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#### **Guidance to the International Medical Guide for Ships 3rd edition:** Interim advice regarding the best use of the medical chest for ocean-going merchant vessels without a doctor onboard

#### Joint Statement of WHO Collaborating Centres for the Health of Seafarers and the **International Maritime Health Association - 2009 Version**

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#### **Background**

Diagnosis and treatment of the sick and injured onboard is a challenge to seafaring. This has always been true despite recent developments in telemedicine. Where no doctor is on board -as it is the case in most merchant ships- a non-medical person holds the responsibility for medical care. He has to rely on his medical training, written information, and -if appropriate- shore based radiomedical or telemedical advise. This information will help him to make best use of the medical chest and equipment on board. Appropriateness of the information available, adequacy, uniformity and quality of the medical chest and equipment is a key to the safeguard of the seafarer's health at his work-place.

The WHO International Medical Guide for Ships (IMGS) was first published in 1967. The IMGS has widely been used in the maritime world. The second edition<sup>1</sup>, written in 1988 was recently replaced by the third edition<sup>2</sup> in 2007. Immediately after the publication of the current IMGS a discussion on the best use of the tool and on further needs developed among experts from the WHO Collaborating Centres<sup>3</sup> for the Health of Seafarers and the International Maritime Health Association<sup>4</sup>.

<sup>&</sup>lt;sup>1</sup> International Medical Guide for Ships (2<sup>nd</sup> Edition). World Health Organization, Geneva.1988. <sup>2</sup> International Medical Guide for Ships (3<sup>rd</sup> Edition). World Health Organization, Geneva. 2007.

<sup>&</sup>lt;sup>3</sup> http://www.who.int/collaboratingcentres/ The WHO collaborating centres are institutions such as research institutes, parts of universities or academies, which are designated by the Director-General of the World Health Organization to carry out activities in support of the Organization's programmes.

During a workshop of the INTERNATIONAL MARITIME HEALTH ASSOCIATION (IMHA) in Athens, Greece, November 14<sup>th</sup>-15<sup>th</sup> 2008 the concerns were summarized as follows: "Flag states that do not have national requirements for the contents of the medical chest have in the past relied on a list that has been provided by WHO in the International Medical Guide for Ships (2<sup>nd'</sup> Edition, 1988). This list provided information on the quantities to be carried on board. It is not a formal international instrument but the Guide is noted as a source of information in the non-statutory part of the relevant ILO Convention. Port State Control Inspectors use the IMGS list as the minimum requirement for medical supplies. The medication list is now very out of date and when WHO recently published a new edition of the Guide it included updated lists of recommended medications that were derived from the WHO Essential Medications List and of medical equipment taken from The Inter-agency Emergency Health Kit 2006. While this was a rational approach for the WHO to ensure that well validated treatments were available it did not take into account the need for remedies for minor ailments at sea - the sort that can impair ability to work without being dangerous, nor did it cover all the medical equipment that was needed in maritime situations. More significantly WHO did not consider that they could specify quantities of medications to be carried as there was a lack of information on use and effectiveness of medications at sea. In the absence of such data WHO considered that quantities should be related to voyage pattern and to political / managerial decisions rather than being stated by WHO. This lack of specification is not causing immediate problems where the flag state of the ship has its own national regulations or guidelines but it has led to great difficulties for maritime pharmacists called on to check and restock medical chests on ships from countries, including many of those with major open ship registries, that have no national lists. Pharmacists cannot continue to work to the outdated list and quantities in the old International Medical Guide, while they have no benchmarks for quantities required from the new one, nor the authority to make consistent decisions on the quantities to supply".

WHO Collaborating Centres for the Health of Seafarers and IMHA agreed that there are a number of topics where improvements are needed. The aim is to produce a knowledge-base to specify the contents of medical chests and the medical textbook. While this is a long-term approach requiring research efforts it was also agreed upon the need to produce an interim guidance on the medical chest to the current users of the IMGS even in the absence of further evidence. Symptom-oriented algorithms for diagnosis and treatment as a supplement to the current IMGS 3<sup>rd</sup> edition will follow soon.

In this paper the authors, who are experts from the International Medical Health Association and the WHO Collaborating Centres for the Health of Seafarers publish recommendations to the medical chest as given in the IMGS 3<sup>rd</sup> edition. This is an interim advice to be available to ship-owners, -masters and maritime authorities and pharmacists for use on merchant ships not carrying a medical doctor of those flags that do not follow the EU Directive 92/29<sup>5</sup> and do not have national requirements. The readers and users of the interim advice need to be aware that the expert group does not judge on the content of the current list as published by the World Health Organization in the 3<sup>rd</sup> edition of the IMGS.

The aim of the Interim Advice as given below is

- to provide an aid for decision making for quantities required for seagoing and coastal vessels
- to add items named in the textbook of the IMGS 3<sup>rd</sup> edition but missing in the list of medicines or equipment
- to add page numbers from the medical textbook to the list of medicines for easier use.

#### The Interim Advice as given below is not

- mandatory for ship-owners, suppliers or port health authorities. It is to the flag states responsibility to specify national requirements in a legally binding way.
- meant to substitute a qualified medical consulting. Owners and operators carry the final responsibility for the content of the medical chests on board of the ship. Owners and operators will need to seek qualified medical consulting for the content and quantities carried on board.

<sup>&</sup>lt;sup>4</sup> <a href="http://www.imha.net/">http://www.imha.net/</a> IMHA is the sole international association concerned exclusively with Maritime Health. It is an association of professionals from a wide range of disciplines who are committed to improving the health of seafarers by developing better approaches to health protection, health promotion and health treatment.

<sup>&</sup>lt;sup>5</sup> Council Directive 92/29/ eec of 31 March 1992 on the minimum safety and health requirements for improved medical treatment on board vessels.

The particularities of the voyage will need to be considered by the consultant, like travel to malaria risk areas.

The authors of the *Interim Advice* are solely responsible for the content of all additions made to *The List of Recommended Medicines and Equipment of the International Medical Guide for Ships 3<sup>rd</sup> edition, pages 430-46.* We appreciate the comments of the maritime community to this publication which will be continuously revised. All comments and suggestions need to be directed to the corresponding author. Please mail to Clara.Schlaich@bsg.hamburg.de

# How to use the proposed list of recommended medicines and equipment of the International Medical Guide for Ships 3<sup>rd</sup> edition, pages 430-461

- The *Interim Advice* is **only** to be used in conjunction with the International Medical Guide for Ships 3<sup>rd</sup> edition<sup>2</sup> as published by WHO in 2007.
- All items suggested from WHO in the original list on pages 430 to 461 are included.
- Any additions to the original list (items and comments) are made visible by the use of italic letters. Reference pages from the medical textbook to the list of items which justify the additions are given.
- Running numbers have been given to the list of medicines and equipment including added items.
- Drugs, forms, books and equipment which are mentioned in the textbook but have not been displayed in the list of medicines are added to the list in alphabetical order.
- Reference pages to the medical textbook are given for all items to ease the use of the list.
- If an item may be omitted under special circumstances this is mentioned in italic letters in the last column.
- Suggestions for quantities have been included. Quantities are calculated on the basis of the following assumptions: Ocean-going merchant vessels without a doctor onboard. Maximum duration of travel of 3 weeks. Crew sizes of 10, 20, 30 or 40 persons.
- For merchant vessels without a doctor onboard engaged in coastal trade or going to nearby foreign ports, and not more than 24 hours away from a port of call, for fishing boats and private craft: Quantities may be adapted or omitted on the advice of a qualified medical practitioner or pharmacist with regards to the destination, medical facilities ashore, number of crew members and cargo.
- For dosage, contra-indications, unwanted effects, radiomedical advice and further remarks the users needs to refer to original text of the IMGS 3<sup>rd</sup> edition.
- Recommended quantities will not always reflect the standard packs in a given country. In this case the recommendation is for the nearest available dispensing sales pack above the minimum required quantity.
- Owners and operators may substitute exact equivalents on the advice of a qualified medical practitioner or pharmacist, provided they are satisfied that an equivalent level of treatment is assured.
- Specific items will not be available in certain countries, for example Chlorpyrifos was banned in the European Communion (Directive 98/8 eec of March 16<sup>th</sup> 1998). The pharmacist will have to supply an analogous drug in corresponding quantities. The same is true for items which have transport restrictions and can not be delivered locally.
- For ships carrying dangerous goods according to the IMDG Code<sup>6</sup>: Medicines and equipment already available in the IMGS list may be counted toward the Medical First Aid Guide (MFAG) numerical requirement, if appropriate.

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<sup>&</sup>lt;sup>6</sup> Medical First Aid Guide (MfAG) for use in accidents involving dangerous goods. International Maritime Organization, London, 2004.

# Ocean-going merchant vessels without a doctor onboard. Maximum duration of travel of 3 weeks. Crew sizes of 10, 20, 30 or 40 persons.

Only to be used in conjunction with the International Medical Guide for Ships 3<sup>rd</sup> edition

Running numbers are given to the alphabetical list of medicines and equipment. Items which have been added by authors appear in alphabetical order and are written in italic letters. Quantities for the recommended minimum number of items for ocean-going vessels are based on an estimated 3 weeks inventory for a crew complement of 10 to 40 persons.

Comments in italic letters refer to added items which are mentioned in the textbook but have not been displayed in the list of medicines. Remarks on items which may be omitted under special circumstance are given. For dosage, contra-indications, doctor consulting, unwanted effects and remarks refer to IMGS 3 rd ed. p. 430-461 and textbook

#### MEDICINES, p. 431 – 450

Item No.	Recommended Item Dosage form, Strength	per 10	per 20	Per 30	per 40	Indications (on board ships) Added comments
1	Acetylsalicylic acid 300mg tablet	100	200	300	400	- high dose (600-900mg): to reduce pain, fever, inflammation - low dose (100-150mg) to inhibit formation of blood clots in angina pectoris, myocardial infarction, stroke See pages 17-25 and 113-116, 133-135, 137, 138
2	Aciclovir 400mg tbl.	35	35	70	70	- treatment of primary or recurrent herpes simplex virus infection; - may be useful for severe varicella and herpes zoster infection (doctor should be consulted) See pages 125-126, 198-199, 256
3	Adrenaline 1:1000 ampoule 1ml = 1 mg	10	10	10	10	<ul> <li>to raise blood pressure in anaphylaxis</li> <li>to dilate airways in severe asthma or anaphylaxis</li> <li>See pages 145-147</li> </ul>
4	Amethocaine (tetracaine hydrochloride) 0.5% eye drops, single-use vial 1ml	20	20	20	20	for eye examination and procedures See pages 33-34
5	Amoxicillin + clavulanate tablets 875mg/125mg	15	30	30	45	- to treat infections responsive to this antibiotic See pages 7-776, 140-144, 181-183, 204, 216-217, 221-223, 262 and 288

6	Antimalarial prophylaxis (prevention) tablets	of c	ntity d	mbei	r, risk	Prophylaxis and treatment of Malaria as recommended by www.who.int/malaria/publications.html
		in a given port and duration of dwell in				or www.cdc.gov/travel/regionalmalaria/inde x.html
			k medi	cal a	dvice	See pages 265-269
7	Artemether Ampoule 1 ml = (80mg)	5	5	5	5	Treatment of severe malaria. See pages 265-269 required only for voyages to areas where malaria transmission is a risk
8	Artemether + Lumefantrine tablets 20mg + 120mg	24	24	48	48	Treatment of malaria. See pages 265-269 required only for voyages to areas where malaria transmission is a risk
9	Atropine ampoule 1.2 mg/ml	10	10	10	10	<ul> <li>to treat slow heart rate in myocardial infarction</li> <li>to treat organophosphate insecticide poisoning</li> <li>See pages 96, 136</li> </ul>
10	Azithromycin tablet 500mg	3	3	6	6	- to treat infections responsive to this antibiotics See pages 141-144, 195-207, 260, 274, 277, 281
11	Ceftriaxone ampoule 1g powder for injection (dissolve in water for injection)	15	30	45	60	- to treat infections responsive to this antibiotic See pages 16, 141-144, 153, 160-161, 172, 175, 187, 194, 195-207, 269-270
12	Cetirizine tablet 10mg	30	30	30	30	- to treat allergy symptoms in hay fever, hives, allergic dermatitis, etc. See page 145
13	Charcoal, activated 50g in 300 ml purified water	2	2	2	2	to absorb ingested poisons. See pages 93- 96
14	Ciprofloxacin tablet 250mg	40	40	40	40	- to treat infections responsive to this antibiotic See pages 77, 156-157, 181-183, 195-207, 221-223, 262 and 277
15	Cloves, oil of 10 ml	1	1	1	1	Toothache, see pages 287-289
16	Dexamethasone ampoule 4mg/ml	5	5	5	5	<ul> <li>to treat life-threatening and severe asthma</li> <li>to treat anaphylaxis</li> <li>to treat severe allergic reactions</li> </ul>
17	Diazepam tablets 5mg	50	50	100	100	to treat alcohol withdrawal. See pages 235-239.
18	Docusate with Senna tablet 50mg +8mg	20	20	40	40	<ul> <li>to avoid straining in patients with anal fissure and haemorrhoids</li> <li>to prevent constipation caused by opioid use</li> <li>See pages 168-169</li> </ul>
19	Doxycycline tablet 100mg	20	20	40	40	as recommended in IMGS3 for the specific infection See pages 195-207, 209-210, 221-223, 271-272.
20	Ethanol 70%, hand cleanser gel 250ml	2	4	6	8	an alternative to hand-washing when hands are not obviously soiled
21	Ethanol 70%, liquid Liquid 500 ml	1	1	2	2	to disinfect instruments and surfaces

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22	Fluorescein 1%, strips or single use vials 1 ml	20	20	20	20	to detect damage to cornea: damaged area stains yellow/green See pages 33-34
23	Frusemide	5	5	5	5	to treat severe fluid retention in lungs
23	Ampoule 4ml = 40mg	٦	]	5	٦	(pulmonary oedema) due to cardiac
	Ampoole 4mi = 40mg					1 11
24	Chiaggan randy to use	1	7	1	1	failure, see pages 15, 136
24	Glucagon, ready to use	1	1	1	1	to treat low blood sugar (hypoglycaemia)
	ampoule 1mg amp					due to insulin when oral intake is impossible
						and intravenous glucose cannot be given.
						See pages 123, 125.
						It is recommended to carry a glucose
0.5						measuring instrument on board.
25	Haloperidol	5	5	10	10	- to treat psychotic hallucinations and
	Ampoule 1 ml= 5mg					delusions
						- to treat severe agitation and
						aggressiveness
						See pages 126-132.
26	Hydrocortisone 1% cream	2	4	6	8	to treat allergy and some other
	Cream (20 -30 gramm)					inflammatory skin conditions. See pages
						169, 212-213, 219-221
27	Ibuprofen	50	100	150	200	-to treat inflammation
	coated tablet 400 mg					- to reduce mild-to-moderate pain,
						especially if associated with inflammation
						See pages 17-25.
28	Insect repellent lotions for	One	vial p	er pe	rson	Consider diseases transmitted by
	skin. Vials for personal use	in ar	eas of	risk o	f	mosquitoes as Dengue Fever p 258-259,
	DEET 20-35% formulation	acq	uiring d	a dise	ease	Malaria p. 265-269, Yellow fever p 284
	or	tran:	smitted	d by		See also pages 363-364 for mosquito
	Picaridin or p-menthane-	mos	quitoe	s in a		control in general
	3,8-diol	give	n port			
29	Isosorbide dinitrate	20	20	40	40	- to treat angina pectoris (chest pain)
	tablet 5mg sublingual.					- to treat myocardial infarction
30	Lignocaine 1% (without	5	5	10	10	for local anaesthesia when suturing
	adrenaline)					wounds or performing minor surgery
	Ampoule 5ml					See pages 71-74, 216-219
31	Loperamide	30	60	90	120	to treat symptoms of diarrhoea
	tablet 2mg					See pages 156-157
32	Mebendazole	10	10	20	20	- to treat intestinal worm infections
	tablet 100mg					not effective for tapeworm infection or
						hydatid disease See pages 281-284
33	Metoprolol	30	60	60	60	- to treat hypertension (high blood
	tablet 100mg					pressure)
						- to treat artrial fibrillation (irregular or rapid
						heart rate)
						- to treat angina pectoris (chest pain)
						- to prevent migraine See pages 133-137
34	Metronidazole	30	30	30	30	to treat infections responsive to antibiotics
	tablet 500mg			L		See pages 160-163, 172, 203-204
35	Miconazole 2%	2	4	6	8	to treat fungal skin infections
	cream					See pages 203-204, 214
						If women on board, supply also
						Miconazole vaginal cream.
36	Midazolam	5	5	10	10	to terminate epileptic fits. See pages 121,
	ampoule 1ml (= 5mg)					128-130
37	Misoprostol	3	3	3	3	to prevent post-partum haemorrhage.
	tablet 200µg					Page 192
						If women on board
38	Morphine (injectable)	10	20	30	40	- to reduce severe pain
				~~		1

	ampoule 1 ml = 10mg					- to reduce pain not relieved by other analgesics See pages 17-25.
39	Morphine (oral) liquid 1 mg/ml 100ml bottle or 10 tablets with 10 mg	1	1	1	1	to reduce severe pain likely to last several days in patients able to eat and drink See pages 17-25
40	Naloxone Ampoule 1 ml (=0.4mg)	10	10	10	10	to reverse effects of opioids, especially in case of overdose See pages 123, 240
41	Omeprazole tablets 20mg	30	30	60	60	- to treat gastro-oesophageal reflux - to treat peptic ulcer disease See pages 152, 163-167 and 173
42	Ondansetron tablet 4mg or	10	10	20	20	<ul><li>to prevent vomiting</li><li>to prevent seasickness</li><li>See page 347.</li></ul>
	Scopolamin transdermal patches see page 347.	5	5	10	10	Caution: Scopolamine treatment causes sedation, see remarks on page 347
43	Oral rehydration salts sachets of powder for reconstitution	10	10	20	20	to prevent or treat dehydration, especially due to diarrhoea, see pages 257-258 and 347
44	Oxymetazoline 0.5% (or equivalent) drops or spray	4	5	6	7	<ul><li>to treat nasal obstruction due to allergies or viral infection</li><li>to improve sinus drainage in sinusitis</li></ul>
45	Paracetamol Tablets 500mg	100	200	300	400	to reduce pain and fever (but not inflammation) See pages 17-25
46	Permethrin 1% lotion 250 ml	1	1	2	2	to eliminate hair, pubic, and body lice See pages 219-221
47	Permethrin 5% Lotion, vial of 250 g	1	1	2	2	to treat scabies See pages 219-221
48	Povidone iodine ointment 10% 25 to 50 g	2	3	4	5	to disinfect skin and wounds See pages 67- 77, 215-219
49	Povidone iodine solution 10% 30 to 120ml	2	3	4	5	to disinfect skin and wounds See pages 67- 77, 215-219
50	Prednisone tablet 25mg	30	30	60	60	<ul> <li>to treat severe asthma</li> <li>to treat other inflammatory conditions (on medical advice)</li> <li>See pages 125-126, 145-147</li> </ul>
51	Petroleum jelly 50 g to 100 g (vaseline)*	2	3	4	5	-to treat chapped skin. See page 212, 261 for lubricating rectal thermometer
52	Salbutamol aerosol inhaler 0.1 mg/dose	1	2	3	4	<ul> <li>to treat asthma</li> <li>to treat chronic bronchitis</li> <li>to treat emphysema</li> <li>to treat other lung diseases</li> </ul> See pages 145-147
52a	Volume spacer for salbutamol inhaler	1	1	1	1	To make inhaling salbutamol more effective See page 146
53	Sodium chloride 0.9% infusion plastic-bottle 1 litre or 2x 500ml plastic bottle	5	5	5	5	for fluid replacement Can also be used for sterile eye irrigation, see page 38
54	Sodium chloride 0.9% infusion plastic-bottle 10 ml	2	2	2	2	For sterile eye bathing and application of wet compresses, see page 38
55	Tetracycline 1% ointment Eye – ointment 5 g	2	4	6	8	to treat minor eye infections; to prevent infections following damage to the cornea.

						See pages 33-34, 40-42, 261.
56	Tetanus Immunoglobulin ampoule. (keep at 2-8°C)	1	1	1	1	Part of wound care if state of vaccination is unknown, see page 68
57	Tetanus toxoid vaccination ampoule (keep at 2-8°C)	1	1	1	1	Part of wound care if state of vaccination is unknown, see page 68
58	Tramadol tablets 50 mg.	50	50	50	50	Against moderate pain; See pages 22-23 In severe pain use morphine; See pages 17-25
59	Vitamin K (Phytomenadione) Ampoule 1 ml= 10mg	2	2	2	2	to reverse excessive or unwanted effects of warfarin or related drugs. See pages 96, 173
60	Water for injection Ampoules 5ml	20	30	40	50	reconstitution of injectable drugs provided as powders
61	Zidovudine plus Lamivudine tablets, 300mg+150mg	Carr table	y at le et.	ast 60	)	Prophylaxis against HIV infections after needle-stick injury. One tablet daily twice daily for four weeks. See page 252
	Consider adding further or using other antiviral substance following current guidelines	advi gen	ilified r ise nee eral risl ssmen	eded k	for	In case of exposure immediately seek radio-medical advice for risk assessment in individual person.
	http://www.who.int/hiv/p ub/prophylaxis/pep_guid elines/en/index.html	risk c	t only of infec osure c	ction v	with	
	www.liv.ac.uk/hiv/guidelines.htm	antiv guid	furthe virals fo lelines derate	ollowi with	ng	
	http://www.cdc.gov/mm wr/preview/mmwrhtml/rr 5409a1.htm	of ex	nfectio xposur	e.		
62	Zinc oxide 20% paste or ointment 50-100 g	5	5	5	5	protection of irritated skin

#### **EQUIPMENT p. 451 –461**

Item No.	Recommended item	per 10	per 20	Per 30	per 40	Category Added comments					
1. RES	1. RESUSCITATION EQUIPMENT										
1.1	Portable oxygen set, complete containing:	1	1	1	1	appliance for the administration of oxygen See pages 4-5					
1.1a	1 oxygen cylinder, 21/200bar	1	1	1	1	Ready to use. See pages 4-5					
1.1b	1 spare oxygen cylinder, 21/200bar	1	1	1	1	See pages 4-5. If no additional equipment from the MFAG on board consider to increase amount of oxygen to 4 X 101					
1.1c	Pressure regulating unit and flow meter with tubes such that ship's industrial oxygen can also	1	1	1	1	See pages 4-5					

	be used		[			
1.1d	3 disposable face masks of choice: including simple face mask and non-rebreathing mask	1	2	3	4	See pages 4-5
1.2a	Guedel airway (Mayo- tube): size medium	1	1	1	1	Oropharyngeal airway, see pages 4-5, 315
1.2b	Guedel airway (Mayo- tube): size large	1	1	1	1	Oropharyngeal airway, see pages 4-5, 315
1.3a	Manual aspirator to clear upper airways	1	1	1	1	Mechanical aspirator, see pages 4-5
1.3b	Catheters for aspirator,	2	2	2	2	Mechanical aspirator, different sizes; see pages 4-5
1.4	Ambubag or equivalent; supplied with small, medium, and large masks	1	1	1	1	Bag and mask resuscitator including oxygen reservoir bag and oxygen tubing, see pages 4-5
1.5	Brook Airway, Lifeway, pocket face mask or equivalent	1	1	1	1	Cannula for mouth-to-mouth resuscitation, see pages 4-5
2. DRE	SSING MATERIAL AND SUTUR	ING I	QUIP	MENT		
2.1	Assorted wound-plaster or plaster strips, water resistant – slim and broad	200	200	200	200	adhesive dressings
2.2a	Sterile gauze compresses, 5cm x 5cm, sterile	50	50	100	100	Sterile gauze compresses
2.2b	Sterile gauze compresses, 10 cm x 10cm	50	50	100	100	Sterile gauze compresses
2.3	Gauze roll, 5cm and 60 or 90 cm x 100 m, non-sterile	1	1	1	1	Gauze roll 60 cm / 90 cm my be substituted by gauze roll of smaller size
2.4	Non-adherent gauze dressing, square 10cm	10	20	30	40	Gauze dressing with non-adherent surface
2.5	Paraffin gauze dressing, 10 x 10 cm, sterile	40	40	40	40	Vaseline gauze
2.6	Elastic fixation bandage, 4 m x 6 cm	3	6	9	12	Bandage
2.7a	First-aid absorbent gauze-covered cotton pad sewn onto a cotton bandage (ambulance dressing) small	5	5	10	10	Sterile compression bandages.
2.7b	First-aid absorbent gauze-covered cotton pad sewn onto a cotton bandage (ambulance dressing) medium	5	5	10	10	Sterile compression bandages
2.7c	First-aid absorbent gauze-covered cotton pad sewn onto a cotton bandage (ambulance dressing) large	5	5	10	10	Sterile compression bandages
2.8a	Tubular gauze bandage for finger bandage, 5m	1	1	1	1	Tubular gauze for finger bandage See pages 43-58
2.8b	Applicator for finger bandage	1	1	1	1	See pages 43-58
2.9	Adhesive elastic	10	10	10	10	Adhesive elastic bandage

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ĺ	bandage				1	I
	4 m x 6 cm					
2.10	Triangular sling	5	5	5	5	Triangular sling. See pages 43-58 and 77
2.11	Sterile sheets for burn patients	2	2	4	4	Sterile sheet for burn victims. Different sizes See pages 79-83
2.12	•	1	1	2	2	Only if honey for medical purposes
2.12	Honey for dressing burns 1kg, (only purified 1000 g)		1	2	2	available Otherwise use a hydrogel- burnkit. See pages 79-83
2.13	Adhesive tape, waterproof, skin-friendly, 5 x 1.25 cm	3	3	6	6	Adhesive sutures or zinc oxide bandages
2.14	Q-tips (wooden)	100	100	100	100	Q-tips
2.15	Safety pins (stainless steel), 12 pieces	1	1	2	2	safety pins
2.16	Butterfly sutures, Steristrip® or Leukostrip®, sterile	50	50	50	50	Butterfly sutures. See pages 69-74
2.17	2-octyl cyanoacrylate liquid, 0.5ml	1	1	1	1	Skin adhesive for closing small wounds. See pages 69-74.
2.18 a	Sutures, absorbable with curved non-traumatic needles, 1 – O,	3	3	6	6	Suturing equipment. See pages 71-74. Replace with non-absorbable sutures for easier use See page 71
2.18 b	Sutures, absorbable with curved non-traumatic needles, 3 – O,	3	3	6	6	Suturing equipment. See pages 71-74. Replace with non-absorbable sutures for easier use, See page 71
2.18 C	Sutures, absorbable with curved non-traumatic needles, 4 - 0 or 5 - 0	3	3	6	6	Suturing equipment. See pages 71-74. Replace with non-absorbable sutures for easier use, See page 71
2.19a	Disposable examination gloves, size M	100	100	100	100	Gloves
2.19b	Disposable examination gloves, size L	100	100	100	100	Gloves
2.19c	Surgical gloves size 6.5, sterile in pairs	3	4	5	6	Gloves (sterile)
2.19d	Surgical gloves size 7.5, sterile, in pairs	3	4	5	6	Gloves (sterile)
2.19e	Surgical gloves size 8.5, sterile, in pairs	3	4	5	6	Gloves (sterile)
2.20	Eye pads	1	2	3	4	See pages 36, 38.
3. INS	RUMENTS					
3.1	Scalpel, sterile, disposable	10	10	10	10	Disposable scalpels See pages 71-74, 216-219.
3.2	Instrument box (stainless steel)	1	1	1	1	Stainless-steel instrument box.
3.3	Operating scissors, straight (stainless steel)	1	1	1	1	Scissors
3.4	Bandage scissors (stainless steel)	1	1	1	1	Scissors
3.5	Splinter forceps, pointed (stainless steel)	1	1	1	1	Forceps
3.6	Teeth tissue forceps (stainless steel)	1	1	1	1	Forceps. See pages 71-74, 216-219.
3.7	Needle holder, Mayo- Hegar 180mm, straight	1	1	1	1	Needle holder. See pages 71-74.
3.8	Haemostatic clamp, Halstead mosquito,	2	2	2	2	Haemostatic clamps

	125mm, stainless steel					
3.9	Razor, disposable	5	5	5	5	Disposable razors
4. EXA	MINATION AND MONITORIN	IG EQ	UIPM	ENT		
4.1	Tongue depressors, disposable	100	100	100	100	Disposable tongue depressors
4.2	Reactive strips for urine analysis: blood/ glucose/ protein/nitrite/leukocytes	50	50	100	100	Reactive strips for urine analysis, see pages 311-312, 324.
4.3	Microscope slides	12	12	12	12	Microscope slides, See pages 265-269
4.4	Stethoscope	1	1	1	1	Stethoscope
4.5	Sphygmomanometer (blood pressure set), preferably automatic	1	1	1	1	Aneroid sphygmomanometer, see pages 305-307
4.6a	Standard thermometer, digital if possible	2	2	3	3	Standard thermometer, see pages 302-304
4.6b	Rectal thermometer, digital if possible	1	1	1	1	Rectal thermometer, see pages 302-304
4.7	Thermometer 32°-34°C, digital if possible	1	1	1	1	Hypothermic thermometer, preferable range 26°C to 42°C to differentiate between severe-moderate-mild hypothermia; see pages 343-344.
4.8	Penlight + blue cover	1	1	1	1	Penlight (blue light) to detect damage to cornea. See pages 33-34
4.9	Waterproof indelible marker	1	1	1	1	see page 29.
4.10	Magnifying glass (a x 8 loupe)	1	1	1	1	See pages 33-34.
FORM.	S AND BOOKS					
4.11	Temperature cards / charts	10	10	10	10	Use as master copy from page 302
4.12	Cards for telemedical advise	10	10	10	10	Use ass master copy. Should be filled in before calling radiomedical advise
4.13	Medical logbook	1	1	1	1	See p. 455
4.14	Controlled drug register	1	1	1	1	Controlled drug register
4.15	International Medical Guide for Ships 3rd	1	1	1	1	Hard-copy
4.16a	Forms from Annex A Ship master's report form	10	10	10	10	Use as master copy (see pages 455 - 461) file in medical log p. 455
4.16b	Forms from Annex A Ship's identity and navigational status form	10	10	10	10	Use as master copy (see pages 455 – 461)
4.16C	Forms from Annex A Patient health status form	10	10	10	10	Use as master copy (see pages 455 – 461)
4.16d	Forms from Annex A Primary physician's report form	10	10	10	10	Use as master copy (see pages 455 - 461)
4.17	Vaccination requirements	1	1	1	1	International travel and Health, current edition (WHO)
4.18	Malaria prophylaxis and treatement	1	1	1	1	www.who.int/malaria/publications.html or www.cdc.gov/travel/regionalmalaria/inde x.html See Page 266
	JIPMENT FOR INJECTION, INF		1		1	
5.1	Syringes, Luer connection, 2ml, sterile, disposable	10	20	30	40	Equipment for injection, see pages 324-329

5.3 Sy co di 5.4 H	lisposable yringes, Luer onnection, 10 ml, sterile, lisposable lypodermic	10	10	00		
SU	• •			20	20	Equipment for injection, see pages 324-329
	ubcutaneous needle, uer connection, 6x0.5mm (23 G or 25 G), terile, disposable	20	30	40	50	Equipment for subcutaneous injection, see pages 324-329
in (1	lypodermic htramuscular needle 19G or 21G), Luer connection, 40x0.8mm, terile, disposable	20	30	40	50	Equipment for intramuscular injection, see pages 324-329
	leedles, 19G or 21G, Junt, "drawing up" type	20	30	40	50	Equipment for drawing the medicine into the syringe, see pages 324-329
C 19	ntravenous infusion cannula 16G (1.7mm) or 9G, Luer-lock connection, sterile, non- ecap type + mandarin	5	5	10	10	Equipment for intravenous fluid infusion, see page 326
2 C	ntravenous infusion cannula 22G (0.8mm) or 1G, Luer-lock connection, sterile, non- ecap type+mandrin	5	5	10	10	Equipment for intravenous fluid infusion, see page 326
Lu st	ntravenous giving set, uer-lock connection, teril +3-way valve/ connection	5	5	10	10	Equipment for intravenous infusion, see pages 324-329,
ty in	ourniquet, blood-taking ype, to be used with htravenous infusion annula	1	1	1	1	Equipment for infusion, see pages 324-329
C	enile sheath set with condom catheter, tube, and bag	1	1	1	1	Bladder drainage equipment, see page 308-309
	ndwelling urine catheter 4 CH	1	1	1	1	Bladder drainage equipment, see pages 319-321
w Th	hort-term urine catheter vith soft-eye straight tip hieman No. 12 , or quivalent	2	2	2	2	Bladder drainage equipment, see pages 319-321
w Th	hort-term urine catheter vith soft-eye straight tip niemann No 16, or quivalent	2	2	2	2	Bladder drainage equipment, see pages 319-321
5.11c C	Complete sterile urine atheterization set with ubricant, drapes, cotton wabs, skin disinfection, prceps, sterile container	2	2	2	2	Bladder drainage equipment, see pages 319-321
5.12 Ui	rine collecting bag and  Jbe  RAL MEDICAL AND NURSIN	2	2	2	2	Bladder drainage equipment, see pages 319-321

6.1	Plastic goggles or full- face mask	1	1	1	1	Eye protection
6.2	Disposable plastic apron	10	10	10	10	Plastic apron
6.3	Kidney dish, stainless steel, 825ml	1	1	2	2	Kidney dish
6.4	Towels, plastic backed, absorbent, 600x500mm	10	10	10	10	Plastic backed towels
6.5	Safety box for sharps disposable, 51	1	1	1	1	Safety box Size of 1-5 liters may be chosen
6.6	Mask, duckbill type, disposable	50	50	100	100	Mask
6.7	Tape measure, vinyl coated, 1.5m	1	1	1	1	Tape measure
6.8	Draw sheet, plastic 90x180cm	1	1	1	1	Draw sheet
6.9	Bedpan, stainless steel	1	1	1	1	Bedpan
6.10	Hot-water bag	1	1	1	1	Hot-water bottle
6.11	Urinal, male (plastic)	1	1	1	1	Urine bottle
6.12	ColdHotpack maxi	1	1	1	1	Ice bag
6.13	Aluminum foil blanket	1	1	1	1	Aluminium foil blanket
6.14	Male condoms	100	200	300	400	Condoms, assorted sizes
6.15	Plastic wash bottle, 250ml	1	1	1	1	Wash bottle
6.16	Bottle, 11 plastic with	1	1	1	1	Plastic bottle
0.10	screw top	ĺ .	'	<b>'</b>	'	Trashe berne
6.17	Stainless steel dressing tray 300x200x30mm	1	1	1	1	Dressing tray
6.18	Bowl, stainless steal, 180ml	1	1	1	1	Bowl
6.19	Jars, plastic, with lids and lables 100ml	10	20	30	40	Specimen jars
6.20a	Bandages, POP, 5cmx2.7m	6	6	6	6	Plaster-of-Paris bandages, may be omitted if splints are carried
6.20b	Bandages, POP, 10cmx2.7m	6	6	6	6	Plaster-of-Paris bandages, may be omitted if splints are carried
6.21a	Stockinet sizes for arm splints 10m roll	1	1	1	1	Stockinet See pages 43-58
6.21b	Stockinet sizes for leg splints 10m roll	1	1	1	1	Stockinet. See pages 43-58
6.22	Cotton wool roll 500g	1	1	2	2	Cotton wool. See pages 43-58
6.23	Alcohol swabs	100	100	100	100	70% alcohol swabs for skin cleansing prior to injection
6.24	Nail brush	1	1	1	1	Nail brush
6.25	Thermometer for refrigerator	1	1	1	1	If Tetanus vaccine and Immunoglobin are on board
6.26	Mortuary transfer bag	1	1	1	1	see pages 334 – 336
	FACTANTS, DISINSECTANTS	•				
6.27	Water disinfection set including measure kit/test stripes for pH and for residual chlorine	1	1	1	1	To disinfect potable water tanks with chlorine effectively. See pages 359-360.
6.28	Disinfectant solution for medical instruments, 1000 ml: 3 % aqueous phenolic solution	1	1	1	1	For disinfection of used instruments* and thermometers, see page 331. *Caution: All items entering the skin or are in direct contact with mucous membranes should be single use (i.e. injection needles, urinary catheters.

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6.29	Disinfectant for surfaces and floor, 1000 ml concentrate: 2% cetrimide solution or 3% aqueous phenolic solution	1	1	1	1	For disinfection of contaminated surfaces, hard-surface objects and floors (non-food-handling area), see page 331.
6.30	Disinfectant for surfaces and floor 1000 ml concentrate: sodium hypochlorite 100mg/litre	2	2	2	2	For disinfection of food-handling area: cutlery, dishes, plates, glasses), see page 331
6.31	Chlorpyrifos 5g/l in Bait stations or gels	20	20	20	20	To use against cockroaches in food storage and preparation area, see pages 362-365
6.32	Chlorpyrifos-methyl 7-10 g/l Spray – 1 piece	10	10	10	10	To use against cockroaches in other areas than food storage and preparation area See pages 362-365
6.33	Insecticide spray Permethrine, natural pyrethrins or chlorpyriphos-methyl	1	2	3	4	For space spraying, not for skin See pages 362-365
	MOBILIZATION AND TRANSPO	RTATI	ON E	QUIPA	<b>NENT</b>	T
7.1	Malleable finger splint  Malleable forearm/ hand splint	2	2	2	2	Malleable splints (small). See pages 43-58.  Malleable splints (medium). See pages 43-58.
7.3	Malleabloe splint legs	2	2	2	2	Malleable splints (large). See pages 43-58.
7.4	Stretcher	1	1	1	1	Stretcher equipment (a system for trauma management, i.e. immobilization and stretcher equipment most suited for treatment in the vessel concerned.  Preferably allowing crane/helicopter lifting. See page 7
7.5	Cervical rigid collar variable size	1	1	1	1	for neck immobilisation. See pages 7, 45