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Chapter 7

FIRST AID

SECTION 1. — INTRODUCTION

General

0701. APC first aid training consists of:

- a. Emergency Action (managing an incident and getting help).
- b. The emergency aid given to a casualty (Casaid).
- c. First Aid Qualification (for a recognized youth or adult first aid certificate).

0702. Emergency Action and Casaid comprise the ACF First Aid Syllabus at Basic Training and 1–Star and the First Aid content in the APC (CCF) Basic Syllabus. First aid qualification comprises the ACF syllabus at 2– to 4–Star and the APC (CCF) Advanced Syllabus.

0703. This volume deals only with Emergency Action and Casaid. First aid qualification is dealt with in Volume 2.

0704. First aid must be taught in the CCF and ACF to accepted civilian standards. However, it is also a core military skill and can therefore be taught and tested by suitable adult leaders in a similar way to other APC subjects.

Emergency Action

0705. Emergency Action is the first period of first aid which is included in ACF Basic Training and revised at 1–Star. In the CCF it will be taught as the first period of Casaid for self reliance training for APC (CCF) Basic Syllabus. Emergency Action can be taught and tested by any suitable person, including cadets.

Casaid

0706. Casaid must be completed before a 1–Star pass can be obtained or the APC (CCF) Basic Syllabus completed. This is essential because of the need for cadets to have adequate training for the other activities in which they will be involved at 2–Star, APC (CCF) Advanced Syllabus and for the Duke of Edinburgh’s Bronze Award expedition training (for which Casaid is the required basic first aid training requirement).

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0707. Casaid training should not extend beyond four hours and the theory element must be restricted to what is necessary for adequate performance of simple and effective practical skills. Casaid will be revised at 2–Star/APC (CCF) Advanced Syllabus level as part of first aid qualification training. Casaid will ideally be taught at detachment level over four evenings plus testing, or in the CCF in one day or two afternoons including testing. Testing should be restricted to safe, prompt and effective treatment leaving more detailed knowledge to be tested at 2–Star and APC (CCF) Advanced Syllabus levels.

0708. Casaid does not provide recognized first aid skills or qualification. It is the level of emergency aid which should be provided by any individual and not merely by qualified first aiders. Consequently, Casaid does not need to be registered, does not lead to a certificate or badge and involves no cost.

0709. Cadets who have already obtained comparable training at school or elsewhere (for example, through the Three Cross Award or Young Lifesaver) can be tested in Casaid with appropriate revision if necessary.

0710. Casaid may be taught by any suitable person, including cadets who have a first aid qualification and methods of instruction skills, and be tested by any person with a first aid qualification or any other suitable person approved by the ACF County First Aid Training Officer or Contingent Commander.

0711 – 0720. *Reserved.*

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SECTION 2. — EMERGENCY ACTION

A. INSTRUCTOR'S NOTES

Aim

0721. *The aim of the lesson is to teach cadets emergency action comprising:*

- a. *Managing an Incident* *Stage 1.*
- b. *Getting help* *Stage 2.*
- c. *Aftercare* *Stage 3.*

Timings

0722. *One 30 minute period.*

Stores

0723. *Telephone.*

B. CONDUCT OF THE LESSON

0724. **Revision.** *Nil.*

Stage 1 — Managing an Incident

0725. *Explain:* A clear plan of action is needed to deal with an incident. This is called the Incident Action Plan. The Incident Action Plan is:

- a. ASSESS.
- b. MAKE SAFE.
- c. EMERGENCY AID.
- d. GET HELP.
- e. AFTERCARE.

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0726. **Assess.** *Explain:* Assess the situation. STOP/LOOK/THINK. Identify any danger first to yourself and then to the casualty. Use your eyes, ears and nose to look for clues, for example, the hiss of gas or the smell of petrol. Decide what has happened, how many casualties there are and where they are (beware of casualties who may be hidden behind hedges, in wreckage or who may have wandered away from the immediate vicinity of the incident). Decide what resources you have available. Be calm and take charge unless there is anyone better qualified, in which case offer your assistance.

0727. **Make Safe.** *Explain:* Make the area safe. Put your own safety first. Not only will you not be able to help the casualty if you also become a casualty, but you will increase the problem for others. If the danger which caused the incident is still present, remove it from the casualty if you can do so safely. If this is not possible, you may have to remove the casualty from the danger. Particular points to consider when making the area safe are detailed in the following paragraphs.

0728. **Road Accidents.** *Explain:*

- a. Do not run across a motorway or busy road — if casualties are still on the carriageway, make no attempt to deal with them until traffic has stopped and there is no danger of further collision. Take equal care when dealing with casualties on the hard shoulder. Apply similar rules on other busy roads.
- b. If in a vehicle yourself, ensure the driver parks safely and uses hazard lights.
- c. Wear high visibility/reflective jacket or vest — improvise if possible.
- d. Send bystanders in both directions (except possibly motorways) to warn other drivers but ensure they do so safely. Get other bystanders to set up warning triangles/lights 200 metres in each direction.
- e. Apply handbrake. Put blocks on wheels. Switch off ignition/fuel supply. Disconnect battery if possible.
- f. Do not attempt to right upturned vehicle — try to prevent it from rolling over.
- g. Ensure no smoking.
- h. Look for other dangers — damaged power lines, spilt fuel, Hazchem/ radiation warnings.

0729. **Fires.** *Explain:*

- a. Keep calm while you assess the situation. Do not rush in.
- b. Activate fire alarm.

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- c. Warn people at risk. Calm people down to stop spread of panic. Do not run.
- d. If any danger to you, await emergency services.
- e. Be aware of other dangers — gas/flammable or explosive substances/ electrocution, etc.
- f. Never enter a burning building — leave it to the emergency services.
- g. Break the triangle of fire — oxygen/ignition/fuel — if possible and safe to do so.
- h. Only fight the fire if emergency services have been called and you are not putting yourself in danger.
- i. If leaving the building help everyone out if you can do so safely. Look for fire exits. Shut all doors behind you. Do not use lifts. Look for assembly points.

0730. **Clothing on Fire.** *Explain:*

- a. Follow this drill when dealing with a casualty whose clothing is on fire:

STOP
DROP
WRAP
ROLL

- b. Stop the casualty panicking or running around, particularly outside where the breeze will fan the flame.
- c. Drop the casualty to the ground.
- d. Wrap the casualty if possible tightly in coat, curtain, blanket, rug, etc. **Do not use nylon.**
- e. Roll the casualty along the ground until the flames have been extinguished. If water is available, lay the casualty flames uppermost and douse with water.

0731. **Smoke and Fumes.** *Explain:*

- a. Never enter a fume filled building, pit or other enclosed area — wait for the emergency services.
- b. If you must pass through a smoke filled room keep low down — the air at floor level is the cleanest.
- c. If trapped, go into a room with a window and shut the door. Put blanket, etc., against bottom of door to keep out smoke and fumes.

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- d. Keep by window. Keep low. Wait for emergency services.
- e. If you have to escape through a window, go feet first, lower yourself to the full length of your arms before dropping to the ground.

0732. **High Voltage Electricity.** *Explain:* High voltage electricity may jump up to 20 metres. Normally insulating materials such as wood will not protect you. Do not approach railway overhead power lines, other power lines or high tension cables until you are told officially that the power has been cut off and isolated. Keep bystanders away.

0733. **Low Voltage Current.** *Explain:* Low voltage current such as used in homes, in offices, workshops, etc., can cause serious injury and death:

- a. Do not touch the casualty if in contact with the electrical current.
- b. Switch off the current at the mains or meter if possible.
- c. Remove the plug or pull the cable free.
- d. If unable to break contact with a source of electricity:
 - (1) Avoid contact with water, wet floor and ensure hands are not wet.
 - (2) Stand on dry insulating material (e.g., wooden box, rubber or plastic mat, telephone directory, thick pile of paper).
 - (3) Push casualty's limbs away from source with broom, wooden chair, stool, etc., or push the source away from the casualty.
 - (4) Without touching the casualty loop rope around feet or under arms and pull away from source.
 - (5) As a last resort pull casualty free by pulling at his loose dry clothing.

0734. **Drowning.** *Explain:* Rescue the casualty. REACH AND THROW, DO NOT GO. Do not enter the water yourself unless it is absolutely necessary. Stay on land and reach out with your hand, stick, branch, etc., or throw lifebelt, float rope, etc. If you are a trained lifesaver, you may have to swim/wade to the casualty and tow him to dry land. If the casualty is unconscious carry with head lower than chest once clear of the water to minimise risk of vomiting. Shield the casualty from the wind to prevent wind chill.

0735. **Emergency Aid.** *Explain:* Emergency aid is the immediate life saving treatment given to a casualty. This is taught as part of casaid and is not dealt with in this lesson.

0736. *Confirm Stage 1 by questions from and to the cadets.*

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Stage 2 — Getting Help

0737. Depending on the situation you may already have called for the assistance of the emergency services, or ensured that someone else has done so. The emergency aid a casualty requires may often take precedence however, particularly when on your own. As soon as is practicable ensure that the emergency services are called.

0738. Telephoning for help — consider means of making an emergency call, e.g., mobile and car phones, emergency motorway phones, public call box. Emergency phones are located at every mile on motorways with marker posts between to indicate direction and distance of the nearest phone. These phones have only to be picked up to be answered. On other phones the emergency services can be obtained free of charge by entering the number 999 or 112 (the European Union emergency number).

0739. Decide which emergency services are required. The emergency services which can be obtained by 999 or 112 include:

- a. Police.
- b. Fire.
- c. Ambulance.
- d. Mountain, moor and fell rescue.
- e. Coastguard.
- f. Mines rescue.

0740. Consider whether other forms of help may be needed and ask the Police to notify them. Some examples of help which may be appropriate are:

- a. Utilities — gas, electricity, rail, water.
- b. Health Services — doctor, dentist, nurse, midwife.

0741. Get help from other people to:

- a. Make the area safe.
- b. Telephone for assistance.
- c. Find and fetch first aid equipment.
- d. Control traffic and onlookers.
- e. Control bleeding, support the casualty, support a limb.
- f. Maintain the casualty's privacy.

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- g.** Move the casualty, e.g., into the recovery position.
- h.** Move the casualty to safety.

0742. If using bystanders to phone for help give clear instructions, ensure they report back with any messages and so you obtain confirmation that help has been called, and send several people in opposite directions. Prevent other people from using mobile phones to call for help once you are sure this has been done. Speak with firmness and confidence to helpers and onlookers who may well feel frightened and helpless.

Stage 3 — Aftercare

0743. Your job is not ended when the emergency services arrive. Your responsibilities may include:

- a.** Taking care of the casualty's personal belongings and ensuring they go with the casualty, or are returned to the casualty, or are put in the care of a reliable friend or relative.
- b.** Making a report to the ambulance crew, doctor, etc., to include:
 - (1) The casualty's name and address.
 - (2) History of the accident or illness.
 - (3) Brief description of injuries.
 - (4) Unusual behaviour.
 - (5) Treatment given.
 - (6) Observations made of breathing, pulse, levels of response.
- c.** In minor cases arranging transport home and accompanying the casualty or arranging this, and arranging to let someone at home know what has happened. You may need to advise or arrange for the casualty to see their doctor.
- d.** Watch for indications of stress (delayed reaction) or even post traumatic stress disorder (PTSD) not only in casualties but in others involved in an accident, including first aiders.

0744. Those involved in an accident or in giving first aid may experience a delayed reaction due to stress. Seek or obtain help from a doctor, medical officer or nurse if possible, or at least talk over the situation with a friend. It may help to make a written account of the incident, including the positive action taken.

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0745. Symptoms of stress which appear or continue more than a month after an incident involving loss of or serious threat to life may indicate PTSD. Seek help from a doctor or trained counsellor.

0746. *Confirm Stages 2 and 3 by questions from and to the cadets, and by asking cadets to give practical examples of making a telephone call to get help.*

Conclusion

0747. ***End of Lesson Drill.***

- a. *Questions to and from the class on the lesson.*
- b. *Confirm by practical test.*
- c. *Summary. To include the Incident Action Plan:*
 - (1) ASSESS.
 - (2) MAKE SAFE.
 - (3) EMERGENCY AID.
 - (4) GET HELP.
 - (5) AFTERCARE.
- d. *Pack Up.*
- e. *Look forward. Emergency aid to be dealt with in casaid.*

0748 – 0750. *Reserved.*

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SECTION 3. — CASAID

LESSON 1 (PERIODS 1 AND 2). — THE AIMS OF FIRST AID,
INCIDENT ACTION PLAN, INITIAL ASSESSMENT AND
THE RECOVERY POSITION

A. INSTRUCTOR'S NOTES

Aim

0751. *The aim of the lesson is to teach cadets:*

- a. *The Aims of First Aid* *Stage 1.*
- b. *Emergency Aid* *Stage 2.*
- c. *The Recovery Position* *Stage 3.*

Timings

0752. *Two 30 minute periods.*

Stores

0753. *Nil.*

B. CONDUCT OF THE LESSON

0754. **Revision.** *Nil.*

0755. **Incident Action Plan.**

- a. ASSESS.
- b. MAKE SAFE.
- c. EMERGENCY AID.
- d. GET HELP.
- e. AFTERCARE.

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Stage 1 — The Aims of First Aid

0756. *Explain:* First aid is the immediate assistance or treatment of a sick or injured person before the arrival of more qualified assistance such as an ambulance or doctor. It may involve improvisation and making use of the facilities or materials available.

0757. The aims of first aid (the three Ps) are to:

- a. **P**reserve the casualty's life.
- b. **P**revent worsening of the condition.
- c. **P**romote the casualty's recovery.

Stage 2 — Emergency Aid

0758. *Explain:*

- a. Emergency aid depends on the ABC of life:
 - A** — Airway — must be open so oxygen can enter the body.
 - B** — Breathing — must take place so oxygen can enter the blood-stream via the lungs.
 - C** — Circulation — heart must beat to ensure blood travels around the body and is not lost through the result of injury.
- b. The initial assessment of the casualty consists of:

DANGER
RESPONSE
AIRWAY
BREATHING
CIRCULATION

Remember this as Dr ABC!

0759. *Demonstrate:*

- a. **D**anger — ensure no danger.
- b. **R**esponse — ask a question, give a command, gentle shake.
- c. **A**irway — remove any obvious obstruction. Open the airway by jaw lift/head tilt — lift the jaw by placing two fingers under the chin and gently tilt the head back with the other hand on the casualty's forehead. Maintain jaw lift/head tilt whilst completing the initial assessment (see Fig 176).



Fig 176. — Opening the Airway — Jaw Lift/Head Tilt

d. Breathing — LOOK, LISTEN AND FEEL.

Look along the chest to see if it rises.

Listen for sounds of breath.

Feel for breath on your cheek.

Carry out these checks for ten seconds to determine if the casualty is breathing (Fig 177). If the casualty is not breathing give two breaths of mouth to mouth ventilation.



Fig 177. — Checking for Breathing

e. Circulation — check for pulse in the neck for up to ten seconds (see Fig 178). If there is no pulse then CPR must be carried out.

0760. **Imitate.** Students to carry out initial assessment under instructors command.

0761. **Practice.** Students to practice carrying out of initial assessment in pairs.

0762. Confirm Stage 2 by questions from and to the cadets.

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Fig 178. — Checking for a Pulse

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Stage 3 — Recovery Position

0763. *Explain:*

- a. All unconscious casualties must be placed in the recovery position. This is to:
 - (1) Stop the tongue from blocking the throat.
 - (2) Allow fluid to drain from the mouth and reduce the risk of inhaling stomach contents.
- b. The aim is to keep head, neck and back aligned, while bent limbs keep the body propped in a comfortable and secure position. If you are forced to leave the casualty, the recovery position will minimise the risks.
- c. Beware of neck or spinal injury. Take more care and use extra help if this is suspected.

0764. *Demonstrate (see Fig 179):*

- a. Kneel beside the casualty.
- b. Open airway.
- c. Straighten legs.
- d. Tuck hand nearest you under upper thigh, palm uppermost and arm straight.
- e. Remove fragile or bulky objects from pockets.
- f. Bring the arm furthest from you across the chest and hold the back of the hand against the casualty's nearer cheek.
- g. Pull up the leg just above the knee, keeping the foot flat on the ground.
- h. Keeping the casualty's hand pressed against his cheek, pull on the upper leg to roll the casualty towards you and onto his side.
- i. Use your knees to support the casualty and stop him rolling too far.
- j. Bend the upper leg at the knee so that it is at a right angle to the body.
- k. Ensure the head is tilted back to keep the airway open.
- l. Check lower arm is free and lying alongside back, palm uppermost.

0765. *Confirm. Cadets to carry out recovery position under instructor's command, then practise recovery position in pairs.*

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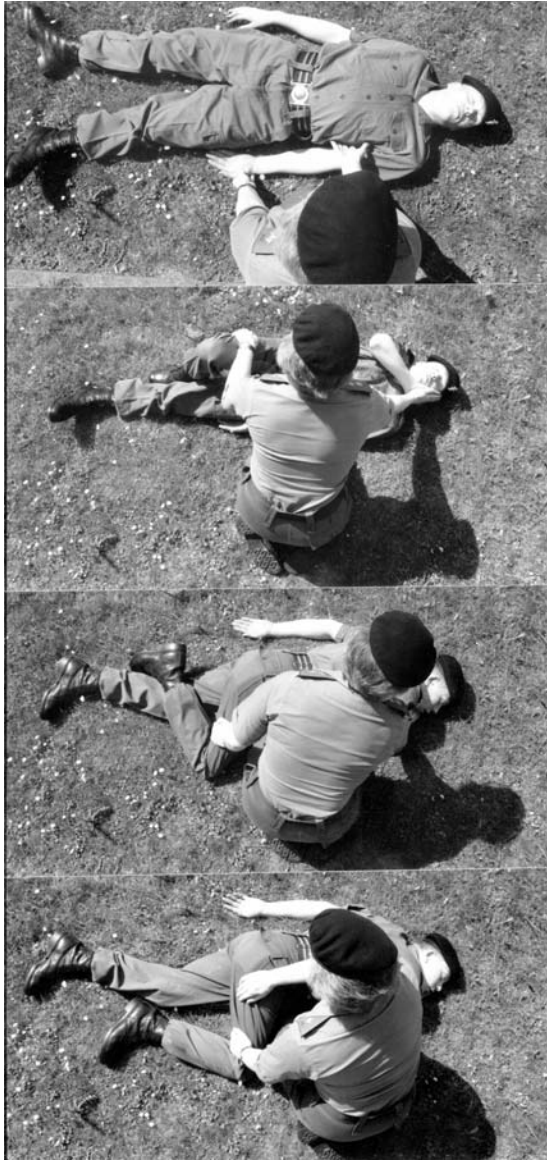


Fig 179. — The Recovery Position

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Conclusion

0766. ***End of Lesson Drill.***

- a. *Questions to and from the class on the lesson.*
- b. *Confirm by practical test — initial assessment and recovery position.*
- c. *Summary. To include the following:*
 - (1) *The aims of first aid.*
 - (2) *Initial assessment.*
 - (3) *Recovery position.*
- d. *Look forward. Action to be taken when no breathing/pulse.*

0767 – 0769. *Reserved.*

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LESSON 2 (PERIODS 3 AND 4). — RESUSCITATION

A. INSTRUCTOR'S NOTES

Aim

0770. *The aim of the lesson is to teach cadets resuscitation techniques:*

- a. *Mouth to mouth ventilation.*
- b. *Cardio-pulmonary resuscitation (CPR).*

Timings

0771. *Two 30 minute periods. This lesson is taught in three stages which may be split between the two periods at the discretion of the instructor.*

Stores

0772. *Resuscitation mannikins.*

Miscellaneous

0773. *This short Casaid lesson does not deal with the unusual case of airway obstruction, or with children and babies under eight years. These topics are covered at 2-Star/CCF Advanced Syllabus.*

0774. *When teaching this lesson explain and demonstrate each method, then talk through the cadets, and finally practise the cadets whilst fault checking.*

B. CONDUCT OF THE LESSON

0775. *Revision.*

- a. ABC of life —
A — Airway
B — Breathing
C — Circulation
- b. Initial Assessment — Dr ABC.

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- D — Check for danger
- R — Check response
- A — Open airway jaw lift/head tilt
- B — Check breathing for 10 seconds
- C — Check pulse for 10 seconds

Stage 1 — Mouth to Mouth Ventilation

0776. *Explain:* Air breathed in contains 21% oxygen and air breathed out contains 16% oxygen. This is sufficient to ensure that the cells of the body, especially the brain, obtain sufficient oxygen to stay alive when air is blown into the casualty's lungs.

0777. *Explain and demonstrate:*

- a. Carry out initial assessment as far as breathing check.
- b. Close the casualty's nose by pinching it, and seal around casualty's mouth with your lips (see Fig 180).
- c. Blow into casualty's mouth for two seconds until chest rises, maintaining jaw lift/head tilt and nose seal (see Fig 181).
- d. Remove your lips and take a fresh breath for four seconds while chest falls.
- e. Repeat c. and d. once more.
- f. Check pulse (at neck) for circulation.
- g. If circulation present continue c. and d., checking pulse every 10 breaths/1 minute.
- h. If breathing returns, place casualty into recovery position.
- i. If pulse absent begin CPR.

0778. *Confirm Stage 1 by questions from and to cadets, then cadets to carry out mouth to mouth ventilation on resuscitation mannikins under instructor's command for two breaths and pulse check. Practice mouth to mouth ventilation of resuscitation mannikins for at least a full minute including second pulse check.*

Stage 2 — Cardio-Pulmonary Resuscitation

0779. *Explain:* If there is no pulse this indicates that the heart is not beating. Oxygen which is air breathed into the lungs cannot be circulated around the body and to the brain cells in particular unless the heart is able to pump the oxygenated blood around the body. You will have to provide an artificial circulation by means of chest compressions. Chest compressions must be combined with mouth to mouth ventilation to maintain both the circulation and the supply of oxygen to the brain.

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Fig 180. — Pinch Nose and Seal Mouth



Fig 181. — Maintain Jaw Lift/Head Tilt

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0780. *Explain and demonstrate:* Carry out initial assessment, and two mouth to mouth ventilations and pulse check as taught.

- a. If no pulse, locate one of the lower ribs with two fingers, move fingers to where the ribs meet the breastbone. Place fingers on the lower breastbone with the heel of the other hand immediately above the two fingers and in the centre of the chest ('landmark' the exact position for next time).
- b. Place the heel of the first hand over the other hand with fingers of both hands interlocked.
- c. Lean well over the casualty, arms straight and elbows locked, and press down 4 – 5 cms (see Fig 182).
- d. Without removing your hands compress the chest 15 times at the rate of 100 compressions per minute for 8 – 9 seconds.
- e. Give two breaths of mouth to mouth ventilation.
- f. Continue d. and e. until help arrives.



Fig 182. — External Chest Compression

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0781. *Confirm Stage 2 by questions from and to cadets. Cadets to carry out CPR on resuscitation mannikins under instructor's command for ten compressions. Practice CPR on resuscitation mannikins for at least one minute.*

Stage 3 — Getting Help

0782. *Explain:* The rules for deciding when to leave your casualty and get help depend on whether you have someone to help or are alone, and whether the absence of breathing is due to injury or drowning, or some other condition such as a heart attack. If breathing/pulse fails as a result of a heart attack the one single factor which will save the casualty is the early arrival of an ambulance with a defibrillator (now carried on all front line emergency ambulances) preferably within eight minutes. In these circumstances get help on the way as soon as it is detected that there is no breathing.

0783. The possible drills are:

- a. No breathing — helper available
 - (1) Send helper for ambulance as soon as it is detected casualty is not breathing.
 - (2) Commence resuscitation.
- b. No breathing — alone — condition **not** due to injury or drowning.
 - (1) Call for ambulance.
 - (2) Commence resuscitation.
- c. No breathing — alone — condition **is** due to injury or drowning.
 - (1) Carry out resuscitation for one minute.
 - (2) Call for ambulance.
 - (3) Continue resuscitation.

0784. *Confirm Stage 3 by questions from and to cadets.*

Conclusion

0785. **End of Lesson Drill.**

- a. *Confirm whole lesson.*
- b. *Questions to and from the cadets on the whole of the lesson.*

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c. *Cadets to carry out further practice under test conditions on varying scenarios involving:*

- (1) *No breathing/pulse present.*
- (2) *No breathing/pulse absent.*
- (3) *Student alone.*
- (4) *Helper available.*
- (5) *Conditions due to injury/drowning.*
- (6) *Condition not due to injury/drowning.*

d. *Pack up. Resuscitation mannikins to be cleaned and put away.*

e. *Look forward. More casualties will involve wounds and bleeding than CPR, and the next lesson will deal with these.*

0786 – 0789. *Reserved.*

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LESSON 3 (PERIODS 5 AND 6). — STOPPING BLEEDING, HOW TO APPLY A DRESSING AND TREATMENT FOR SHOCK, CUTS AND GRAZES

A. INSTRUCTOR'S NOTES

Aim

0790. *The aim of the lesson is to teach cadets:*
- a. *How to stop bleeding using direct and indirect pressure.*
 - b. *The application of a dressing.*
 - c. *The treatment for shock.*
 - d. *The treatment for cuts and grazes and cleaning of affected parts.*

Timings

0791. *Two 30 minute periods.*

Stores

0792. *Sterile/field dressings.*

B. CONDUCT OF THE LESSON

0793. **Revision.** *Revise points from Lesson 2 and practise Resuscitation.*

Severe Bleeding

0794. *Explain:* Controlling severe bleeding will help ensure adequate **CIRCULATION**. Check the **AIRWAY** and **BREATHING** first.

0795. **Uncover the Wound.** *Explain and demonstrate:* Look for foreign bodies embedded in the wound. Small foreign bodies on the surface of the wound should be carefully removed if they can be wiped off easily. If there are no embedded foreign bodies the treatment is to:

- a. Apply direct pressure to control the bleeding by pressing with fingers or the palm of the hand on the wound. Press over a clean dressing if one is

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immediately available. If the wound is gaping it may be necessary to squeeze the sides together.

b. Raise and support the injured part — if the wound is on a limb and you do not suspect a fracture.

c. Place a sterile or clean dressing over the wound. Ensure that it is large enough to extend well beyond the edges of the wound. Press down firmly and secure with the bandage attached to the dressing (see Fig 183) or with a separate bandage.

d. Tie the bandage firmly enough to control the bleeding, but not so tight as to cut off circulation.

e. Raise and support the injured part — put an injured arm into an elevation sling, or improvise (see Fig 184).

f. If bleeding continues, apply up to two more dressings on top of the original one and bandage firmly. Do not remove dressings once applied.

g. Treat for shock.

0796. If no sterile dressing is available, improvise with any suitable material.

Indirect Pressure

0797. *Explain:* Indirect pressure must be applied only in the very exceptional case of an injury to a limb where direct pressure is not possible or effective. It is applied to the main artery which supplies the limb and should be attempted only when the technique has been properly taught.

0798. **Do not** apply indirect pressure for more than 10 minutes.

0799. **Do not** apply a tourniquet.

Embedded Foreign Body

07100. *Explain and demonstrate:* **Never attempt to remove** a large foreign body embedded in a wound. The treatment is modified as follows:

a. Apply direct pressure by squeezing the sides of the wound together alongside the foreign body.

b. Raise and support the affected limb.

c. Place a piece of gauze or other dressing over and around the foreign body.

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Fig 183. — Applying a Dressing



Fig 184. — Arm Elevated in an Elevation Sling

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- d. Place pads of cotton wool or other material around the foreign body until high enough to prevent any pressure on it.
- e. Secure with a firm bandage. Tie the bandage diagonally around the foreign body if it is still protruding beyond the built up dressing.
- f. Treat for shock.

Treatment for Shock

07101. *Explain:* Shock is a serious condition which may prove fatal. It is caused when the pressure or volume of circulating blood falls. This happens when the heart pump fails so that the pressure of the circulating blood becomes weak. It also happens when the volume of circulating blood falls, as in all cases of external or internal bleeding, or burns. The treatment for shock is:

- a. Treat the cause, e.g., stop bleeding.
 - b. Keep the casualty still. Lay him down with his head low and turned to one side.
 - c. Reassure the casualty.
 - d. Raise and support the casualty's legs.
 - e. Loosen any tight or restrictive clothing.
 - f. Shelter from the cold and keep comfortable. Do not overheat.
 - g. Check breathing rate, pulse (see Fig 185) and level of response at ten minute intervals.
 - h. If breathing becomes difficult or vomiting occurs, place in the Recovery position.
 - i. If the casualty becomes unconscious, follow the ABC rule.
- Do not** move the casualty unnecessarily
- Do not** give anything to eat or drink (moisten his lips with water if necessary)
- Do not** use hot water bottles
- Do not** allow the casualty to smoke



Fig 185. — Taking a Pulse

Treatment for Cuts and Grazes

07102. *Explain and demonstrate:* Trivial cuts and grazes which involve only slight bleeding should be treated as follows:

- a. If possible, wash hands before dealing with the wound.
- b. Lightly rinse the wound with running water, if available, until it is clean.
- c. Temporarily protect the wound with a sterile swab. Clean the surrounding area with water and soap, if available. Wipe away from the wound using each swab once only. Take care not to wipe off any blood clots.
- d. Dab gently to dry.
- e. If bleeding persists, apply direct pressure.
- f. Cover with an adhesive dressing or appropriate dressing.
- g. If in any doubt about the injury, seek medical aid.

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Tetanus Infection

07103. *Explain:* Every wound carries the risk of tetanus infection. Any casualty with a wound who has not had an anti-tetanus injection or whose last injection was more than five years ago should be referred for medical advice.

Conclusion

07104. ***End of Lesson Drill.***

- a. *Questions to and from the class on the lesson.*
- b. *Confirm actions by practice.*
- c. *Summary. To include the following:*
 - (1) How to stop bleeding.
 - (2) Treatment for shock.
 - (3) How to treat small wounds.

07105 – 07109. *Reserved.*

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LESSON 4 (PERIODS 7 AND 8). — FRACTURES AND HOW TO TREAT THEM AND OTHER INJURIES

A. INSTRUCTOR'S NOTES

Aim

07110. *The aim of the lesson is to teach cadets:*
- a. *Recognition of fractures and immediate treatment.*
 - b. *Immobilisation of fractures of ankle, leg and arm.*
 - c. *Treatment of blisters, stings and burns.*
 - d. *Recognition of injury to joints or muscles.*
 - e. *Treatment for dislocation and sprains.*
 - f. *Dealing with foreign bodies in the eye, ear or nose.*

Timings

07111. *Two 30 minute periods.*

Stores

07112.

*Blankets/clothing for support
Soft padding
Triangular bandages*

B. CONDUCT OF THE LESSON

07113. **Revision.** *Treatment for shock and how to stop bleeding.*

Fractures

07114. *Explain:* A fracture is a broken or cracked bone. It can be caused by direct force such as a violent injury to that part of the body, or indirect force. Indirect force may result in a fracture away from the point of impact, such as landing heavily on the feet resulting in damage to the spine, or a fall on the outstretched arm breaking the

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collar bone. Another kind of indirect force is a fracture caused by violent jerking of the muscles or ligaments breaking a bone, such as the kneecap.

07115. Fractures may be either:

- a. *Closed.* This is where there is no external injury.
- b. *Open.* This is where there is a wound leading to the fracture site. The bone may protrude through the skin.

07116. A closed or open fracture may also be complicated, when associated with another injury to nerves, large blood vessels, organs or a dislocation.

Signs and Symptoms

07117. *Explain:* Not all the signs and symptoms will be present. Some may develop later. Those which may be seen or described by the casualty are:

- a. The casualty may have felt or heard the bone snap.
- b. Pain, increased by movement.
- c. Inability to move the injured part normally.
- d. Tenderness on gentle pressure at or near the fracture site, with swelling and/or bruising in that area.
- e. Deformity, such as a limb at an unusual angle or other abnormality, especially when comparing one side of the body with the other.
- f. Signs and symptoms of shock, particularly in the case of closed fractures.

General Treatment

07118. *Explain:* The general treatment of fractures is to steady and support the injured part, whilst dealing with more important priorities first. The immediate action is to check and deal with:

- a. **AIRWAY.**
- b. **BREATHING.**
- c. **CIRCULATION.**
- d. **SEVERE BLEEDING.**
- e. **UNCONSCIOUSNESS.**

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07119. Open wounds with severe bleeding must be treated as in paragraphs 0794 – 0799, treating a bone protruding outside the wound as for an embedded foreign body.

07120. The injured part should be steadied and supported whilst dealing with the more important priorities, if this is possible without hindering the immediate treatment. This applies particularly to putting the casualty into the Recovery position which should be done with regard for the other injuries.

07121. Steady and support the injured part with your hands above and below the fracture site until it is immobilised. Rolled up blankets or clothing should be used to support the injured part. No attempt should be made to effect more permanent immobilisation unless the casualty needs to be moved, or removal by ambulance is delayed by more than 30 minutes.

07122. If it is essential for first aiders to move the casualty or the ambulance is likely to be delayed, immobilise the injured part by fixing it to another part of the body with padding and bandages.

Immobilisation of Fractures of Ankle and Leg

07123. *Explain and demonstrate:* If the ambulance is likely to be delayed:

- a. Lay the casualty down and steady and support the injured leg with your hands above and below the fracture site until it is immobilised (see Fig 186).
- b. Straighten the limb by applying gentle traction (see Fig 187).
- c. Place broad bandages under the feet and knees avoiding the fracture site.
- d. Put adequate soft padding between the ankles and knees.
- e. Move the good leg to the injured leg. Steady and support (see Fig 188).
- f. If likely to be a delay, tie the bandage round the feet in a figure of eight.
- g. Tie the bandage round the knees (see Figs 189 and 190).

07124. If the casualty needs to be moved by first aiders more padding and bandages will be needed:

- a. Complete as in paragraph above.
- b. Place two extra broad bandages above and below the fracture site.
- c. Tie off.

07125. *Explain:* Splints are to be used only by fully trained and qualified first aiders and are not appropriate to first aid at 1–Star level.



Fig 186. — Steady and Support a Fractured Leg



Fig 187. — Apply Gentle Traction



Fig 188. — Immobilise the Fractured Leg



Fig 189. — Immobilise Using Triangular Bandages



Fig 190. — Immobilisation of Fractured Leg for a Delay or Journey

Immobilisation of Fracture of the Arm

07126. *Explain:* The treatment for a fracture involving the arm, where the arm can be easily placed across the chest, is as follows:

- a. Place padding between the arm and chest.
- b. Support the injured arm across the chest.
- c. Apply an arm sling, supporting both the arm and the padding (see Figs 191 and 192).
- d. Place a broad bandage across the sling for additional immobilisation.



Fig 191. — Support for a Fractured Arm



Fig 192. — Immobilisation and Support for a Fractured Arm

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Blisters

07127. *Explain:* Blisters are caused by friction or heat. Unless a blister breaks or is likely to be further damaged it requires no treatment. If it does break or is likely to be further damaged apply a dressing large enough to extend well beyond the blistered area — **do not break a blister.**

Stings

07128. *Explain:* Insect stings may be painful but do not usually require first aid treatment. They may cause a problem in people who are allergic to the poison in the sting, in the case of multiple stings from a swarm of insects or where stings in the mouth have caused swelling. The general treatment is to:

- a. If the sting is embedded in the skin, grasp the sting with tweezers as near as possible to the skin surface and remove.
- b. Relieve pain and swelling by applying a cold compress.
- c. If pain or swelling increases over the next day, seek medical aid.

Stings in the Mouth or Throat

07129. *Explain:* The treatment for stings in the mouth or throat resulting in swelling is to:

- a. Give the casualty ice to suck, or rinse the mouth with cold water.
- b. If breathing is difficult place in Recovery position.
- c. Arrange removal to hospital.

Burns

07130. *Explain:* Burns are injuries to the body tissues which may be caused in the following ways:

- a. *Dry Burns.* Caused by contact with flames, hot objects and friction.
- b. *Scalds.* Caused by wet heat such as steam, hot water or fat.
- c. *Cold Burns.* Caused by contact with a very cold object.
- d. *Chemical Burns.* Caused by contact with chemicals (including some household items).

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- e. *Electrical Burns.* Caused by electric current or lightning.
- f. *Radiation Burns.* Caused by rays from the sun.

07131. Most burns need medical attention, including:

- a. Any burn more than 25 mm (1 inch) square in area.
- b. All burns resulting from electrical contact.
- c. Any deep burn involving all layers of the skin.

Treatment

07132. *Explain:* If clothing is on fire, put out the flames by wrapping the casualty tightly in a coat or heavy material that will not catch fire — **not** nylon or other material which will melt. Roll the casualty along the ground until the flames have been extinguished. If water is available, lay the casualty flames uppermost and douse with water. The general treatment is to:

- a. Check — **AIRWAY — BREATHING — CIRCULATION**

and continue to check and deal with ABC whilst carrying out other treatment.

- b. Cool as quickly as possible by flooding the affected area with cold water. For minor burns and scalds place the injured part under slowly running cold water or immerse in cold water for at least ten minutes, but longer if the pain persists.
- c. Carefully remove any clothing soaked in boiling fluid, such as hot tea or coffee. **Do not** remove burnt clothing or anything that is sticking to the burn.
- d. Reassure the casualty.
- e. Remove rings, watches etc., before the affected area begins to swell.
- f. Cover the burn with a sterile dressing.
- g. Immobilise a badly burnt limb.
- h. Treat for shock.
- i. If the casualty is conscious — give frequent sips of cold water.

07133. *Explain:* **Do not:**

- a. Use plasters or adhesive materials.

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- b. Use any creams or lotions.
- c. Break blisters.
- d. Remove loose skin or otherwise interfere with the injury in any way.

Injury to Joints and Muscles

07134. **Sprains and Strains.** *Explain:* A sprain occurs when ligaments and tissues at a joint are wrenched or torn, causing pain and tenderness at the joint, increased by movement. Swelling will occur and later, bruising.

07135. *Explain:* A strain is the overstretching and possible tearing of a muscle, causing pain at the site of the injury with stiffness and cramp.

07136. **Treatment.** *Explain:* Remember to use the mnemonic: **RICE**

- a. **R** — rest and support the joint in the most comfortable position.
- b. **I** — ice bag, or cold compress, applied for 30 minutes if the sprain is recent.
- c. **C** — compress, by applying a firm bandage over a good layer of cotton wool.
- d. **E** — elevate the injured limb.

Note: If in doubt, treat as a fracture.

Dislocation

07137. *Explain:* A dislocation is the displacement of a bone at a joint, usually shoulder, elbow, thumb, finger or jaw. Symptoms and signs include severe and sickening pain at the joint with immobility of the joint. The joint will appear misshapen and swelling will occur.

07138. **Treatment.** *Explain:* To treat a dislocation:

- a. **Do not** attempt to 'reduce' the dislocation by moving the bones to their normal position.
- b. Support and secure the injured part in the most comfortable position using padding, bandages and slings.
- c. Remove to hospital.

Note: If in doubt, treat as a fracture.

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Foreign Bodies in the Eye

07139. *Explain and demonstrate:* Particles of dust, grit, etc., may lodge in the eyeball or under the eyelid causing considerable discomfort if not removed quickly. Attempt to remove as follows:

- a. Tilt the head towards the injured side.
- b. Wash away using an eye irrigator, jug of water or running tap water.
- c. If it does not wash away or water is not available lift off with a moist swab or the damp corner of a clean handkerchief.

07140. *Explain:* **Do not** attempt to remove a foreign body which is:

- a. On the coloured part of the eye.
- b. Embedded in the eye.
- c. Stuck to the eye.

07141. If the foreign body cannot be removed, treat as follows:

- a. Tell the casualty not to move the eye.
- b. Cover with an eye pad.
- c. Remove to hospital.

Foreign Body in the Ear or Nose

07142. *Explain:* An insect in the ear may be removed by tilting the casualties head and flooding the ear with tepid water. Otherwise do not attempt to remove foreign bodies from the ear or nose — seek medical aid or remove to hospital.

Conclusion

07143. **End of Lesson Drill.**

- a. *Questions to and from the class on the lesson.*
- b. *Confirm actions by practice.*
- c. *Summary. To include the following:*
 - (1) Types of fracture.
 - (2) General treatment.

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- (3) How to immobilise.
- (4) Treatment of burns.
- (5) Treatment of sprains and strains.
- (6) Eye injuries.

07144 – 07145. *Reserved.*