GUIDANCE NOTES

ON

MEDICAL FACILITIES ABOARD SHIPS

Australian Maritime Safety Authority February 2002

1 Introduction

Marine Orders, Part 10, provides that, to the extent that is reasonable, adequate medical supplies and appropriately competent persons must be available to treat injuries and diseases aboard ship, until a patient can be transferred to the care of a medical practitioner.

2 Provision of medical supplies

- **2.1** Marine Orders, Part 10 lists the basic responsibilities of the operator of a ship to arrange for the provision of such medical supplies as are reasonably necessary to ensure that persons on board the ship have access to adequate first-aid. What constitutes "reasonably necessary" will depend on circumstances and the operator will need to take into account a number of factors including the following:
 - the number and sex of persons who will be on board ship at any particular time;
 - the type of ship and the particular health hazards of the cargoes being carried;
 - the length of the proposed voyage;
 - the facilities available for communication with shore-based advice;
 - the distance the ship will be from medical facilities on shore and the capacity for evacuation of sick or injured persons in an emergency.
- **2.2** It is the responsibility of the master of a ship to ensure that the medicines are in date and the medical and surgical stores and appliances are in working order and readily available for use. The master of a ship must also ensure that non-reusable medical supplies used, or otherwise becoming unserviceable, during a voyage are replaced at the earliest opportunity and if, for whatever reason, the master of a ship considers that the medical supplies provided on the ship are inadequate, he or she must take necessary steps to rectify the deficiency. For example, a ship might take on board an unplanned cargo presenting hazards for which adequate provision has not been made by the operator in advance.
- **2.3** The Annex to these Guidance Notes sets out some scales of medical supplies that may assist ship operators in meeting their obligations. Although there is no internationally agreed list of medical supplies that should be carried on a ship, the scales in the Annex are based on experience of operating conditions on ships of various types and trades. In addition, the *Ship Captain's Medical Guide* contains information to assist ships' crews in diagnosing and treating sick and injured seafarers.
- **2.4** Medical supplies which are goods for therapeutic use within the meaning of the *Therapeutic Goods Act 1989*, should conform to both the general standards and the specific standards applicable to the goods under that Act.

3 Storage of medical supplies

- **3.1** Marine Orders, Part 10 requires the operator of a ship to ensure that medical supplies are capable of being stored on board the ship in such a way that they are adequately protected from premature deterioration. Drugs and other medicines should be stored in a cool place, below 25°C if possible, but no such item should be frozen.
- **3.2** Storage should be secure enough to prevent misuse, while ensuring that prompt access to them is available when they are required. The nature of some medicines requires special care to be taken in their storage and security. The following suggestions may assist operators to meet their obligations in this regard.

Medical cabinet

- **3.3.1** The medical supplies provided in a ship should be kept in a medical cabinet of a suitable size, design and construction. It should be provided with the following:
 - an outer door fitted with an efficient lock;
 - an inner cupboard, independently lockable, for the storage of the medical supplies referred to in 3.3.4;
 - shelves so constructed as to facilitate identification of articles stored on them,

and ideally:

- at least 2 drawers suitable for the storage of articles;
- a rack suitable for holding articles for measurement of medicine.
- **3.3.2** The medical cabinet should be a separate compartment adjacent to the ship's hospital accommodation or adjacent to the accommodation provided for the ship's officers. It should not be located in a recreation room, sleeping room, mess room, wash place or other space provided as accommodation for the crew if it unduly reduces the space available in that area.
- **3.3.3** The medical cabinet should be lit by an electric light located inside or immediately outside the cabinet that enables all the contents of the cabinet to be clearly seen in the absence of light from another source. The cabinet and the place in which it is located should be ventilated so as to avoid deterioration of its contents.
- **3.3.4** Medical supplies marked with the symbol * in the Annex should be stored in a locked inner cupboard of the medical cabinet. Each inner cupboard key carried on board should be kept in the custody of the Master or one officer.

Refrigerated storage

3.3.5 Medical supplies marked with the symbol § in the Annex should be kept in refrigerated storage between 2°C and 8°C.

4 Labelling of medical supplies

4.1 A drug, other medicine or disinfectant should be correctly labelled in English. The label should be durably affixed to the container and of such nature as to be clearly readable for the normal life of the contents of the original manufacturer's container showing the storage conditions, batch number and expiry date. In the case of a drug or other medicine supplied in Australia, the label should bear such information as is specified by Therapeutic Goods Order No. 48, made under the *Therapeutic Goods Act 1989*.

A drug or medicine supplied in a country other than Australia should comply with the equivalent labelling requirements of that country.

4.2 If a pharmacist supplies a drug or medicine the use of which is not described in the *Ship Captain's Medical Guide*, the pharmacist should, unless already provided by the manufacturer, provide advisory and cautionary labels describing the substitute's safe and efficient use and warnings regarding side effects and adverse indications.

5 Packaging of medical supplies

Drugs, other medicines and disinfectants should be packed in containers conforming to the requirements of the laws of the State, Territory or country of manufacture.

6 Use of medical supplies

- **6.1** Marine Orders, Part 10, requires the operator of a ship to ensure that the master and crew of the ship are provided with a list of medical supplies on the ship, written instructions and adequate training on the proper use of medical supplies. The instructions must cover the obtaining of advice from qualified medical personnel.
- **6. 2** The master must ensure that all members of the crew are aware of the operator's instructions on the proper use of medical supplies.
- **6.3** Each member of the crew of a ship must comply with the operator's directions on the use of medical supplies and to report to a responsible officer any deficiencies in the medical supplies that comes to the crew member's notice.

7 Publications

The following publications may assist operators in demonstrating compliance with 5.2.3 of Marine Orders, Part 10:

- Ship Captain's Medical Guide (published by HMSO, London) provides information to assist in diagnosing and treating the sick and injured, as well as general information regarding the obtaining of radio medical advice. Its carriage is strongly recommended.
- Medical First Aid Guide, for use in accidents involving dangerous goods (published by IMO) is required by Marine Orders, Part 41, to be carried on ships carrying dangerous goods. It is contained in the Supplement to the IMDG Code, 2000 Edition.

Annex 1

Medical Supplies

1 General

This Annex provides guidance on the appropriate medical supplies to be carried on ships. The supplies and quantities are based on experience of the range of medical and surgical emergencies that can arise on board. However, they should be adjusted in accordance with the particular risks inherent on the voyage, the length of voyage, ports of call, the cargoes carried, and the persons on board.

Operators should obtain medical advice from their consultant medical practitioners or pharmacists in specifying medical supplies for their ships, especially should they wish to differ from the suggested listings. They must provide the Master of each ship with a written list of the medicines to be provided on board. In appropriate cases, other, or additional, medicines may be desirable.

CAUTION: All injectable medications should only be administered by the IM (intramuscular) or SC (subcutaneous i.e. under the skin) routes. Refer to pages 66 to 68 of the *Ship Captain's Medical Guide*, 22nd edition, for information on these injections. (Note that references to Figures 3.7 to 3.11 in the text should be to Figures 3.9 to 3.13.) Do NOT attempt to use IV (Intravenous) injections, as this requires considerable skill and practice, and often requires different doses and rates of administration.

Medicines in the attached tables are grouped according to purpose. Thus Group 1 covers medicines for dealing with cardiovascular problems. In the rows below the shading, 'A', 'B', etc. refer to sub-groups; thus '1C' relates to medicines with a diuretic effect.

Some medicines fall into two groups. For instance, 'hyoscine hydrobromide' is both in group 4C, as a seasickness remedy, and group 3C, as an anti-spasmolytic. Where this occurs, the later group usually refers to the earlier group. The main exception to this is Group 15, where a large number of medicines are also listed in earlier groups. Quantities are specifically listed for all items in Group 15 (Poison Treatments and Antidotes), being the quantity required to be carried by the latest edition of the IMO *Medical First Aid Guide*. Where quantities are listed in Group 15 and another Group, eg, '100' in Group 15 and '12' in Group 4, the amount that should be carried is the higher of the two, not the sum of both (eg, 100, not 112).

Except for Group 15 (see below), the quantity specified in the column headed "Cat A" is a suggested quantity for a seagoing vessel on unlimited voyages, and assumes that supplies can be restocked if necessary from acceptable sources at wayports without problems. The quantity should be sufficient for a crew of about 20 people. If the voyage is to be lengthy, without a satisfactory opportunity of replenishing supplies from reputable sources, some quantities may need to be increased. For larger crews, an increase in quantity may be desirable (an extra quarter or half quantity is suggested for each extra 5 or 10 crew).

Again excepting Group 15, the quantity specified in the column headed "Cat B" is a suggested quantity for a seagoing vessel on short voyages, generally not extending more

than 150 miles from the nearest port with adequate medical equipment. This distance could be increased to 200 miles from the nearest port with adequate medical equipment if the ship remains continuously within range of helicopter rescue services.

For Group 15 (Poison Treatments and Antidotes), the Category A quantity is for ships where casualties cannot, or may not, be able to be hospitalized on shore within 24 hours. Category B is for ships where casualties can always be hospitalized within 24 hours.

Most medicines have an expiry date. It is recommended that unopened packs, bottles or other containers of unused medicines be landed at an appropriate time before they become time expired. Pharmacists can advise on appropriate disposal. In particular, unused controlled drugs (see 5.5.1 of Marine Orders, Part 10) must not be disposed of other than by transferring them to the control of a registered pharmacist on receipt of new stock.

Sections 4 and 5 cover medicines and medical equipment for ships that operate in smooth and partially smooth waters, and those which stay close to the shore.

2 Medicines for ships of Categories A and B

Explanation of symbols:

- * must be stored in a locked inner cupboard of the medical cabinet.
- § must be kept in refrigerated storage between 2°C and 8°C.
- # must be stored in a locked inner cupboard of the medical cabinet. Special recording requirements apply see provision 5.5.1 of Marine Orders, Part 10, and 3.3.4 of the Guidelines.
- † for items so marked in column 4, the specified quantity is considered sufficient regardless of the number of persons on board.

Names in brackets refer to the same medicines, but may be a local name used outside Australia. Medicines and dosages are given in the following format: Name of medicine, dosage/strength, type of supply (eg, tablet, bottle, pack, &c, and unless included in name of medicine), or size. In the case of injections supplied in ampoules, the word ampoule is omitted and strengths are given as "total quantity per ampoule/size of ampoule". If the quantity suggested of a particular drug is less than the manufacturer's smallest pack, the smallest available pack should be used.

1	2	3	4	1
Ref No	Treatment and storage symbols	Recommended Medicine and Dosage Strength	Suggested quantity	
			Cat A	Cat B
1	Cardio vascu	ılar		
Α	Cardio vascula	r restoratives Sympathomimetics		
1A	*	Adrenaline (Epinephrine) 1.0mg/1mL, injection.	5†	5†
В	Anti-angina pre	eparations		
1B		Glyceryl trinitrate 400 micrograms, spray, 200 metered dose aerosol.	2	1
С	Diuretics			
1C1	*	Frusemide 40mg, tablet.	20†	-
1C2	*	Frusemide 20mg/2mL, injection.	5	5
D	Anti-haemorrh	agics		
	(including uteroto	pnics if there are women with potential for child bearing work	ing on boa	ard)
1D1		Phytomenadione Paediatric 1mg/0.5mL, injection (Vitamin K1).	1†	1†
		(Note: intended for use with new-born infants)		
1D2	§*	Ergometrine Maleate 500 micrograms & Oxytocin 5 units, injection.	5†	5†
		(additional quantity recommended if there are women with potential for child bearing working on board)	5†	5†
Е	Anti-hypertens	ive		
1E		Atenolol 50mg, tablet, pack of 28.	1 pack	-

1	2	3	4	ļ
Ref No	Treatment and storage symbols	Recommended Medicine and Dosage Strength	Suggeste	d quantity
			Cat A	Cat B
2	Gastro intes	tinal system		
Α	Medicines for	gastric and duodenal disorders		
	Histamine H₂ r	eceptor anti ulcer antagonists		
2A1		Cimetidine 400mg, tablet, pack of 60.	1 pack	-
	Antacids			
2A2		Proprietary antacid of choice, tablet, or corresponding quantity of powder or liquid.	500	100
В	Anti-emetics			
2B1	*	Prochlorperazine 3mg, buccal tablet or	30†	30†
2B1		Prochlorperazine 5mg, tablet.	25†	25†
2B2		Promethazine 25mg/1mL, injection.	10†	10†
2B3	*	Prochlorperazine 12.5mg/1mL, injection.	5†	5†
С	Lubricant laxa	tives		
2C		Glycerol Suppository, 4g.	12	-
D	Anti-diarrhoea	ls		
2D1		Codeine Phosphate 30mg, tablet,	60	30
2D2		Loperamide 2mg, capsules.	24	16
E	Intestinal anti-	infective		
2E		Trimethoprim 200 or 300mg, tablet.	20	20
F	Haemorrhoid p	reparations		
2F		Proprietary preparation of choice, pack.	1	1
		(Increase quantity if needed).		
3	Analgesics a	and Anti-spasmodics		
Α	Analgesics, an	ti-pyretics and anti-inflammatory agents		
3A1		Paracetamol 500mg, tablet, pack of 100.	5	5
3A2		Diclofenac 100mg, suppository.	10	-
3A3		Ibuprofen 200 or 400mg, tablet, pack of 24, or	2	1
3A3		Mefenamic acid 250mg, capsules, pack of 20, or	3	1
3A3	*	Naproxen 275mg, tablet, pack of 12.	4	2

1	2	3		4
Ref No	Treatment and storage symbols	Recommended Medicine and Dosage Strength	e Strength Suggested quant	
			Cat A	Cat B
В	Powerful analg	esics		
3B1	*	Codeine Phosphate 30mg, tablet.	see 2D1	see 2D1
3B2	#	Morphine Sulfate 10mg/1mL, injection.	10	5
3B3	(Emergency antidote to Morphine)*	Naloxone 0.4mg/1mL, injection. Note: Naloxone is a Morphine antidote or antagonist, NOT an analgesic.	5	5
С	Anti-Spasmoly	tics		
3C		Hyoscine hydrobromide 0.3mg, tablet.	100	20
4	Nervous sys	tem		
Α	Tranquilizers, ı	muscle relaxants		
4A1	#	Diazepam 10mg/2mL, injection (See also Group 15).	2†	-
4A2	#	Diazepam 5mg, tablet.	40†	20†
В	Major tranquili	zers		
4B1		Chlorpromazine 25mg/1mL, injection.	10†	5†
4B2	*	Chlorpromazine 25mg, tablet.	100†	20†
4B3	*	Benztropine 2mg, tablet.	100†	50†
		(for concurrent therapy with chlorpromazine , to control side effects, on doctor's recommendation).		
С	Seasickness re	emedies		
4C		Hyoscine hydrobromide 0.3mg, tablet.	Use 3C	Use 3C
D	Anti-epileptics	1		
4D		Diazepam 10mg, rectal.	5	5
Е	Anti-depressio	n		
4E	*	Amitriptyline 50mg, tablet.	20	10
F	Anti- insomnia			
4F	#	Nitrazepam 5mg, tablet.	25	10

1	2	3	4	4
Ref No	Treatment and storage symbols	Recommended Medicine and Dosage Strength	Suggeste	ed quantity
			Cat A	Cat B
5	Anti-allergics	s and Anti-anaphylactics		
Α	H₁ Anti-histami	ines		
5A	*	Loratadine 10mg, tablet.	30†	30†
		(Note: This anti-histamine can be used where patient sedation MUST be avoided or some alcohol has been consumed.)		
В	Cortisones			
5B1	*Injectable	Hydrocortisone powder for injection 100mg vial, each with 2mL water for reconstitution.	5	-
		(use on medical advice only)		
5B2	*Oral	Prednisolone, tablet, 5mg.	60	60
		(use on medical advice only)		
6	Respiratory	System	T	
Α	Bronchospasm preparations			
6A1	*	Salbutamol, 100 micrograms per metered dose, 200 dose inhaler.	2	1
6A2		Beclomethasone, 50 micrograms per metered dose, 200 dose inhaler.	2	1
В	Anti-cough			
6B1		Codeine Phosphate 30mg, tablet.	Use 2D	Use 2D
6B2	*	Codeine Phosphate, linctus, 100mL bottle.	6	4
С	Medicines for o	colds and sinusitis		
6C1		Paracetamol 500mg, tablet.	Use 3A	Use 3A
6C2		Menthol & benzoin, inhalation, 50mL.	2	1
6C3		"Cold & Flu" tablets	120	-
7	Anti-infection	n		
Α	Antibiotics			
7A1		Benzyl Penicillin 600mg, injection, vial.	20	5
7A1a		Water for injection, to suit Benzyl Penicillin injection.	20	5
7A2		Ciprofloxacin 500mg, tablet.	28	14

1	2	3	4	
Ref No	Treatment and storage symbols	Recommended Medicine and Dosage Strength	Suggeste	d quantity
			Cat A	Cat B
7A3		Ceftriaxone 1g, injection, vial.	20	-
		(To be diluted with Lignocaine injection, see 13B2.)		
		(Note: for category A vessels which may be more than 48 hours from medical assistance)		
7A4	*	Erythromycin 250mg, tablet.	100	50
7A5	*	Doxycycline 100mg, tablet.	21	7
		(General requirement for treatment of STDs. Additional product, if required, may be available from Group 14 (antimalarial regime))		
В	Anti-bacterial			
7B		Trimethoprim 200 or 300mg, tablet.	40	_
С	Urinary anti-in	fective		
7C	,	Trimethoprim 200 or 300mg, tablet.	Use 7B	-
D	Anti-parasitics	<u> </u>		
7D	•	Mebendazole 100mg, tablet.	6†	6†
Е	Intestinal anti-	infectives		
7E1		Metronidazole 0.5g, suppository.	20	-
7E2	*	Metronidazole 400mg, tablet.	42	21
7E3	*	Tinidazole 500mg, tablet.	24	12
F	Anti-tetanus va	accines and immunoglobulins		
7F1	§*	Tetanus Adsorbed Vaccine, injection, 0.5mL.	5†	1†
7F2	§*	Tetanus Immunoglobulin 250 units, injection.	1†	1†
8	Compounds expansion	promoting rehydration, caloric intake and p	lasma	
8		Sodium chloride and glucose or dextrose	120	40
_		compound, powder sachets, 4.9g.		-
		Equivalent other formulations may be used.		
9	Skin medicir	nes		
Α	Antiseptic solu	utions		
9A		Pre-diluted aqueous solution containing cetrimide and chlorhexidine, bottle, 100mL, for individual use.	24†	12†

1	2	3	4	1
Ref No	Treatment and storage symbols	Recommended Medicine and Dosage Strength	Suggeste	ed quantity
			Cat A	Cat B
В	Antibiotic ointr	ments		
9B		Bacitracin Co., tube, 15g	3	1
_		or proprietary brand of antibiotic ointment or cream.		
С	Anti-inflammat	ory and analgesic ointments		
9C1		Hydrocortisone 1% cream or ointment, tube, 30g.	2	1
9C2		Calamine 15%, Lotion, non-oily, bottle, 200mL.	2	1
D	Anti-fungal ski	n creams		
9D1		Benzoic acid compound ointment 100g (synonym: Whitfields ointment).	1	-
9D2	*	Miconazole nitrate 2% vaginal cream 40g (Only if one or more persons on board is female. Increase quantity if four or more females are on board.)	2	1
9D3	*	Miconazole nitrate 100mg vaginal pessary, pack of 7	2	-
		(Only if one or more persons on board is female.)		
9D4	*	Miconazole nitrate 2 % topical cream 30g.	2	1
		(Double quantity should be supplied if one or more persons on board is female.)		
	Burn preparation	ons		
9E	*	Silver sulfadiazine 1% and chlorhexidine digluconate 2% cream, sterile tube, 50g.	4	4
	Miscellaneous	skin preparations		
9F1		Gamma benzene 1% <i>or</i> Pemethrin, 5% cream, 30g.	6	2
9F2		Gamma benzene <i>or</i> Pemethrin (hair application), bottle, 100mL.	2†	-
9F3		Petroleum Jelly 50g.	2	1
9F4		Potassium permanganate, crystals, 25g.	1†	1†
9F5		Zinc oxide, ointment, 100g.	1†	1†
10	Eye medicine	es		
	Antibiotic eye	pintment		
10A		Framycetin 0.5 % eye ointment, tube, 5g.	5	2

1	2	3	4	4
Ref No	Treatment and storage symbols	Recommended Medicine and Dosage Strength	Suggeste	ed quantity
			Cat A	Cat B
	Antibiotic and	anti-inflammatory eyedrops		
10B	§	Betamethasone sodium phosphate 0.1 % neomycin sulfate 0.5%, eyedrops, 5mL.	2	1†
		Use on radiomedical advice only, and preferably after diagnosis by an eye specialist.		
	Anaesthetic ey	edrops		
10C	§*	Amethocaine 0.5%, eye drops, (individual doses).	20†	20†
	Glaucoma trea	tment		
10D		Pilocarpine 0.5%, eyedrops, 15mL.	1†	1†
	Detection of fo	reign bodies		
10E	§*	Fluorescein 2% eye drops, disposable units.	20†	20†
11	Ear medicine	es estate de la constant de la const		
11A1		Antibiotic eardrops containing in each mL; neomycin 3 400 units, polymixin B sulfate 10 000 units, hydrocortisone 10mg, in a 5mL dropper bottle, <i>or</i>	1†	1†
11A1	*	Cortisone ear drops (containing Framycetin 5mg, Dexamethasone 0.5mg, Gramicidin 0.05mg/ml) 8mL.	3†	1†
11A2		Aluminium acetate ear drops, with dropper, 15mL.	2	1
	Wax softener,	ubricating		
11B		Arachis Oil, ear drops, with dropper, 15mL.	2	-
	Nasal deconge	stants		
11C		Ephedrine 0.5%, nasal drops, 15mL	2†	1†
12	Medicines fo	r mouth and throat infections		
	Mouthwash, ar	ntiseptic		
12A		Chlorhexidine gluconate 0.2%, mouthwash, 300mL.	2	1

1	2	3	4	
Ref No	Treatment and storage symbols	Recommended Medicine and Dosage Strength	Suggeste	d quantity
			Cat A	Cat B
13	Local Anaes	thetics		
	Local anaesthe	etics using freezing		
13A		Ethyl chloride, liquid spray, 100mL.	1†	1†
	Local anaesthe	etics given by subcutaneous injection		
13B2	*	Lignocaine 1%, injection, 2mL.	25	5
		Note: In addition to its use as an anaesthetic, Lignocaine is used as a diluent for Ceftriaxone, q.v. (see 7A3).		
	Dental anaesth	etic and antiseptic mixtures		
13B2	(see 22 for other dental preparations)	Lignocaine 2%, gel, water miscible base, 15g.	4	2
14	Anti-Malarial	S		
Α	Prevention			
14A1	*Regime 1	Chloroquine 150mg base (approx.), tablet <i>and</i>	500	250
14A2	*	Proguanil 100mg, tablet.	1000	500
14A3	*Regime 2	Doxycycline 100mg, tablet.	420	420
		For prolonged visits to malarial areas, sufficient Doxycycline must be carried to allow administration of one tablet per adult per day for the period 2 days before to 14 days after potential exposure.		
14A4	Regime 3	Mefloquine 250mg, tablet	120	60
		(Note: for prolonged visits to malarial areas, sufficient Mefloquine should be carried to allow administration of one tablet per adult per week for the period 7 days before to 14 days after potential exposure.)		
	basis (provided a	ternate between regimes 1 and 2 on an alternate voyage full course of treatment of each regime is completed).		
		nalaria is known to be resistant to Regimes 1 or 2.		
В	Treatment			
14B1	*	Pyrimethamine (25mg) & Sulfadoxine (500mg), tablet	12	12
		(Note: Use only on medical advice).		
14B2		Quinine 300mg, tablet.	100	100
	Use Regime 3 abo	ove also for treatment.		

1	2	3	4	4
Ref No	Treatment and storage symbols	Recommended Medicine and Dosage Strength	Suggeste	ed quantity
			Cat A	Cat B
15	Poison treate	ments and Antidotes		
	IMDG Code, 2000 group or groups, th	pecified against items in the following table are those listed in the Edition. Where quantities are listed in Group 15 and in another e amount that should be carried is the higher or highest of the s, not the sum of all quantities listed.		
	Supplement to the there is no longer a in italics are no longer	f the Medical First Aid Guide (MFAG), contained in the IMDG Code (2000 Edition), except for a few specific treatments a set link between poison and antidote. The Group 15 medicines ger contained in the Medical First Aid Guide, but are specific antidotes for the substances listed with the entry.		
	materials carried w listed in Group 15,	consider that the nature or quantity of specific hazardous arrants the carriage of specific antidotes or treatments, not advice should be obtained from the Company's medical or psultant, or from the State Poisons Treatment Centre.		
	*	Amoxycillin 500mg, capsule.	30	-
	*	Amyl Nitrite Vitrella 0.3mL.	96	96
		Antidote for poisoning by cyanides, nitriles or hydrogen sulphide		
	§*	Anaesthetic eye drops, <i>eg</i> Amethocaine 0.5%, eye drops, (individual use).	5	5
	*	Antibiotic eye ointment - Framycetin eye ointment.	5	5
		Ascorbic Acid 500mg/5mL, injection. Treatment for methaemoglobinaemia	5	5
	*	Atropine 1.2mg/1mL, injection.	15	15
		Beclomethasone, 50 micrograms per metered dose, 200 dose inhaler.	5	5
		Calcium Gluconate 2%, gel.	150g	150g
		Calcium Gluconate 1g, tablet, effervescent.	20	20
		Ceftriaxone 1g, injection, plus 5 Lignocaine 1%, as diluent.	5	-
		Charcoal, activated 300mg, tablet.	200	200
		Diazepam 10mg, rectal.	5	5
		Dimercaprol 100mg/2mL, injection.	10	10
		Antidote for poisoning by arsenic and mercury compounds		
	*	Erythromycin 250mg, tablet.	75	-
		Ethyl Alcohol 90%, solution, 500 mL.	3	1

1	2	3	4	1
Ref No	Treatment and storage symbols	Recommended Medicine and Dosage Strength	Suggested quantity	
			Cat A	Cat B
	*§	Fluorescein 2% eye drops, disposable units.	20	20
	*	Frusemide 20mg/2mL, injection.	15	-
	*	Metoclopramide 10mg/2mL, injection.	30	10
		Metronidazole 0.5g, suppository.	20	-
	#	Morphine sulfate 10mg/1mL, injection.	40	10
	*	Naloxone 0.4mg/1mL, injection.	5	5
		Oral rehydration salts, sachets, 4.9 g, (or tablet to produce the equivalent).	90	30
		Paracetamol 500mg, tablet.	200	100
		Phytomenadione 10mg/1mL, injection.	10	-
		Plasma expander, infusion, 500mL.	3	3
		Polyethylene Glycol, 500mL.	1	1
		Treatment for phenolic burns		
	*	Salbutamol 100 microgram metered 200 doses, spray, aerosol inhaler.	5	5
		Sodium chloride 0.9%, solution, isotonic (saline), 1L.	5	3
16	Vitamins			
16		Vitamin K1 (Phytomenadione) See Groups 1 & 15.		
17	Disinfectants	s and Antiseptics		
	General Purpo	se Disinfectant/deodorant		
17		Solutions of alkylphenols in a saponaceous solvent or a quaternary ammonium compound, litres.	18	9
	Antiseptics			
17		Solution of Chlorhexidine 0.05% & Cetrimide 0.5% in an aqueous vehicle.	Use 9	Use 9
17		Hydrogen peroxide 6% (20 vol), solution, 100mL.	2	-

1	2	3	4	4
Ref No	Treatment and storage symbols	Recommended Medicine and Dosage Strength	Suggeste	ed quantity
			Cat A	Cat B
	Chlorine comp	ound		
17		Calcium hypochlorite, high test, powder.	8kg	8kg
		Note 1: Do not store near metal objects, instruments, sinks, &c. Keep in sealed container until used.		
		Note 2: Replace annually if not used.		
		Note 3: Calcium hypochlorite is an oxidising agent and has been implicated in fires. It is recommended that if stored on board it should be kept at temperatures less than 35°C and, so far as possible, only purchased for immediate use.		
18	Insecticides	and Repellents		
18	Repellent,	Diethyltoluamide.	As reqd	As reqd
	personal	(Recommended 1 pack per crew member)		
18	Insecticide, liquid	The insecticide should not be harmful to humans, should be free from offensive odour and so far as possible non-staining, should be effective for killing insects or keeping spaces clear of insects, and be suitable for use in crew and passenger accommodation and food preparation areas. Instructions should be specified on the packaging.	5L	-
19	Vaccines			
19	§*	Tetanus Vaccine Adsorbed, injection, 0.5mL	Use 7F1	Use 7F1
19		Tetanus Immunoglobulin.	Use 7F2	Use 7F2
20	Anti-Inflamm	natory		
20		Diclofenac.	Use 3B2	-
21	Endocrines			
21		-	-	-
22	Dental			
22		Oil of Cloves, 15mL.	1	1†
22		Zinc oxide dental paste, tube, 7g.	1	

3 Medical equipment

(This is the recommended quantity irrespective of the number of persons on board.)

Equipment marked MF is additional equipment recommended in the *Medical First Aid Guide*, published by IMO, for ships carrying dangerous goods. It is not required for other ships.

	Equipment Category	Recommended Specification	Α	В
1	Resuscitation Equipm	ent		
	Manual resuscitation appliance	Valve and bag type. One should be supplied for ordinary ships. Two are required for ships carrying dangerous cargoes.	1 or 2(MF)	1 or 2(MF)
	Appliance for the administration of oxygen For tankers.	Oxygen Giving Set comprising the following: 1) Oxygen reservoir, 2 cylinders with 60 - 90 minutes total supply 2) 1 flow meter unit giving a minimum setting of 4 litres per minute 3) 1 pressure regulating unit 4) 1 set of tubing 5) 5 x 24% oxygen disposable face masks 6) 5 x 35% oxygen disposable face masks. Each part must be constructed so that it can only be assembled in the correct manner. Note 1: Items (2) and (3) may be combined in one unit. Note 2: A carry case for the set need only contain one oxygen cylinder if a second is stored nearby and is interchangeable with the first with negligible interruption to the flow of oxygen.	1	1
	Appliance for the administration of oxygen For ships carrying dangerous cargoes, other than tankers	In addition to the above, ships carrying dangerous cargoes should carry 10 x 60% disposable facemasks. There should be a minimum of 44 litres of oxygen at 200 bar. This supply (including the above) should be composed as follows:	MF	MF

	Equipment Category	Recommended Specification	Α	В
		1 portable set with at least 1 x two litre 200 bar cylinder ready for use, with a spare two litre 200 bar cylinder, and		
		1 x 40 litre 200 bar cylinder ready for direct use at the ship's hospital, with one flowmeter unit (two ports) for supplying of oxygen to two persons at the same time. (Small cylinders may be used to give the equivalent amount.) If more than one non-portable oxygen cylinder is used, there must be two flowmeter units for supply of oxygen to two persons at the same time.		
	Mechanical aspirator to clear upper respiratory passages	Aspirator to clear airways (manual, hand operated) + two catheters	1	1
	Equipment for mouth to	Pocket Mask <i>or</i>	1	1
	mouth resuscitation	Disposable mouth-to-mouth plastic shield.	6	6
		Guedel Airway Sizes 1, 3 and 4	1	1
		For ships carrying dangerous cargoes, the quantity should be increased to 2 of each size.	2(MF)	2(MF)
2	Dressing and suturing	equipment		
	Balls, cotton wool, sterile	Pack of 5, in damp proof packaging.	100	50
	Bandage, crepe	7.5cm x 1.5m when stretched	4	2
	Bandage, elastic, adhesive	7.5cm x 4m	2	1
	Bandage, gauze, conforming	5cm x 5m	4	4
		7.5cm x 5m	6	6
	Bandage, gauze, tubular	Seamless, of a size suitable for finger dressings, 5m with applicator, plus 1 refill	1	1
	Bandage, suspensory	Large size	1	1
	Bandage, triangular	Calico, with two sides about 90cm and a base about 127cm	4	4

Equipment Category	Recommended Specification	Α	В
Bandage, zinc oxide	Zinc Oxide Plaster, waterproof, on a spool:	1	1
	2.5cm x 5m	1	1
	7.5cm x 5m	•	'
Buds, cotton tipped, sterile	Pack of 2, sealed	10	10
Closures, wound, sterile, adhesive	Pack of 8 strips ("Butterfly closures"), 4 x 38mm.	4	4
Dressing strip, elastic adhesive	Medicated dressing strip, 6 cm x 1 m, in a pack	2	1
Dressings, adhesive, plastic, waterproof	19mm x 72mm, or pack of 100, assorted, sterile	2	2
Dressings, paraffin gauze, sterile	Individually wrapped, 10 x 10cm	50	50
Dressings, plain wound,	(1) small, BPC 13	5	5
unmedicated	(2) medium, BPC 14	5	5
	(3) large, BPC 15	5	5
Gauze, absorbent	Pack containing one piece, size 1m x 90cm	4	2
Gauze, compresses, sterile	Pack containing 5 pads, size 7.5 x 7.5cm	5	5
Gauze, ribbon, absorbent, sterile	Pack containing ribbon, size 2.5cm x 2.5m	1	1
Gloves, disposable	Polyethylene or latex, large or extra large	40	20
Suture kit, disposable, with needles	Sutures, sterile, of monofilament nylon or silk (except 3), swaged to a 26mm, or 40mm half circle needle with a cutting edge. (sizes approximate)		
	Each needle and suture to be in a sealed pack		
	suture, non-absorbable, 26mm half circle needle	3	1
	suture, non-absorbable, 40mm half circle needle	3	1
	suture, absorbable, catgut, 40mm half circle needle	26	

	Equipment Category	Recommended Specification		В
	Suture strips, sterile, adhesive	75mm adhesive suture strips.	4	4
	Swabs, alcohol impregnated	Pack of 100	1	1
	Talc	A closable tin containing 100g of talc dusting powder, BP or similar	1	-
	Tampons/sanitary napkins	Small pack. On voyages of more than 48 hours, it is recommended that the quantity carried be 2 packs per female per month.	4	2
	Towels for treating burn victims	Towels, assorted, non-adhering, non-linting, in sachets ready for hydrating with normal saline, in a portable kit. Each kit should contain at least: 2 towels - body dressing size 2 towels - leg dressing size 2 towels - arms dressing size 2 towels - hand dressing size 1 towel - face mask dressing 6 x 500mL bottles/sachets normal saline irrigation 3 crepe bandages, light 10cm width 2 rolls adhesive tape, 1 x scissors, s/b stainless steel, 12cm. Note: the above can be obtained in a proprietary kit.	1	-
3	Instruments	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	Bottle, eye wash, for irrigation	Alternative to eye spud	1	1
	Box, instrument, stainless steel, with lid.	For forceps, scissors and thermometers. Alternative to instrument roll.	1	1
	Forceps, dissecting Stainless steel, 12.5cm		1	1
	Forceps, epilation (tweezers)	Oblique ends	1	1
	Forceps, needle	(for holding needles for suturing)	1	-

	1			
	Equipment Category	Recommended Specification	Α	В
	Forceps, packing	Stainless steel	1	-
	Forceps, sinus	Stainless steel, 12.5cm	1	-
	Forceps, Spencer Wells'	Stainless steel, 12.5cm	1	1
	Razors, disposable		5	-
	Roll, instrument, fabric	For forceps, scissors and thermometers. Alternative to instrument box.	1	1
	Scalpels, disposable, sterile	Straight, size 23	6	6
	Scissors, surgical, stainless steel	About 18cm, one blade sharp pointed and the other round-ended	1	1
	Scissors, surgical, stainless steel	12.5cm, both blades sharp pointed	1	1
	Spud, eye, rubber	Alternative to eyewash bottle	2	2
4	Examination & monito	oring		
	Charts, temperature	Am/pm, four hourly	1 pad	1 pad
	Container, specimen, for blood and urine testing	Strong, transparent, sterilizable plastic or glass, size 50mL	2	-
	Cup, sputum with cover	Wax paper or plastic, disposable	20	20
	Jars, specimen	Strong glass or plastic, with airtight lid, with blank labels, size 50mL	5	-
	Labels	Plain, self adhesive, about 5 x 3cm	10	5
	Reports, medical evaluation		1 pad	1 pad
	Sphygmomanometer		1	-
	Stethoscope		1	-
	Strips, reactive, for urine analysis	Multistix, in manufacturer's container, with instructions	100	100
	Tags, identification	For patients who have been given morphine	10	5
	Thermometer, hypothermic	Sub-normal range, low body temperature, stubby bulb pattern	1	1
	Thermometer, rectal	Ordinary range, case clearly marked: "For Rectal Use"	2	1

	Equipment Category	Recommended Specification	Α	В
	Thermometer, standard medical	To AS 2190	2	2
	Tongue Depressors, disposable		10	10
	Torch, disposable	Pencil or other torch suitable for examining eyes.	2	2
5	Equipment for injection	on, perfusion puncture and catheteri	zation	
	Catheter, rectal infusion	Size 26 or 28, French gauge	6(MF)	-
	Catheter, sterile	1) Foley type, 16 gauge, with 5mL balloon (Short/medium term use in adults)	1	-
	Catheter, sterile	2) Nelaton or Jacques type, 16 gauge (with no balloon)	1	-
	Condom, urinary	With teat connexion for incontinence	1	-
Drainage instrument, urine/bladder urine/bladder bladder bladd	Bladder drainage set (including 2 litre capacity bag, spigots and tube)	1	-	
	Rectal Infusion Set	A drip set for giving into the rectum 200mL of fluid over a period of 10-15 minutes. Comprises:	1	
		a 2 m length of transparent plastic tubing attached to a reservoir;		
		a device for attaching the tube to a rectal catheter;		
		a device for regulating the flow of liquid from the reservoir;		
		a spigot to close the catheter when the drip set is disconnected; and		
		an appropriate rectal catheter. (see above for additional rectal catheters if the ship carries dangerous goods.)		
	Infusion equipment, intravenous	Cannula, (size 1.2mm)	10(MF)	10(MF)
	Infusion equipment, intra- venous	Intra-venous administration set, with disposable infuser filters.	10(MF)	10(MF)
	Syringes and needles disposable (additional, for	2.5mL syringe/0.8mm (21 gauge) 4cm needle	60(MF)	30(MF)
	ships carrying dangerous cargoes)	5mL syringe/0.8mm (21 gauge) 4cm needle	5(MF)	10(MF)

	Equipment Category	Recommended Specification	Α	В
	Syringes and needles, disposable	2.5mL syringe/0.8mm (21 gauge) 4cm needle	40	20
	Syringes and needles, disposable	5mL syringe/0.8mm (21 gauge) 4cm needle	5	-
	Syringes and needles, disposable	10mL syringe/0.8mm (21 gauge) 4cm needle	20	-
6	General Medical Equip	pment	_	
	Bedpan	Stainless steel to BS 2588.1, or sterilizable plastic	1	-
	Bottle, hot water	rubber, with a non-burn surface or a fabric cover, size about 30 x 20cm	2	1
	Bottle, urine, male	Glass or sterilizable plastic, graduated in mL A female bottle should also be carried if there	1	1
		are female crew members		
	Pack, hot/cold	Flexible, re-usable	2	-
7	Immobilization & setti	ng		
	Collar for neck immobilization	Adult size set of 3, small, medium and large, adjustable, rigid, with chin support for fractured neck.	1	1
	Splint, inflatable	Set of six (half-leg, full leg, half arm, and full arm, ankle and wrist)	1	1
	Splint, malleable, finger		1	1
	Splint, malleable, forearm and hand		1	1
	Splint, thigh	Thomas, adjustable	1	1
	Stalls, finger	With tapes, of robust material throughout, two or more sizes	5	2
8	B Disinfection, Disinsectization and Prophylaxis			
	Sterilizer	Electrically heated sterilizer for unwrapped utensils and instruments. Capacity: at least two kidney dishes, one pair of scissors, and three forceps, at one sterilization. A sterilizer designed for sterilizing baby's bottles should normally be suitable.	1	-

	Equipment Category	Recommended Specification	Α	В
	Water-Disinfection compound	See 'Chlorine compound' in Group 17 in Section 2.		
		See Group 18 in Section 2 for other disinfection supplies.		
9	Other Equipment			
	Bags, for records	Approx. size 30cm x 50cm, to hold medivac records, dirty bandages, afterbirth, &c	6	-
	Bags, mortuary	Body bag - Large size, heavy duty opaque plastic, with a zip closure on the long side, designed to store a dead person in a refrigerator for up to 14 days or in a cool place for up to 5 days	1	1
	Bags, specimen	strong, approx. size 15cm x 30cm, to hold specimen jars/containers	6	-
	Box, "sharps" disposal	For used needles and scalpels	1	1
	Bowl, lotion	Size at least 200mm x 90mm, stainless steel to BS 1823, or sterilizable plastic to BS 5452	1	-
	Brush, nail	Strong, sterilizable plastic throughout	1	1
	Dish, kidney	Size 250mm stainless steel to BS 1823, or sterilizable plastic to BS 5452.	2	-
	Eye products	Eye bath, plastic, sterilizable	2	2
		Eye Pads, sterile, 50 individual	1	1
		Eye shades, either eye	2	2
		Eye wash solution, normal saline or similar, 500mL	6	6
	Face masks	Disposable	12	6

Equipment Category	Recommended Specification	Α	В
First Aid Kits	Vessels should carry first aid kits to be distributed in appropriate locations on the ship e.g. in the galley, engine room and bridge.	3	3
	The kit should include the following items to be kept in a portable waterproof container.		
	(1) 8 x triangular bandages (90 x 90 x 127cm base)		
	(2) 2 x No 13 BPC sterile unmedicated dressings		
	(3) 2 x No 14 BPC sterile unmedicated dressings		
	(4) 1 x No 15 BPC sterile unmedicated dressings		
	(5) 12 medium safety pins, rustless		
	(6) 30 assorted elastic adhesive waterproof dressings medicated BPC. Those supplied for use in the galley should be blue or other easily detectable colour.		
	(7) 2 x sterile eye pads with attachment		
	(8) 6 x packs each containing 5 sterile cotton balls		
	(9) 5 pairs large or extra large size disposable polythene or latex gloves.		
	(10) 10 paraffin gauze dressings, BP, 10 x 10cm, in individual sterile pack		
	(11) one pair of stainless steel scissors, about 18cm long, one blade sharp pointed, the other round ended.		
	In addition, it is suggested that in other areas where injuries are possible, such as workrooms, kits for immediate first aid be stored with materials such as hydrogen peroxide solution for		
	disinfection and cleaning minor wounds, sterile pads and adhesive tape. The kits should contain eyewash materials in the engine room workshop areas and any areas where liquids or solids may splash into the eye, and burn treatments in areas where high temperature burns are likely.		
Glass, magnifying	7.5cm diameter on handle	1	1

Equipment Category	Recommended Specification	Α	В
Gloves	Latex gloves surgical quality - sterile (large and extra large)	5 pairs	5 pairs
Instruments, dental	 Excavator double ended Guy's pattern G2 Filling paste inserter or cotton tipped applicators (for inserting filling paste into the tooth) Dental mirror size 4 on handle Cavit (temporary dental filling) tube, 7g Oral splinting tape Note: Items 2 to 5 can be obtained prepacked in a proprietary kit, "Dentist in a Box™ – plus tooth trauma care", which also provides information on emergency dental treatment. See Group 22 above for other dental requisites. 	1 set all items	1 set items 2, to 5
Kit for protection against blood transmitted diseases (BTD kit)	For all vessels trading in known malarial areas and in areas where medical facilities are limited and emergency shore based treatment may be necessary. To be kept in a heavy gauge polythene bag, and labelled "to be used only for the treatment of" (insert the name of the seafarer going ashore for emergency treatment) Each kit to contain the following (1) 10 x 2.5mL syringes (2) 10 x 10mL syringes (3) 20 x 21G 0.8mm needles (4) 1 blood giving set (5) 1 blood taking set (6) pack of pre-injection site swabs (7) Disposable plastic or latex gloves 2 pairs. (large size)	1	-

Equipment Category	Recommended Specification	Α	В
Measuring equipment	Transparent plastic measuring jug, strong, sterilizable, 750mL, graduated	1	1
	Medicine measures, plastic, size 30 to 40mL, graduated	6	2
	Dropper, plastic (for infants) (see disposable syringes)	-	-
	Spoon, measuring, plastic, size 5mL, conforming to AS 1325	50	50
Pins, safety	Rustless medium, size 5cm or assorted	12	12
Publications	Marine Orders Part 10, and the Guidelines	1	1
	Controlled Drugs Register	1	1
	Dispensary Book or Medical Log	1	1
Sheeting, waterproof	Smooth, strong, non-adhesive, rubber or plastic sheeting, size 1m x 2m, or fitted sheets of similar type and size	2	1
Slides, microscope	Microscope slides in individual transit containers. Ships in malarial areas only	5	5
Stretcher equipment	An efficient carrying stretcher, suitable for lifting the patient horizontally and vertically	2	1
Tissues	Soft paper, in closable container	200	200
Towels, paper	Paper, disposable, individual, hand size	100	100

4 Medical Supplies for Category C Ships

(Ships in smooth or partially smooth waters, and those that stay close to the shore.)

Ref no	Treatment, and Storage Symbols	Recommended Medicine and Dosage Strength	Recommended Quantity
1	Cardio vascular		
В	Anti-angina preparations		
1B		Glyceryl trinitrate 400 micrograms metered 200 doses, spray, aerosol	1 unit

Ref no	Treatment, and Storage Symbols	Recommended Medicine and Dosage Strength	Recommended Quantity	
D	Anti-haemorrhagics (including uterotonics if there are women with potential for child bearing working on board)			
1D1		Phytomenadione paediatric 1mg/0.5mL, (Vitamin K1) injection	1*	
1D2		Ergometrine 500 microgram Oxytocin 5 units, injection, 1mL	1*	
2	Gastro intestinal system			
В	Anti-emetics			
2B		Hyoscine hydrobromide 0.3mg, tablet	60	
(D)	Anti-diarrhoeals			
		Codeine Phosphate 30mg, tablet	20	
3	Analgesics and Anti-spasmodics			
Α	Analgesics			
3A1		Paracetamol 500mg, tablet	50	
3A2		Codeine Phosphate (See 2D)	Use 2(D)	
4	Nervous system			
С	Seasickness remedies			
4C		Hyoscine hydrobromide (See 2B)	Use 2(B)	
9	Medicines for External Use			
Α	Skin medicines			
9A	Antiseptic solutions	Pre-diluted aqueous solution containing Cetrimide and chlorhexidine, bottles, 100mL, disposable, for individual use.	6	
9A	Burn preparations	Cetrimide Cream, tube, 50g, with local anaesthetic effect.	1	

5 Medical Equipment for Category C Ships

	Equipment category	Recommended Specification	Quantity
1	Resuscitation Equipment		
	Mask, for mouth to-mouth resuscitation	Pocket Mask	1
2	Dressing and suturing equi	pment	
	Bandage, adhesive elastic	7.5cm x 4m	1
	Bandages, sterile compression and Dressings, unmedicated	(1) No 13, BPC	6
		(2) No 14, BPC	2
		(3) No 15 BPC	2
	Bandages, triangular	about 90 x 90 x 127cm	4
	Closures, wound, sterile, adhesive,	Pack of 8 strips ("Butterfly closures"), 4 x 38mm.	6
	Compresses, sterile gauze	Pack containing 5 sterile gauze pads. Size 7.5 x 7.5cm	2
	Dressings, adhesive	Assorted, sterile	20
	Instruments, dental	Filling paste inserter or cotton tipped applicators (for inserting filling paste into the tooth)	1 set all items
		2) Dental mirror size 4 on handle3) Cavit (temporary dental filling)tube, 7g	
		4) Oral splinting tape Note: These items can be obtained prepacked in a proprietary kit, "Dentist in a Box™ – plus tooth trauma care", which also provides information on emergency dental treatment.	
	Dressings, paraffin gauze	Sterile, 10 x 10cm	10
	Gloves, disposable	Polyethylene or latex, large or extra large	5 pairs
	Pins, safety	Medium, rustless, assorted	6
	Scissors, surgical	Stainless steel, 12.5cm	1 pr
	Strips, suture	Adhesive, 75mm	4
	Recommended Additional Item		
	Bag, hazardous waste, plastic	For disposal of hazardous waster materials	1