

# The Diving Medical Advisory Committee

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## Medical Equipment to be Held at the Site of an Offshore Diving Operation

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*Supersedes DMAC I5 and DMAC I5 Rev. 1, which are now withdrawn*

Commercial diving operations include both surface supplied and saturation diving operations and cover a wide range of work activities. Appropriate medical equipment to be held at any particular site is best determined by an occupational health service with special knowledge of commercial diving operations. This list is designed to provide guidance on equipment to be held at the site where such advice is not available. It is recognised that in certain circumstances similar or greater facilities may be available from other sources which are sufficiently close and reliable.

The list covers equipment suitable for the treatment of diving related disorders on the surface or in a recompression chamber and for other potential problems eg. trauma which may occur during diving operations. The list takes account of situations where the diving operation may be remote from a vessel or installation sickbay and medical services. It includes equipment for use in an immediate first aid situation, equipment and drugs which may be used by personnel with advanced first aid training as well as equipment which would almost certainly only be used by medical staff. Medical staff who attend a casualty at a dive site may not necessarily be able to bring the appropriate equipment.

Some of the drugs mentioned in this note may not be available in some geographical areas and in such cases alternative drugs to those identified should be considered.

It is anticipated that except in emergency situations, equipment other than that in the bell or chamber first aid kits would be for use by or on the direction of medical staff.

There should be an appropriate system for the control and maintenance of the equipment and responsibility for the equipment should be vested in the Diving Superintendent or vessel medic. Equipment should be stored in a locked container and appropriately labelled. The diving supervisor must have access to the equipment at all times. Scheduled drugs should be held in a secure double locked container (with vessel medical supplies or installation sickbay). A logbook should be maintained with the equipment in which all use of equipment and drugs is recorded. The equipment should be inspected regularly (at least every three months) to ensure that all items are in working order (e.g. batteries) and to exchange drugs and other equipment which is nearing the end of its shelf life. These regular inspections should be recorded in the logbook. Consideration should be given to the need for pressure testing mechanical or electrical equipment.

## Equipment to be Held in a Diving Bell

- |  |                                    |
|--|------------------------------------|
| 1 Tourniquet                                     | 3 Polythene bags                   |
| 1 Pocket resuscitator (e.g. Laerdal pocket mask) | 1 Airway size 4 (e.g. Guedel type) |
| 1 Tuf cut scissors                               | 1 Medium dressing                  |
| 1 Large dressing                                 | 2 Triangular bandage               |
| 1 Role of 1 inch adhesive tape                   | 2 Crepe bandage 3 in               |
| 1 Hand operated suction pump (e.g. Vitalograph)  | 1 Water tight bag                  |
| 1 Suction catheters sizes 12 and 14              |                                    |

[20 Hyoscine dermal patches for Hyperbaric evacuation chamber (e.g. Scopoderm plasters)]

The same equipment should be held in each living chamber of a saturation system, in air diving chambers and in hyperbaric lifeboats. In living chambers a foot or gas powered suction pump may be preferred.

## Equipment to be Held at the Dive Site

### Diagnostic Equipment

- |  |   |
|--|---|
| Pencil torch                             | Thermometer (electronic) - inc low range    |
| Stethoscope                              | Aneroid sphygmomanometer                    |
| Reflex hammer                            | Tape measure                                |
| Tuning fork (256 Hz)                     | Pins for testing sensation (e.g. Neurotips) |
| Tongue depressors                        | Urine testing strips                        |
| Otoscope (with spare bulb and batteries) |   |

### Thoracocentesis

- |  |                            |
|--|----------------------------|
| Intercostal drain/trocar and drainage kit (e.g. Portex type) | 2 intravenous cannulae 14g |
| Heimlich valve   | 1 wide bore needle         |

### Urinary Catheterisation

- |   |                         |
|---|-------------------------|
| 2 Urinary catheters sizes 16 and 18 (e.g. Foley type) | 2 Urine collection bags |
| 2 Catheter spigots                                    | 2 20ml sterile water    |
| 2 Urethral anaesthetic gel                            |                         |

### Dressings

- |                                 |                       |
|---------------------------------|-----------------------|
| 10 pkts Gauze squares 10 x 10cm | 6 Triangular bandages |
| 10 pkts Cotton wool balls       | 12 Safety pins        |
| 2 Adhesive bandage 75mm x 3m    | 40 Adhesive bandages  |
| 2 Adhesive bandage 25mm x 3m    | 2 Crepe bandages 3in  |
| 2 Large dressings               | 2 Crepe bandages 6in  |
| 2 Medium dressings              | 2 Dressing bowls      |
| 2 Small dressings               | 4 Eye pads            |
| 2 Ambulance dressings           |                       |

## Sterile Supplies General

4 Universal containers		6 Sachets skin disinfectant (e.g. Cetrimide solution)
10 Alcohol swabs		2 Drapes
5 Gloves (selection of sizes)		
6 Sutures nylon (2/0 and 3/0), preferably with cutting needles attached		
2 Resorbable sutures (2/0 and 3/0), preferably with needles attached		
5 x 20ml Syringes	5 x 10ml Syringes	5 x 2ml Syringes
10 x 18g Needles 38mm	10 x 21g Needles	2 x 18g Needles 90mm

## Sterile Instruments

2 Spencer Wells forceps 5 inch	1 pr Mosquito forceps
1 Spencer Wells forceps 7 inch	1 Dressing forceps
1 Scissors fine pointed	2 Disposable scalpels
1 Forceps fine toothed	1 Dressing scissors

## Intravenous Access

3 Giving sets	4 iv cannulae 16g
4 Butterfly infusion sets 19g	4 iv cannulae 18g
4 Infusion bottle holders	2 long needles (for venting infusion bottles)

## Resuscitation

Resuscitator to include reservoir and connection for BIBS gas. (eg. Laerdal type) \*

3 resuscitation masks (varied sizes)

Pocket resuscitator with one way valve (e.g. Laerdal pocket mask)

Laryngoscope and batteries and spare bulb

Endotracheal tubes (e.g. sizes 7, 8 and 9). 2 Laryngeal masks or oesophago-laryngeal tubes (Larynxtube, Combitube) may replace endrotracheal tubes. \*\*

1 ET tube coupling and mount	2 Airways sizes 3+4 (e.g. Guedel type)
Foot operated suction device	Torniquet
2 endotracheal suction catheters	2 wide bore suckers

Semi-automatic defibrillator

\* Resuscitators may require modification to gas inlet to ensure adequate filling at pressure

\*\* Endrotracheal tubes should be provided for use by doctors only

## Drugs

<u>Anaesthesia/analgesia</u>	<u>Resuscitation</u>	<u>Various</u>
5 x 10ml Lignocaine 10 mg/ml amps	2 x 40mg Furosemide amps	2 x 10mg Chlorpheniramine amps
25 x 500mg Paracetamol tabs	10 x 1ml Adrenaline 1mg/ml amps	2 x 50mg Chlorpromazine amps
20 x 30mg Dihydrocodeine tabs	2 x 1.2mg Atropine amps	5 x 10mg Diazepam amps
20 x 300mg Soluble aspirin tabs	5 x 100mg Hydrocortisone amps	10 x 5mg Diazepam tablets
5 x 10mg Morphine sulphate amps (or 100mg pethidine amps)	2 x 25mg Prochlorperazine amps	1 tube Silver Sulphadiazine cream 1 %
2 x 1ml Naloxone 0.4mg/ml amps	3 x 20ml Glucose 50mg/ml	6 x 500ml Saline 9mg/ml
	6 x 150mg Amiodarone amps	20 x 250mg Amoxycillin tabs
		20 x 250mg Erythromycin tabs
		2 bottles antibiotic ear drops
		2 x 10mg Diazepam (rectal)