the wound** is important as there is risk of infection to the exposed wound. Also, the larger the area of the wound, the more circulating fluid is lost, producing a greater degree of shock. Shock from loss of plasma is aggravated by pain. Much fluid is lost in full thickness burns into the tissues beneath the dry 'parchment'-like burned skin.

To estimate the area burnt, apply the Rule of Nines. Burns estimated to be more than 10% (or 5% in children, the elderly or the very ill) are serious. Seek urgent medical help. Full thickness burns always need urgent medical assistance.

Burns are assessed as serious by five points:

life threatening associated injuries e.g. head injury, fractures;

. inhalation injury and carbon monoxide poisoning;
. depth - how deep the burn is;
. area - how large the area of the body which is burnt (apply the Rule of Nines);
. special sites - face, neck, fingers, toes, genitals, anus.

The special sites are classed as serious because the skin and tissue in these areas are so loose that scarring and contraction of healing could result in additional complications, i.e. partial or complete loss of movement in burns around joints, and deformity due to contraction in burns to the toes and fingers.

In the case of burns to the face, the patient may inhale irritant gases, smoke or steam causing an obstruction in the airway with noisy croupy sound and require surgical treatment to assist in the patient's breathing. Also, with facial burns the eyelids swell greatly, causing apparent blindness for several days even though the eyes may not be damaged.

Treatment

The aim of treatment of burns is to prevent infection, combat shock and get the patient to medical aid as soon as possible.

Note: All casualties from a confined-space burning area should be assumed to have an inhalation injury. Give 100% oxygen if available. Transport urgently to medical aid.

At the Incident:

- Wear gloves.

- D.R.A.B.C.

- Check for other injuries e.g. head injuries or fractures.

- Cool the burns with cold water for 10-15 minutes - e.g. from the tap.

- Remove smouldering clothes, hot liquid soaked clothes or chemical contaminated clothing.

- Cover the wound with a sterile non-stick dressing or burn sheet.

- Secure with a bandage.

If area is large:

- Cool the area.

- Use a clean sheet or pillow case or garbage bag or plastic cling wrap to envelope the area.

- Soaked clothing, which has not stuck to the skin, should be removed but try not to remove clothes unnecessarily.

- Dressings should be applied over burnt clothing which has stuck to the burn area.

- Make sure the casualty's airway is clear. Continually monitor breathing, circulation and level of consciousness. If casualty is unconscious, transport in the stable side position.

Special Circumstances

In cases where there is damage to the eyes, nose and mouth, special care should be taken.

In cases of electrical burns, ensure that the electricity is **off** and that you are not in danger of also being electrocuted. If the electricity supply cannot be shut off, remove the casualty, or that part of the casualty in contact with the current by using a **dry** wooden object. The rescuer should stand on a dry surface.

Note: Only do this if you are absolutely sure that the article you are using and the surface you are standing on are dry and non-conductive.

Note that with electrical burns to the skin and body, the casualty may have other conditions due to the electric shock, such as cardiac arrest, fractures or head injury due to being thrown by the electric force.

Treat Priorities First

In cases of chemical burns, the source of heat should be removed. Corrosive acids and alkalis should be treated by immersion or flushing with water for a minimum of 10 minutes, preferably 20 minutes.

Note that in the case of burns from chemical powders, e.g. phosphorus and lime, special attention should be paid to the powder's reaction.

Phosphorus ignites when exposed to air. Immersion in water as for normal burns is adequate. In the dressing of phosphorus burns, the dressing and area of the burn should be kept wet due to the combustible reaction of air and phosphorus. Transport the casualty covered in wet towels.

Lime dissolved in water gives off heat; it should be brushed from the wound before immersion in water.

Special Notes

1. Observation of the casualty is essential. Ensure the airway is kept clear. Monitor breathing, circulation and level of consciousness.

2. Most burns are painful. The more superficial the burn, the greater the pain. Large-area, full-thickness burns may be virtually pain free.

3. **Do not lower body temperature too far by excessive cooling**. If patient complains of cold or shivers or is blue from cold, cease cooling. Cover with a sterile burn sheet or non-stick dressing or plastic.

4. **Casualties with burn injuries require urgent removal to hospital.**

Surface Area (Adults)

The body surface burnt is very important in determining the seriousness of the injury. A reasonably accurate estimate of the amount of body surface burnt is determined by the Rule of Nines. This rule applies especially to adults and older children. It divides the body into sections each of which constitutes 9% of the total area (Figure 1).

Surface Area (Infants and Younger Children)

In infants and younger children, a greater proportion of the body is taken up by the head and the smaller portion by the lower extremities. The Rule is modified accordingly (see Figure 2).

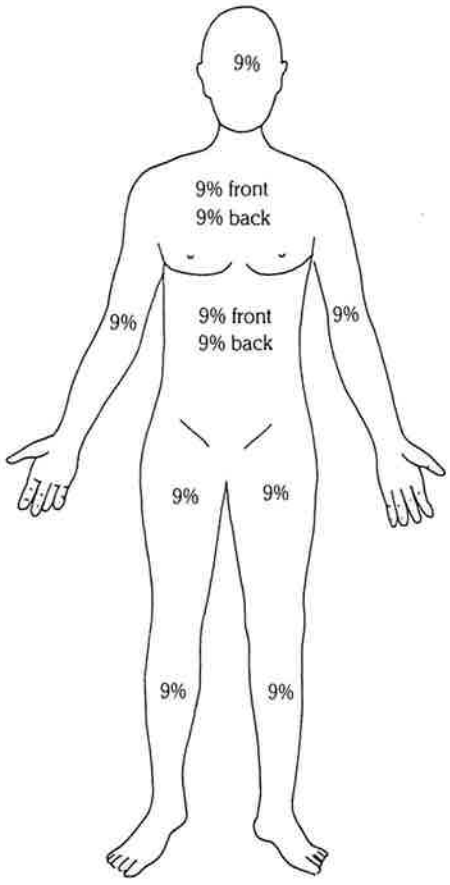


Fig. 1 Rule of Nines (Adult)

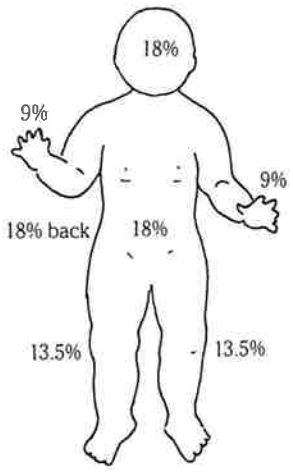


Fig. 2 Rule of Nines (Infants and younger children)

4.1 Manage the treatment of a casualty with burns

INCIDENT

Whilst attending a party, you hear a cry for help. On investigation you find a person's clothing ablaze. Treat the casualty accordingly.

Equipment Required:

- C.P.R. manikin or similar doll
- 1 blanket
- 1 sheet
- quantity of water in containers

Checklist	Tick
Wear protective gloves, if possible.	
Burning stopped Remove casualty from heat/heat from casualty. Place casualty on ground. Extinguish fire on patient using blankets to smother flames. Remove blanket after flame extinguished. If no blanket, roll casualty from side to side to extinguish flames. Douse or immerse casualty in water, if available.	
Breathing maintained Open airway and clear.	
Check breathing - look, listen, feel.	
Check pulse - feel carotid.	
Give E.A.R. or C.P.R.: Oxygen as needed if available in all suspected respiratory and inhalation injuries	
Body examined Haemorrhage check.	
Level of consciousness Command; Touch; Pain.	
Fractures: injuries.	
Estimate depth of burn, partial /full-thickness and estimate surface area.	

Treatment of Burn

Wear gloves.

Cool

Apply cool running water to burnt area.
Remove burnt clothing.
Cut around clothing that has adhered to skin.
Do not over-cool casualty.
Remove constricting rings and watches.

Cover

Apply sterile non-stick or clean dressing to area.

Carry
Obtain medical aid urgently.

Note: Burn deaths are usually due to the inhalation of smoke and fumes and carbon monoxide poisoning.

DO NOT:

- Delay medical aid;
- Break blisters;
- Use cream, ointments etc.;
- Over-cool or over-heat;
- Overlook other injuries, which may be more life threatening.

Correctly dispose of used swabs, gloves and equipment.

Skills Mastered

	Satisfactory	Fail	Re-test
EXAMINER Please tick	❒	❒	❒

Please sign and print name

Signed: _____ Date ____/____/1995.

Name: _____ Position: _____

Qualification: (Please tick where appropriate)

Doctor _____ Registered Nurse _____ Ambulance Officer _____

Training Branch Accredited Instructor: _____

Operations Branch Member (approved by District Surgeon): _____

Wounds and Haemorrhage

PRESCRIBED REFERENCES:

Australian First Aid, Vol. 1, 1989, reprinted annually.
Family Care at Home, 1990. Pamphlet 10, Skills Book No. 25.
Skills Maintenance Programme 1995, Module 2.

OBJECTIVE: On completion of the training period and after practising the practical skills listed below, the member will be able to apply one or more of these skills in the mock, practical incident.

Practical Skills

5.1 Manage a casualty with a wound:
(a) Minor;
(b) Major.

5.2 Manage a casualty with external bleeding.

5.3 Manage a casualty with bleeding from special sites:
(a) Nose;
(b) Tooth socket;
(c) Ear.

5.4 Manage an unconscious casualty with external bleeding.

5.5 Manage a casualty with internal bleeding.

Wounds

A **wound** is a break in the continuity of any tissue, caused by injury, operation or illness.

Types of wound:

1. **Abrasion**: superficial grazing; a raw oozing area, frequently contaminated by dirt.
2. **Incision**: a cut caused by sharp object; clean edges; often bleeds a lot.
3. **Laceration**: caused by blunt or jagged objects; edges torn.
4. **Contusion**: bruising caused by a fall or blow; bleeding occurs into the damaged tissue.
5. **Penetrating stab**: a stab has a small entrance; it may damage deep structures.
6. **Gunshot**: entry wound; may be exit wound.
7. **Amputation**: a severed part or limb.
8. **Bites**: jagged, penetrating; high risk of infection, e.g. animal, human.

9. **Burns**

10. **Fractures**

Aims of Wound Treatment

1. Control haemorrhage.

2. Prevent further damage to area.

3. Prevent or minimise infection.

4. Seek medical aid if necessary.

5. Give ongoing advice.

Wounds - General Rules of Treatment

1. Wash hands.

2. Use occlusive dressing if necessary.

3. Wear gloves: use forceps (non-touch technique).

4. Control haemorrhage.

5. Explain procedure to casualty and reassure.

6. Put casualty and injured part at rest.

7. Cleanse wounds with:
   (a) normal saline;
   (b) water (sterile if available);
   (c) antiseptic (as approved by your State).

   Note: Depending on type of wound, this procedure may be omitted.
   Do not use cotton wool on open wounds.

8. Apply a dressing, e.g.:
   (a) dry dressing;
   (b) non-stick (if open or weeping wound);
   (c) dressing must be large enough to extend at least 2.5 cms beyond wound edges.

9. Bandage or tape; check for allergy to tape and consider the elderly and others with frail skin.

10. Immobilise and elevate if necessary.

11. Handle all wounds gently to prevent further damage and further shock.

12. Always remove rings, watches etc. from injured limbs and keep in a safe place.

13. Use good nursing procedure to prevent infection.

14. Watch for signs of shock.

15. When assessing a wound take into account:
   (a) size of wound;
   (b) how it happened;
   (c) what area it is on, e.g. face or over wrist;
   (d) what structures are underneath this wound;
   (e) the casualty's medical history, e.g. diabetic.

16. Enter record of treatment on form OB12.

17. Give ongoing advice and reassurance.

18. Advise further medical care.

Major Wounds

Any large or deeply incised or lacerated wound, whether by stab or gunshot or other means, needs prompt medical referral after basic first aid. Such wounds may involve damage to underlying structures, such as tendons or nerves, or may be associated with fractures. Control bleeding. Do not clean or paint these wounds as this may complicate medical assessment procedures later. Cover rapidly and evacuate.

Major Wound Care for Operations Branch Field Duties

1. Member should wear gloves.

2. Control bleeding by direct pressure and elevation.

3. Secure padding in place with firm, even pressure bandage.

4. Immobilise fractures and cover minor injuries.

5. Arrange transfer of casualty to medical aid by most appropriate means.

Haemorrhage

Haemorrhage is bleeding.

Classification of bleeding:

1. External - discharging via a wound or body orifice.

2. Internal - into tissues/organs; can be concealed or revealed.

Types of Bleeding

1. **Arterial** (systemic artery): bleeding occurs in spurts; bright red in colour; in time with the heart beat /pulse.

2. **Venous** (systemic vein): bleeding is a steady flow; dark red in colour.

3. **Capillary**: blood oozes from the wound; bright red in colour; it is usually small in volume and easily controlled.

Note: All bleeding can be serious or fatal, especially in an infant or child because of the relatively low blood volume:

- A newborn has a blood volume of approximately 280 mls. A blood filled lump on the scalp, for example, may represent as much as a third of an infant's blood volume.

- An adult has 5- 6 litres (6000 mls) of blood .

This knowledge is important when having to triage, assess and treat all accidents.

How does your body help control bleeding?

1. Constriction and retraction of vessels.

2. Coagulation (clotting).

3. Reduction in blood pressure.

Signs and symptoms of blood loss:

- obvious bleeding;
- weak, feeble, rapid pulse;
- faintness and dizziness;
- restlessness, apprehension;
- nausea;
- thirst;
- pale, face and lips;
- cold and clammy skin;
- rapid breathing;
- air hunger or sighing respirations.

Blood may be:
- coughed up;
- vomited;
- passed from the rectum;
- lost from the vagina;
- found mixed with urine.

Look for evidence of disease or injury.

Types of haemorrhage

1. **Concealed:**
   - ruptured liver;
   - spleen;
   - kidney;
   - ectopic pregnancy.

   Blood may remain in the abdominal cavity:
   - extremely dangerous;
   - fatal if prolific or uncontrolled.

   Recognition:
   It is very important, to take a history (if possible). Look for:
   - evidence of a blow to the area;
   - redness, bruising, swelling;
   - guarding (rigidity of abdominal muscles);
   - general signs of blood loss.

2. **Revealed:** Blood from any body orifice is an indication of possible internal bleeding (except normal menstruation) e.g.
   - lungs: blood is coughed up and is bright red and frothy;
   - stomach: blood is vomited; it often has the colour of coffee grounds, but bright if haemorrhage is severe;
   - small intestines: blood may be mixed with the motions; due to digestive juices, a black tarry appearance and offensive odour are common; these are known as melaena stools;
   - large intestines: motions may be red (no digestive juices) or of normal colour but with blood also present;
   - kidneys/bladder: blood in the urine gives it a brown red or smoky appearance.

5.1(a) Manage a casualty with a minor wound

Cover any existing wound which you have according to the Infection Control Chart in Module 2.

Checklist	Tick
Ensure privacy if possible.	
Patient Care Reassure casualty. Sit casualty down (lie down if pale). Explain what you are going to do.	
Take history of injury.	
Wound Examination Put on gloves. Look at wound. Note: - type; - size.	
Check for foreign bodies in wound.	
Position injured limb, e.g. support arm or leg.	
Equipment Collect equipment needed: - swabs; - sticking plaster; - solution; - bandage, etc.; - dressing; - scissors.	
Procedure Wear gloves. Use non-touch technique.	
Protect casualty's clothing.	
Clean wound using: - normal saline; - water (sterile if available); - or antiseptic (approved by your State); or - rinse under tap.	
Clean wound thoroughly: - swab from top to bottom; - swab from centre out. Use each swab for one wipe, then discard.	
Dry with gauze. Apply suitable dressing.	
Fix dressing in position with: - sticking plaster;	

- tape; or - bandage . (Dressing needs to be safe if casualty returning to work.)	
Check casualty's comfort.	
Records Fill out correct Operations Branch forms, e.g. OB12.	
Ongoing advice Keep dressing dry. Remove in 24 hours. Re-apply if necessary. If wound becomes very: - red; - swollen; - painful to use; - throbs; - red line appears up arm or leg; - casualty has an elevated temperature; - feeling generally unwell; **See a doctor.** Get a tetanus injection or booster if needed.	
Correctly dispose of used swabs, equipment and gloves.	

5.1(b) Manage a casualty with a major wound

Cover any existing wound which you have according to the Infection Control Chart in Module 2.

Checklist	Tick
Ensure privacy if possible.	
Patient Care Reassure casualty. Put on gloves. Lie casualty down. Explain what you are going to do.	
Ask how it happened: - when? - where?	
Wound Examination Quickly assess wound: - type; - size; - position of injury. Immediately control bleeding as per checklist : *A.F.A.* Vol.1, pp. 61, 62, 63.	

If no bleeding present, continue with this procedure.	
Position of injured limb, e.g. support arm or leg.	
Protection of Wound Cover with sterile non-stick dressing: (a) to help minimise infection; (b) to prevent further injury. **Note**: If protruding abdominal organs, cover with a wet, sterile, non-stick dressing.	
Check medical history. **Check if casualty has any allergies or is on any medication.**	
Equipment Collect equipment needed: - forceps; - sticking plaster; - swabs; - bandage; - solution; - scissors; - dressings; - slings etc. If sterile dressing trays available these should be used.	
Procedure Wear gloves. Use non-touch technique.	
Protect casualty's clothing.	
Remove covering dressing.	
Clean wound with swabs using: - normal saline; - sterile water; - antiseptic (approved by your State).	
Swab wound: - from top to bottom; - from centre out. Use each swab for one wipe, then discard. Continue using as many swabs as necessary to clean wound.	
Dry with gauze swabs.	
Apply a suitable dressing, e.g.: - non-stick dressing; - burn dressing.	
Apply suitable padding if wound is likely to weep.	
Fix dressing in position with: - sticking plaster; - tape; - bandage.	

Check casualty's comfort.	
Give nothing by mouth if you suspect casualty may need: - sutures as wound gaping; - tendon repair as unable to move part or all of limb; - anaesthetic; - or is drowsy or unconscious.	
Check if casualty needs a tetanus injection, booster or hepatitis B injection and give appropriate advice.	
Records Fill out correct Operations Branch forms. A Casualty Report form OB12 must accompany casualty to hospital or medical facility.	
Correctly dispose of used swabs, equipment and gloves.	

5.2 Management of a casualty with external bleeding

Cover any existing wound which you have according to the Infection Control Chart in Module 2.

Checklist	Tick
Member to wear gloves.	
Look at wound Check for foreign object, e.g. glass. (No glass)	
Direct digital pressure *A.F.A. Vol.1 pp. 61,62,63.* Thumbs along edges, parallel to wound with fingers outstretched around limb or part.	
Timing Must reach this stage within 10 seconds of start. Bleeding controlled - 5 minutes pressure by the clock	
Elevate the part Limb elevated, whilst maintaining digital pressure.	
Rest the patient Sit or lie the patient down (whichever applicable to the injury). Maintain elevation and digital pressure.	
Bandage affected area Dressing in place if available, otherwise a pad for pressure. Roller or triangular bandage to cover pad. Improvise if no prepared equipment available.	

Immobilisation Rest the injured part: - Arm: sling; - Leg: instruct the casualty not to move. Reassurance is given from the moment of contact with the casualty.	
Check affected area Has bleeding been controlled? If not, apply another pressure pad/bandage. Check area below part bandaged: - colour; - pulse; - sensation. . pins and needles, suggesting bandage too tight; . numbness, suggesting nerves injured in accident.	
Ask casualty if he/she is comfortable.	
Note: Uncontrolled bleeding - If severe bleeding cannot be controlled by direct pressure, it may be necessary to apply pressure to the **pressure points**. *A.F.A.* Vol.1 p. 64. Alternatively, apply **constrictive bandage**. *A.F.A.* Vol. 1 p. 65.	
Correctly dispose of used swabs, equipment and gloves.	

5.3(a) Manage bleeding from special sites - Nose

Cover any existing wound that you have according to the Infection Control Chart in Module 2.

Checklist	Tick
Member to wear gloves. Sit casualty down on chair or ground, with head slightly foward. Pinch off soft part of nose with finger and thumb for 5-10 minutes by the clock. Instruct casualty to breathe through mouth slowly, and gently spit any blood out into a bowl. Loosen tight clothing. Instruct casualty not to blow nose. Place cold wet towels on neck and forehead. Reassure casualty continually. Maintain a peaceful environment, with supply of fresh air. Seek medical aid if bleeding continues for more than 20 minutes. Check casualty's medical history for hypertension (high blood pressure) and for bleeding and bruising disorders.	
Correctly dispose of used swabs, equipment and gloves.	

5.3(b) Manage bleeding from special sites - tooth socket

Causes: 1. Tooth extraction 2. Injury

Cover any existing wound that you have according to the Infection Control Chart in Module 2.

Checklist	Tick
Member to wear gloves. Reassure. Instruct casualty to keep tongue clear of socket. Do not remove clot in the socket by rinsing. Place a firm pad of gauze over the socket and instruct the casualty to bite firmly on it. Instruct casualty to keep pad in place for 1 hour. Instruct casualty to seek medical aid if bleeding continues. If permanent tooth is dislodged, rinse gently in milk or saline, preferably not water, and replace in socket. Advise to seek immediate dental aid. If can't replace tooth, rinse gently, wrap in plastic cling wrap or place in milk and send with patient to dental aid.	
Correctly dispose of used swabs, equipment and gloves.	

5.3(c) Manage bleeding from special sites - Ear

Causes: 1. A blow to the head 2. A fall

Cover any existing wound that you have according to the Infection Control Chart in Module 2.

Checklist	Tick
Member to wear gloves. D.R.A.B.C. Do not plug ear canal. Do not put drops in of any kind. Allow fluid to drain freely. Place the casualty on the side with the affected ear downwards, even if the casualty is conscious. Place a clean pad between the ear and the ground. Seek medical aid urgently.	
Correctly dispose of used swabs, equipment and gloves.	

5.4 Manage external bleeding in an unconscious casualty

Cover any existing wound that you have according to the Infection Control Chart in Module 2.

Checklist	Tick
Member to wear gloves	
Casualty Approach D.R.A.B.C. *A.F.A.* Vol.1 pp. 30-43. **Note:** An unconscious casualty is always rolled on the side for A.B.C. and thus remains in that position for the rest of the examination if breathing and circulation are present.	
Check for External Bleeding A quick systematic approach is used to check for external blood loss. Look and feel.	
Discovery of Blood Loss Examine area. Remove or cut clothing in that area to assess site of bleeding accurately. If no foreign object, apply direct pressure. Elevate the part carefully.	
Control Bleeding Apply firm pad and bandage (improvise if necessary).	
Check below part bandaged for circulation, colour and sensation.	
Regular checks A.B.C. every 2 minutes as well as observe site bandaged for further blood loss.	
Continuing Care Monitor unconscious casualty whilst on his/her side. Take pulse, respirations and record, noting time. Observe colour and any altered conscious state. Record observations accurately. Check bleeding site - if bleeding noticed, reinforce with another pad and bandage over the top. Do not remove dressing over the wound. **Note:** As long as the casualty is unconscious he/she stays on the side to ensure a clear airway is maintained.	
Correctly dispose of used swabs, equipment and gloves.	

5.5 Manage a casualty with suspected internal bleeding

Checklist	Tick
Note: As no pressure can be applied to the bleeding part, manage as follows: Reassure the casualty. Lay the casualty down. Maintain absolute rest for the casualty. Raise the legs or bend the knees. Loosen tight clothing. Give nothing by mouth. Make casualty comfortable. Give oxygen if available. Seek medical aid urgently. Record vital signs, e.g. pulse, respiration, altered conscious state, noting time every 15 minutes.	

Skills Mastered

EXAMINER Please tick		Satisfactory	Fail	Re-test
	5.1 (a)	❒	❒	❒
	5.1 (b)	❒	❒	❒
	5.2	❒	❒	❒
	5.3 (a)	❒	❒	❒
	5.3 (b)	❒	❒	❒
	5.3 (c)	❒	❒	❒
	5.4	❒	❒	❒
	5.5	❒	❒	❒

Please sign and print name

Signed: _____ Date ____/____/1995.

Name: _____ Position: _____

Qualification: (Please tick where appropriate)

Doctor _____ Registered Nurse _____ Ambulance Officer _____

Training Branch Accredited Instructor: _____

Operations Branch Member (approved by District Surgeon): _____

Shock

Definition

Shock may be defined as an inadequate flow of blood through the organs of the body. It may be a condition which comes on suddenly, or slowly and progressively, depending on the cause. If shock and its cause are not controlled, failure of the circulation and organ damage, especially to the heart, kidneys, liver and brain, can follow. The casualty may die.

Characteristics

Shock results from the loss of an effective circulating blood volume, due to either less blood volume being available, or dilation (widening) of blood vessels. Shock is a progressive condition
if the cause is not removed. The body's compensatory mechanisms include making the heart pump faster, thus causing more rapid breathing, and diverting blood volume away from the skin to the central organs. Decreasing blood pressure occurs as a later sign when there is failure to maintain adequate blood flow around the body.

Should the cause not be removed, the combination of decreased oxygen supply to cells and build-up of the body's toxins, both in and around the cells, will ultimately result in damage and lead to death of these cells, and maybe the person.

Types of shock

The five categories of shock are:

1. **Hypovolaemic shock** (low blood volume)
   Factors which result in reduction of volume of blood circulating around the body come under this category. These include:

   (a) loss of whole blood by major bleeding, which is the most common cause of shock generally;
   (b) loss of the fluid part of the blood by burns, excessive vomiting, diarrhoea, excessive sweating (e.g. accompanying heat exhaustion) or excessive urination (e.g. in uncontrolled diabetes as a result of increased glucose in the blood).

2. **Neurogenic shock** also called **Vasogenic shock** (blood vessel origin)
   Shock in this category is an ongoing process resulting from general dilation of these vessels. This is due to loss of function of the nerves which control the width of blood vessels. With gravity playing a part, pressure of blood cannot be maintained. Blood pools in the parts closer to the ground, usually the pelvis and other limbs. Fainting is an example of a temporary loss of control of the size of the blood vessels but is not an example of shock. Head injuries or spinal injuries can result in the nervous system not being able to maintain a normal size of blood vessel, owing to the nervous message pathway being interrupted at the source or at the site of injury.

3. **Cardiogenic shock** (heart origin)
   This is caused by the heart's failure to maintain an adequate blood circulation around the body. Not enough oxygen and nutrients are pumped to the cells and not enough blood gets back to the heart from the body. Commonly, this is caused by a heart attack, with significant death of the heart muscle. Other causes include those which affect the rate and

regularity of the heart beat (conducting mechanism) or congestive cardiac failure (where the heart muscle pumps weakly and therefore ineffectively, owing to previous damage).

4. **Anaphylactic shock**
   This is an overwhelming, severe and sudden allergic reaction. The casualty may have a known allergy, or may react to a substance which previously has not caused any reactions. These may include a specific food substance or additive, insect bite or sting or medications, e.g. eggs or bee stings.

   The allergen enters the body by means of injection, ingestion, inhalation or contact and absorption through the skin. On contact with the substance, the body may react by initiating a local response of pain, swelling, itching and reddening. Alternatively, there may be a generalised reaction which may present in a number of ways, the most severe of which is acute (meaning sudden) anaphylactic shock. The allergen causes the release in the body of substances, mainly histamine, which trigger general reddening and rapid swelling of the skin and other tissues including in the region of the upper airway. The blood vessels dilate, causing a drop in blood pressure. The casualty can collapse. An acute asthmatic attack may occur, even in a person who has not had asthma. Airway obstruction can occur owing to swelling around the larynx and throat. **Urgent** medical assistance is required. People with known severe allergies often carry medication. They should be immediately assisted to use it. Note that an allergen, e.g. a penicillin tablet, may cause a mild reaction the first time and a severe one the next time.

5. **Septic shock**
   Severe infection can cause septic shock. Bacteria can enter the circulation, multiply and release toxic substances. These are distributed by the blood around the body and cause the smaller blood vessels to dilate, resulting in a reduction of blood pressure. This is accompanied by a release of chemicals which can make the heart contract less effectively. Casualties require urgent medical intervention.

   A number of factors can increase the likelihood of developing shock or the degree to which it develops. The elderly and the very young are more susceptible. Persons bleeding profusely or those with traumatic injuries, casualties with heart conditions and people with severe infections, are all more at risk. Pain can make an actual 'shocked' person more shocked, as can exhaustion, chronic illness, rough handling (causing more damage), delay in treatment, extremes in temperature, and dehydration.

Treatment

D.R.A.B.C. and control of major bleeding are the first priority. Next, treat what is causing the shock. If the cause cannot be controlled, then first aid management should be directed towards helping the body's own corrective and compensatory mechanisms. Seek medical aid as soon as possible.

The casualty is generally placed lying down with the legs raised to maintain an adequate blood flow to the organs. Should there be difficulty with breathing, the conscious casualty is assisted to adopt the most comfortable position, usually half sitting. The legs are not raised if it could aggravate an injury and increase shock. Casualties should be kept warm (not hot), so as not to redirect blood away from vital organs to the skin. Pain can be somewhat relieved by supporting an injured limb above and below the injury. Administer oxygen at 8 litres per minute via a Hudson face mask.

Topic Mastered

	Satisfactory	Fail	Re-test
EXAMINER Please tick	❒	❒	❒

Please sign and print name

Signed: _____ Date ____/____/1995.

Name: _____ Position: _____

Qualification: (Please tick where appropriate)

Doctor _____ Registered Nurse _____ Ambulance Officer _____

Training Branch Accredited Instructor: _____

Operations Branch Member (approved by District Surgeon): _____

The Nervous System, Head Injuries and Unconsciousness

PRESCRIBED REFERENCES: *Australian First Aid,* Vol. 1, 1989, reprinted annually.
Supplementary Training Material.

OBJECTIVES: At the conclusion of the period of instruction, the adult member will be able to:

1. Describe the structures of the nervous system.
2. List the causes of altered consciousness in a casualty.
3. Describe the method of assessing the level of consciousness of a sick or injured person.
4. Explain the significance of differences in pupillary size and response to light stimulus. Record these observations using appropriate symbols.
5. Demonstrate the systematic examination of an unconscious, breathing casualty.
6. Describe the first aid management of an unconscious, breathing casualty.

Practical Skills

7.1 Examination of an unconscious casualty.
7.2 Examination of a casualty's pupils.
7.3 Position a casualty into the stable side position.

Stores required:
- torch
- pencil and paper
- blanket

Organs and Structure

The nervous system coordinates all body activities.

The **central nervous system** consists of the brain and the spinal cord, which extends down the vertebral column. It processes information and sends out instructions.

The **peripheral nervous system** receives information from and sends instructions to the rest of the body.

There are three kinds of **peripheral nerves**:

1. **Motor nerves** move muscles. If a nerve is damaged, varying degrees of paralysis will be present in the limbs and body.

2. **Sensory nerves** collect information from the outside world, e.g. hearing, sight, pain, touch. Damage causes such results as blindness, deafness and numbness.

3. **Autonomic nerves** run the automatic body functions, e.g. heart beat, digestion, skin temperature. Damage results in altered function and impaired body control, e.g. loss of bladder control, heart beat disturbance and problems with temperature regulation.

Peripheral nerves can be damaged by:
- direct trauma, e.g. cut by knife, crush injury;
- lack of oxygen, e.g. tourniquet;
- poisons, e.g. alcohol, drugs.

Causes of Altered Consciousness

The following list is by no means complete. The common or important problems the first aider may encounter include:

1. Direct injury or illness affecting the brain, e.g.
   - head injury;
   - stroke;
   - seizures;
   - infections, e.g.meningitis.

2. Lack of oxygen to the brain, e.g.
   - cardiac arrest;
   - irregular or ineffective heart beat;
   - advanced shock;
   - severe respiratory problems;
   - blocked airway;
   - smoke inhalation.

3. Poisons and toxic products in the blood, e.g.
   - overdose of alcohol or other drugs;
   - industrial or domestic chemicals/poisons.

4. Metabolic problems, e.g.
   - diabetes;
   - major organ failure, such as liver or kidney failure.

5. Environmental exposure, e.g.
   - hypothermia;
   - heat stroke.

6. Severe mental illness (rarely).

In some situations, the altered state of consciousness is temporary. However, severe permanent brain damage can occur as a result of any of these conditions.

Good first aid assessment and management of a casualty with an altered conscious state can make all the difference. Not only may life be saved but the casualty's subsequent quality of life can be preserved.

Assessing the Level of Consciousness

The casualty's level of consciousness indicates the amount of damage to the brain.

A person who is fully conscious is alert, oriented in time and place and responsive to appropriate commands and requests. Of course, someone who is asleep will not answer - but as soon as they are awake, they can.

A casualty with an altered state of consciousness must be transported rapidly to hospital. Until medical aid or transport arrives, the level of consciousness should be assessed every 15

minutes, preferably by the same first aider each time, and be carefully and accurately recorded on the OB12.

Whenever level of consciousness is tested, the time and result must be recorded. If a fully conscious casualty becomes less alert and less responsive, medical aid must be summoned urgently.

Any casualty who has lost consciousness - even if he/she appears quite well - should be transported to hospital for assessment and observation.

There are five levels of consciousness:

1. Casualty is conscious, cooperative and answers questions sensibly, e.g. 'Where are you?' 'I'm at the school fete'.

2. Casualty is conscious but confused and disoriented.

3. Casualty is unconscious but responds to verbal command, e.g. a command to open his/her eyes.

4. Casualty is unconscious but responds to pain by groaning or moving limbs. Check by squeezing base of finger nail.

5. Casualty does not respond to voice or pain.

Assessing the Reaction of the Pupils

The pupil is the black area at the centre of the coloured part (iris) of each eye. The pupils decrease in size (contract) when a light is shone into the eyes. They become larger (dilate) in a darker environment.

These reactions are controlled by the oculomotor nerves, which run from the brain to the back of the eye. Any damage to, or pressure on, these nerves will affect the pupillary size and reaction to light. Changes to pupil size and the ways it reacts to light do not reflect actual brain damage but indicate a rise in pressure inside the skull.

When pressure rises, the pupils become large and do not constrict when light is shone into them. With lesser rises in pressure, the pupils may react slowly to light.

If there is an injury to one side of the brain only, then only one pupil will react slowly to light, while the other may react normally.

In a patient with decreased level of consciousness:

1. **If one or both pupils are enlarged, and do not react to light, the casualty is dangerously ill and needs very urgent hospital care.**

2. **In head injuries, pupil changes are a late sign; they are always preceded by significant changes in level of consciousness.**

Any casualty who is unconscious, or who has lost consciousness but now recovered, must have the pupil reactions tested. It is essential to write down your observations every time you check the pupils.

The pupils are tested by shining a light (pen torch) into the eyes.

1. **Dilated Pupils**
   Cause: - fright;
   - drugs (e.g. atropine or certain eye drops);
   - brain swelling as a result of head injury or something else such as brain haemorrhage, causing a general rise in pressure inside the skull; the casualty is unconscious.

2. **Constricted**
Cause: - narcotic overdose (e.g. heroin, morphine);
- excessive alcohol;
- stroke or nervous system disorder;
- bright lights.

3. **Unequal Pupils**
Cause: - may be normal (10-15% of the population have unequal pupils; a difference of greater
than 1 mm is abnormal);
- head injury;
- stroke;
- eye surgery on one side (e.g. cataracts);
- direct trauma (sharp or blunt) to the eye;
- eye medications;
- artificial (glass) eye.

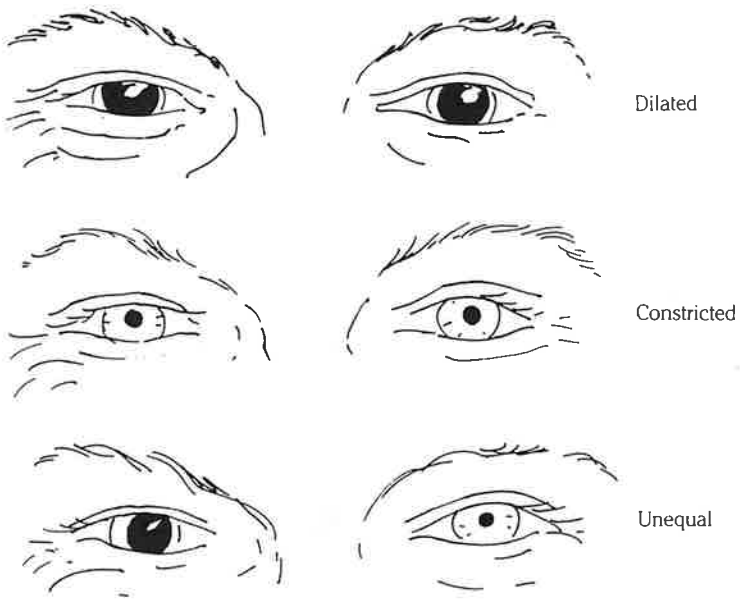


Fig. 1 Dilated, Constricted and Unequal Eyes

Examination of Unconscious but Breathing Casualty

Refer to Skills Sheet 7.1

General First Aid Management of Unconscious, Breathing Casualty

Unconsciousness is very serious. It indicates:

- a significant brain injury which may be temporary or permanent;

- that the casualty is at risk of further injury.

The first aid management of an unconscious casualty is the same no matter what the cause of the unconsciousness:

- **Protect the casualty from danger**, e.g. oncoming traffic.

- **Ensure a clear airway.** This is best achieved with the casualty on his/her side. Lack of oxygen will cause further damage to injured brain cells and prevent those which can recover from doing so.

- **Administer oxygen,** if available.

- **Control haemorrhage.**

- **Splint the cervical spine;** regard any unconscious trauma victim as having a cervical injury until proved otherwise.

- **Treatment of any other injuries,** e.g. splint fractures, cover wounds. Remember that the casualty may have spinal injuries.

- **Transfer to hospital,** with an adequate record of all observations you have made.

The Head Injury Chart should include a record of vital signs, pupil reaction, level of consciousness and the time the observations were taken.

Time	Pulse	Respiration	Pupil Size (R)	Pupil Size (L)	Pupil Reaction (R)	Pupil Reaction (L)	Level of Consciousness	Remarks
1400	120	20	•	= •	√	√	drowsy	
1415	120	20	●	> ●			confused	vomiting clear fluid; Ambulance called 1420
1430	100	61	●	> •	slow √		responds to pain	fit lasting 2 mins; Ambulance notified

Fig. 2 Head Injury Chart

Extra Material

The **Glasgow Coma Scale** is the standard measurement tool to assess casualties with head injuries in a hospital and pre-hospital environment.

This is a standardised check list, where 'points' are given at each examination.

1. **Eye Opening**
   - Spontaneous: eyes open spontaneously as someone approaches.
   - To voice: the casualty is asked to open his/her eyes.
   - To pain: the eyes open when a painful stimulus is applied.
   - None: the eyes do not open to pain.

2. **Verbal Response**
   - Orientated: casualty is orientated to time, place and person.
   - Confused: casualty is disorientated to time, place or person.
   - Inappropriate: speech is clear but makes no sense.
   - Incomprehensible sounds: moans, or makes garbled sounds the examiner cannot understand.
   - None: the casualty makes no sounds.

3. **Motor Response**

- Obeys: obeys simple commands.
- Localises: moves hands to painful area or tries to push the examiner away when the examiner applies a painful stimulus to the casualty.
- Withdrawal*: pulls part of the body away from painful stimuli.
- Flexion: flexes the body inappropriately to pain to form an abnormal flexion posture (see Fig. 4).
- Extension: body becomes rigid in an extended position to form an abnormal extension position (see Fig. 5) in response to a painful stimulus.
- None: no movement or response to a painful stimulus.

Fig. 3 Vital Signs Chart with Coma Scale

*Withdrawal is not included on all Glasgow Coma Scale Charts. Check chart *A.F.A.*, Vol. 2, p. 119.

Fig. 4 Abnormal flexion position - arms brought up towards the body indicates severe brain damage.

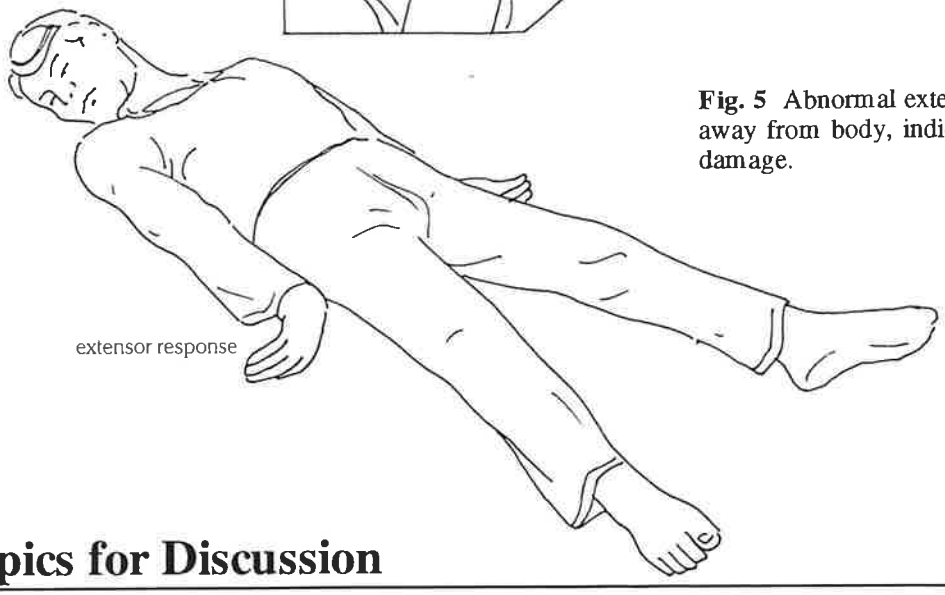


Fig. 5 Abnormal extension position - arms angled away from body, indicating very severe brain damage.

Topics for Discussion

1. How could you assess the level of consciousness in:
   (a) a deaf casualty?
   (b) a baby?
   (c) a very elderly person who is already confused, for example, a person who never knows what day it is or where he or she is?
   Ask your Divisional/Corps Surgeon to explain what a 'Mental State Examination' is.

2. You are on duty and are called to assist an unconscious casualty. There is a young man lying on the ground, face down, with a graze to his temple. His friends say that he has been drinking all day and has tripped over and now will not get up. How do you tell if he is unconscious from a head injury or from alcohol?

3. How can head injuries be prevented? How many bike riders in your family **always** wear helmets?

4. There is a national organisation called Headway which helps in the rehabilitation of brain-injured people. Ask if they can visit you, or you visit them.

7.1 Examine an unconscious casualty

Checklist	Tick
Danger present in area? Yes/No	
Response to shake and shout - 'Are you all right?'	
(No response)	

Turn casualty on the side. *A.F.A.*, Vol. 1, pp. 31 and 53.	
Check and clear **A**irway.	
Check for **B**reathing.	
Check for **C**irculation.	
Check for and manage any major external haemorrhage.	
Make sure that the casualty is lying securely on his/her side, with the face slightly downwards, and that he/she cannot roll out of position.	
Continue your examination with the casualty on the side.	
Send for medical aid (but do not leave casualty alone).	
Check: - pulse; - respiration; - skin colour.	
Check level of consciousness (eyes, motor response, verbal response).	
Check pupil response and size.	
Exclude other injuries: look, feel and move all areas of the body in turn, checking for wounds, fractures, etc.	
Treat any injury.	
Think of the possibility of spinal injury.	
Check casualty for medication and Medic Alert bracelet.	
Ask any bystanders about what happened. Record all observations.	
Re-check pulse, respiration, level of consciousness, and pupils at least every 15 minutes and record.	

7.2 Examine a casualty's pupils

Checklist	Tick
Explain what you are going to do.	
Shade the casualty's forehead with one hand, and open one of his/her eyes.	
Note the size of the pupil. Holding the torch about 15 cms (6") above the face, let the light sweep across the eye,	

from the outer corner of the eye into the pupil. Observe the reaction.	
Note: You may need to repeat this several times to be certain of the response. If the pupil reaction seems abnormal, ask someone else to check it with you.	
Do the same for the other eye.	
Write down your observations, using a diagram to show the actual size of each pupil.	

Time	Pupil Size (R) (L)	Reaction to Light (R) (L)
1100	● ●	
1115	● > ●	slow

Fig. 6 Example of Pupil Reaction Chart

7.3 Position a casualty into the stable side position

Checklist	Tick
Kneel near casualty's hips. Place casualty's far arm out straight from shoulder.	
Fold near arm across chest.	
Flex near leg at knee till thigh at right angle to body.	
Support the casualty's shoulder, neck and head with one hand. Grasp the near knee with the other hand.	
Rotate casualty away from you, using the knee as a lever.	
Draw upper leg towards casualty's head so knee is flexed at right angles.	
Place nearer arm across farther arm at level of elbow.	
Tilt head and support jaw.	
Turn face slightly downwards.	
Check airway, breathing and circulation.	

7.4 Position a casualty into a stable side position, often called the 'coma position'

(For a casualty lying on the back)

Checklist	Tick
Kneel beside the casualty. Place the casualty's nearer arm, palm up, under the buttocks.	
Cross the farther leg over the near leg.	
Cross the casualty's farther arm across the chest, so that his/her hand rests on the nearer shoulder.	
Support the casualty's head and neck with your hand that is nearer the head. Grasp the farther hip with your other hand.	
Rotate the casualty towards you until he/she is lying on his/her side. Support the weight of the casualty in this position by resting him/her against your knees.	
Gently lower the head by allowing the casualty to roll slightly towards you, until the nearer elbow rests on the ground and supports the casualty.	
Remove the farther arm from under the body, starting at the shoulder.	
Tilt the head back to ensure an open airway.	
Place the hand of the casualty's upper arm palm downwards on the ground, with the fingers under the chin.	
Draw the upper leg up at a right angle to the body, allowing the bulk of the casualty's weight to be supported.	
Ensure the casualty's mouth is open.	

Skills Mastered

EXAMINER Please tick		Satisfactory	Fail	Re-test
	7.1	❒	❒	❒
	7.2	❒	❒	❒
	7.3	❒	❒	❒
	7.4	❒	❒	❒

Please sign and print name

Signed: _____ Date ____/____/1995.

Name: _____ Position: _____

Qualification: (Please tick where appropriate)

Doctor _____ Registered Nurse _____ Ambulance Officer _____

Training Branch Accredited Instructor: _____

Operations Branch Member (approved by District Surgeon): _____

Casualty Assessment: Temperature, Pulse and Respiration

OBJECTIVE: On completion of the training period and after practising the practical skills listed below (to the satisfactory performance level as per the module points/checklists) the member will be able to apply one or more of these skills to the section's mock practical incident.

Practical Skills

8.1 How to use a mercury thermometer to obtain a patient's temperature.
8.2 How to take an oral temperature.
8.3 How to take a pulse - radially.
8.4 How to count a patient's respiratory rate.

Stores Required:
- thermometer;
- jar of cold water;
- disinfectant solution and jar of cotton wool (or alcohol wipes);
- watch with sweeping second hand;
- paper bag.

8.1 Use a mercury thermometer to obtain a patient's temperature

Prerequisite: Explanation about the parts of a thermometer.

Note: Wash hands before and after all procedures.

Checklist	Tick
Remove thermometer from disinfectant Hold between thumb and first finger. By non-bulbous end.	
Observe markings Heavy lines are degrees, e.g. 37°C. Light lines are parts of a degree, e.g. 37.1°C.	
Observe mercury Note the level of mercury: If not below 35°C shake thermometer, by a flick of the wrist action. Re-check level of mercury.	

8.2 Take an oral temperature

(For oriented adults; discretion required for children)

Checklist	Tick
Sit or lie patient down and explain procedure.	
Ensure patient has not had anything that could influence temperature recording, e.g. hot/cold drinks/food, smoking.	
Observe position of mercury Must be below 35°C.	
Wipe disinfectant off thermometer With a water moistened swab. Swab from non-bulbous end to bulbous end.	
Position thermometer Under tongue. Mouth closed (close lips not teeth). Do not talk. For at least 2 minutes.	
Read thermometer Observe level of mercury and note nearest marking, e.g. 38°C.	
Swab thermometer With a disinfectant solution.	
Record details e.g. Mrs Smith, temperature 36.8°C at 1000 hrs.	

8.3 Take a pulse - radially

Prerequisite: know location of the radial artery.

Checklist	Tick
Explain procedure to patient. Rest the patient and the arm.	
Locate radial artery Thumb side of arm, wrist area. Place the tips of two/three fingers along line of artery. Gentle but firm pressure.	
Taking pulse Count rate, e.g. 96 per minute. Count rate for 1 minute. Note: rhythm, e.g. regular; volume, e.g. bounding.	

Record information e.g. Mrs Smith: rate 96 regular and bounding. Time taken.	

8.4 How to count a patient's respiratory rate

Note: This procedure is performed so patient is not consciously aware that respirations are being counted, e.g. count respiration rate whilst fingers are still in position after counting pulse rate.

Checklist	Tick
Observe lower chest, upper abdominal area Breathing in (inspiration) and breathing out (expiration) = 1 respiration.	
Count respirations for 1 minute. Note rate, e.g. 16 per minute.	
Note pattern, e.g. regular.	
Note character, e.g. noisy.	
Note depth.	
Record e.g. Mrs Smith has a respiratory rate of 16 regular and noisy. Time taken.	

Skills Mastered

EXAMINER Please tick		Satisfactory	Fail	Re-test
	8.1	❒	❒	❒
	8.2	❒	❒	❒
	8.3	❒	❒	❒
	8.4	❒	❒	❒

Please sign and print name

Signed: _____ Date ____/____/1995.

Name: _____ Position: _____

Qualification: (Please tick where appropriate)

Doctor _____ Registered Nurse _____ Ambulance Officer _____

Training Branch Accredited Instructor: _____

Operations Branch Member (approved by District Surgeon): _____

MODULE 9

Emergency Childbirth

RECOMMENDED REFERENCES:

N.R.C.ROBERTON: *A Manual of Neonatal Intensive Care*, 2nd edition, Edward Arnold, London, 1986.
Australian First Aid, Vol. 2, Ch. 24, 1989.
Film/Video.

OBJECTIVE: 9.1 To assist at a normal unexpected delivery of a baby away from medical care.

Stores

- doll;
- Resusi-baby;
- childbirth stores as in *A.F.A.*;
- soft bag and mask;
- oxygen equipment and suction.

Introduction

Childbirth is a natural event. It usually goes smoothly, with a healthy mother and healthy baby at the conclusion. However, complications can occur and they can occur quickly and unexpectedly.

It is always better for a mother to have her baby with the help of medical attendants and midwives. The best way to take a baby to hospital is inside his/her mother. It is almost always safer to take a woman in labour to hospital, than to delay at home or elsewhere making elaborate preparations for an emergency delivery.

It is rare nowadays to be out of contact with an emergency service; ring a hospital, doctor or Ambulance Service for instructions and advice before you attempt an emergency delivery. Ring again if anything abnormal arises.

First Stage of Labour

During the first stage of labour the cervix, or entrance to the uterus, opens up.

The first stage of a normal labour may last up to 24 hours in a woman having her first child. It may be as short as one hour for a woman who has given birth before.

Contractions are regular, painful tightenings of the uterus, which force the cervix open. Contractions become more frequent and stronger as labour goes on; at the height of labour they come every 2-3 minutes and last for 45-60 seconds. The mother may not know what contractions feel like and may describe period pain, low back pain or excessive tightening of the abdomen.

During the first stage, allow the mother to walk, move or lie as she wishes. Check her pulse every 30 minutes, and temperature every 2 hours.

Second Stage of Labour

In the second stage, the baby moves down the mother's vagina. The contractions are now strong and frequent, lasting about 60 seconds every 2-3 minutes. The mother will feel like 'pushing' or opening her bowels. **Do not let her sit on the toilet.**

The second stage may last up to 2 hours with a first baby. This allows plenty of time for the mother to be taken to medical aid. With a second or subsequent child, the second stage may take a few minutes only.

Potential dangers

1. To mother:
   (a) Infection (see *A.F.A.* Vol. 2, p. 50).
   (b) Bleeding. Note the amount and colour of blood lost.
   Retain blood-soaked pads and towels to be assessed by medical attendants.

2. To baby:
   (a) Infection from the cut end of the umbilical cord.
   (b) Heat loss.
   (c) Lack of oxygen.
   (d) Blood loss from cord.

When Delivery is Close

Obtain and prepare equipment (see *A.F.A.*, Vol. 2, p. 51)

Position mother for delivery
- Explain each action to the mother before you do it;
- help the mother adopt a position of comfort;
- place a drape or sheet over the lower part of mother, if possible;
- maintain privacy.

Prepare first aider for delivery
- Put on mask or tie clean handerkerchief over your mouth;
- tie apron or sheet around waist, to protect your clothing and minimise infection;
- wash hands thoroughly and dry on a clean towel;
- put on gloves;
- prepare 2 warm towels or nappies for the baby;
- warm them near a heater or have someone warm them under their jumper.

Prepare mother for delivery
- Swab the genital area thoroughly with diluted, warm antiseptic solution or cooled boiled water and soap, from her front to back, anal area last;
- if there are no swabs available, gently pour warm water over the mother's genital area.

Delivery of the Head
When delivery is imminent, the perineum (skin between anus and vagina) will start to bulge.

- Place a pad over the anal area;
- as the head emerges, ask the mother to pant, not push, so the head is born slowly and gently; pushing is a reflex action and may be difficult to control;
- place one hand on the crown of the baby's head and hold it gently but firmly to prevent it flicking out suddenly;
- **Note:** if the head is born too quickly, the mother may suffer a major laceration of the perineum, and the baby may suffer brain damage (see *A.F.A.*, Vol. 2, p. 52, Diagram 24.1).
- the head will usually emerge face towards the mother's anus, then turn to one side;
- feel for cord; if it is around the neck, free it gently; again the mother should pant not push; (see *A.F.A*, Diagram 24.2).
- **Note:** If the cord is too tight and cannot be slipped over the baby's head, the first aider will have to tie the cord very securely in 2 places, 3 cms apart, and cut between the ties. This can be very difficult.
- await next contraction for delivery of shoulders.

Delivery of shoulders
- Position your hands on either side of the baby's head, over the ears;
- guide the head slowly downwards as the mother pushes;
- watch for delivery of upper shoulder;

- guide head upwards for delivery of lower shoulder.

Delivery of body

- Grasp baby under armpits (he/she will be slippery and very wet);
- slowly lift baby up onto mother's abdomen;
- make a mental note of the exact time of birth and call it out to the mother or anyone else around for it to be written down as soon as possible.

The mother will often feel weak and shaky as soon as the baby is born. It is usually best if she lies down on her back or her side.

Care of the Baby

The baby will be wet and blue at birth and often covered in a greasy substance called 'vernix'. He/she must be kept **warm and pink** to survive.

1. Airway

- Place baby's head low, to drain secretions from its mouth; on the mother's abdomen is ideal;
- it may be necessary for the first aider to wrap one or two fingers in gauze to remove mucus from the baby's mouth.

2. Warmth

- Immediately and firmly dry the baby all over with a dry, and preferably warm, nappy or towel; this will take 15-30 seconds;
- remember to dry the baby's head and in the creases of groin and armpits;
- as soon as the baby is mostly dry, discard the wet towel and cover the baby in a dry one; cover head area as much as possible because of potential heat loss; if there is a blanket available, put it around the baby;
- keep the baby close to the mother.

3. Respiration

The baby will gasp and then start breathing regularly. Its colour will then change from blue to pink. The hands and feet may remain blue for several hours. If the baby has not begun to breathe by one minute, clear the airway of mucus with your fingers or with suction. Blow once on the baby's chest and face; your cold breath may stimulate the first breath.

If there is no breathing in response to that:

- commence E.A.R. (see *A.F.A.*, Vol. 1, Diagram 4.3);
- or infant bag and mask resuscitation;
- use oxygen if this is available.

4. Circulation

- Check pulse at the apex of the heart; feel with 2 fingers over the left nipple;
- if heart rate is under 60, commence cardiac compression at 120 beats/minute.

The heart rate for a normal new-born is 120 beats/minute. A baby with a heart rate of 60 beats/minute is already a sick baby and will die without first aid intervention. External cardiac compression will promote recovery of the heart to its normal rate and rhythm, while E.A.R. improves the oxygen supply to the baby. Almost all babies respond very quickly to this basic resuscitation. Keep the baby covered and warm while performing resuscitation.

Once the baby is breathing and pink, wrap it firmly in the dry towel and hand it over to the mother. Mother and baby are now ready to be transported.

Care of the Cord

Once the baby is pink and breathing, it does not need the blood supply from the umbilical cord:

- after cord pulsations have ceased, place a sterile tie approximately 10 cms from the baby's navel area;
- place 2 other ties at 15 cms and 20 cms;
- **do not pull on the cord.**

The cord may need to be cut if:

- the cord is too short for the mother to hold baby properly;
- baby needs to be taken from mother's side for intensive resuscitation;
- mother needs attention and cannot hold baby.

If warranted, cut the cord between the second and third ties, using sterile scissors. The cord is very tough. Leave 2 ties on the baby's end of the cord. As the cord is cut, blood will spurt everywhere. Place a pad over the cord to stop the spray. Then:

- cover cord stump loosely with a sterile dressing;
- watch the baby's cord stump for bleeding - even a 30 ml blood loss is very serious in a baby.

Delivery of the Placenta

- Mother lies on her back, with legs apart;
- wait patiently for delivery of placenta (10-30 mins.);
- do not pull on cord as some placenta segments may remain in the uterus or vagina and haemorrhage may occur;
- should contractions cease and placenta not be delivered, again do not pull on the cord;
- place placenta in plastic bag or icecream container;
- note time of delivery of placenta;
- placenta is always transported with mother, with details of time of the birth of the baby and delivery of the placenta.

Care of the Mother

- Change your gloves if they are covered in blood;
- sponge her face, hands, legs and genital area;
- place two sanitary pads or a towel in position;
- change bedding;
- give her a drink;
- cover her with a warm blanket; it is very common for the mother to have 'the shakes' straight after the birth;
- check pulse, temperature and respiration;
- check blood loss.

Note: If blood loss is excessive, firmly but gently massage the abdomen above the uterus, which will be felt as a hard lump at the level of the navel. At the same time place the baby to the mother's breast. The abdominal and nipple stimulation will help control and stop bleeding. The uterus has an 800 ml per minute blood supply so haemorrhage can be severe. If excessive bleeding continues, contact medical aid.

Record all these events, observations, and time of delivery on Casualty Record sheet.

9.1 Manage emergency childbirth

Practical Incident
At a duty at a country fair, a woman in labour arrives at your first aid vehicle. Within 5 minutes she gives birth to her baby in your first aid vehicle. The baby is blue and makes no attempt to breathe. Continue from that point.

Checklist	Tick
Position baby Lay baby on mother's abdomen. Place baby in head down position, head to one side.	
Dry baby Dry baby quickly. Cover baby with warm towel.	
Airway Open baby's mouth. Sweep mouth clear of mucus. Wipe nose free of mucus. Use suction, if available, to suck visible mucus from mouth and nose.	
Breathing **No attempt to breathe at one minute.** Blow once onto baby's chest. Await response. **No response.** Place one hand on top of head. Place other hand at point of chin. Tilt head back slightly. Place your widely open mouth over baby's slightly open mouth and nose. Puff gently. Watch for rise and fall of chest/abdominal area. Give 5 quick breaths. Respirations established - **No.**	
Check Circulation Feel for apex beat; pulse is 40. Locate midpoint sternum using calliper method. Place 2 fingers over lower half of sternum. Depress 1.5 cms at rate of 15 compressions in 10 seconds. Continue C.P.R. at rate of 12 inflations and 90-100 compressions per minute.	
Check after 1 minute - **respiration established - yes** - **colour - pink** - **heart rate - 120**	
Wrap baby warmly. Give to mother.	

Skills Mastered

		Satisfactory	Fail	Re-test
EXAMINER Please tick	9.1	❒	❒	❒

Please sign and print name

Signed: _____ Date ____/____/1995.

Name: _____ Position: _____

Qualification: (Please tick where appropriate)

Doctor _____ Registered Nurse _____ Ambulance Officer _____

Training Branch Accredited Instructor: _____

Operations Branch Member (approved by District Surgeon): _____

Triage

PRESCRIBED REFERENCES:

Australian First Aid, Vol. 1 and 2, 1989, reprinted annually.
N.L. CAROLINE: *Emergency Medical Treatment - A Text for EMT-A's and EMT Intermediates,* Little Brown & Co, Boston, 1982.

Triage (pronounced tree-ahzh) is a system of determining which casualties, or which injuries, need to be treated first. The word 'triage' comes from the French word meaning 'to sort'.

Modern triage is a process that has evolved largely from management of casualties and is based upon the degree of threat to life of illness or injury.

Triage is used when there are many casualties requiring attention simultaneously such as in a traffic accident, disaster scene or busy first-aid duty. The principles of triage are also applied to the management of one casualty who may present with multiple injuries or a severe illness.

The St John action plan for D.R.A.B.C. is triage by another name and can be applied equally in multiple or single casualty situations, for example:

> DANGERS: Assess scene for dangers and remove them if possible. Move casualty from the danger if this is more appropriate. Call for help; notify the ambulance service by calling '000'. Consider the need for other agencies - fire service, police, additional St John members.
>
> RESPONSE: Rapidly find out which casualties are unconscious by using the 'shout and shake' approach. All casualties who do not respond **must** be placed in a stable lateral position and checked frequently to avoid 'silent' deterioration. These casualties must be dealt with first.
>
> AIRWAY: Make sure all casualties who are unconscious, or are likely to become unconscious, have a clear airway.
>
> BREATHING: Next, manage the casualty who has difficulty breathing.
>
> CIRCULATION: Finally, manage casualties with circulation problems, such as bleeding.

The fundamental principles of triage are:

1. The process is an extension of the D.R.A.B.C. action plan.
2. Salvage of life takes precedence over salvage of a limb.
3. The two immediate threats to life are a blocked airway and bleeding.
4. Function takes priority over appearance. A fractured limb may look grossly deformed but have little obvious damage to skin or other tissue. On the other hand, an injured limb may show no external deformity but numbness, pallor and absent pulses may indicate the need for urgent hospitalisation.

In the multiple casualty situation, whatever the cause, triage requires the knowledge and skill to make quick, balanced judgments about who will be treated first and by whom. Therefore triage should be carried out by the most experienced first aider present who then allocates casualties to another appropriate first aider or treatment area.

The triage person needs to establish close and accurate communication with the Duty Officer and other services. Duty officers and communications officers need to ensure that their own first aid knowledge and skills are maintained so that good triage is not lost to poor communication or command.

In the disaster situation where the first aiders may be confronted by many badly injured casualties, the Triage Officer assigns casualties to five categories:

PRIORITY O: The obviously dead, e.g. decapitation, massive head or torso destruction, incineration.

PRIORITY 1: Those with life-threatening injuries requiring urgent stabilisation treatment **and** disposal to medical aid, e.g. airway obstruction, chest injuries, severe bleeding, head injuries with a deteriorating conscious state.

PRIORITY 2: Those who require medical aid within a few hours, e.g. unconscious casualty with a clear and stable airway, large wounds in which bleeding has been controlled, burns of less than 30% body surface, dislocation of major joints or open fractures of long bones.

PRIORITY 3: Those who require medical aid when possible, e.g. minor wounds, facial injuries without airway obstruction, burns of less than 10% body surface, spinal injuries that have been immobilised.

PRIORITY 4: The walking wounded suffering from trivial injuries that they, in the ordinary course of events, would not seek medical aid for, e.g. minor wounds and abrasions, fright or slight headache. These patients should be marshalled into a holding area away from the disaster scene to await registration and further instruction.

In any large disaster, professional emergency service personnel - police, ambulance officers, fire fighters - will be on the scene quickly. Any St John first aiders present will then act under their instructions, after passing on information about all patients treated.

Discussion

1. Whom would you treat first?

   - casualty with an open fracture of the leg;
   - casualty with a laceration and arterial bleeding;
   - casualty with symptoms of heart attack;
   - casualty who is unconscious.

2. Your division is attending a triathlon duty where there are 200 competitors, all expected to arrive at the finish line in approximately two hours.

   - How will you organise a triage system?
   - What injuries might you reasonably expect to be faced with?
   - Draw a layout of your first aid post and how you will allocate treatment areas and first aiders.

3. Nominate 8-10 casualties with complex injuries. Arrange these casualties in order of priority. List the casualties in the order in which they should be transported.

Topic Mastered

	Satisfactory	Fail	Re-test
EXAMINER Please tick	❐	❐	❐

Please sign and print name

Signed: _____ Date ____/____/1995.

Name: _____ Position: _____

Qualification: (Please tick where appropriate)

Doctor _____ Registered Nurse _____ Ambulance Officer _____

Training Branch Accredited Instructor: _____

Operations Branch Member (approved by District Surgeon): _____

Operations Branch Organisational Structure and Safety Management

PRESCRIBED REFERENCE: *Administration Manual,* General Regulations, 1990.

OBJECTIVE: On completion of the training period and after studying the material listed below, the St John member will be able to complete the questionnaire in the module and apply the knowledge to the section's mock practical incidents.

1.1 Outline the four annual requirements for Operations Branch efficiency for members, as laid down in General Regulation 7.1(a).

1.2 Outline the first aid responsibilities of an Operations Branch member as laid down in General Regulation 8.8.

1.3 State the correct order of priorities of basic life support for any emergency.

1.4 List four categories of emergency personnel likely to be encountered by the Operations Branch first aider at an accident scene.

1.5 List three categories of risk likely to be encountered by the Operations Branch first aider at an accident scene.

1.6 Outline action to be taken by the Operations Branch member should he/she sustain personal injury in the course of performing duty.

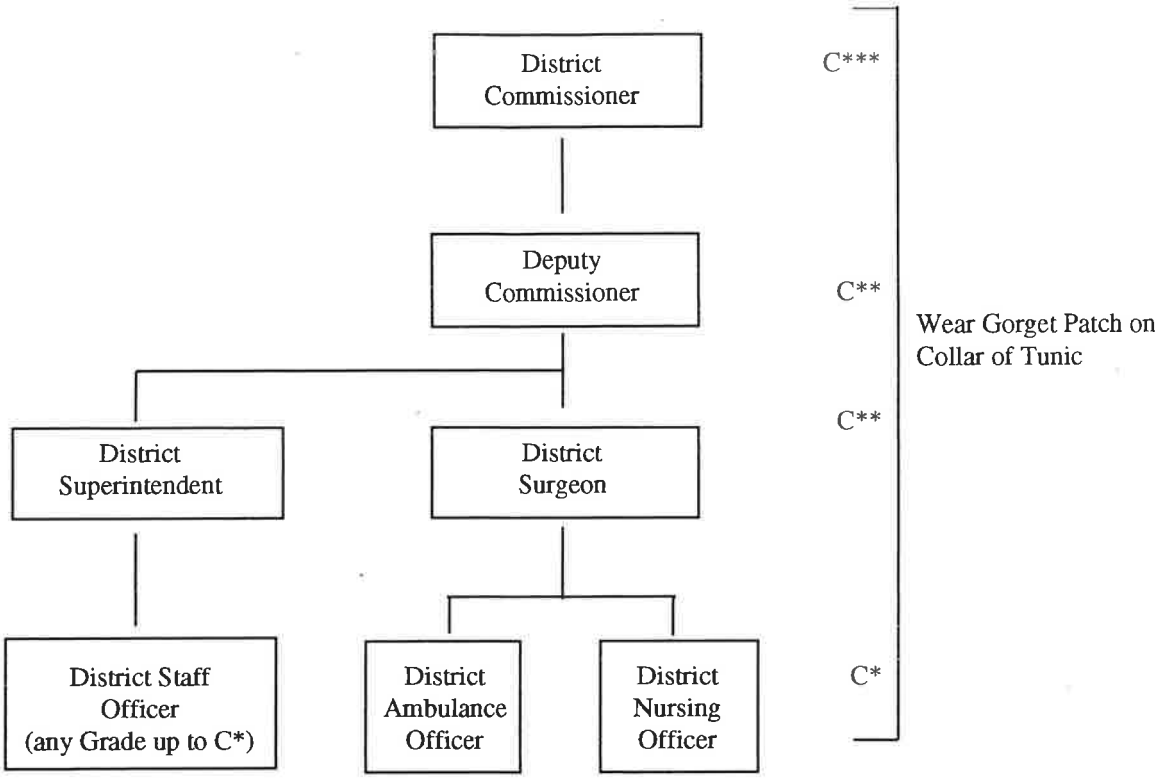
Operations Branch Organisation

Operations Branch members should, from time to time, re-acquaint themselves with the organisational structure under which they function. Keep in mind that we are an international organisation with a very long history of service to all people. To operate such an organisation, a large number of people is required and these must work in an organised fashion. To do this we have a rank structure. If this chain of command is used efficiently, the Operations Branch can operate with great benefit to the people who matter most - the casualties.

Revise this structure and, in the questionnaire later in this module, write in the names of the officers who hold positions in your District, Corps, Division.

St John Ambulance Australia
Operations Branch Structure and Rank Markings

Rank Marking
C = Crown
* = Star



Metropolitan and Country Corps

Corps Superintendent	C
Corps Surgeon	C
Corps Nursing Officer	***
Corps Ambulance Officer	***
Corps Staff Officer	***

Wear Silver Bar on Shoulder

Divisions – Ambulance, Nursing and Combined

Divisional Superintendent	***
Divisional Surgeon	***
Divisional Officer	**
Divisional Ambulance Officer	**
Divisional Nursing Officer	**
Probationary Surgeon/Divisional Nurse	*
Sergeants	
Corporals	
Privates and Nursing Members	

Responsibilities of a St John First Aider

General Regulation 7.1, Efficiency Requirements

(a) Efficiency Requirements for Active Members

In order to be returned efficient, active members of the Operations Branch must fulfil the following requirements during each year:

(i) successfully undertake the Skills Maintenance Programme as prescribed by the Chief Surgeon or pass a re-examination in First Aid at the discretion of the District Surgeon;

(ii) be present at an Annual Divisional Inspection;

(iii) carry out their duties to the satisfaction of their senior Officer;

(iv) attend, if a member of a Division, at least twelve Divisional instructional meetings (see Regulation 9.4). (Each day's attendance at an authorised training course or camp may count as one instructional meeting up to a maximum of six.)

(b) Efficiency Requirements for Members on Reserve

Those serving on the Reserve, other than Officers appointed by the Grand Prior, are required to:

(i) attend six Divisional instructional meetings a year;

(ii) comply with General Regulation 7.1(a)(i) (subject to Regulation 7.2).

Failure to comply with these requirements for two consecutive years will automatically entail discharge from the Operations Branch.

General Regulation 8.8, Rendering First Aid

It is the duty of members of the Operations Branch to render first aid, when necessary, irrespective of time, of place and whether in uniform or not. Membership of the Operations Branch does not, however, confer upon individuals the right to take up a position in the streets or elsewhere on public or other occasions for the purpose of rendering first aid, nor to force their services upon persons who may be injured or in need or assistance. Approved casualty report forms are to be used in respect of all casualties treated or advised in accordance with instructions issued from time to time by the Chief Surgeon. Management of such casualties shall be undertaken using a first aid kit, the contents of which have been approved by the Chief Surgeon.

Members will report in writing to the officer-in-charge of their division every instance of first aid rendered by them, whether on or off duty.

Records: Casualty Report Forms, OB12
Casualty Occurrence Book/Form OB11

Primary Survey

Priorities of Basic Life Support

Dangers	- Self; - Bystanders; - Casualty.
Response	- Conscious casualty; - Unconscious casualty.
No response	Turn casualty to stable side position.
Airway	- Clear; - Open.
Breathing	Look, feel, listen.
Circulation	- Pulse; - Bleeding.
Call an ambulance:	Dial '000' (or emergency number in your State).
Tell controller:	- What has happened; - Where it has happened - House number, street name, suburb; - How many casualties; - Condition of casualty(ies).

Secondary Survey

- Ensure that no further danger exists for yourself or for the casualty. If the casualty has to be moved urgently, serious complications may be reduced by dragging the casualty rather than attempting to lift him/her.

- Ensure that all casualties are assessed and managed according to the accepted system of priorities. Keep your eyes and ears open for information, but avoid distress to the casualty through careless comments.

- **The first aider should refrain from expressing his/her opinion on the severity or the outcome of the casualty's condition.** This is the responsibility of the medical personnel.

- Ensure that appropriate medical aid is called at the earliest opportunity.

- Consider weather conditions, both heat and cold, and ensure that the casualty's body heat is maintained. Injuries should be exposed without unnecessary removal of clothing.

- Discuss and demonstrate methods of removing a coat or shirt, trousers, or skirt, shoes and socks from an injured casualty.

- Discuss responsibility for any personal property, valuables, including spectacles, dentures, briefcase, shopping, watch, jewellery and money. Personal belongings should be handed over to a known relative accompanying the casualty, to police or entrusted to the ambulance crew.

  If any personal belongings are found after the casualty has left the scene, hand them in at nearest police station.

- Before the casualty leaves the scene, check whether a relative or friend should be notified. Write down relevant details and check with the ambulance crew regarding the destination of casualty so that this information can be given to a relative. If contacting a relative or friend on behalf of the casualty, be tactful and brief; avoid giving diagnosis or prognosis

and stress that these details must be sought from hospital concerned. Suggest that the hospital be contacted by telephone, or else advise the relative to go to the appropriate casualty/emergency department.

- Operations Branch members should give a written pink casualty report, OB12, to the casualty. The yellow copy is to be kept by the first aider and the white copy sent to their division concerning any first aid treatment or advice given, whether on duty officially or not. The report should contain details of time, place, name of casualty (if known) or 'unknown male/female, approx. 50 years' (if name unknown), and any treatment or advice given. The OB12 yellow copy is to be retained for 7 years by the first aider.

Interpersonal Relationships

Interaction between the first aider and the casualty

Operations Branch members must be conscious of their responsibilities towards people other than the casualty that they may be in contact with. These include relatives, friends and bystanders.

Confidentiality

At all times consider the information given to you by the casualty as confidential and only to be disclosed with the casualty's written consent.

Relatives and friends of casualties need to have a report on the casualty's condition as soon as possible. While being reassuring, try not to give too much information, and refrain from prognostic statements as this is the prerogative of the doctor.

Bystanders at the scene of any incident need to be made to feel useful. Try and use them. If a bystander becomes a hindrance, call the police to assist.

At the scene of a large incident, police, ambulance officers and fire officers may be present. Operations Branch members must obey the instructions of members of these services. If handing a casualty over to an ambulance officer, give a history of the incident along with all details of the casualty's injuries and observations, and the pink copy of the OB12 Casualty Report form.

Safety Management

Hazards that may be identified in the environment whilst treating a casualty may be classified into the following three categories:

- obvious;
- potential;
- hidden.

Eliminate - cut off electricity; cut off gas supply; remove any obstructions; re-direct traffic; to assist in isolation with some incidents, the local authorities may be required.

Guard - protect the work area from any danger source (e.g. stop vehicles, bystanders, provide protection from sun); wear appropriate personal protective equipment.

Warn - tell others of danger; erect warning sign if appropriate.

Unless holding specific exemption, all Operations Branch members shall comply fully with statutory Acts, regulations and codes. In addition, Operations Branch members have responsibilities at Common Law. In brief, the Common Law is the law that has evolved over a period of time from case judgments made by the judiciary.

Specifically, the Operations Branch member in the performance of work has a duty to care for **all** persons. The level of duty owed to a casualty may be identified as that of 'a Contract of Care'.

A claimant at Common Law must show **negligence**. The Operations Branch member must ensure that he/she does all that is **reasonable**, within the respective member's level of training and the individual District policy, to safeguard the casualty and others from injury or aggravation of injury. The member must therefore keep his/her skills up to date.

It is emphasised that Operations Branch members' first aid equipment must be restricted to the approved lists. Should any complications follow the use of unauthorised equipment, the Operations Branch member may be outside the normal protection of Operations Branch insurance policies.

If injured in the course of a duty, you must report that injury as soon as practicable, through the senior Operations Branch officer responsible for the duty. This is especially important for suspected or actual needle stick injuries.

Questionnaire

1. Write down the names of the person occupying the following positions in the St John Ambulance Operations Branch in your District.

   (a) Commissioner .....

   (b) District Superintendent .....

   (c) District Surgeon _____

   (d) District Nursing Officer_____

   (e) District Ambulance Officer_____

   (f) Divisional Superintendent _____

   (g) Divisional Surgeon _____

   (h) Divisional Nursing Officer_____

   (i) Divisional Ambulance Officer_____

2. Whilst returning from a social function, you notice a person who appears to be a victim of a sudden stroke. Once you have handed the casualty over to the appropriate care, you must write a report on the incident for your divisional records. Using fictional names and your imagination, briefly write a report of your attendance at such an incident.

3. Indicate briefly the steps you would take in handling one of the following incidents:

   (a) A four year old child falls off a swing. He has a cut to his head and appears dazed.

   (b) A man on a bicycle is hit by a car.

   (c) A lone elderly lady falls in the supermarket and has hurt her hip.

4. List three areas of dangers that might be encountered in the environment; and briefly indicate how you would control these hazards.

   (a) .....

   _____

   (b) .....

   _____

   (c) _____

Further Topics for Discussion

1. What emergency resources are available in your area?
2. What first aid/emergency equipment, if any, should you carry in your car?

Topic Mastered

	Satisfactory	Fail	Re-test
EXAMINER Please tick	❒	❒	❒

Please sign and print name

Signed: _____ Date ____/____/1995.

Name: _____ Position: _____

MODULE 12

Organisation of a Duty

PRESCRIBED REFERENCE: Supplementary Training Material.

OBJECTIVE: Having studied the training material, discussed the topic with others and satisfactorily answered the topic questions, the St John member will be able to organise and set up a public duty.

Supplementary training material

Types of duties - (Operations Branch definition):

1. **District duties:**
   Organised by H.Q.
   - usually involving several corps;
   - rooms and areas already selected;
   - people are allocated to these areas.
2. **Corps duties:**
   Organised by Corps staff
   - usually involving several divisions.
3. **Divisional duties:**
   Organised by the division
   - using its own personnel, but can ask for help from other divisions.

Information needed in accepting a duty:

1. Time?
2. Date?
3. Place?
4. Duration of duty?
5. Map reference?
6. Name of organisation in control?
7. Name of person to contact re duty?
8. Phone number of person to contact re duty?
9. What type of function?
10. Number of people expected to attend - participants, audience?
11. What facilities available - e.g. room, lighting, water, toilets?
12. Has this function been held before?
13. If so - what type of injuries then?
14. Are meals available?
15. Are facilities available to buy meals?
16. Check communication facilities - phone, radio?
17. What other organisations are involved - e.g. ambulance, police?
18. Medical facilities nearby and available at time of duty?

Types of Duties - (re equipment needed):

As per regulations, Operations Branch members will at all times carry their own approved personal first aid kit and have access to a larger kit of approved equipment.

On many large duties, e.g. football finals, cricket, fun festivals, equipment will be provided for members to use. But you will also have your own kit in case back-up equipment is needed or you need to use it on the way to or from a duty.

Extras which may be needed: some examples are given below:

Beach	- extra eye washing equipment; - foot washing equipment; - umbrellas.
Hills	- washing equipment (duty may be muddy); - towels; - blankets.
Marches	- extra drinks; - extra water; - extra equipment for treating blisters.
Fires	- extra eye washing equipment; - foot washing equipment; - extra paracetamol for headaches; - extra water to drink.
Athletics	- extra drinks; - extra ice; - extra strapping; - crepe bandages.
Kits	- personal kit; - large kit.

On arrival at a duty:

Working from Operations vehicle

Parked in safe position.

↓

Opening away from wind and weather.

↓

Safe step up into vehicle.

↓

Set out equipment in vehicle.

↓

Check oxygen and suction equipment.

↓

Adequate light.

Casualty room

Sign posted.

↓

Clean as possible:
- sweep and wipe down.

↓

Needs:

- water for washing;
- lighting;
- tables;
- seating;
- blankets;
- stretchers away from entrance;
- rubbish bin or bags;
- communications;

↓

Set up areas for:

- triage;
- admitting patients;
- discharging patients;
- sitting patients;
- lying patients;
- relatives;
- records;
- equipment;
- hand washing for personnel (away from treatment areas).

↓

Check oxygen and suction equipment in the room.

May be same area on small duty

Let organisers know your position → Sign post it.

Organisation of personnel in room:

Have a roster: with members designated 1,2,3,4 and so on.
Work per numbers, one member to each casualty as they enter - unless it is obvious that more staff are necessary. Otherwise, wait to be asked by person attending casualty.

Know capabilities

If asked to treat a casualty and it is beyond your ability, say so; ask if you can observe a more experienced member treat the casualty.

Supervision and teaching at duties

If a doctor is present, he/she is in charge of the treatment in the First Aid Room. If no doctor is present, then a State Registered Nurse (S.R.N.) will take charge.

Doctors, S.R.N.s and ambulance officers should supervise and teach members of the Operations Branch. Use of the training programme should be encouraged. Senior members should always supervise and teach new members and cadets.

New members and cadets should not learn nor practise on people with very painful or serious injuries, e.g. - large burns;
- multiple fractures.
These people need the most experienced treatment available.

Reception of Casualties:

TRIAGE → Done by a receiving person; most senior medical, nursing or ambulance person available on duty. → N.B. Not done by duty officer. His/her duty is administration.

OBSERVE → Casualty on his/her approach.

FIRSTLY → Lie casualty down;
→ or sit casualty down.

THEN Ask name;
→ Ask complaint.

KEEP → People who deliver casualty to First Aid Room;

TO GET →
- History;
- Where found;
- What treatment already given;
- Known medical history;
- Assist with disposal of casualty;
- Help with calling for assistance.

CASUALTY

LOOK AT

Lie down or sit down.
↓
Ask name.
↓
Ask complaint.
↓
Take history.
↓
Ask symptoms.
↓

HISTORY

Take record:

- how it happened;
- where it happened;
- when it happened;

Check signs.
↓
Treat.
↓
Record.
↓
T.L.C.(Tender loving care).
↓
Give ongoing advice.

- has it happened before;
- medical history.

Note symptoms and signs.
↓
Seek help if necessary.
↓
Treat.
↓
Give advice to casualty.
↓
Disposal/ referral
- back to function;
- to home;
- to hospital;
- to local doctor.

For teaching

If patient is not too ill, ask him/her if other Operations Branch members can observe the first aid management.

Allow patients privacy if necessary

Very elderly females may prefer a female treating them, or very young males may prefer a male treating them, if possible. Members should consider the cultural needs of the casualty. Male members can help with very heavy, very drunk or very rude casualties .

Patients' valuables and belongings

Check that all belongings are looked after and transferred with patient, e.g.

- money - check with another member if necessary;
- handbags;
- shoes;
- coats - old torn coat may be only coat patient has.

Information

Keep the casualty's relatives or friends informed on his/her condition (with casualty's permission). Be polite to them at all times. Children's parents or guardians may need to be contacted.

Common Treatments

Headache

↓
Ask why: e.g. → - Sitting in the sun.
- Out drinking last night.
- Fell over and hit head.
- Has high B.P.

↓
Ask: → - Age?
- Allergy to paracetamol?
- When did he/she last have tablets?

↓
'NO' to question: → Give paracetamol tablets and record.

Wounds

↓
Put gloves on.
↓
Ask history: → Look for foreign bodies; if loose, remove. Control bleeding. → Check they are not allergic to adhesive plaster

If no bleeding, clean and dry wound. Apply dressing. → Area dry

→ Keep plaster off hair and eyebrows if possible.

Ongoing advice to casualty:

- keep wound dry;
- change dressing in 24 hours;
- if it becomes red, sore, swollen or starts throbbing or red line running up the limb, **see own doctor promptly - discuss tetanus cover.**

Wounds for suturing →

- do not paint with coloured dyes, e.g. mercurochrome, (can't see to suture);
- tell casualty to go to own doctor or hospital as soon as possible;
- **discuss tetanus cover.**

Sprains →

- continue to apply ice or cold pack in wet towel for 20 minutes;
- apply firm bandage:
  - check circulation;
  - remove if becomes too tight;
- tell patient not to weight bear for next few hours;
- if pain or swelling persists or becomes worse, or there is loss of function: **go to own doctor;**
- instruct patient to apply ice (20 minutes on, 20 minutes off for first 4 hours; 20 minutes on every 2 hours for 24 hours; 20 minutes on every 4 hours for 24 hours)

Head Injuries →

Loss of consciousness → **Stable side position or alternative side position (coma position)** → Ambulance → Hospital

No loss of consciousness

Advice to patient, relative or responsible person.

Observe state of consciousness; pulse, respiration; talk to and check casualty every 15 minutes for next 4 hours.

Watch for: →

- vomiting repeatedly;
- continuing headache;
- disturbed vision;
- increasing drowsiness;
- unrousable;
- any fits or spasms of limbs or face;
- any bleeding or clear fluid from ears or nose;

- patient becomes irrational or confused.

If any of the above is present → **Ambulance to hospital**

Records

Casualty record forms as laid down by the Operations Branch regulations (OB11 or OB12) must be filled in accurately:

- the middle pink copy of OB12 is to be given to casualty;
- the bottom yellow copy is to be kept by member managing the casualty;
- the top white copy is to be kept in Duty Records.

Observation Charts

Please remember to hand on the copy of observation and history taken on the casualty on transfer to local medical officer or to hospital emergency department. (Give to Ambulance officer.)

Calling for an Ambulance

Identify yourself.

↓

Location → State address - nearest cross street, suburb.

↓

State how many patients.

↓

State type of injuries or illness.

↓

Give call-back phone number; this assists Ambulance Service to check location if necessary.

↓

If possible, have person to guide in ambulance.

↓

State if police or fire brigade needed.

↓

Give history and observations to ambulance officer.

↓

Hand over belongings to ambulance officer.

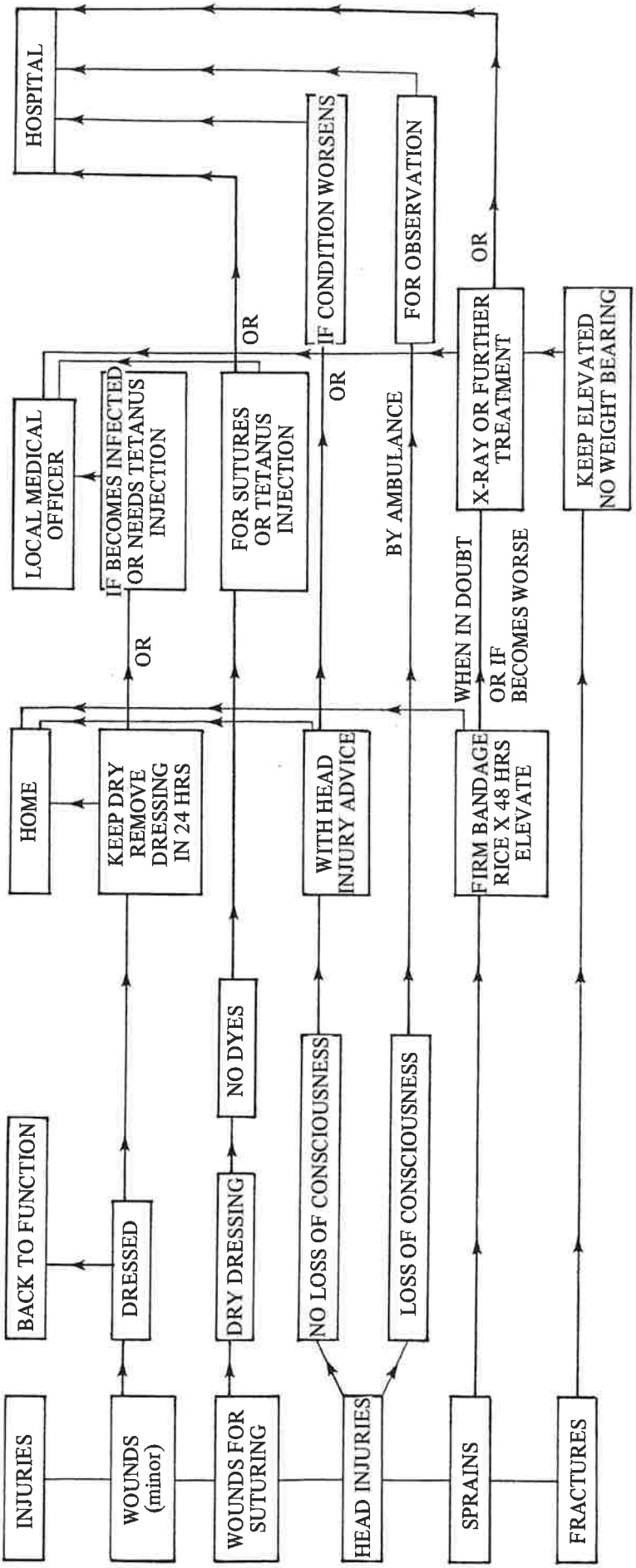
↓

If hospital treatment is needed for casualty arrange transport as soon as possible. Do not delay.

Check arrangements for ordering ambulances. On large or combined duties this is usually done through duty officer only.

N.B. **For Operations**
Take ambulance number or case number and destination.
Branch records
Check your State's policy.

DISPOSAL


INJURIES
WOUNDS (minor)
WOUNDS FOR SUTURING
HEAD INJURIES
SPRAINS
FRACTURES
BACK TO FUNCTION
DRESSED
DRY DRESSING
NO DYES
NO LOSS OF CONSCIOUSNESS
LOSS OF CONSCIOUSNESS
HOME
KEEP DRY REMOVE DRESSING IN 24 HRS
WITH HEAD INJURY ADVICE
FIRM BANDAGE RICE X 48 HRS ELEVATE
KEEP ELEVATED NO WEIGHT BEARING
OR
WHEN IN DOUBT
OR IF BECOMES WORSE
BY AMBULANCE
LOCAL MEDICAL OFFICER
IF BECOMES INFECTED OR NEEDS TETANUS INJECTION
FOR SUTURES OR TETANUS INJECTION
IF CONDITION WORSENS
FOR OBSERVATION
X-RAY OR FURTHER TREATMENT
HOSPITAL

Clean Up

Pack away all equipment not used.

↓

Clean up any equipment used and leave ready for further use.

↓

Empty rubbish containers.

↓

Clean area.

↓

Correctly dispose of used swabs, equipment and gloves.

Reporting Off

To Duty Officer ⟶ To organisers of function.

↓

To Radio Control.

Notifying Headquarters

It is not necessary for most incident reports to be notified to Headquarters. However, a copy of any incident reports about cardiac arrests, deaths and any occurrence where legal action is expected, should be forwarded to Headquarters so that appropriate records and legal advice can be assured.

Treatment Follow Up

Discuss back in your own division.

↓

Injuries or illness experienced - management carried out.

↓

If you have treated a patient but are not sure if your management was correct, check with:

- Divisional Surgeon;
- Divisional Nursing Officer;
- Divisional Ambulance Officer;

OR

- through the chain of communication up to the District Surgeon.

Consider stress counselling, especially following the care of seriously injured or ill, or in event of unsuccessful C.P.R.:

- crisis intervention;
- caring for the carer.

Remember:

- casualty care at all times;
- the casualty is entitled to the best first aid available;
- our job is to look after them;
- or to refer them.

Questions

1. List the information you would need to know in relation to requirements for a school sports day.
2. What extra equipment would you require if attending a bush fire?
3. What ongoing advice should you give a patient who has had a head injury with no loss of consciousness?
4. Why should you not put a coloured dye on a wound that has to be sutured?
5. When sending a patient to hospital by ambulance, what information for recording purposes should be obtained?
6. Draw up a check list you could use to obtain information for a parade and fireworks display.
7. Draw up a check list for the preparation of a First Aid Room.

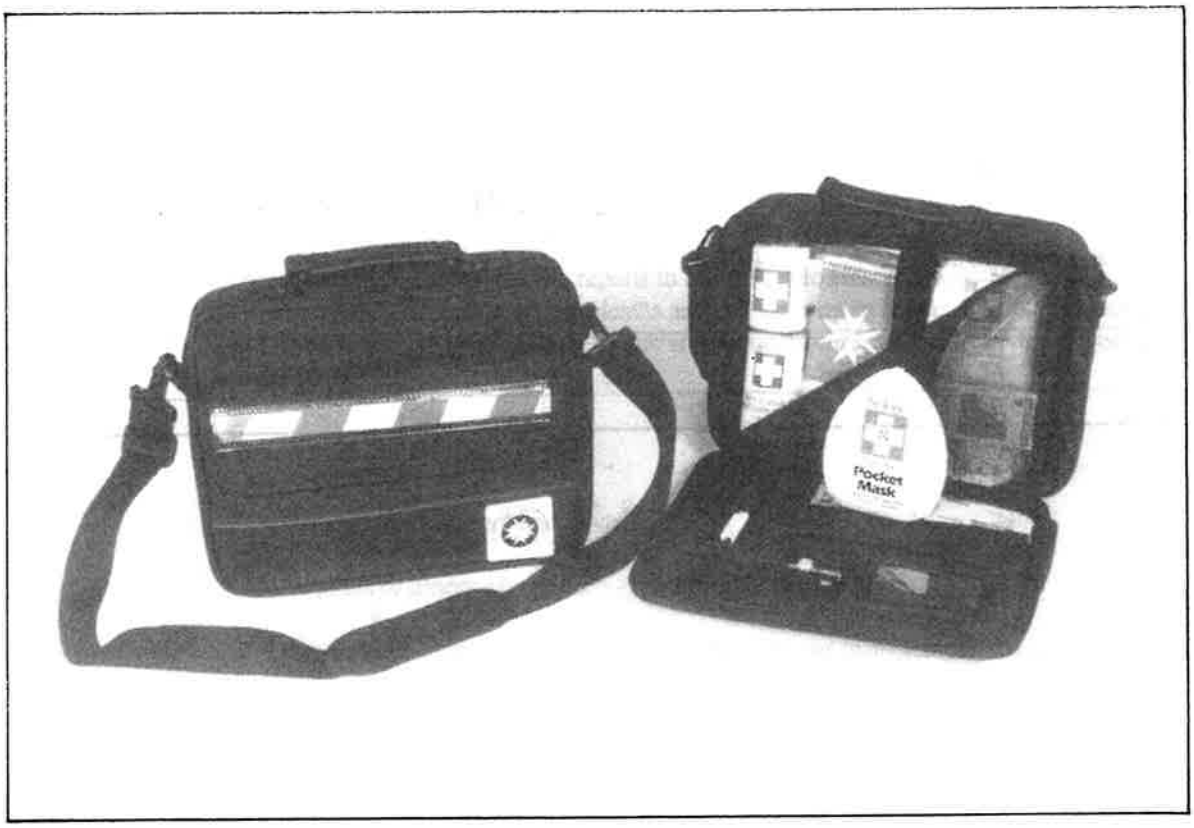
Topic Mastered

EXAMINER Please tick	Satisfactory	Fail	Re-test
	❒	❒	❒

Please sign and print name

Signed: ..... Date ...../...../1995.

Name: ..... Position: .....



'Operations Branch Personal First Aid Kit (available from National Supplies)'