



# TUVALU SHIP REGISTRY

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## MARINE CIRCULAR

**MC-2/2007/12/2**

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**FOR:** Ship Owners, Ship Managers, Ship Operators, Ship Masters, Ship Officers, Classification Societies, Flag State Inspectors

**SUBJECT: MEDICAL CARE ON BOARD TUVALU SHIPS AND ASHORE**

### **PURPOSE:**

This Marine Circular establishes the standards for medical care on board Tuvalu ships and ashore as required by the Maritime Labour Convention, 2006 (MLC 2006).

This marine circular adopts, as guidance, the "Quantification Addendum: International Guide for Ships, 3rd Edition", published by the World Health Organization (WHO) and specifically addresses the following:

- **Ship's Medical Chest:** the type and quantity of medicines, medical supplies and equipment that should be considered for a ship's medical chest, and requirements for their re-supply, replacement and disposal;
- **Recordkeeping:** requirements for inventorying and recording medicines including controlled drugs, introduction of:
  - **Seafarer Medical Record (Form SMR)** to provide a medium to exchange medical information between ship and shore; and
  - **Master's Medical Report Form (Form MMR)** to record each medical case managed on board; and
- **Responsibilities/Training:** defining the medical care responsibilities of the Ship Owner / Operator, Master and others.

### **APPLICATION:**

This marine circular applies to all Tuvalu ships.

### **REFERENCES:**

- (a) Merchant Shipping Act 2008 (Section 93)
- (b) MLC 2006 - Standard A4.1 and Guideline B4.1
- (c) International Medical Guide for Ships (IMGS), 3rd Edition 2007, World Health Organization (WHO)
- (d) Quantification Addendum, International Medical Guide for Ships, 3rd Edition, World Health Organization, 2010
- (e) International Maritime Organization (IMO) Medical First Aid Guide for Use in Accidents Involving Dangerous Goods (MFAG), 2010 Edition
- (f) MSC/Circ.1042

### **CONTENTS:**

#### **1. Ship's Medical Chest**

- 1.1. All Tuvalu vessels shall carry a medical chest containing:
  - 1.1.1. medical supplies and equipment (refer to section 1.4 below, and Annex I); and
  - 1.1.2. the latest edition of applicable publications, forms and charts (refer to Annex II).
- 1.2. Except for ships carrying dangerous goods, the contents of a ship's medical chest is not mandated through any statutory requirement to which this Administration is a party. As such, guidance on the medicines and medical supplies that should be maintained on board should be taken from the IMGS (reference (c) above) and its "Quantification Addendum" (reference (d) above) published by the World Health Organization (WHO).
- 1.3. For convenience, the guidance is reproduced in Annex I of this marine circular and is well-accepted by the international maritime community. It is also recommended by the MLC 2006 Guideline B4.1.1.4 for consideration when determining the contents of the medical chest and medical equipment.

#### 1.4. Carriage Requirements for Medicines and Medical Supplies

##### 1.4.1. All Vessels

All vessels shall stock their medicine chests so that the inventory (types, dosage and quantities of medicines, medical supplies and equipment) is appropriate to the particular vessel's route, operation and number of persons on board.

**Note:** All vessels of greater than 500 gross tons shall, in addition to any other requirement, provide commercially available first aid kits for their engine room and galley.

##### 1.4.2. Vessels with a Doctor on Board

Vessels, including passenger ships, carrying 100 or more persons and ordinarily engaged on international voyages with duration of more than three (3) days are required to carry a qualified medical doctor responsible for providing medical care. The exact inventory of medicines, medical equipment and supplies should be determined by the ship owner or operator in consultation with a qualified medical professional, such as the ship's doctor or medical consultant.

##### 1.4.3. Vessels without a Doctor on Board

Vessels without a doctor on board are to utilize the tables contained in Annex I as guidance in establishing the contents of their medical chest in accordance to the WHO category as per Table 1 that follows.

The types, amounts and quantities indicated by the tables in Annex I are expected to vary based on the vessel's route, operation and the number of persons on board. If there is any question about the appropriate types or quantities of medicines or supplies to be carried, the contents of the medical chest should be established by the ship owner or operator by consultation with a qualified medical practitioner or medical consultant.

**TABLE 1**

<b>Vessel Description</b>	<b>WHO Category</b>
Oceangoing ships	Category A
Coastal, Great Lakes or nearby foreign ports with voyages not more than 24 hours from port of call	Category B
Fishing vessels <ul style="list-style-type: none"><li>▪ on extended voyages (more than seven (7) days)</li><li>▪ on voyages of seven (7) days or less and in close proximity to a port of call</li></ul>	Category B Category C
Yachts <ul style="list-style-type: none"><li>▪ on voyages more than 60 miles from safe harbour</li><li>▪ on voyages 60 miles or less from safe harbour</li></ul>	Category B Category C
Ro-Ro Passenger Ships not normally carrying a medical doctor	Category B and Emergency Medical Kit per MSC/Circ. 1042
Mobile and immobile floating production, storage and offloading units (FPSOs) and floating storage units (FSUs)	To seek advice of qualified medical practitioner or pharmacist to establish inventory

1.5. Carriage Requirements for Ship's carrying Dangerous Cargoes

- 1.5.1. Ships, including ferries, carrying dangerous cargoes or their residues, shall, in addition, comply with the International Maritime Dangerous Goods (IMDG) Code and the guidance in the latest edition of MFAG (reference (e) above). Medicines and equipment already available in the IMGS list may be counted toward the MFAG numerical requirement, if appropriate. They should be stored and registered together with the regular medicines and medical supplies carried on board.
- 1.5.2. Where a cargo which is classified as dangerous has not been included in the most recent edition of MFAG, the necessary information on the nature of the substances, the risks involved, the necessary personal protective devices, the relevant medical procedures and specific antidotes should be made available to the seafarers via the ship's occupational safety and health policies.
- 1.5.3. For a listing of medicines and supplies, please refer to MFAG Vol. III, which shall be placed on board.

1.6. Carriage Requirements for Passenger Ships

- 1.6.1. There is a high risk of a medical emergency occurring aboard any passenger ship even for those cruising just for a few hours. To facilitate care of passengers on these types of ships that do not normally carry a medical doctor, particularly ro-ro passenger ships, an Emergency Medical Kit should be carried. See MSC/Circ.1042 for additional guidance.

- 1.6.2. The Emergency Medical Kit should have the following clearly labelled:

"The medicines in this bag are to be used by a qualified medical practitioner or a registered general nurse, a qualified paramedic or ship personnel in charge of medical care on board under the direct supervision of either a medical practitioner on board the ship or under tele-medical advice/prescription by a Tele-medical Advice Service (TMAS)."

1.7. General Provisions for Equivalencies

This Administration recognizes that there are other flag States that may have established standards that are equal to, exceed, and/or are more up-to-date than the WHO (and IMO for

IMDG) standards, and shall be considered in compliance with the requirements of this Administration.

#### 1.8. Requirements for Controlled Drugs

1.8.1. Controlled drugs are drugs that are graded according to the harmfulness attributed to the drug when it is misused and are categorized into three (3) categories:

- Class A includes heroin, morphine, and opium
- Class B includes barbiturates and codeine
- Class C includes, among other drugs, anabolic steroids

1.8.2. No ship shall carry excess quantities of Class A or Class C drugs unless permission has been granted by this Administration. Morphine Sulphate is the only Class A drug authorized to be carried aboard Tuvalu ships.

1.8.3. As certain countries forbid the sale of controlled drugs to ships not registered in that country, ship managers are encouraged to become familiar with the controlled drug distribution laws in the countries where their ships are trading and to communicate directly with the respective authorities to understand the alternatives available for the procurement and delivery of controlled drugs to ships operating in these countries.

1.8.4. Controlled drugs shall be kept in the Master's safe or behind a double-lock system.

#### 1.9. Disposal of Medicines and Medical Supplies

Medicines and medical supplies shall be disposed lawfully in accordance with all applicable national laws and regulations of the State in which disposal is made and any applicable international requirements.

1.9.1. Disposal of Non-Controlled Medicines and Medical Supplies:

1.9.1.1. Expired medicines and medical supplies should be returned to the supplier where possible, or sent to an approved shore-side contractor for disposal.

1.9.1.2. If disposal under 1.9.1.1 is not possible, expired medicines and medical supplies may be incinerated at sea where a vessel has in place a written waste disposal policy and program that includes incineration at appropriate temperatures by exclusively authorized personnel. Records of such incinerated medicines and medical supplies shall be kept as part of the medical inventory.

1.9.1.3. It should be noted that there are licensed pharmaceutical distribution centres that handle the supply and disposal of prescription and non-prescription medicines for marine vessels on a global basis. This Administration recommends use of these companies for a vessel that regularly encounters problems with locating shore-side facilities able to accept such wastes.

1.9.2. Disposal of Controlled Drugs

1.9.2.1. There are various methods for disposing of controlled drugs lawfully. They include:

- giving them to a person who may lawfully supply them, such as a qualified doctor or pharmacist;
- incineration;
- waste encapsulation; and
- inertization.

1.9.2.2. The following conditions must be met regardless of the method used for disposing of controlled drugs:

- The method utilized must be properly implemented;
- The entire process from unpacking throughout the final destruction of the controlled drug must be witnessed by at least two (2) persons and documented in the Controlled Drugs Register.

#### 1.10. Medicine Supply, Labelling, Re-supply, Replacement and Storage

- 1.10.1. All medicines are to be supplied in standard small packages, and to the extent possible, in single dose portions. The prescribed active ingredients and strengths shall be clearly stated.
- 1.10.2. Medical instructions and, if necessary, the medicine labelling shall be in a language understood by the crew.
- 1.10.3. Sufficient reference material or product use and identification cards related to the medicines carried shall be available on board the vessel.
- 1.10.4. Medicines and medical equipment shall be re-supplied as necessary.
- 1.10.5. Medicines with expiration dates shall be replaced at the earliest possible date after the expiration date, and in any case within three (3) months of the expiration date. Once replaced, expired medicines should be removed from the vessel and disposed of in accordance with section 1.9, above. It should be noted that some countries impose fines on ships entering their territory with expired medicinal items on board.
- 1.10.6. All medicines shall be stored in accordance with the manufacturer's recommendation.
- 1.10.7. All medicines and medical devices shall be stored under lock and key.

#### 1.11. Requirements for Carriage of Defibrillators

- 1.11.1. It is not mandatory under international or national legislation for ships to carry defibrillators, and as such, it is up to individual ship owners / operators to decide whether or not to include a defibrillator on board their ships.
- 1.11.2. However, if a defibrillator is carried, this Administration recommends that a system be in place to ensure regular maintenance of the equipment (in accordance with manufacturer's instructions), and adequate training for the first aid providers, including regular refresher training (at least every six (6) months). Training should also particularly cover care of the patient after defibrillation since immediate hospitalization facilities may not be possible most of the time.

## 2. Inspections required by MLC 2006

- 2.1. In accordance to MLC 2006 Standard A4.1.4(a), regular inspection of the ship's medical chest shall be carried out by the competent authority at intervals not exceeding 12 months.
- 2.2. In this regard, shipowners may rely upon the inspection and certification of medicine chests by competent local authorities providing this service.
- 2.3. Flag State inspections may also be used to verify that medical chests are adequate and have been recently certified.

### **3. Requirement for Recordkeeping (may be kept and managed electronically)**

#### 3.1. Inventory of Medicines

A list of medicines and medical supplies shall be maintained on board. The list should be regularly updated and contain, for each item, the following information:

- 3.1.1. expiry date;
- 3.1.2. storage conditions;
- 3.1.3. quantities remaining after purchase or use; and
- 3.1.4. disposal information.

The medicine chest shall be inventoried no less than once a year.

#### 3.2. Seafarer Medical Record (Form SMR)

3.2.1. The Master or designated and certified onboard "medical care provider" shall complete Form SMR to the extent possible, whenever treatment of a seafarer aboard a vessel needs to be rendered on shore. The purpose of this form is to facilitate the exchange of medical and related information concerning individual seafarers between the vessel and shore in cases of illness or injury.

3.2.2. This form shall be kept confidential and shall be used only to facilitate the treatment of seafarers. As such, it shall be:

- used to transmit information in the evacuation of a seafarer;
- provided to shore-side medical personnel either filled out in part or full, as applicable, or forwarded to shore-side medical personnel as a blank form to be completed and returned to the vessel upon examination of the seafarer;
- provided in copy to the seafarer upon request;
- kept with the seafarer's medical records while on board the vessel or ashore by the ship owner when the seafarer leaves the ship; and
- included as a copy to this Administration when a "Report on Personal Injury or Loss of Life" (Form PI) is filed.

3.2.3. Form SMR shall be kept by the ship owner / operator for a period of two (2) years.

3.2.4. Form SMR can be downloaded at: [www.tvship.com](http://www.tvship.com)

#### 3.3. Master's Medical Report (Form MMR)

3.3.1. Assisted by the ship's doctor or crew members assigned to basic medical duties, the Master shall complete Form MMR for each medical case managed on board that is the result of a seafarer being injured or ill for 72 hours or more in duration, or requires medical advice or assistance from a medical facility or practitioner ashore. This form shall be filed in the ship's medical log with the seafarer's Form SMR attached.

3.3.2. Form MMR shall be kept by the ship owner / operator for a period of two (2) years.

3.3.3. Form MMR can be downloaded at: [www.tvship.com](http://www.tvship.com)

#### 3.4. Ship's Medical Log

Each vessel shall keep a medical log book (commercially available) wherein shall be entered every case of illness or injury happening to any member of the crew, passenger or other persons engaged in the operations of the vessel; the nature thereof; and the medical treatment administered.

#### 3.5. Controlled Drugs Register

3.5.1. A register of controlled drugs must be maintained by the Master.

3.5.2. Controlled drugs must be entered into the controlled drugs register on reception by the vessel and the following information should be recorded:

3.5.2.1. Controlled Drugs received:

- Type and Quantity
- Date received
- Name and address of the person or supplier from whom the drug was obtained
- Running Total

3.5.2.2. Controlled Drugs administered:

- Type and Quantity
- Date administered
- Name of the person ordering the drug
- Name of the person administering the drug
- Name of the person receiving the drug
- Running total of remaining stocks, updated after each use

3.5.2.3. Controlled Drugs lost or spoiled(e.g., broken ampoule, drug prepared, but not injected, etc):

- Type and Quantity
- Date that drug was found lost or spoiled

3.5.2.4. Controlled Drugs disposed:

- Type and Quantity
- Date disposed
- Method of disposal
- Receipts and witness documentation (including signatures e.g. control signature form).

3.5.2.5. Record that a count is carried out at least once a month on the remaining controlled drugs in store for verification against records of use and the running total.

3.5.3. The Controlled Drugs Register shall be kept for a period of two (2) years after the date of last entry.

3.6. Electronic Records

#### **4. Responsibilities and Training**

4.1. The ship owner / operator is ultimately responsible for the content of the medical chest on board a vessel and, therefore when putting together the medical chest, should seek qualified medical consulting, particularly when considering travel to areas with certain medical risks (e.g. malaria).

4.2. The Master is responsible for keeping and managing medical supplies kept on board to ensure that the medications are properly dispensed and that records are kept of their disposition. This responsibility may be delegated to a properly trained and certified crew member.

4.3. Ships which do not carry a medical doctor on board should have:

- one (1) certified seafarer “Medical Care Person in Charge” responsible for medical care and administering medicine as part of their regular duties; and
- one (1) certified seafarer “Medical First Aid Provider” designated to undertake the duties of providing immediate first aid in case of injury or illness on board ship.

A single individual may serve in both capacities, provided he/she holds the two (2) certifications.

4.4. Seafarers in charge of medical care or first aid shall report health-related conditions on board to the Master, and shall present the Ship’s Medical Logbook to the Master on request.

4.5. Master or seafarers designated with responsibilities for medical care or first aid shall have full use of all available (24-hour per day) medical advice by radio or radiotelephone. These seafarers shall be instructed in the use of the ship’s medical guide and the medical section of the most recent edition of the “International Code of Signals” to enable them to understand the type of information needed by the advising doctor as well as the advice received.

4.6. Seafarers on board whom are designated to provide medical care or first aid shall have training as required by the International Convention on Standards of Training, Certification and Watchkeeping, 1978, as amended, (STCW). The training should be based on the contents of the most recent editions of the IMGS, MFAG and the medical section of the “International Code of Signals” (published by the IMO). Such persons should undergo refresher training approximately once every five (5) years to ensure proper utilization of all medicines or medical supplies on board.

STCW certification is not required for ship doctors or ship nurses and it shall be the responsibility of the ship owner / operator to verify the medical certification validity of such persons.

4.7. Regardless of training, seafarers are not medically qualified to replace doctors, and as such, a doctor should always be consulted with regards to serious illness or injury, or when any doubt arises on the action to take in treating a patient.



## **5. International Health Regulations**

- 5.1. The International Health Regulations (2005) (IHR (2005)), administered by WHO, provide a code of procedures and practices for preventing the spread of infectious disease. Article 37 of the regulations require, in general, a Master of a ship arriving from a foreign port to provide a State that is a Party to IHR (2005) with a Maritime Declaration of Health (MDH) prior to arrival in port. The MDH contains a series of health-related questions, including those addressing illness, death and sanitary measures on board, to which a Master must attest.
- 5.2. Form MDH can be downloaded at: [www.tvship.com](http://www.tvship.com) for use by ships that call on ports where a MDH is required.

## **6. Pest Management**

- 6.1. The presence of insects, rodents and other pests shall be controlled to prevent the transmission of illness and disease to seafarers and other persons on board a ship.
- 6.2. In controlling pests, it is important to note that very few pesticides are suitable for use against all kinds of pests that may be present on board. It is therefore necessary to consider the pesticides individually and utilize them in accordance with manufacturer instructions and as recommended in the IMDG Code Supplement, "Revised Recommendations on the Safe Use of Pesticides in Ships".
- 6.3. In developing a pest control strategy, cruise ships and commercial yachts may want to consider recommendations regarding pest control contained in section 8 of the "Vessel Sanitation Program" (VSP) 2011 Operations Manual by the United States Centers for Disease Control and Prevention.

## **7. Mosquito Protection**

- 7.1. Ships that regularly call mosquito-infested ports shall be fitted with appropriate devices (e.g. nets, screens) as prophylaxes against mosquitoes and carry anti-malarial medicines.
- 7.2. Ships that transit in areas where flies and mosquitoes are prevalent may seek guidance from the "Guide to Ship Sanitation" by WHO which provides ship designer and constructor guidelines for the control of insects particularly for sleeping quarters, mess rooms, dining rooms, indoor recreational areas, and all food spaces. Control measures that may be employed by the Master and Crew are also provided.
- 7.3. Please refer to Table I of Annex I for the types and quantities of anti-malarial medications to be carried.

Yours sincerely,

Deputy Registrar  
Tuvalu Ship Registry

## ANNEX I

### Inventory Guidelines for Medicines and Medical Supplies for Ships Without a Doctor On Board

**Table I**  
**Recommended Quantities of Medicines for Ships Without a Doctor On Board**  
 (WHO Quantification Addendum to be used with the International Medical Guide for Ships, 3rd Edition)

Category A: Ocean-going ships with crews of 25-40. Stock levels are based on a six (6) months supply.

Category B: Vessels engaged in coastal trade or going to nearby ports with crews of up to 25 that travel no more than 24 hours from port of call. Stock levels are based on a six (6) months supply.

Category C: Fishing vessels and private craft with crews of 15 or fewer, and usually travelling no more than a few hours from home port or a port of call. The assumed duration of each trip is up to 3-4 weeks.

(Note: <sup>1</sup> Quantities marked with a "+" are suggested quantities irrespective of crew size)

Name	Form	Strength	Indication	Quantities per 10 crew <sup>1</sup>			Notes
				A	B	C	
Acetylsalicylic acid	Tablet	300mg	<ul style="list-style-type: none"> <li>▪ high dose (600-900mg) to reduce pain, fever, inflammation</li> <li>▪ low dose (100-150mg) to inhibit formation of blood clots in angina pectoris, myocardial infarction, stroke</li> </ul>	50	50	-	
Aciclovir	Tablet	400mg	<ul style="list-style-type: none"> <li>▪ treatment of primary or recurrent herpes simplex virus infection;</li> <li>▪ may be useful for severe varicella and herpes zoster infection (doctor should be consulted)</li> </ul>	70+	35+	-	
Adrenaline	Ampoule	1ml=1mg	<ul style="list-style-type: none"> <li>▪ to raise blood pressure in anaphylaxis</li> <li>▪ to dilate airways in severe asthma or anaphylaxis</li> </ul>	10+	5+	5+	
Amethocaine (tetracaine hydrochloride)	Eye drop	0.5%	for eye examination and procedures	20+	20+	-	
Amoxicillin + clavulanate acid	Tablet	875mg/125mg	to treat infections responsive to this antibiotic	20+	10	-	
Artemether	Ampoule	1ml=80mg	Treatment of severe malaria and required for voyages to areas where malaria transmission is a risk	12+	12+	-	
Artemether + Lumefantrine	Tab	20mg+120mg	Treatment of severe malaria and required for voyages to areas where malaria transmission is a risk	24+	24+	-	Double if crew size > 30

Atropine	Ampoule	1.2mg/ml	<ul style="list-style-type: none"> <li>▪ to treat slow heart rate in myocardial infarction</li> <li>▪ to treat organophosphate insecticide poisoning</li> </ul>	10+	5+	-	Double quantity if carrying organophosphates
Azithromycin	Tablet	500mg	to treat infections responsive to this antibiotic	10+	5+	-	Double if crew size > 30
Ceftriaxone	Ampoule	1g	to treat infections responsive to this antibiotic	15	15+	-	
Cetirizine	Tablet	10mg	to treat allergy symptoms in hay fever, hives, allergic dermatitis, etc.	30+	30+	-	
Charcoal, activated	Powder	50g in 300ml purified water	to absorb ingested poisons	120g+	120g+	-	
Ciprofloxacin	Tablet	250mg	to treat infections responsive to this antibiotic	20+	10+	-	Double if crew size ≥ 30
Cloves, oil of	Liquid	10ml	Toothache	10ml	10ml+	-	
Dexamethasone	Ampoule	4mg/ml	<ul style="list-style-type: none"> <li>▪ to treat life-threatening and severe asthma</li> <li>▪ to treat anaphylaxis</li> <li>▪ to treat severe allergic reactions</li> </ul>	3	1	-	
Diazepam	Tablet	5mg	to treat alcohol withdrawal	50+	20+	-	
Docusate with senna	Tablet	50mg+8mg	<ul style="list-style-type: none"> <li>▪ to avoid straining in patients with anal fissure and hemorrhoids</li> <li>▪ to prevent constipation caused by opioid use</li> </ul>	30+	-	-	
Doxycycline	Tablet	100mg	as recommended in IMGS3 for the specific infection	10	-	-	
Ethanol, hand cleanser	Gel	70%/250ml	an alternative to hand-washing when hands are not obviously soiled	500ml	500ml+	100ml+	
Ethanol	Liquid	70%/500ml	to disinfect instruments and surfaces	500ml	100ml	-	
Fluorescein	Eye strips	1%	to detect damage to cornea: damaged area stains yellow/green	20+	20+	-	
Furosemide	Ampoule	4ml=40mg	to treat severe fluid retention in lungs (pulmonary oedema) due to cardiac failure	5+	5+	-	
Glucagon	Ampoule	1mg	to treat low blood sugar (hypoglycaemia) due to insulin when oral intake is impossible and intravenous glucose cannot be given	1+	1+	-	It is recommended to carry a glucose measuring instrument on board.
Haloperidol	Ampoule	1ml=5mg	<ul style="list-style-type: none"> <li>▪ to treat psychotic hallucinations and delusions</li> <li>▪ to treat severe agitation and aggressiveness</li> </ul>	5	5+	-	
Hydrocortisone	Cream	1% (20-30g)	to treat allergy and some other inflammatory skin conditions	2x30g	1x30g	-	
Ibuprofen	Tablet	400mg	<ul style="list-style-type: none"> <li>▪ to treat inflammation</li> <li>▪ to reduce mild to moderate pain, especially if associated with inflammation</li> </ul>	100	50	50+	

DEET 20-35% formulation or Picaridin or p-menthane-3,8-diol	Vial	n/a	<ul style="list-style-type: none"> <li>▪ Insect repellent lotions for skin.</li> <li>▪ Consider diseases transmitted by mosquitoes as Dengue Fever, Malaria,, Yellow fever</li> </ul>	10	10	5+	One vial per person in areas of risk of acquiring a disease transmitted by mosquitoes in a given port
Isosorbide dinitrate	Tablet	5mg	<ul style="list-style-type: none"> <li>▪ to treat angina pectoris (chest pain)</li> <li>▪ to treat myocardial infarction</li> </ul>	10	10	5+	
Lignocaine	Ampoule	1%,5ml	for local anesthesia when suturing wounds or performing minor surgery	5	5	-	
Loperamide	Tablet	2mg	to treat symptoms of Diarrhoea	30	30	10+	
Mebendazole	Tablet	100mg	to treat intestinal worm infections, not effective for tapeworm infection or hydatid disease	6+	6+	-	
Metroprolol	Tablet	100mg	<ul style="list-style-type: none"> <li>▪ to treat hypertension (high blood pressure)</li> <li>▪ to treat atrial fibrillation (irregular or rapid heart rate)</li> <li>▪ to treat angina pectoris (chest pain)</li> <li>▪ to prevent migraine</li> </ul>	60+	-	-	
Metronidazole	Tablet	500mg	to treat infections responsive to this antibiotic	30+	20+	-	
Miconazole	Cream	2%	to treat fungal skin infections	2x30g	1x30g	-	If women on board, supply also Miconazole vaginal cream
Midazolam	Ampoule	1ml=5mg	to terminate epileptic fits	10+	5+	-	
Misoprostol	Tab	200µg	to prevent post-partum hemorrhage	3+	3+	-	Only if females on board
Morphine (controlled Substance)	Amp	1ml=10mg (injectable)	<ul style="list-style-type: none"> <li>▪ to reduce severe pain</li> <li>▪ to reduce pain not relieved by other analgesics</li> </ul>	10	10	-	
Morphine (controlled Substance)	Liquid / Tablet	1mg/ml 100ml bottle or 10 tablets with 10mg (oral)	to reduce severe pain likely to last several days in patients able to eat and drink	100ml+	100ml+	-	
Naloxone	Ampoule	1ml=0.4mg	to reverse effects of opioids, especially in case of overdose	10+	5+	-	
Omeprazole	Tablet	20mg	<ul style="list-style-type: none"> <li>▪ to treat gastro-oesophageal reflux</li> <li>▪ to treat peptic ulcer disease</li> </ul>	30+	30+	-	
Ondanestron	Tablet	4mg	<ul style="list-style-type: none"> <li>▪ to prevent vomiting</li> <li>▪ to prevent seasickness</li> </ul>	10	10	10+	
Oral rehydration salts sachets of powder for reconstitution	Powder	Sachet	to prevent or treat dehydration, especially due to diarrhoea	151(75)	101(50)	21(10)+	Quantities in brackets are number of sachets based on sachets made up to 200ml

Oxymetazoline	Nasal drop	0.5%	<ul style="list-style-type: none"> <li>▪ to treat nasal obstruction due to allergies or viral infection</li> <li>▪ to improve sinus drainage in sinusitis</li> </ul>	2	1	-	One (1) bottle per patient
Paracetamol	Tablet	500mg	to reduce pain and fever (but not inflammation)	100	50	25	
Permethrin	Lotion	1%,250ml	to eliminate hair, pubic, and body lice	200ml+	100ml+	-	Double if crew size > 30
Permethrin	Lotion	5%,250g	to treat scabies	300ml+	100ml+	-	100ml per patient
Povidone iodine	Ointment	10%	to disinfect skin and wounds	1x25g	1x25g	-	
Povidone iodine	Liquid	10%	to disinfect skin and wounds	100ml	100ml	100ml+	
Prednisone	Tablet	25mg	<ul style="list-style-type: none"> <li>▪ to treat severe asthma</li> <li>▪ to treat other inflammatory conditions (on medical advice)</li> </ul>	30+	30+	-	
Petroleum jelly (Vaseline)	Ointment	n/a	<ul style="list-style-type: none"> <li>▪ to treat chapped skin</li> <li>▪ for lubricating rectal thermometer</li> </ul>	100g	100g	-	
Salbutamol	Inhaler	0.1mg/dose	<ul style="list-style-type: none"> <li>▪ to treat asthma</li> <li>▪ to treat chronic bronchitis</li> <li>▪ to treat emphysema</li> <li>▪ to treat other lung diseases</li> </ul>	1	1	-	One (1) inhaler per patient
Volume spacer for salbutamol inhaler	n/a	n/a	▪ to make inhaling salbutamol more effective	1	1	-	
Sodium chloride	Liquid	0.9%,1 litre	for fluid replacement but can also be used for sterile eye irrigation	5+	1	-	
Sodium chloride	Liquid	0.9%,10ml	For sterile eye bathing and application of wet compresses	2+	1	-	
Tetracycline	Eye ointment	1%,5g	to treat minor eye infections; to prevent infections following damage to the cornea.	2	1	1+	One (1) tube per patient
Tetanus Immunoglobulin ampoule	Ampoule	n/a	Part of wound care if state of vaccination is unknown	1	1	-	
Tetanus toxoid vaccination ampoule	Ampoule	n/a	Part of wound care if state of vaccination is unknown	1	1	-	
Tramadol	Tablets	50mg	<ul style="list-style-type: none"> <li>▪ against moderate pain</li> <li>▪ in severe pain use morphine</li> </ul>	50+	50+	-	
Vitamin K (Phytomenadione)	Ampoule	1ml=10mg	to reverse excessive or unwanted effects of warfarin or related drugs	2+	2+	-	
Water for injection	Ampoule	5ml	reconstitution of injectable drugs provided as powders	10	5+	-	Only used to reconstitute ceftriaxone
Zidovudine+ lamivudine	Tablet	300mg/150mg	prophylaxis against HIV infections after needle-stick injury	60+	60+	-	One tablet daily twice daily for four weeks
Zinc oxide	Paste / ointment	20%	protection of irritated skin	200g+	100g+	100g+	4x25g or 3x30g tubes per 100g

**Table I**  
**Continued Supplies and Equipment**  
*(International Medical Guide for Ships, 3<sup>rd</sup> Edition)*

Category	Recommended Item	Quantity per 10 crew
<b>RESUSCITATION EQUIPMENT</b>		
Appliance for the administration of oxygen	Portable oxygen set, complete, containing:	
	▪ 1 oxygen cylinder, 2L/200 bar	1
	▪ 1 spare oxygen cylinder, 2L/200 bar	1
	▪ Pressure regulating unit and flow meter with tubes such that ship's industrial oxygen can also be used	1
	▪ 3 disposable face masks of choice; including simple face mask and non-rebreathing mask	3
Oropharyngeal airway	Guedel airway (Mayo-tube): sizes medium	2
Oropharyngeal airway	Guedel airway (Mayo-tube): sizes large	2
Mechanical aspirator	Manual aspirator to clear upper airways	1
	Catheters for Mechanical aspirator	2
Bag and mask resuscitator	Ambubag (or equivalent); supplied with large, medium and small masks	1
Cannula for mouth-to-mouth resuscitation	Brook airway, Lifeway, pocket face mask or equivalent	1
<b>DRESSING MATERIAL AND SUTURING EQUIPMENT</b>		
Adhesive dressings	Assorted wound-plaster or plaster strips, water-resistant - slim and broad	200
Sterile gauze compresses	Sterile gauze compresses, 5x5cm, sterile	100
	Sterile gauze compresses, 10x10cm, sterile	100
Gauze roll	Gauze roll, 5cm x 100m, non-sterile	1
Gauze roll	Gauze roll, 90cm / 60cm x 100m, non-sterile (may be substituted by gauze roll of smaller size)	1
Gauze dressing with non-adherent surface	Non-adherent gauze dressing, square, 10cm	100
Vaseline gauze	Paraffin gauze dressing, 10x10cm, sterile	50
Bandage	Elastic fixation bandage, 4m x 6cm	3
Sterile compression bandages	First-aid absorbent gauze-covered cotton pad sewn into a cotton bandage (ambulance dressing), small	5
Sterile compression bandages	First-aid absorbent gauze-covered cotton pad sewn into a cotton bandage (ambulance dressing), medium	5
Sterile compression bandages	First-aid absorbent gauze-covered cotton pad sewn into a cotton bandage (ambulance dressing), large	5
Tubular gauze for finger bandage	Tubular gauze bandage for finger bandage with applicator, 5m	1
Adhesive elastic bandage	Adhesive elastic bandage, 4m x 6cm	10
Triangular sling	Triangular sling	5
Sterile sheet for burn victims	Sterile sheet for burn patients	1
Honey for dressing burns	1kg	1
Adhesive sutures or zinc oxide bandages	Adhesive tape, waterproof, skin-friendly, 5x1.25cm	10
Q-tips	Q-tips (wooden)	100
Safety pins	Safety pins (stainless steel) 12pcs	50
Butterfly sutures	Butterfly sutures, Steristrips® or Leuko-strip®, sterile	20
Skin adhesive	2-octyl cyanoacrylate liquid, 0.5ml	2
Suturing equipment	Sutures, absorbable with curved non-traumatic needles, 1-O,	10
	Sutures, absorbable with curved non-traumatic needles, 3-O,	10
	Sutures, absorbable with curved non-traumatic needles, 4-O or 5-O,	10
Gloves	Disposable examination gloves, medium	50
	Disposable examination gloves, large	50
	Surgical gloves size 6.5 sterile in pairs	3
	Surgical gloves size 7.5 sterile in pairs	3
	Surgical gloves size 8.5 sterile in pairs	3

<b>INSTRUMENTS</b>		
Scalpels	Scalpel, sterile, disposable	20
Instrument box	Instrument box (stainless steel)	1
Scissors	Operating scissors, straight (stainless steel)	1
	Bandage scissors (stainless steel)	1
Forceps	Splinter forceps, pointed (stainless steel)	2
	Teeth tissue forceps (stainless steel)	1
Needle holder	Needle holder, Mayo-Hegar 180mm, straight	1
Haemostatic clamps	Haemostatic clamp, Halstead mosquito, 125mm, stainless steel	2
Disposable razors	Razor, disposable	5
<b>EXAMINATION AND MONITORING EQUIPMENT</b>		
Disposable tongue depressors	Tongue Depressors, disposable	100
Reactive strips for urine analysis	Reactive strips for urine analysis: blood/ glucose/ protein/nitrite/leukocytes	100
Microscope slides	Microscope slides	100
Stethoscope	Stethoscope	1
Aneroid sphygmomanometer	Sphygmomanometer (blood pressure set), preferably automatic	1
Standard thermometer	Standard thermometer, digital if possible	1
Rectal thermometer	Rectal thermometer, digital if possible	1
Hypothermic thermometer	Thermometer 32°-34 °C, digital if possible, preferable range 26 °C to 42 °C to differentiate between sever-moderate-mild hypothermia	1
Penlight (blue light)	Penlight + blue cover to detect damage to cornea	1
Marker	Waterproof indelible marker	1
Magnifying glass	Magnifying glass (a x 8 loupe)	1
<b>EQUIPMENT FOR INJECTION, INFUSION, AND CATHETERIZATION</b>		
Equipment for injection	Syringes, Luer connection, 2ml, sterile, disposable	20
	Syringes, Luer connection, 5ml, sterile, disposable	20
	Syringes, Luer connection, 10ml, sterile, disposable	20
Equipment for subcutaneous injection	Hypodermic subcutaneous needle, Luer connection, 16x0.5mm (23 G or 25 G), sterile, disposable	20
Equipment for intramuscular injection	Hypodermic intramuscular needle (19G or 21G), Luer connection, 40x0.8mm, sterile, disposable	20
Equipment for drawing the medicine into the syringe	Needles, 19G or 21G, blunt, "drawing up" type	20
Equipment for intravenous fluid infusion	Intravenous infusion cannula 16G (1.7mm) or 19G, Luer-lock connection, sterile, non-recap type + mandarin	10
	Intravenous infusion cannula 22G (0.8mm) or 21G, Luer-lock connection, sterile, non-recap type + mandarin	10
	Intravenous giving set, Luer-lock connection, steril +3-way valve/ connection	5
	Tourniquet, blood-taking type, to be used with intravenous infusion cannula	1
Bladder drainage equipment	Penile sheath set with condom catheter, tube, and bag	2
	Indwelling urine catheter 14 CH	2
	Short-term urine catheter with soft-eye straight tip Thieman No. 12 , or equivalent	2
	Short-term urine catheter with soft-eye straight tip Thieman No. 12 , or equivalent	2
	Complete sterile urine catheterization set with lubricant, drapes, cotton swabs, skin disinfection, forceps, sterile container	2
	Urine collecting bag and tube	2
<b>GENERAL MEDICAL AND NURSING EQUIPMENT</b>		
Eye protection	Plastic goggles or full-face mask	2
Plastic apron	Disposable plastic apron	10
Kidney dish	Kidney dish, stainless steel, 825ml	2
Plastic backed towels	Towels, plastic backed, absorbent, 600x500mm	10
Safety box	Safety box for sharps disposable, 5L	1
Mask	Mask, duckbill type, disposable	50

Tape measure	Tape measure, vinyl coated, 1.5m	1
Draw sheet	Draw sheet, plastic 90x180cm	2
Bedpan	Bedpan, stainless steel	1
Hot-water bottle	Hot-water bag	1
Urine bottle	Urinal, male (plastic)	1
Ice bag	ColdHotpack maxi	1
Aluminum foil blanket	Aluminum foil blanket	1
Condoms	Male condoms	100
Wash bottle	Plastic wash bottle, 250ml	1
Plastic bottle	Bottle, 1L plastic with screw top	2
Dressing tray	Stainless steel dressing tray 300x200x30mm	1
Bowl	Bowl, stainless steal, 180ml	2
Specimen jars	Jars, plastic, with lids and lables 100ml	10
Plaster-of-Paris bandages	Bandages, POP, 5cmx2.7m, may be omitted if splints are carried	6
	Bandages, POP, 10cmx2.7m, may be omitted if splints are carried	6
Stockinet	Stockinet sizes for arm splints 10m roll	1
	Stockinet sizes for leg splints 10m roll	1
Cotton wool	Cotton wool roll 500g	5
Alcohol swabs	70% alcohol swabs for skin cleansing prior to injection	10
Nail brush	Nail brush	1
Mortuary transfer bag	Mortuary transfer bag	1
<b>IMMOBILIZATION AND TRANSPORTATION EQUIPMENT</b>		
Malleable splints	Malleable finger splint (Small)	1
	Malleable forearm/ hand splint (Medium)	2
	Malleable splint legs (Large)	2
Stretcher equipment	Stretcher, Preferably allowing crane/helicopter lifting.	1
For neck immobilisation	Cervical rigid collar variable size	1



**ANNEX II**

**Publications, Forms and Charts to be Carried**

<b>Publications, Forms and Charts</b>	<b>Quantity (per vessel)</b>
International Medical Guide for Ships (IMGS) (hard copy of most recent edition):	1
Medical First Aid Guide for Use in Accidents Involving Dangerous Goods (MFAG) (hard copy of most recent edition; carry if transporting dangerous goods)	1
Cards for telemedical advise (fill in before calling for radiomedical advice)	10 cards up to 40 persons 20 cards for 41-99 persons
Cards/Charts for tracking temperature	10 cards up to 40 persons 20 cards for 41-100 persons
Master's Medical Report Form (Form MMR)	10 forms up to 40 persons 20 forms for 41-100 persons
Seafarer Medical Record (Form SMR)	10 forms up to 40 persons 20 forms for 41-100 persons
Medical logbook	1
Controlled drugs log	1