



**Ecumenical  
Pharmaceutical Network**



**ICRC**



**International Federation  
of Red Cross and Red Crescent Societies**



**IOM • OIM**

**International Organization  
for Migration**



**United Nations  
Population Fund**



**UNHCR**  
The UN Refugee Agency



# **The Interagency Emergency Health Kit 2006**

Medicines and medical devices  
for 10,000 people for  
approximately 3 months

**An interagency document**

First edition 1990  
Reprinted 1992  
Second edition 1998  
Third edition 2006

Each agency collaborating in the distribution and use of the interagency emergency health kit will support the implementation of the interventions recommended in this booklet only in so far as they are consistent with the existing policy and mandate of that agency.

**© World Health Organization 2006**

All rights reserved. Publications of the World Health Organization can be obtained from Marketing and Dissemination, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel: +41 22 791 2476; fax: +41 22 791 4857; email: [bookorders@who.int](mailto:bookorders@who.int)). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to Publications, at the above address (fax: +41 22 791 4806; email: [permissions@who.int](mailto:permissions@who.int)).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization and the organizations listed on the title page do not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

## Acknowledgments

The following individuals and organizations contributed to the development of this revision and their advice and support are gratefully acknowledged.

United Nations High Commissioner for Refugees (UNHCR): Nadine Ezard, Tsegereda Assebe, Nadine Cornier

United Nations Children' Fund (UNICEF): Murtada Sesay, Monique Supiot, Hanne Bak Pedersen

Joint United Nations Programme on HIV/AIDS (UNAIDS): Françoise Renaud-Théry

United Nations Population Fund (UNFPA): Wilma Doedens, Thidar Myint

United Nations Development Programme/Inter-Agency Procurement Services Office (UNDP/IAPSO): Jack Gottling

World Bank: Yolanda Tayler, Juan Rovira

International Committee of the Red Cross (ICRC): Stephanie Arzac-Janvier

International Federation of Red Cross and Red Crescent Societies (IFRC): Hakan Sandbladh, Birgitte Olsen, Adelheid Marschang

International Office for Migration (IOM): Sajith Gunaratne, Daniel Grondin, Stéphanie Krause

International Pharmaceutical Federation (FIP): Xuan Hao Chan, Satu Tainio

WHO/Roll Back Malaria (RBM): Andrea Bosman, Charles Delacollette, Peter Olumese, Aafje Rietveld, Maryse Dugué, David Bell (WHO Regional Office for the Western Pacific)

WHO/Contracting and Procurement Services (CPS): Françoise Mas, Paul Acriviadis

WHO/Health Action in Crises (HAC): Elisabeth Pluut, Christine Chomilier

WHO/Reproductive Health and Research: Margaret Usher-Patel

WHO/Making Pregnancy Safer (MPS): Rita Kabra

WHO/Medicines Policy and Standards (PSM): Hans Hogerzeil, Marthe Everard, Sophie Logez, Shalini Jayasekar, Clive Ondari, Willem Scholten

WHO/Child and Adolescent Health and Development (CAH): Olivier Fontaine, Shamim Qazi, Martin Weber

WHO/Control of Neglected Tropical Diseases (NTD): Pamela Mbabazi, Michelle Gayer

Médecins Sans Frontières: Myriam Henkens, Olivier Raemdonck, Christa Hook, Jean-Marie Kindermans, Michel van Herp

Save the Children (UK): Elizabeth Berryman

John Snow, Inc. (JSI): Carolyn Hart, Paula Nersesian

Ecumenical Pharmaceutical Network (EPN): Eva Ombaka

Merlin: Elizabeth Berryman (previously with Save the Children, UK)

IDA Foundation: Connie van Marrewijk, Michiel de Goeje

Missionpharma: Jens Rasmussen

Centrale Humanitaire Médico-Pharmaceutique (CHMP): Alasanne Ba

Medical Export Group: Klaas-Jan Koning

Special thanks are due to Dr Robin Gray (WHO/PSM) who until his retirement was the focal point for coordinating the content updates of the last two emergency health kits.

# Contents

<b>Acknowledgments .....</b>	<b>iii</b>
<b>Introduction .....</b>	<b>1</b>
<b>Chapter 1. Essential medicines and medical devices in emergency situations.....</b>	<b>3</b>
What is an emergency? .....	3
Principles behind the IEHK 2006.....	3
Composition of IEHK 2006.....	4
Referral system.....	5
Immunization and nutrition in emergency.....	5
Reproductive health .....	6
Malaria .....	7
HIV, AIDS, tuberculosis and leprosy.....	7
Procurement of IEHK 2006.....	7
Post-emergency needs.....	7
<b>Chapter 2: Selection of medicines and medical devices included in IEHK 2006.....</b>	<b>9</b>
Selection of the medicines for IEHK 2006 .....	9
Medicines not included in IEHK 2006 .....	10
Selection of medical devices for IEHK 2006.....	10
Selection of equipment.....	11
Medical devices not included in IEHK 2006.....	11
Major changes in content since the 1998 edition of the emergency health kit .....	12
<b>Chapter 3: Content of IEHK 2006 .....</b>	<b>13</b>
10 basic units - for health care workers with limited training.....	13
One supplementary unit - for physicians and senior health care workers.....	13
Basic unit (for 1,000 people for 3 months).....	14
Supplementary unit (for 10,000 people for 3 months).....	16
<b>Annex 1: Basic unit: treatment guidelines.....</b>	<b>23</b>
Anaemia .....	23
Pain .....	24
Diarrhoea .....	24
Fever .....	27
Respiratory tract infections .....	28
Measles.....	28
"Red eye" condition .....	28
Skin conditions.....	29
Sexually transmitted and urinary tract infections.....	29
Preventive care in pregnancy.....	29
<b>Annex 2. Assessment and treatment of diarrhoea .....</b>	<b>31</b>
A-2.1 Assessment of diarrhoeal patients for dehydration.....	31
A-2.2 Treatment of acute diarrhoea (without blood) .....	32
A-2.3 Treatment Plan B: oral rehydration therapy for children with some dehydration.....	34
A-2.4 Treatment Plan C: for patients with severe dehydration .....	37

<b>Annex 3: Management of the child with cough or difficult breathing.....</b>	<b>39</b>
A-3.1    Assess the child.....	39
A-3.2    Decide how to treat the child .....	39
A-3.3    Child less than two months old .....	40
A-3.4    Child two months to five years old .....	41
A-3.5    Treatment instructions .....	42
<b>Annex 4: Sample data collection forms.....</b>	<b>45</b>
<b>Annex 5: Sample health card .....</b>	<b>49</b>
<b>Annex 6. Guidelines for suppliers.....</b>	<b>51</b>
Specifications for medicines and medical devices .....	51
Packaging.....	51
Packing list.....	52
Information slips.....	52
<b>Annex 7. Other kits for emergency situations .....</b>	<b>55</b>
Immunization.....	55
Nutrition .....	55
Reproductive health .....	56
<b>Annex 8. Guidelines for Drug Donations .....</b>	<b>59</b>
Selection of drugs .....	59
Quality assurance and shelf-life .....	60
Presentation, packing and labelling.....	61
Information and management .....	62
<b>Annex 9. Model Regulatory Aspects of Exportation and Importation of     Controlled Substances .....</b>	<b>63</b>
Introduction.....	63
Standard procedure for international transfer of narcotic and psychotropic substances..	64
Procedure to be followed in disaster relief.....	64
Outline of standard agreement between supplier and control authorities of exporting countries.....	66
Shipment request/notification form for emergency supplies of controlled substances.....	68
<b>Annex 10. References.....</b>	<b>71</b>
Medicines.....	71
Medicine management.....	71
Communicable diseases.....	71
General public health.....	72
Child health.....	72
HIV and STIs.....	72
International travel and health .....	72
Malaria .....	72
Mental health.....	73
Nutrition .....	73
Reproductive health .....	73
Tuberculosis .....	73
<b>Annex 11. Useful addresses.....</b>	<b>75</b>
Partners .....	75
Suppliers .....	78
<b>Feedback form .....</b>	<b>81</b>

## **Introduction**

The organizations and agencies of the United Nations system and international and nongovernmental organizations are called upon to respond to an increasing number of large-scale emergencies and disasters, many of which pose a serious threat to health. Much of the assistance provided in such situations is in the form of medicines and medical devices (renewable and equipment).

During the 1980s, the World Health Organization (WHO) took up the question of how emergency response could be facilitated through effective emergency preparedness measures. The aim was to encourage the standardization of medicines and medical supplies needed in emergencies to permit a swift and effective response with medicines and medical devices using standard, pre-packed kits that could be kept in readiness to meet priority health needs in disaster situations.

The Interagency Emergency Health Kit 2006 (IEHK 2006) is the third edition of the WHO Emergency Health Kit which was the first such kit when it was launched in 1990. The second kit, "The New Emergency Health Kit 98" was revised and further harmonized by WHO in collaboration with a large number of international and nongovernmental agencies. This updated third edition takes into account the global HIV/AIDS epidemic, the increasing parasite resistance to commonly available antimalarials and the field experience of agencies using the emergency health kit.

Over the years the concept of the emergency health kit has been adopted by many organizations and national authorities as a reliable, standardized, affordable, and quickly available source of the essential medicines and medical devices (renewable and equipment) urgently needed in a disaster situation. Its content is based on the health needs of 10,000 people for a period of three months.

This document provides background information on the composition and use of the emergency health kit. Chapter 1 describes supply needs in emergency situations and is intended as a general introduction for health administrators and field officers. Chapter 2 explains the selection of medicines and medical devices - renewable and equipment - which are included in the kit and also provides more technical details intended for prescribers. Chapter 3 describes the composition of the kit, consisting of the basic and complementary units. The annexes provide more details on treatment guidelines, sample forms, a health card, guidelines for suppliers, other kits for emergency situations, guidelines for medicines donations, a standard procedure for importation of controlled medicines, references, and useful addresses. A feedback form is also included to report on experiences when using the emergency health kit and to encourage comments and recommendations on the contents of the kit from distributors and users for consideration when updating the contents.

The WHO Department of Medicines Policy and Standards (formerly known as the Department of Essential Drugs and Medicines Policy) has coordinated the review process and has published this interagency document on behalf of all collaborating partners.



# Chapter 1.

## Essential medicines and medical devices in emergency situations

### What is an emergency?

The term “emergency” is applied to various situations resulting from natural, political and economic disasters. The Interagency Emergency Health Kit 2006 (IEHK 2006) is designed to meet the initial primary health care needs of a displaced population without medical facilities, or a population with disrupted medical facilities in the immediate aftermath of a natural disaster or during an emergency. It must be emphasized that, although supplying medicines, medical devices (renewable and equipment) in standard pre-packed kits is convenient early in an emergency, specific local needs must be assessed as soon as possible and further supplies must be ordered accordingly.

### Medicine and medical device needs in the context of an emergency situation

The practical impact of many well-meaning donations and support sent in emergencies has often been diminished because the supplies did not reflect real needs or because requirements were not adequately assessed. Often this resulted in donations of unsorted, unsuitable, inadequately labelled and expired medicines and other medical devices which could not all be used at the receiving end. The Interagency *Guidelines for Drug Donations*, revised in 1999, describe "good donation practices" and promote the principles necessary for improved quality medicine donations. More detailed information is provided in Annex 8.

Morbidity patterns may vary considerably between emergencies. For example, in emergencies where malnutrition is common, morbidity rates may be very high. For this reason an estimate of medicine requirements can only be approximate, although certain predictions can be made based on previous experience.

### Principles behind the IEHK 2006

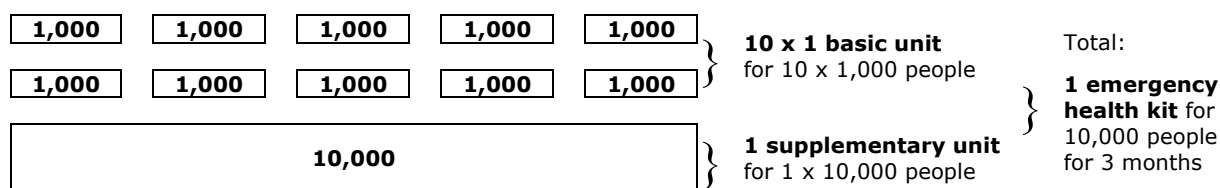
**IEHK 2006 is designed principally to meet the first primary health care needs of a displaced population without medical facilities. Its content is a compromise and there will always be some items which do not completely meet requirements. An ideal kit can only be designed with an exact knowledge of the population characteristics, disease prevalence, morbidity patterns and level of training of those using the kit.**

IEHK 2006 consists of two different sets of medicines and medical devices, named a *basic unit* and a *supplementary unit*. To facilitate distribution to smaller health facilities on site, the quantities of medicines and medical devices in the basic unit have been divided into 10 identical units for 1,000 people each.

## Terminology

Confusion has arisen over the words "kit" and "unit". In this context, a kit refers to 10 basic units plus one supplementary unit as explained in Figure 1.

Figure 1: Composition of IEHK 2006



## Basic unit

The basic unit contains essential medicines and medical devices for primary health care workers with limited training. It contains oral and topical medicines, none of which are injectable. Combination therapy for the treatment of uncomplicated falciparum malaria is provided unless there is a specific request not to include it in the kit.

Standard treatment guidelines, based on symptoms, have been developed to help primary health care personnel use the medicines rationally and these can be found in Annexes 1 to 3. Two printed copies of this publication in English, French and Spanish are included in each basic unit. Additional printed copies can be obtained from the Department of Medicines Policy and Standards, WHO, Geneva, see Annex 10. Electronic copies can be downloaded from the web site: [www.who.int/medicines/](http://www.who.int/medicines/).

## Supplementary unit

The supplementary unit contains medicines and medical devices for a population of 10,000 and is to be used only by professional health workers or physicians. It does not contain any medicines or devices from the basic unit and can therefore only be used when these are available as well. Modules for malaria and for patient post-exposure prophylaxis (Patient PEP) are provided unless there is a specific request not to include them in the kit.

**The supplementary unit does not contain any medicines or medical devices from the basic units. The supplementary unit should only be used together with one or more basic units.**

## Selection of medicines

The selection of medicines in the kit has been based on treatment recommendations from technical units within WHO. A manual describing the standard treatment guidelines for

target diseases was developed through collaboration between Médecins Sans Frontières (MSF) and WHO. Two copies of the manual in English, French and Spanish are included in each supplementary unit. Additional printed copies can be obtained from MSF, see Annex 11.

## **Quantification of medicines**

The estimation of medicine requirements in the kit has been based on:

1. the average morbidity patterns among displaced populations;
2. the use of standard treatment guidelines;
3. figures provided by agencies with field experience.

The quantities of medicines supplied will therefore only be adequate if prescribers follow the standard treatment guidelines.

## **Referral system**

Health services can be decentralized by the use of basic health care clinics (the most peripheral level of health care) providing simple treatment using the basic units. Such decentralization will: (1) increase the access of the population to curative care; and (2) avoid overcrowding of referral facilities by treating common health problems at the most peripheral level. Standard treatment guidelines included in the kit will provide primary health care workers with information to enable them to take the right decision on treatment or referral, according to the symptoms.

The first referral level should be staffed by professional health care workers, usually medical assistants or doctors, who will use medicines and medical devices from both the basic and supplementary units.

It should be stressed here that the basic and supplementary units are not intended to enable these health care workers to treat rare diseases or major surgical cases. For such patients a second level of referral is needed, usually a district or general hospital. Such facilities are normally part of the national health system and referral procedures should be arranged with the local health authorities.

## **Immunization and nutrition in emergency situations**

**IEHK 2006 is not designed for immunization or nutritional programmes: kits covering immunization and nutritional requirements may be ordered after an assessment of needs (see Annex 7).**

Experience in emergencies involving displaced populations has shown that measles is one of the major causes of death among young children. The disease spreads rapidly in overcrowded conditions, and serious respiratory tract infections are frequent, particularly in malnourished children.

Measles vaccine administration should therefore be given a high priority, with all children between six months and five years old being immunized. Children immunized before nine months should be re-immunized as soon after nine months as possible. All children in the target age group should be immunized, irrespective of history.

Children with clinical measles should be treated promptly for complications, enrolled in a supplementary feeding programme and given appropriate doses of vitamin A.

## **Reproductive health**

**IEHK 2006 is not designed for reproductive health services: reproductive health kits for emergencies may be ordered after a basic assessment of needs (see Annex 7).**

A number of priority reproductive health interventions have been defined as essential for a displaced population during an emergency. The Minimum Initial Service Package for Reproductive Health (MISP) is a coordinated set of activities, including the provision of: emergency obstetric care to prevent excess neonatal and maternal morbidity and mortality; provisions to reduce HIV transmission; and activities to prevent and manage the consequences of sexual violence.

Professional midwifery care is an essential service for which the necessary instruments and medicines are included in the kit. A small quantity of magnesium sulfate for severe pre-eclampsia and for eclampsia is included in the supplementary unit for use as a "holding" measure prior to referral.

The use of emergency contraception is a personal choice that can only be made by the woman herself. Women should be offered counselling on this method so as to reach an informed decision. A health worker who is willing to prescribe ECPs should always be available to prescribe them to rape survivors who wish to use them.<sup>1</sup>

In the context of patient post-exposure prophylaxis (Patient PEP), a limited quantity of medicines for: (1) presumptive treatment of sexually transmitted infections, including *N. gonorrhoea* and *C. trachomatis*; for (2) prevention of transmission of human immunodeficiency virus (HIV); and (3) prevention of pregnancy (emergency contraception) for survivors/victims of sexual assault (rape), is included in the kit.

Supplies for routine and general treatment of sexually transmitted infections and contraception will have to be ordered separately according to need (see Annex 7).

Comprehensive reproductive health services need to be integrated into the primary health care system as soon as possible and a referral system for obstetric emergencies must be made accessible to the population. It is also recommended that a qualified and experienced person be appointed as reproductive health coordinator.

---

<sup>1</sup> Clinical management of rape survivors. Developing protocols for use with refugees and internally displaced persons. Revised edition. Geneva: World Health Organization; 2004.

To assist the implementation of a reproductive health programme, the Inter-Agency Working Group on Reproductive Health in Emergencies (IAWG) has designed a number of reproductive health kits for all levels of the health care system during an emergency (see Annex 7). The kits can be ordered through the United Nations Population Fund (UNFPA)

**IEHK 2006 will always be supplied with a Patient PEP module unless there is a specific request not to include these items at the time of ordering.**

## Malaria

In recent years, the pace of parasite resistance against the safest and least expensive antimalarials has been accelerating. A new approach to combat malaria is combination therapy. Artemether + lumefantrine is the first fixed-dose antimalarial combination containing an artemisinin derivative and is included in the kit for the treatment of malaria due to *Plasmodium falciparum*, including *Plasmodium falciparum* in areas with significant drug resistance. It is not recommended for prophylaxis and should not be used by women in the first trimester of their pregnancy, since safety in pregnancy has not yet been established. Rapid diagnostic tests (RDTs) are included in the malaria modules for the confirmation of suspected malaria cases.

**IEHK 2006 will always be supplied with malaria modules unless there is a specific request not to include these items at the time of ordering.**

## HIV, AIDS, tuberculosis and leprosy

**IEHK 2006 does not include any medicines against communicable diseases such as HIV, AIDS, tuberculosis or leprosy. Supplies for prevention and/or treatment of these communicable diseases will have to be ordered separately after an assessment of needs.**

## Procurement of IEHK 2006

Pharmaceutical suppliers who may supply the IEHK should ensure that (1) the content of the IEHK is updated according to the following kit and (2) manufacturers comply with the international guidelines for quality, packaging and labelling of medicines and medical devices. Pharmaceutical suppliers should follow the general instructions given in Annex 6. Some suppliers may have a permanent stock of IEHK ready for shipment within 24 hours.

## Post emergency needs

**IEHK 2006 is for use only in the early phase of an emergency. The kit is not designed and not recommended for re-supplying existing health care facilities.**

After the acute phase of an emergency is over and basic health needs have been covered by the basic and supplementary units, specific needs for further supplies and equipment should be assessed as soon as possible.



## Chapter 2. Selection of medicines and medical devices included in IEHK 2006

The contents of IEHK 2006 are based on epidemiological data, population profiles, disease patterns and certain assumptions based on experience gained in emergency situations.

These assumptions are:

- ◆ The most peripheral level of the health care system will be staffed by health care workers with limited medical training, who will treat symptoms rather than diagnosed diseases using the basic units, and refer patients who need more specialized treatment to the next level.
- ◆ Half of the population is under 15 years of age.
- ◆ The average number of patients presenting themselves with the more common symptoms or diseases can be predicted.
- ◆ Standard treatment guidelines will be used to treat these symptoms or diseases.
- ◆ The rate of referral from the most peripheral to the next level of health services is 10%.
- ◆ The first referral level of health care is staffed by experienced nurses, midwives, medical assistants or physicians, with no or limited facilities for inpatient care. They will use the supplementary unit in conjunction with one or more basic units.
- ◆ If both the most peripheral and first referral health care facilities are within reasonable reach of the target population, every individual will, on average, visit such facilities four times per year for advice or treatment. The supplies in the kit therefore serve a population of 10,000 people for a period of approximately 3 months.

### Selection of medicines for IEHK 2006

#### Injectable medicines

There are no injectable medicines in the basic unit as most common diseases in their uncomplicated form do not require injectable medicines. Any patient who needs an injection must be referred to the first referral level. Injectable medicines are provided in the supplementary unit and are intended for use by professional health care workers at first referral level.

#### Antibiotics

Infectious bacterial diseases are common at all levels of health care, including the most peripheral, and basic health care workers should therefore have the possibility to prescribe an antibiotic. However, many basic health care workers have not been trained to prescribe antibiotics in a rational way. Amoxicillin is the only antibiotic included in the basic unit, and

this will enable the health care worker to concentrate on making the right decision between prescribing an antibiotic or not, rather than on choosing between several antibiotics. Amoxicillin is active against bacterial pneumonia and otitis media. The risk of increasing bacterial resistance must be reduced by rational prescribing practice.

### **Medication for children**

Paediatric formulations included in the kit are paracetamol 100 mg tab, the fixed-dose antimalarial combination artemether + lumefantrine 20 mg + 120 mg tab for the weight group 5-14 kg, artemether injection 20 mg/ml, zinc sulfate 20 mg dispersible tab, ORS (oral rehydration salts) solution for children can be prepared with the sachets included in the kit.

Syrups for children are not included because of their instability, their short shelf-life after reconstitution and their volume and weight. Instead, for children, half or quarter adult tablets may be crushed and administered with a small volume of fluid or with food.

### **Medicines not included in IEHK 2006**

As indicated before, the kit includes neither the common vaccines nor any medicines against communicable diseases such as AIDS, tuberculosis<sup>2</sup> or leprosy.

No specific medicines are included for the treatment of sexually transmitted infections other than a small quantity as presumptive treatment of gonococcal infection, chlamydia and prevention of HIV infection in the context of post-exposure prophylaxis. Supplies for regular contraception and condoms are not included in the kit.

### **Selection of medical devices for IEHK 2006**

#### **Syringes, needles and safety boxes**

Unsafe injection leads to the risk of transmission of bloodborne pathogens including, hepatitis B, hepatitis C virus and HIV. Injection associated risks for patients and health workers should be limited by:

- ◆ limiting the number of injections;
- ◆ using disposable syringes and needles only;
- ◆ using safety boxes designed for the collection and incineration of used syringes, needles and lancets;
- ◆ strictly following the destruction procedures for disposable material.

Only disposable syringes and needles are provided in the supplementary unit. Estimates of needs are based on the number of injectable medicines included in the supplementary unit, which are to be used in line with the treatment guidelines provided.

---

<sup>2</sup> The general prerequisites for the establishment of a tuberculosis control programme for refugees and displaced persons are: 1) the emergency phase is over; 2) security in and stability of the camp or site is envisioned for at least six months; 3) basic needs of water, adequate food and sanitation are available; and 4) essential clinical services and medicines are available.



## **Gloves**

Disposable protective gloves are provided in the basic unit and the supplementary unit to protect health workers against possible infection during dressings or handling of infected materials. Sterile disposable surgical gloves are supplied in the supplementary unit to be used for deliveries, sutures and minor surgery, all under medical supervision.

## **Selection of equipment**

### **Sterilization**

A complete sterilization set is provided in the kit. The basic units contain two small drums each to be used as containers for sterile dressing materials. Two drums are included to allow sterilization of one while the other is being used. The supplementary unit contains one steam sterilizer, drums for steam sterilization, TST indicators, timer and kerosene stove.

### **Dilution and storage of liquids**

The kit contains several plastic bottles to dilute and store liquids (e.g. chlorhexidine, benzyl benzoate and gentian violet solution).

### **Water supply**

The kit contains several items to help provide clean water at the health facility. Each basic unit contains a collapsible water container and two plastic pails with bail. The supplementary unit contains a water filter with candles and tablets of sodium dichloroisocyanurate (NaDCC) to chlorinate the water.

## **Medical devices not included in IEHK 2006**

### **Resuscitation/major surgery**

The kit has been designed to meet the first primary health care needs of a displaced population without medical facilities, and for that reason no equipment for resuscitation or major surgery has been included. In situations of war, earthquakes or epidemics, specialized teams with medicines and medical devices will be required.

**IEHK 2006 does not contain equipment for resuscitation or major surgery.**

## Major medicine and medical device changes since the 1998 edition of the emergency health kit

### Basic unit

**albendazole tab** replaces mebendazole tab

**aluminium hydroxide + magnesium hydroxide tab** replaces aluminium hydroxide tab

**amoxicillin tab** replaces co-trimoxazole tab

**artemether + lumefantrine tab** replaces chloroquine tab

**ibuprofen tab** partially replaces acetylsalicylic acid tab

**paracetamol 500mg tab** partially replaces acetylsalicylic acid tab

**rapid diagnostic tests** for malaria are added

**thermometer clinical, digital** replaces clinical mercury thermometer

**zinc sulfate dispersible tab** is added

---

### Supplementary unit

**artemether inj** is added

**atenolol tab** is added

**ceftriaxone inj** replaces chloramphenicol inj

**clotrimazole pessary** replaces nystatin vaginal tablet

**cloxacillin tab** is added

**doxycycline tab and amoxicillin tab** replace chloramphenicol tab

**levonorgestrel tab** replaces ethinylestradiol + levonorgestrel tab

**miconazole tab** replaces nystatin tab

**miconazole cream** replaces benzoic acid + salicylic acid ointment

**azithromycin tab** is added as part of Patient PEP

**cefixime tab** for gonococcal infection is added as part of Patient PEP

**zidovudine + lamivudine tab** is added as part of Patient PEP

**disposable syringes and needles** replace all sterilizable syringes and needles

## Chapter 3. Content of IEHK 2006

### IEHK 2006 consists of 10 basic units and one supplementary unit.

#### 10 basic units - for health care workers with limited training

Each basic unit contains medicines, medical devices renewable and equipment, for a population of 1,000 people for 3 months.

To facilitate identification in an emergency, one green sticker should be placed on each parcel. The word "BASIC" should be printed on stickers for basic units.

One basic unit contains:

- ◆ medicines
- ◆ medical devices, renewable
- ◆ medical devices, equipment
- ◆ module: malaria items (uncomplicated malaria)<sup>3</sup>

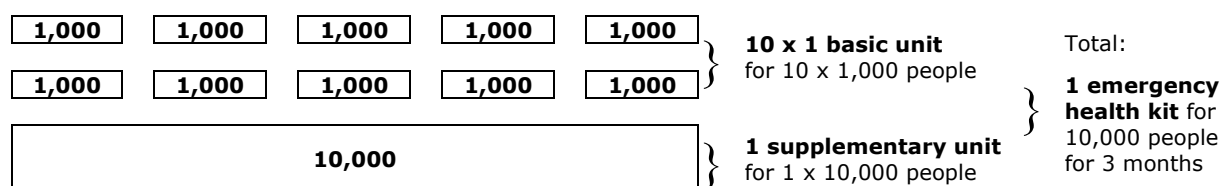
#### One supplementary unit - for physicians and senior health care workers

A supplementary unit contains medicines, medical devices renewable and equipment for a population of 10,000 people for 3 months and is packed in cartons of a maximum weight of 50 kg.

To be operational, the supplementary unit should be used together with at least one or more basic units.

One supplementary unit contains:

- ◆ medicines
- ◆ essential infusions
- ◆ medical devices, renewable
- ◆ medical devices, equipment
- ◆ module: patient PEP<sup>3</sup>
- ◆ module: malaria items<sup>3</sup>



One IEHK 2006 weighs approximately 1000 kg and occupies 4 m<sup>3</sup> space.

<sup>3</sup> These items are automatically provided unless a specific request is made not to include them in the kit.

## Basic unit (for 1,000 persons for 3 months)

Items	Unit	Quantity
<b>Medicines</b>		
albendazole, chewable tab 400mg	tab	200
aluminium hydroxide + magnesium hydroxide, tab 400 mg + 400 mg <sup>4</sup>	tab	1,000
amoxicillin, tab 250 mg	tab	3,000
benzyl benzoate, lotion 25% <sup>5</sup>	bottle, 1 litre	1
chlorhexidine gluconate, solution 5% <sup>6</sup>	bottle, 1 litre	1
ferrous sulfate + folic acid, tab 200 mg + 0.4 mg	tab	2,000
gentian violet, powder	25 g	4
ibuprofen, scored tab 400 mg	tab	2,000
ORS (oral rehydration salts) <sup>7</sup>	sachet for 1 litre	200
paracetamol, tab 100 mg	tab	1,000
paracetamol, tab 500 mg	tab	2,000
tetracycline, eye ointment 1%	tube, 5 g	50
zinc sulfate, dispersible tab 20 mg <sup>8</sup>	tab	1,000
<b>Malaria module (can be withheld from the order upon request)</b>		
artemether + lumefantrine, tab 20 mg + 120 mg	tab	
	Weight group	Treatments by weight
	5-14 kg	6 x 1 tab
	15-24 kg	6 x 2 tab
	25-35 kg	6 x 3 tab
	> 35 kg	6 x 4 tab
quinine sulfate, tab 300 mg	tab	2,000
rapid diagnostic tests	unit	800
lancet for blood sampling (sterile)	unit	1,000
safety box for used lancets, 5 litres	unit	2

<sup>4</sup> WHO recommends aluminium hydroxide and magnesium hydroxide as single antacids. The Interagency Group agreed to include in the kit the combination of aluminium hydroxide + magnesium hydroxide tab.

<sup>5</sup> WHO recommends benzyl benzoate, lotion 25%. The use of 90% concentration is not recommended.

<sup>6</sup> WHO recommends chlorhexidine gluconate 5% solution. The use of 20% solution needs distilled water for dilution, otherwise precipitation may occur. Alternative: the combination of cetrime 15% and chlorhexidine gluconate 1.5%.

<sup>7</sup> The updated information about the ORS formulation is provided in the 2005 WHO Model List of Essential Medicines.

<sup>8</sup> In addition to ORS for the treatment of acute diarrhoea in children.

Items	Unit	Quantity
<b>Medical devices, renewable</b>		
bandage, elastic, 7.5 cm x 5 m, roll	unit	20
bandage, gauze, 8 cm x 4 m, roll	unit	200
compress, gauze, 10 cm x 10 cm, non-sterile	unit	500
cotton wool, 500 g, roll, non-sterile	unit	2
gloves, examination, latex, medium, disposable	unit	100
soap, toilet, bar, approximately 110 g, wrapped	unit	10
tape, adhesive, zinc oxide, 2.5 cm x 5 m	unit	30
<b>Stationery</b>		
book, exercise, A4 size, 100 pages, hard cover <sup>9</sup>	unit	4
envelope, plastic, 10 cm x 15 cm	unit	2,000
health card <sup>10</sup>	unit	500
pad, note, plain, A6 size, 100 sheets	unit	10
pen, ball-point, blue	unit	12
plastic bag, for health card, 11 cm x 25 cm, snap-lock fastening	unit	500
<b>Treatment guidelines for basic unit users<sup>11</sup></b>		
- IEHK2006, English version	unit	2
- IEHK2006, French version	unit	2
- IEHK2006, Spanish version	unit	2
<b>Medical devices, equipment</b>		
basin, kidney, stainless steel, 825 ml	unit	1
bottle, plastic, 1L, with screw cap	unit	3
bottle, plastic, 250 ml, wash bottle	unit	1
bowl, stainless steel, 180 ml	unit	1
brush, hand, scrubbing, plastic	unit	2
drum, sterilizing, approximately 150 mm x 150 mm	unit	2
forceps, artery, Kocher, 140 mm, straight	unit	2
pail, with bail, handle, polyethylene, 10L or 15L	unit	2
scissors, Deaver, 140 mm, straight, sharp/blunt	unit	2
surgical instruments, dressing set <sup>12</sup>	unit	2
thermometer, clinical, digital, 32-43 Celsius	unit	5
tray, dressing, stainless steel, 300 mm x 200 mm x 30 mm	unit	1
water container, PVC/PE, collapsible, 10L or 15L	unit	1

<sup>9</sup> It is recommended that one exercise book be used for recording daily medicine dispensing and another for daily basic morbidity data, see Annex 4.

<sup>10</sup> For a sample health card, see Annex 5.

<sup>11</sup> For standard treatment guidelines, see Annexes 1, 2 and 3.

<sup>12</sup> Surgical instruments, dressing set (3 instruments + box):

- 1 forceps, artery, Kocher, 140 mm, straight
- 1 forceps, dressing, standard, 155 mm, straight
- 1 scissors, Deaver, 140 mm, straight, sharp/blunt
- 1 tray, instruments, stainless steel, 225 mm x 125 mm x 50 mm, with cover.

## Supplementary unit (for 10,000 people for 3 months)

Items	Unit	Quantity
<b>Medicines</b>		
<b>Anaesthetics</b>		
ketamine, inj 50 mg/ml	10 ml/vial	25
lidocaine, inj 1% <sup>13</sup>	20 ml/vial	50
<b>Analgesics<sup>14</sup></b>		
morphine, inj 10 mg/ml <sup>15</sup>	1ml/ampoule	50
<b>Recall from basic unit</b>		
<i>ibuprofen, tab 400 mg</i>	<i>(10 x 2,000)</i>	<i>20,000</i>
<i>paracetamol, tab 100</i>	<i>(10 x 1000)</i>	<i>10,000</i>
<i>paracetamol, tab 500 mg</i>	<i>(10 x 2,000)</i>	<i>20,000</i>
<b>Antiallergics</b>		
hydrocortisone, powder for inj 100 mg	vial	50
prednisolone, tab 5 mg	tab	100
epinephrine (adrenaline) see "respiratory tract"		
<b>Antidotes</b>		
calcium gluconate, inj 100mg/ml <sup>16</sup>	10 ml/ampoule	4
naloxone, inj 0.4 mg/ml <sup>17</sup>	1 ml/ampoule	20
<b>Anticonvulsants/antiepileptics</b>		
diazepam, inj 5 mg/ml	2 ml/ampoule	200
magnesium sulfate, inj 500 mg/ml	10 ml/ampoule	40
phenobarbital, tab 100 mg	tab	500
<b>Anti-infective medicines</b>		
benzathine benzylpenicillin, inj 2.4 million IU/vial (long-acting penicillin)	vial	50
benzylpenicillin, inj 5 million IU/vial <sup>18</sup>	vial	250
ceftriaxone, inj 1 g	vial	800
cloxacillin, caps 500 mg <sup>19</sup>	caps	1,000
clotrimazole, pessary 500 mg	pessary	100
doxycycline, tab 100 mg	tab	3,000
metronidazole, tab 500 mg	tab	2,000

<sup>13</sup> 20 ml vials are preferred, although 50 ml vials may be used as an alternative.

<sup>14</sup> Alternative injectable analgesics, such as pentazocine and tramadol, are not recommended by WHO. It is however recognized that these may be practical alternatives to morphine in situations where opioids cannot be sent.

<sup>15</sup> See Annex 9 for more details.

<sup>16</sup> For use as an antidote to magnesium sulfate overdose in case of severe respiratory depression or arrest.

<sup>17</sup> Naloxone is an opioid antagonist given intravenously for the treatment of morphine overdose and to reverse the effects of therapeutic doses of morphine.

<sup>18</sup> Benzylpenicillin inj 5 million UI/vial is provided for diseases requiring high dosage treatment. The vials are not intended for multiple use because of concerns over contamination.

<sup>19</sup> Alternative: cloxacillin tablet 250 mg and doubling the quantity is acceptable.

Items	Unit	Quantity
miconazole, muco-adhesive tab 10mg <sup>20</sup>	tab	350
procaine benzylpenicillin, inj 3-4 million IU/vial <sup>21</sup>	vial	200
<b>Recall from basic unit:</b>		
albendazole, tab 400 mg	(10 x 200)	2,000
amoxicillin, tab 250 mg	(10 x 3,000)	30,000
<b>Malaria module (can be withheld from the order upon request)</b>		
artemether, inj 20 mg/ml <sup>22</sup>	1ml/ampoule	200
artemether, inj 80 mg/ml <sup>22</sup>	1ml/ampoule	72
quinine dihydrochloride, inj 300 mg/ml <sup>23</sup>	2 ml/ampoule	100
<b>Recall from basic unit: malaria module</b>		
artemether + lumefantrine, tab 20 mg+120 mg	(10 x 6,120 tab)	61,200
quinine sulfate, tab 300 mg	(10 x 2,000)	20,000
rapid diagnostic tests	(10 x 800)	8,000
lancet for blood sampling (sterile)	(10 x 1000)	10,000
safety box for used lancets, 5 litres	(10 x 2)	20
<b>Medicines affecting the blood</b>		
folic acid, tab 5 mg	tab	1,000
<b>Recall from basic unit:</b>		
ferrous sulfate + folic acid, tab 200 mg + 0.4 mg	(10 x 2,000)	20,000
<b>Cardiovascular medicines</b>		
atenolol, tab 50 mg	tab	1,000
hydralazine, powder for inj 20 mg <sup>24</sup>	ampoule	20
methyldopa, tab 250 mg <sup>25</sup>	tab	1,000
<b>Dermatological medicines</b>		
polyvidone iodine, solution 10%	bottle, 200 ml	10
silver sulfadiazine, cream 1%	tube, 50 g	30
miconazole, cream 2%	tube, 30 g	25
<b>Recall from basic unit:</b>		
benzyl benzoate, lotion 25%	(10 x 1L)	10
gentian violet, powder 25 g	(10 x 4)	40
tetracycline, eye ointment 1%	(10 x 50)	500

<sup>20</sup> WHO recommends nystatin, tablet, lozenge and pessary as an antifungal agent. The interagency group agreed to include in the kit miconazole muco-adhesive tablets as they are more agreeable for patients than oral nystatin.

<sup>21</sup> The combination of procaine benzylpenicillin 3 million IU and benzylpenicillin 1 million IU (procaine penicillin fortified) is used in many countries and may be included as an alternative.

<sup>22</sup> Alternative: artesunate, 60 mg for inj., 300, and 5 ml of glucose 5% or NaCl 0.9% inj, 300, is acceptable. Before using, inject the added 1 ml sodium bicarbonate 5% injection solution into the artesunate vial, dissolve and then add 5 ml of glucose 5% or NaCl 0.9% inj. Tuberculin syringe, disposable, 1 ml, sterile, 200, needs to be included too for administration purposes.

<sup>23</sup> Intravenous injection of quinine must always be diluted in glucose 5%, bag 500 ml.

<sup>24</sup> For the acute management of severe pregnancy-induced hypertension only.

<sup>25</sup> For the management of pregnancy-induced hypertension only.

Items	Unit	Quantity
<b>Disinfectants and antiseptics</b>		
sodium dichloroisocyanurate (NaDCC), tab 1.67 g <sup>26</sup>	tab	1,200
<b>Recall from basic unit:</b>		
chlorhexidine, solution 5%	(10 x 1L)	10
<b>Diuretics</b>		
furosemide, inj 10 mg/ml	2 ml/ampoule	20
hydrochlorothiazide, tab 25 mg	tab	200
<b>Gastrointestinal medicines</b>		
promethazine, tab 25 mg	tab	500
promethazine, inj 25 mg/ml	2 ml/ampoule	50
atropine, inj 1 mg/ml	1 ml/ampoule	50
<b>Recall from basic unit:</b>		
aluminium hydroxide + magnesium hydroxide, tab 400 mg + 400 mg	(10 x 1,000)	10,000
<b>Oxytocics</b>		
oxytocin, inj 10 IU/ml <sup>27</sup>	1 ml/ampoule	200
<b>Psychotherapeutic medicines</b>		
chlorpromazine, inj 25 mg/ml	2 ml/ampoule	20
<b>Respiratory tract, medicines acting on</b>		
salbutamol, tab 4 mg	tab	1,000
epinephrine (adrenaline), inj 1 mg/ml	1 ml/ampoule	50
<b>Solutions correcting water, electrolyte and acid-base disturbances<sup>28</sup></b>		
compound solution of sodium lactate (Ringer's lactate), inj solution, with IV giving set and needle	500 ml bag	200
glucose 5%, inj solution, with IV giving set and needle <sup>29</sup>	500 ml bag	100
glucose 50%, inj solution (hypertonic)	50 ml/vial	20
water for injection	10 ml/plastic vial	2,000
<b>Recall from basic unit:</b>		
oral rehydration salts, sachets	(10 x 200)	2,000
<b>Vitamins</b>		
retinol (vitamin A), caps 200,000 IU	caps	4,000
ascorbic acid, tab 250 mg	tab	4,000

<sup>26</sup> Each effervescent tablet containing 1.67g of NaDCC releases 1g of available chlorine when dissolved in water.

<sup>27</sup> For prevention and treatment of postpartum haemorrhage.

<sup>28</sup> Because of the weight, the quantity of infusions included in the kit is minimal.

<sup>29</sup> Glucose 5%, bag 500 ml, for administration of quinine by infusion.



Items	Unit	Quantity
<b>Patient PEP module, 50 treatments (can be withheld from the order upon request)</b>		
azithromycin, tab 250 mg <sup>30</sup>	tab	200
cefixime, tab 200 mg <sup>31</sup>	tab	100
pregnancy test	unit	50
levonorgestrel, tab 1.50 mg <sup>32</sup>	tab	50
zidovudine (AZT) + lamivudine (3TC), tab 300 mg +150 mg <sup>33</sup>	tab	3,000
<b>Guidelines</b>		
<i>WHO Model Formulary (latest edition), English version</i>	unit	2
<i>MSF Essential Drugs, practical guide (latest edition)</i>		
- English version	unit	2
- French version	unit	2
- Spanish version	unit	2
<i>MSF Clinical Guidelines, diagnostic and treatment manual (latest edition)</i>		
- English version	unit	2
- French version	unit	2
- Spanish version	unit	2
<b>Medical devices, renewable</b>		
cannula, IV short, 18G (1.3 x 45 mm), sterile, disposable	unit	100
cannula, IV short, 22G (0.8 x 25 mm), sterile, disposable	unit	50
cannula, IV short, 24G (0.7 x 19 mm), sterile, disposable	unit	50
needle, disposable, 19G (1.1 x 40 mm), sterile <sup>34</sup>	unit	2,000
needle, disposable, 21G (0.8 x 40 mm), sterile	unit	1,500
needle, disposable, 23G (0.6 x 25 mm), sterile	unit	1,500
needle, disposable, 25G (0.5 x 16 mm), sterile	unit	100
needle, scalp vein, 21G (0.8 x 19 mm), sterile, disposable	unit	100
needle, scalp vein, 25G (0.5 x 19 mm), sterile, disposable	unit	300
needle, spinal, 20G (0.9 x 90 mm), sterile, disposable	unit	25
needle, spinal, 22G (0.7 x 40 mm), sterile, disposable	unit	25
syringe, disposable, 20 ml, sterile <sup>35</sup>	unit	100
syringe, disposable, 10 ml, sterile	unit	600
syringe, disposable, 5 ml, sterile	unit	2,000
syringe, disposable, 2 ml, sterile	unit	700
syringe, disposable, 1 ml, sterile <sup>36</sup>	unit	200

<sup>30</sup> For presumptive treatment of sexually transmitted infections (Chlamydia infection) by sexual assault (rape). Alternative: azithromycin tab 500 mg and halving the quantity is acceptable.

<sup>31</sup> For presumptive treatment of sexually transmitted infections (Gonococcal infection) by sexual assault (rape). It may be used in pregnancy.

<sup>32</sup> For women who seek help within 72 hours of rape and wish to use emergency contraception to prevent pregnancy, they should take one tablet of levonorgestrel 1.50 mg. Alternative: levonorgestrel 0.75 mg tablets and doubling the quantity is acceptable.

<sup>33</sup> For presumptive treatment to reduce the chances of HIV infection by sexual assault (rape) and by needle stick.

<sup>34</sup> Included mainly for reconstitution purposes.

<sup>35</sup> Included for the administration of magnesium sulfate only.

<sup>36</sup> Included for the administration of artemether in children only.

Items	Unit	Quantity
safety box for used syringes/needles, 5 litres <sup>37</sup>	unit	50
syringe, feeding, 50 ml, conical tip, sterile <sup>38</sup>	unit	10
syringe, feeding, 50 ml, Luer tip, sterile <sup>38</sup>	unit	10
tube, aspirating/feeding, CH16, L125 cm, conical tip, sterile, disposable	unit	10
tube, feeding, CH08, L40 cm, Luer tip, sterile, disposable	unit	50
tube, feeding, CH05, L40 cm, Luer tip, sterile, disposable	unit	20
catheter, Foley, CH12, sterile, disposable	unit	10
catheter, Foley, CH14, sterile, disposable	unit	5
catheter, Foley, CH18, sterile, disposable	unit	5
bag, urine, collecting, 2000 ml	unit	10
gloves, examination, latex, large, disposable	unit	100
gloves, examination, latex, medium, disposable	unit	100
gloves, examination, latex, small, disposable	unit	100
gloves, surgical, 6.5, sterile, disposable, pair	unit	50
gloves, surgical, 7.5, sterile, disposable, pair	unit	150
gloves, surgical, 8.5, sterile, disposable, pair	unit	50
compress, gauze, 10 cm x 10 cm, sterile	unit	1,000
gauze, roll, 90 cm x 100 m, non-sterile <sup>39</sup>	unit	3
razor blade, double-edged, disposable (for use with razor, see p.21)	unit	100
scalpel blade, No. 22, sterile, disposable	unit	100
suture, absorbable, synthetic, braided DEC2 (3/0), curved needle 3/8 circle, 26 mm, triangular point	unit	144
tape umbilical, 3 mm x 50 m, non-sterile	unit	2
tongue depressor, wooden, disposable	unit	500
indicator, TST (Time, Steam, Temperature) control spot	unit	300
indicator, TST (Time, Steam, Temperature) control strip	unit	100
masking tape, 2 cm x 50 m <sup>40</sup>	roll	1
<b>Recall from basic unit:</b>		
<b>Medical devices, renewable</b>		
<i>bandage, elastic, 7.5 cm x 5 m, roll</i>	<i>(10 x 20)</i>	<i>200</i>
<i>bandage, gauze, 8 cm x 4 m, roll</i>	<i>(10 x 200)</i>	<i>2,000</i>
<i>compress, gauze, 10 cm x 10 cm, non-sterile</i>	<i>(10 x 500)</i>	<i>5,000</i>
<i>cotton wool, 500 g, roll, non-sterile</i>	<i>(10 x 2)</i>	<i>20</i>
<i>gloves, examination, latex, medium, disposable</i>	<i>(10 x 100)</i>	<i>1000</i>
<i>soap, toilet, bar, approximately 110 g, wrapped</i>	<i>(10 x 10)</i>	<i>100</i>
<i>tape, adhesive, zinc oxide, 2.5 cm x 5 m</i>	<i>(10 x 30)</i>	<i>300</i>
<b>Stationery</b>		
<i>book, exercise, A4 size, 100 pages, hard cover</i>	<i>(10 x 4)</i>	<i>40</i>
<i>envelope, plastic, 10 cm x 15 cm</i>	<i>(10 x 2,000)</i>	<i>20,000</i>
<i>health card</i>	<i>(10 x 500)</i>	<i>5,000</i>
<i>pad, note, plain, A6 size, 100 sheet</i>	<i>(10 x 10)</i>	<i>100</i>
<i>pen, ball-point, blue</i>	<i>(10 x 12)</i>	<i>120</i>
<i>plastic bag, for health card, 11 cm x 25 cm, snap-lock fastening</i>	<i>(10 x 500)</i>	<i>5,000</i>

<sup>37</sup> WHO/UNICEF standard E10/IC2: boxes should be prominently marked.

<sup>38</sup> Alternative: the two types of feeding syringes 50 ml may be replaced by, syringe, feeding, 60 ml, with Luer and conical connector, unit, 20.

<sup>39</sup> Alternative: gauze, roll, 60 cm x 100 m, non-sterile.

<sup>40</sup> To secure small paper parcels of instruments for sterilization allowing contents and date to be written.

Items	Unit	Quantity
<b>Medical devices, equipment</b>		
apron, protection, plastic, reusable <sup>41</sup>	unit	2
drawsheet, plastic, 90 cm x 180 cm	unit	2
brush, hand, scrubbing, plastic	unit	2
towel, Huck, 430 mm x 500 mm	unit	2
stethoscope, binaural, complete	unit	4
sphygmomanometer, (adult), aneroid	unit	4
stethoscope, fetal, Pinard	unit	1
otoscope set, cased <sup>42</sup>	unit	2
spare battery R6 alkaline AA size, 1.5 V (for otoscope)	unit	12
scale, electronic, mother-and-child, 150 kg x 100 g	unit	1
scale, (only) infant spring, 25 kg x 100 g	unit	3
weighing trousers for scale infant spring, set of 5	unit	3
razor, safety, metal, 3 piece <sup>43</sup>	unit	2
tape measure, vinyl-coated, 1.5 m	unit	5
tape measure, arm circumference, MUAC (mid-upper arm circumference)	unit	50
tourniquet, latex rubber, 75 cm <sup>44</sup>	unit	2
thermometer, clinical, digital, 32-43 Celsius	unit	10
sterilizer, steam, approximately 21 L or 24 L	unit	1
stove, kerosene, single-burner, pressure	unit	1
timer, 60 minutes	unit	1
basin, kidney, stainless steel, 825 ml	unit	2
bowl, stainless steel, 180 ml	unit	2
drum, sterilizing, approximately 150 mm x 150 mm	unit	2
forceps, artery, Kocher, 140 mm, straight	unit	2
scissors, Deaver, 140 mm, straight, sharp/blunt	unit	2
tray, dressing, stainless steel, 300 mm x 200 mm x 30 mm	unit	1
surgical instruments, suture set <sup>45</sup>	unit	2
surgical instruments, dressing set <sup>46</sup>	unit	5

<sup>41</sup> Alternative: apron, protection, plastic disposable, unit, 100, may be supplied.

<sup>42</sup> Spare bulb must be included within the otoscope set.

<sup>43</sup> Alternative: razor, safety, disposable, unit, 100, may be supplied.

<sup>44</sup> Alternative: tourniquet with Velcro, unit, 2, may be supplied.

<sup>45</sup> One suture set should be reserved for repair of postpartum vaginal tears.

Abscess/suture set (7 instruments + box)

- 1 forceps, artery, Halsted-mosquito, 125 mm curved
- 1 forceps, artery, Kocher, 140 mm, straight
- 1 forceps, tissue, standard, 145 mm, straight
- 1 needle holder, Mayo-Hegar, 180 mm, straight
- 1 probe, double-ended, 145 mm
- 1 scalpel handle, No. 4
- 1 scissors, Deaver, 140 mm, curved, sharp/blunt
- 1 tray, instruments, stainless steel, 225 mm x 125 mm x 50 mm, with cover.

<sup>46</sup> Dressing set (3 instruments + box)

- 1 forceps, artery, Kocher, 140 mm, straight
- 1 forceps, dressing, standard, 155 mm, straight
- 1 scissors, Deaver, 140 mm, straight, sharp/blunt
- 1 tray, instruments, stainless steel, 225 mm x 125 mm x 50 mm, with cover.

Items	Unit	Quantity
<b>Medical devices, equipment</b>		
surgical instruments, delivery set <sup>47</sup>	unit	1
filter, drinking, candle, 10-80 L per day	unit	3

Items	Unit	Quantity
<b>Recall from basic unit:</b>		
<b>Medical devices, equipment</b>		
<i>basin, kidney, stainless steel, 825 ml</i>	<i>(10 x 1)</i>	<i>10</i>
<i>bowl, stainless steel, 180 ml</i>	<i>(10 x 1)</i>	<i>10</i>
<i>drum, sterilizing, approximately 150 mm x 150 mm</i>	<i>(10 x 2)</i>	<i>20</i>
<i>forceps, artery, Kocher, 140 mm, straight</i>	<i>(10 x 2)</i>	<i>20</i>
<i>scissors, Deaver, 140 mm, straight, sharp/blunt</i>	<i>(10 x 2)</i>	<i>20</i>
<i>thermometer, clinical, digital 32-43 Celsius</i>	<i>(10 x 5)</i>	<i>50</i>
<i>tray, dressing, stainless steel, 300 mm x 200 mm x 30 mm</i>	<i>(10 x 1)</i>	<i>10</i>
<i>surgical instruments, dressing set</i>	<i>(10 x 2)</i>	<i>20</i>

<sup>47</sup> Delivery set (3 instruments + box)

- 1 scissors, Mayo, 140 mm, curved, blunt/blunt
- 1 scissors, gynaecological, 200 mm, curved, blunt/blunt
- 1 forceps, artery, Kocher, 140 mm, straight
- 1 tray, instruments, stainless steel, 225 mm x 125 mm x 50 mm, with cover.

## Annex 1: Basic unit: treatment guidelines

These treatment guidelines are intended to give simple guidance for primary health care workers using basic units. In these guidelines, five age groups have been distinguished, except for the treatment of diarrhoea with oral rehydration fluid where six age and weight categories are used.

When dosage is shown as "1 tab x 2", one tablet should be taken in the morning and one before bedtime. When dosage is shown as "2 tab x 3", two tablets should be taken in the morning, two tablets should be taken in the middle of the day and two tablets before bedtime.

The treatment guidelines contain the following diagnostic/symptom groups:

- ◆ anaemia
- ◆ pain
- ◆ diarrhoea (see detailed diagnosis and treatment schedules in Annex 2a, b and c)
- ◆ fever
- ◆ respiratory tract infections (see detailed diagnosis and treatment schedules in Annex 3)
- ◆ measles
- ◆ "red eye" condition
- ◆ skin conditions
- ◆ sexually transmitted and urinary tract infections
- ◆ preventive care in pregnancy
- ◆ worms.

### Anaemia

Diagnosis/ Symptom	Weight	0 - <4 kg	4 - <8 kg	8 - <15 kg	15 - <35 kg	≥35 kg
	Age	0 - <2 mths	2 mths - <1 yr	1 - <5 yrs	5 - <15 yrs	≥15 yrs
Severe anaemia (oedema, dizziness, shortness of breath)		<b>REFER</b>				
Moderate anaemia (pallor and tiredness)		<b>REFER</b>	ferrous sulfate + folic acid 1 tab daily, for at least 2 months	ferrous sulfate + folic acid 2 tab daily, for at least 2 months	ferrous sulfate + folic acid 3 tab daily, for at least 2 months	ferrous sulfate + folic acid 3 tab daily, for at least 2 months

## Pain

Diagnosis/ Symptom	Weight	0 - <4 kg	4 - <8 kg	8 - <15 kg	15 - <35 kg	≥35 kg
	Age*	0 - <2 mths	2 mths - <1 yr	1 - <5 yrs	5 - <15 yrs	≥15 yrs
Pain (headache, joint pain, toothache)			paracetamol tab 100 mg ½ - 1 tab x 4	paracetamol tab 100 mg 1 - 2 tab x 4 or ibuprofen tab 400 mg ½ tab x 4	paracetamol tab 500 mg 1 tab x 4 or ibuprofen tab 400 mg 1 tab x 4	paracetamol tab 500 mg 2 tab x 4 or ibuprofen tab 400 mg 2 tab x 4
Stomach pain				<b>REFER</b>	Al + Mg hydroxide tab ½ tab x 3 for 3 days	Al + Mg hydroxide tab 1 tab x 3 for 3 days

## Diarrhoea

Diagnosis/ Symptom	Weight	0 - < 5 kg	5 - 7.9 kg	8 - 10.9 kg	11 - 15.9 kg	16 - 29.9 kg	>30 kg
	Age*	<4 mths	4 - 11 mths	12 - 23 mths	2 - 4 yrs	5 - 14 yrs	≥15 yrs
Quantity of ORS		200-400 ml	400-600 ml	600-800 ml	800 ml-1.2 L	1.2 - 2.2 L	2.2 - 4 L
Diarrhoea with no dehydration Treatment Plan A (see Annex 2)		Give more fluids than usual to prevent dehydration and zinc sulfate 20 mg dispersible tab and continue to feed. Advise that the patient returns to the health worker in case of frequent stools, increased thirst, sunken eyes, fever or when the patient does not eat or drink normally, or does not get better within three days, or develops blood in the stool or repeated vomiting.					
Diarrhoea with some dehydration Treatment Plan B (see Annex 2)		Approximate amount of ORS solution to give in the first 4 hours. In addition, give zinc sulfate 20 mg dispersible tab as soon as the child is able to eat.					
Diarrhoea with severe dehydration Treatment Plan C (see Annex 2)		<b>REFER</b> patient for nasogastric tube and/or IV treatment.					
Diarrhoea lasting more than two weeks or in malnourished or poor condition patient		Give ORS according to dehydration stage and zinc sulfate 20 mg dispersible tab and <b>REFER</b> .					
Bloody diarrhoea (check the presence of blood in stools)		Give ORS according to dehydration stage and zinc sulfate 20 mg dispersible tab and <b>REFER</b> .					

\* Use the patient's age only when you do not know the weight. The approximate amount of ORS required (in ml) can also be calculated by multiplying the patient's weight in kg by 75.

**All children should be given supplemental zinc (20 mg) daily for 10 - 14 days.**

## Confirmed malaria diagnosis

<b>In low malaria transmission areas</b>	Parasite-based diagnosis <sup>48</sup> for all patients of all age groups before treatment is started.
<b>In high malaria transmission areas</b>	<p>Parasite-based diagnosis<sup>47</sup> for all adult patients, including pregnant women, and children &gt; 5 years before treatment is started.</p> <p>For children &lt; 5 years, fever or history of fever or evidence of high temperature (feeling hot or temp. &gt; 37.5C), to be treated on the basis of having had a clinical diagnosis of malaria before treatment is started.</p>

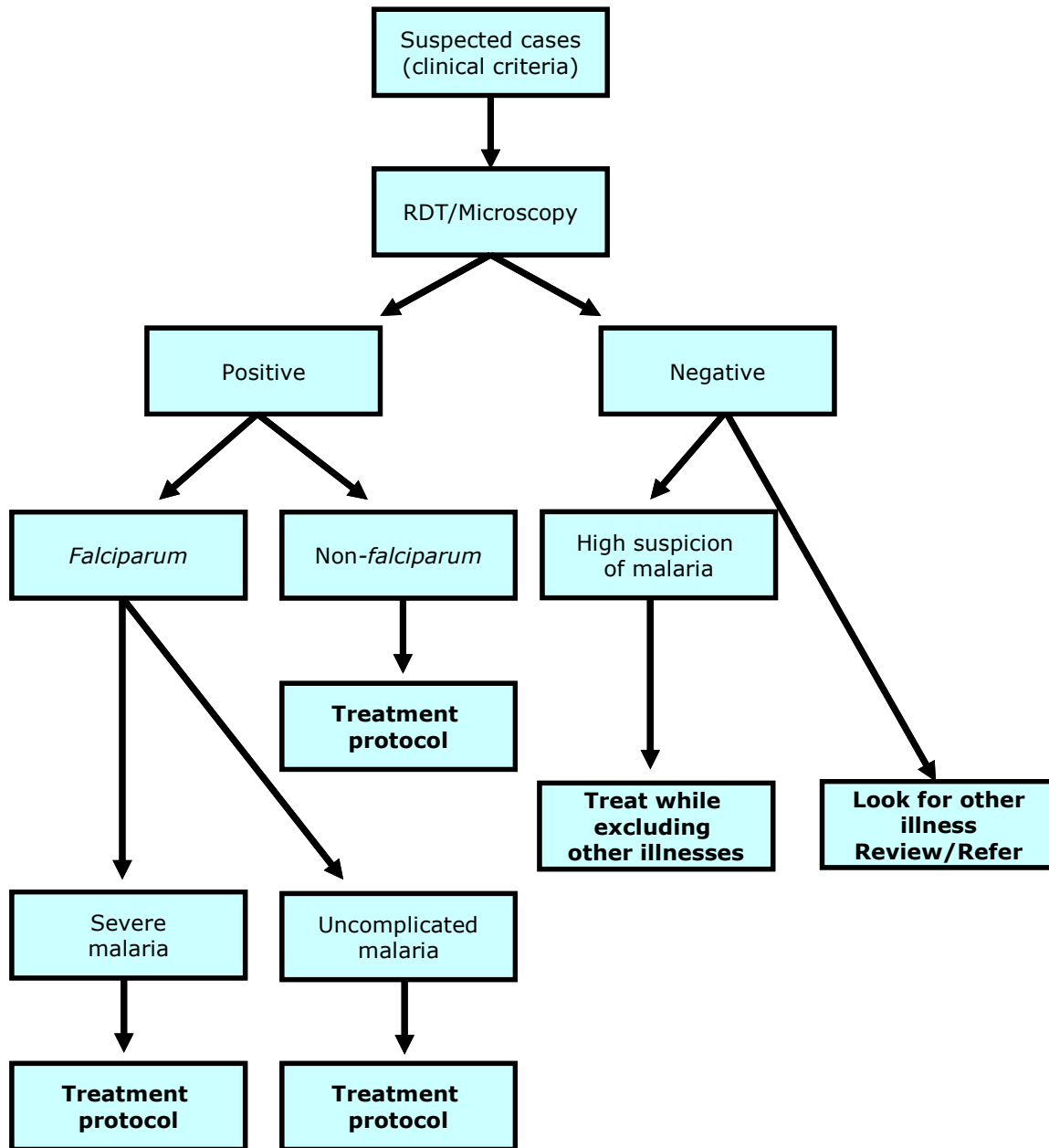
## Performing the test

### Things to remember when using a rapid diagnostic test (RDT):

- prior instruction in the use and interpretation of the particular product is vital;
- a management plan for results must be in place;
- blood-safety precautions should be followed;
- product instructions should be strictly followed;
- RDT should be discarded if the envelope is punctured or badly damaged;
- test envelope should be opened only when it has reached ambient temperature, and the RDT used immediately after opening;
- result should be read within the time specified by the manufacturer;
- RDT cannot be re-used if preparation is delayed after opening the envelope, humidity can damage the RDT.

<sup>48</sup> By microscopy or RDTs.

Figure 2: Sample decision chart for treatment of malaria based on the results of a malaria rapid diagnostic test



Derived from model in National Treatment Guidelines for Malaria (2002), Ministry of Health, Kingdom of Cambodia.



## Fever

Diagnosis/ Symptom	Weight	0 - <10 kg	10 - <15 kg	15 - <25 kg	25 - <35 kg	≥35 kg
	Age	0 - <1 yr	1 - <5 yrs	5 - <10 yrs	10 - <15 yrs	≥15 yrs
Fever in malnourished or poor condition patient or when in doubt				<b>REFER</b>		
Fever with chills in <b>confirmed</b> uncomplicated malaria	<b>REFER</b>		artemether/ lumefantrine tab 20mg A+120mg L 1 tab at once, followed by 5 doses of 1 tab after 8h, 24h, 36h, 48h and 60 hours	artemether/ lumefantrine tab 20mg A+120mg L 2 tab at once, followed by 5 doses of 2 tab after 8h, 24h, 36h, 48h and 60 hours	artemether/ lumefantrine tab 20mg A+120mg L 3 tab at once, followed by 5 doses of 3 tab after 8h, 24h, 36h, 48h and 60 hours	artemether/ lumefantrine tab 20mg A+120mg L 4 tab at once, followed by 5 doses of 4 tab after 8h, 24h, 36h, 48h and 60 hours
<u>Pregnant women:</u> Fever with chills in <b>confirmed</b> uncomplicated malaria						quinine sulfate tab 300 mg 2 tab x 3, for 3 days
Fever with cough	<b>REFER</b>	See respiratory tract infections below.				
Fever (unspecified)	<b>REFER</b>		paracetamol tab 100 mg 1-2 tab x 4, for 1 to 3 days	paracetamol tab 100 mg 2-3 tab x 4, for 1 to 3 days or ibuprofen tab 400 mg ½ tab x 4, for 1 to 3 days	paracetamol tab 500 mg 1 tab x 4, for 1 to 3 days or ibuprofen tab 400 mg 1 tab x 4, for 1 to 3 days	paracetamol tab 500 mg 2 tab x 4, for 3 days or ibuprofen tab 400 mg 2 tab x 4, for 1 to 3 days

## Respiratory tract infections

Diagnosis/ Symptom	Weight	0 - <4 kg	4 - <8 kg	8 - <15 kg	15 - <35 kg	≥35 kg
	Age	0 -<2 mths	2 mths - <1 yr	1 - <5 yrs	5 - <15 yrs	≥15 yrs
Severe pneumonia Annex 3	Give the first dose of amoxicillin (see pneumonia) and <b>REFER</b> .					
Pneumonia Annex 3	<b>REFER</b>	amoxicillin tab 250 mg ½ - 1 tab x 2, for 5 days	amoxicillin tab 250 mg 1- 1½ tab x 2, for 5 days	amoxicillin tab 250 mg 1½ -2 tab x 2, for 5 days	amoxicillin tab 250 mg 4 tab x 2, for 5 days	
		Reassess after 2 days; continue (breast) feeding, give fluids, clear the nose; return if breathing becomes faster or more difficult, or not able to drink or when the condition deteriorates.				
No pneumonia: cough or cold Annex 3	<b>REFER</b>	Paracetamol <sup>49</sup> tab 100 mg ½ tab x 4, for 1 to 3 days	paracetamol tab 100 mg 1 tab x 4, for 1 to 3 days or ibuprofen tab 400 mg ½tab x 3, for 1 to 3 days	paracetamol tab 500 mg 1 tab x 4, for 1 to 3 days or ibuprofen tab 400 mg 1 tab x 3, for 1 to 3 days	paracetamol tab 500 mg 2 tab x 4, for 1 to 3 days or ibuprofen tab 400 mg 2 tab x 3, for 1 to 3 days	
		Supportive therapy; continue (breast) feeding, give fluids, clear the nose; return if breathing becomes faster or more difficult, or not able to drink or when the condition deteriorates.				
Prolonged cough (30 days)	<b>REFER</b>					
Acute ear pain and/or ear discharge for less than 2 weeks	<b>REFER</b>	amoxicillin tab 250 mg ½ - 1 tab x 2, for 5 days	amoxicillin tab 250 mg 1- 1½ tab x 2, for 5 days	amoxicillin tab 250 mg 1½ -2 tab x 2, for 5 days	amoxicillin tab 250 mg 4 tab x 2, for 5 days	
Ear discharge for more than 2 weeks, no pain or fever	Clean the ear once daily by syringe without needle using lukewarm clean water. Repeat until the water comes out clean. Dry repeatedly with clean piece of cloth.					

## Measles

Diagnosis Symptom	Weight	0 - <4 kg	4 - <8 kg	8 - <15 kg	15 - <35 kg	≥35 kg
	Age	0 -<2 mths	2 mths - <1 yr	1 - <5 yrs	5 - <15 yrs	≥15 yrs
Measles			Treat respiratory tract disease according to symptoms. Treat conjunctivitis as "Red eyes". Treat diarrhoea according to symptoms. Continue (breast) feeding, give retinol (vitamin A).			

## "Red eye" condition

Red eyes (conjunctivitis)	Apply tetracycline eye ointment 3 times a day for 7 days. If not improved after 3 days or if in doubt, <b>REFER</b> .
------------------------------	---

<sup>49</sup> If fever is present.

## Skin conditions

Wounds: extensive, deep or on face	<b>REFER</b>	
Wounds: limited and superficial	Clean with clean water and soap or <b>diluted</b> chlorhexidine solution. <sup>50</sup> Gently apply gentian violet solution <sup>51</sup> once a day.	
Severe burns (on face or extensive)	Treat as for mild burns and <b>REFER</b> .	
Mild moderate burns	Immerse <b>immediately</b> in cold water, or use a cold wet cloth. Continue until pain eases then treat as wounds.	
Severe bacterial infection (with fever)	<b>REFER</b>	
Mild bacterial infection	Clean with clean water and soap or <b>diluted</b> chlorhexidine solution. <sup>49</sup> If not improved after 10 days refer.	
Fungal infections	Apply gentian violet solution <sup>50</sup> once a day for 5 days.	
Infected scabies	Bacterial infection: clean with clean water and soap or <b>diluted</b> chlorhexidine solution. <sup>49</sup> Apply gentian violet solution <sup>50</sup> twice a day.	
	<b>When infection is cured:</b> Apply <b>diluted</b> benzyl benzoate <sup>52</sup> once a day for 3 days.      Apply <b>non diluted</b> benzyl benzoate 25% once a day for 3 days.	
Non-infected scabies	Apply <b>diluted</b> benzyl benzoate <sup>51</sup> once a day for 3 days.	Apply <b>non diluted</b> benzyl benzoate 25% once a day for 3 days.

## Sexually transmitted and urinary tract infections

Suspicion of sexually transmitted or urinary tract infection	<b>REFER</b>
Suspicion of sexual violence	<b>REFER</b>

## Preventive care in pregnancy

Diagnosis/ Symptom	Weight	0 - <4 kg	4 - <8 kg	8 - <15 kg	15 - <35 kg	≥35 kg
	Age	0 - <2 mths	2 mths - <1 yr	1 - <5 yrs	5 - <15 yrs	≥15 yrs
Anaemia for treatment see under anaemia						ferrous sulfate + folic acid 1 tab daily, throughout pregnancy
Hookworm in endemic areas: albendazole can be safely given in the second and third trimesters of pregnancy						albendazole chewable tab 400 mg, 1 tab once

<sup>50</sup> Chlorhexidine 5% must always be diluted before use: 20 ml in 1L of water. Take the 1L plastic bottle supplied with the kit; put 20 ml of chlorhexidine solution into the bottle using the 10 ml syringe supplied and fill up the bottle with boiled or clean water. Alternative: chlorhexidine 1.5% + cetrimide 15% solution should be used in the same dilution.

<sup>51</sup> Gentian violet 0.5% concentration = 1 teaspoon of gentian violet powder/1L of boiled/clean water. Shake well, or use warm water to dissolve all powder.

<sup>52</sup> Dilute by mixing ½L benzyl benzoate 25% solution with ½L clean water in the 1L plastic bottle supplied with the kit.

## Worms

<b>Diagnosis/ Symptom</b>	<b>Weight</b>	<b>0 - &lt;4 kg</b>	<b>4 - &lt;8 kg</b>	<b>8 - &lt;15 kg</b>	<b>15 - &lt;35 kg</b>	<b>≥35 kg</b>
	<b>Age</b>	<b>0 - &lt;2 mths</b>	<b>2 mths - &lt;1 yr</b>	<b>1 - &lt;5 yrs</b>	<b>5 - &lt;15 yrs</b>	<b>≥15 yrs</b>
Roundworm Pinworm Threadworm Hookworm  Hookworm in pregnant women: see above				albendazole tab 400 mg ½ -1 tab once	albendazole tab 400 mg 1 tab once	albendazole tab 400 mg 1 tab once

## Annex 2. Assessment and treatment of diarrhoea<sup>53</sup>

### A-2.1 Assessment of diarrhoeal patients for dehydration

**Table 1: Assessment of diarrhoea patients for dehydration**

	<b>A</b>	<b>B</b>	<b>C</b>
<b>1. Look at:</b> Condition <sup>a</sup> Eyes <sup>b</sup> Thirst	Well, alert Normal Drinks normally, not thirsty	Restless, irritable Sunken Thirsty, drinks eagerly	Lethargic or unconscious Sunken Drinks poorly or not able to drink
<b>2. Feel:</b> Skin pinch <sup>c</sup>	Goes back quickly	Goes back slowly	Goes back very slowly
<b>3. Decide:</b>	The patient has <b>no signs of dehydration</b>	If the patient has two or more signs in B, there is <b>some dehydration</b>	If the patient has two or more signs in C, there is <b>severe dehydration</b>
<b>4. Treat:</b>	Use Treatment Plan A	Weigh the patient, if possible, and use Treatment Plan B	Weigh the patient and use Treatment Plan C <b>Urgently</b>
<p><sup>a</sup> Being lethargic and sleepy are <i>not</i> the same. A lethargic child is not simply asleep: the child's mental state is dull and the child cannot be fully awakened; the child may appear to be drifting into unconsciousness.</p> <p><sup>b</sup> In some infants and children the eyes normally appear somewhat sunken. It is helpful to ask the mother if the child's eyes are normal or more sunken than usual.</p> <p><sup>c</sup> The skin pinch is less useful in infants or children with marasmus or kwashiorkor or in obese children.</p>			

<sup>53</sup> Department of Child and Adolescent Health and Development. The treatment of diarrhoea - a manual for physicians and other senior health workers. Geneva: World Health Organization; 2005.

## A-2.2 Treatment of acute diarrhoea (without blood)

### Treatment Plan A to treat diarrhoea at home

Use this plan to teach the mother how to:

- ◆ prevent dehydration at home by giving the child more fluid than usual;
- ◆ prevent malnutrition by continuing to feed the child, and why these actions are important;
- ◆ recognize signs indicating that the child should be taken to a health worker.

The four rules of Treatment Plan A:

#### Rule 1:

#### Give the child more fluids than usual, to prevent dehydration

- ◆ Use recommended home fluids. These include: ORS solution, salted drinks (e.g. salted rice water or a salted yogurt drink), vegetable or chicken soup with salt.
- ◆ Avoid fluids that do not contain salt, such as: plain water, water in which a cereal has been cooked (e.g. unsalted rice water), unsalted soup, yoghurt drinks without salt, green coconut water, weak tea (unsweetened), unsweetened fresh fruit juice. Other fluids to avoid are those with stimulant, diuretic or purgative effects, for example: coffee, some medicinal teas or infusions.
- ◆ Be aware of fluids that are potentially dangerous and should be avoided during diarrhoea. Especially important are drinks sweetened with sugar, which can cause osmotic diarrhoea and hypernatraemia. Some examples are: commercial carbonated beverages, commercial fruit juices, sweetened tea.
- ◆ Use ORS solution for children as described in the box below. (Note: if the child is under 6 months and not yet taking solid food, give ORS solution or water.)

Give as much as the child or adult wants until diarrhoea stops. Use the amounts shown below for ORS as a guide. Describe and show the amount to be given after each stool is passed, using a local measure.

Age	Amount of ORS to be given after each loose stool	Amount of ORS to provide for use at home
≤ 24 months	50-100 ml	500 ml/day
2 - 10 years	100-200 ml	1L/day
≥10 years	as much as wanted	2L/day

#### Show the mother how to mix ORS and show her how to give ORS.

- ◆ Give a teaspoonful every 1-2 minutes for a child under 2 years.
- ◆ Give frequent sips from a cup for older children.

- ◆ If the child vomits, wait 10 minutes. Then give the solution more slowly (for example, a spoonful every 2-3 minutes).
- ◆ If diarrhoea continues after the ORS packets are used up, tell the mother to give other fluids as described in the first rule above or return for more ORS.

**Rule 2:**

**Give supplemental zinc sulfate 20 mg tab to the child, every day for 10 to 14 days**

Zinc sulfate can be given as dispersible tablets. By giving zinc sulfate as soon as diarrhoea starts, the duration and severity of the episode as well as the risk of dehydration will be reduced. By continuing zinc sulfate supplementation for 10 to 14 days, the zinc lost during diarrhoea is fully replaced and the risk of the child having new episodes of diarrhoea in the following 2 to 3 months is reduced.

**Rule 3:**

**Continue to feed the child, to prevent malnutrition**

- ◆ Breastfeeding should **always** be continued.
- ◆ The infant's usual diet should be continued during diarrhoea and increased afterwards;
- ◆ Food should **never** be withheld and the child's usual food should not be diluted;
- ◆ Most children with watery diarrhoea regain their appetite after dehydration is corrected;
- ◆ Milk:
  - **Infants of any age who are breastfed** should be allowed to breast-feed as often and as long as they want. Infants will often breastfeed more than usual, encourage this;
  - **Infants who are not breastfed**, should be given their usual milk feed (formula) at least every three hours, if possible by cup.
  - **Infants below 6 months of age who take breast milk and other foods** should receive increased breastfeeding. As the child recovers and the supply and the supply of breast milk increases, other foods should be decreased.
  - **A child who is at least 6 months old or is already taking soft foods** should be given cereals, vegetables and other foods, in addition to milk. If the child is **over 6 months and such foods are not yet being given**, they should be started during the diarrhoea episode or soon after it stops.
  - Recommended food should be culturally acceptable, readily available. Milk should be mixed with a cereal and if possible, 1 - 2 teaspoonfuls of vegetable oil should be added to each serving of cereal. If available, meat, fish or egg should be given.
  - Foods rich in potassium, such as bananas, green coconut water and fresh fruit juice are beneficial;
    - offer the child food every three or four hours (six times a day);
    - after the diarrhoea stops, continue to give the same energy-rich food, and give one more meal than usual each day for at least two weeks.

**Rule 4:**

**Take the child to a health worker if there are signs of dehydration or other problems**

The mother should take her child to a health worker if the child:

- ◆ Starts to pass many watery stools
- ◆ Vomits repeatedly
- ◆ Becomes very thirsty
- ◆ Is eating or drinking very poorly
- ◆ Develops a fever
- ◆ Has blood in the stool; or
- ◆ Does not get better in three days-

**Treatment Plan B: oral rehydration therapy for children with some dehydration**

**Table 2:  
Guidelines for treating children and adults with some dehydration**

Approximate amount of ORS solution to give in the first 4 hours						
Age*	<4 mths	4-11 mths	12-23mths	2-4 years	5-14 years	≥15 years
Weight	< 5 kg	5-7.9 kg	8-10.9 kg	11-15.9 kg	16-29.9 kg	≥30 kg
Quantity	200-400 ml	400-600 ml	600-800 ml	800 ml-1.2 L	1.2-2 L	2.2-4 L
In local measure						

Use the patient's age only when you do not know the weight. The approximate amount of ORS required (in ml) can also be calculated by multiplying the patient's weight in kg by 75.

- If the patient wants more ORS than shown, give more.
- Encourage the mother to continue breastfeeding her child.

NOTE: during the initial stages of therapy, while still dehydrated, adults can consume up to 750 ml per hour, if necessary, and children up to 20 ml per kg body weight per hour.

**How to give ORS solution**

- ◆ Teach a family member to prepare and give ORS solution.
- ◆ Use a clean spoon or cup to give ORS solution to infants and young children. Feeding bottles should **not** be used.
- ◆ Use droppers or syringes to put small amounts of ORS solution into mouths of babies.
- ◆ Children under 2 years of age, should get a teaspoonful every 1-2 minutes; older children (and adults) may take frequent sips directly from a cup.
- ◆ Check from time to time to see if there are problems.
- ◆ If the child vomits, wait 5-10 minutes and then start giving ORS again, but more slowly, for example, a spoonful every 2-3 minutes.



- ◆ If the child's eyelids become puffy, stop the ORS and give plain water or breast milk. Give ORS according to Plan A when the puffiness is gone.

### Monitoring the progress of oral rehydration therapy

- ◆ Check the child frequently during rehydration.
- ◆ Ensure that ORS solution is being taken satisfactorily and the signs of dehydration are not worsening.
- ◆ After four hours, reassess the child fully following the guidelines in Table 1 and decide what treatment to give.
- ◆ If signs of **severe dehydration** have appeared, shift to Treatment Plan C.
- ◆ If signs indicating **some dehydration** are still present, repeat Treatment Plan B. At the same time offer food, milk and other fluids as described in Treatment Plan A, and continue to reassess the child frequently.
- ◆ If there are **no signs of dehydration**, the child should be considered fully rehydrated. When rehydration is complete:
  - skin pinch is normal;
  - thirst has subsided;
  - urine is passed;
  - child becomes quiet, is no longer irritable and often falls asleep.
- ◆ Teach the mother how to treat her child at home with ORS solution and food following Treatment Plan A. Give her enough ORS packets for 2 days.
- ◆ Also teach her the signs that mean she should bring her child back to see a health worker.

### If oral rehydration therapy must be interrupted

If the mother and child must leave before the rehydration with ORS solution is completed:

- ◆ Show her how much ORS to give to finish the 4-hour treatment at home.
- ◆ Give her enough ORS packets to complete the four hour treatment and to continue oral rehydration for two more days, as shown in Treatment Plan B.
- ◆ Show her how to prepare ORS solution.
- ◆ Teach her the four rules in Treatment Plan A for treating her child at home.

### When oral rehydration fails

- ◆ If signs of dehydration persist or reappear, **refer the child**.

### Giving zinc sulfate

- ◆ Begin to give supplemental zinc sulfate tablets, as in Treatment Plan A, as soon as the child is able to eat following the initial four hour rehydration period.

### Giving food

- ◆ Except for breast milk, food should not be given during the initial four-hour rehydration period.

- ◆ Children continued on Treatment Plan B longer than four hours should be given some food every 3-4 hours as described in Treatment Plan A.
- ◆ **All children** older than 6 months should be given some food before being sent home. This helps to emphasize to mothers the importance of continued feeding during diarrhoea.

## Treatment Plan C: for patients with severe dehydration

Follow the arrows. If the answer is "yes" go across. If "no" go down.

Can you give intravenous (IV) fluids immediately?

Yes



Start IV fluids immediately. If the patient can drink, give ORS by mouth while the drip is set up. Give 100 ml/kg Ringer's Lactate Solution (or if not available normal saline), divided as follows:

Age	First give 30ml/kg in:	Then give 70ml/kg in:
Infants (under 12 months)	1 hour*	5 hours
Older	30 minutes*	2 ½ hours

\* Repeat once if radial pulse is still very weak or non-detectable.

No

Is IV treatment available nearby (within 30 minutes)?

Yes



- ◆ Send the patient immediately for IV treatment.
- ◆ If the patient can drink, provide the mother with ORS solution and show her how to give it during the trip to receive IV treatment.

No

Are you trained to use a naso-gastric tube (NG) for rehydration?

Yes



- ◆ Start rehydration by tube with ORS solution: give 20 ml/kg/hour for 6 hours (total of 120ml/kg).
- ◆ Reassess the patient every 1-2 hours:
  - if there is repeated vomiting or increased abdominal distension, give the fluid more slowly.
  - if hydration is not improved after 3 hours, send the patient for IV therapy.

No

Can the patient drink?

Yes



- ◆ Start rehydration by mouth with ORS solution, giving 20 ml/kg/hour for 6 hours (total of 120 ml/kg).
- ◆ Reassess the patient every 1-2 hours:
  - if there is repeated vomiting, give the fluid more slowly-if hydration is not improved after 3 hours, send the patient for IV therapy.
- ◆ After 6 hours, reassess the patient and choose the appropriate treatment plan.

No

**Urgent:** send the patient for IV or NG treatment.

**NB:** If possible, observe the patient for at least six hours after rehydration to be sure the mother can maintain hydration giving ORS solution by mouth. If the patient is over two years old and there is cholera in your area, give an appropriate oral antibiotic after the patient is alert.



## Annex 3.

# Management of the child with cough or difficult breathing

### A-3.1 Assess the child

#### Ask

- How old is the child?
- Is the child coughing? For how long?
- Is the child able to drink (for children age 2 months up to 5 years)?
- Has the young infant stopped feeding well (for children less than 2 months)?
- Has the child had fever? For how long?
- Has the child had convulsions?

#### Look and listen (the child must be calm)

- Count the breaths in a minute.
- Look for chest indrawing.
- Look and listen for stridor.
- Look and listen for wheeze. Is it recurrent?
- See if the child is abnormally sleepy, or difficult to wake.
- Feel for fever, or low body temperature (or measure temperature).
- Look for severe undernutrition.

### A-3.2 Decide how to treat the child

<b>The child aged less than two months:</b>	☉ see Annex 3.3
<b>The child aged two months up to five years:</b>	
• who is not wheezing	☉ see Annex 3.4
• who is wheezing	☉ <b>Refer</b>
<b>Treatment instructions</b>	☉ see Annex 3.5
• give an antibiotic	
• advise mother to give home care	
• treatment of fever.	

### A-3.3 Child less than two months old

<b>Signs:</b>	No fast breathing (LESS than 60 a minute)  and  No severe chest indrawing	Fast breathing (60 per minute or MORE)  or  Severe chest indrawing	Not able to drink  Convulsions Abnormally sleepy or difficult to wake Stridor in calm child Wheezing  or  Fever or low body temperature
<b>Classify as:</b>	<b>No pneumonia - cough or cold</b>	<b>Severe pneumonia</b>	<b>Very severe disease</b>
<b>Treatment:</b>	Advise mother to give following home care: keep infant warm Breastfeed frequently Clear nose if it interferes with feeding	Refer <b>URGENTLY</b> to hospital Give first dose of an antibiotic	Refer <b>URGENTLY</b> to hospital Give first dose of an antibiotic
	<b>Advise mother to return quickly if:</b>  Illness worsens Breathing is difficult Breathing becomes fast Feeding becomes a problem	<b>Keep infant warm</b>  (If referral is not feasible, treat with an antibiotic and follow closely)	<b>Keep infant warm</b>  (If referral is not feasible, treat with an antibiotic and follow closely)

### A-3.4 Child two months to five years old

<b>Signs:</b>	No chest indrawing and No fast breathing ( <b>less</b> than 50 per minute if child 2-12 months of age or 40 per minute if child 1-5 years)	No chest indrawing and Fast breathing (50 per minute or <b>MORE</b> if child 2-12 months of age or 40 per minute if child 1-5 years)	Chest indrawing	Not able to drink Convulsions Abnormally sleepy or difficult to wake Stridor in calm child or Severe undernutrition
<b>Classify as:</b>	<b>No pneumonia: cough or cold</b>	<b>Pneumonia</b>	<b>Severe pneumonia</b>	<b>Very severe disease</b>
<b>Treat-ment:</b>	If coughing more than 30 days, refer for assessment Assess and treat ear problem or sore throat if present Assess and treat other problems Advise mother to give home care Treat fever if present	Advise mother to give home care  Give an antibiotic  Treat fever if present  Advise mother to return in 2 days for reassessment, or if the child is getting worse	<b>Refer URGENTLY</b> to hospital  Give first dose of antibiotics  Treat fever if present  (If referral is not possible, treat with an antibiotic and follow closely)	<b>Refer URGENTLY</b> to hospital  Give first dose of antibiotics  Treat fever if present  If cerebral malaria is possible, give an antimalarial medicine



<b>Reassess in 2 days a child who is taking an antibiotic for pneumonia</b>			
<b>Signs:</b>	<b>Improving</b>  Less fever Eating better Breathing slower	<b>The same</b>	<b>Worse</b>  Not able to drink Has chest indrawing Has other danger signs
<b>Treatment:</b>	Finish 5 days of antibiotics	Change antibiotic or <b>Refer</b>	<b>Refer URGENTLY</b> to hospital

## A-3.5 Treatment instructions

### A-3.5.1 Give an antibiotic

- Give first dose of antibiotic in the clinic.
- Instruct mother on how to give the antibiotic for five days at home (or to return to clinic for daily procaine-penicillin injection).

Age	or	(Weight)	Amoxicillin tab 250 mg
			Twice daily for 5 days
< 2 mths		(< 6 kg)*	¼ tab
2 - 12 mths		(6-9 kg)	½ tab
12 mths - 5 yrs		(10-19 kg)	1 tab

\* Give oral antibiotic for five days at home if referral is not feasible.

### A-3.5.2 Advise mother to give home care (for child age 2 months up to 5 years)

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• <b>Feed the child</b> <ul style="list-style-type: none"> <li>- feed the child during illness</li> <li>- increase feeding during illness</li> <li>- clear the nose if it interferes with feeding</li> </ul> </li> <li>• <b>Increase fluids</b> <ul style="list-style-type: none"> <li>- offer the child extra to drink</li> <li>- increase breastfeeding</li> <li>- soothe the throat and relieve cough with a safe remedy</li> </ul> </li> <li>• <b>Most important: for the child classified as having no pneumonia, cough or cold, watch for the following signs and return quickly if they occur:</b> <ul style="list-style-type: none"> <li>- breathing becomes difficult</li> <li>- breathing becomes fast</li> <li>- child not able to drink</li> <li>- child becomes sicker</li> </ul> </li> </ul> | } <b>This child may have pneumonia</b> |
|---|--|



**A-3.5.3 Treat Fever (see also page 27)**

<b>In low malaria transmission areas</b>	Fever is high: (> 39°C)	Parasite-based diagnosis <sup>54</sup> for all patients of all age groups	<b>Malaria is not confirmed:</b> Give paracetamol, see table below.
			<b>Malaria is confirmed:</b> Give artemether/lumefantrine treatment see Fever on page 27 (or follow national malaria treatment recommendations)
	Fever is not high: (38-39°C)	Parasite-based diagnosis <sup>53</sup> for all patients of all age groups	<b>Malaria is not confirmed:</b> Advise the mother to give more fluids.
			<b>Malaria is confirmed:</b> Give artemether/lumefantrine treatment see Fever on page 27 (or follow national malaria treatment recommendations)
<b>In high malaria transmission areas</b>	All cases of fever	Parasite based diagnosis <sup>53</sup> for all adult patients and children > 5 years	<b>Malaria is not confirmed:</b> Give paracetamol, see table below.
			<b>Malaria is confirmed:</b> Give artemether/lumefantrine treatment see Fever on page 27 (or follow national malaria treatment recommendations)
		For children < 5 years, to be treated on the basis of a clinical diagnosis of malaria	Give artemether/lumefantrine treatment see Fever on page 27 (or follow national malaria treatment recommendations)
<b>Fever alone is not a reason to give an antibiotic, except in a young infant (age less than 2 months). Give first dose of an antibiotic and Refer URGENTLY to hospital.</b>			

<b>PARACETAMOL</b>		
Every six hours, for 1 to 3 days		
<b>Age or Weight</b>	<b>100 mg tab</b>	<b>500 mg tab</b>
3 - 12 mths (6-<10 kg)	½ - 1	
1- < 5 yrs (10-<15 kg)	1 - 2	
5 - < 10 yrs (15-<25 kg)	2 - 3	½
10-<15 yrs (25-<35 kg)		1

<sup>54</sup> By microscopy or by RDTs



## Annex 4: Sample data collection forms

### Daily morbidity data

**Location:**

**Clinic:**

**Date:**

<b>Total</b>	<b>Children under 5 years old</b>	<b>Children five years and older, and adults</b>	
Diarrhoea with blood			
Diarrhoea without blood			
Fever			
Confirmed malaria			
Malnutrition			
Measles			
Meningitis			
Severe acute respiratory infections/pneumonia			
Sexually transmitted infections			
Others			
<b>Totals</b>			

Number of cases referred to other services:

**Other information:**

## Weekly mortality statistics

**Location:**

**Total population:**

**Week:**

Cause of death	Children under 5 years		Children 5 years and older, and adults		Total	
	Male	Female	Male	Female	Male	Female
ARI <sup>55</sup> /pneumonia						
Diarrhoea						
Diarrhoea with blood						
Fever						
Confirmed malaria						
Malnutrition						
Maternal deaths						
Measles						
Meningitis						
Others						
<b>Totals</b>						

**Other information**

<sup>55</sup> ARI = Acute Respiratory Infection

## Daily medicine consumption form

Date:

Location:

Item/medicine	Quantities dispensed*	Total
1. albendazole 400 mg chewable tab		
2. aluminium hydroxide 400 mg + magnesium hydroxide 400 mg tab		
3. amoxicillin 250 mg tab		
4. artemether + lumefantrine, 20 mg + 120 mg tab		
6 x 1 tab		
6 x 2 tab		
6 x 3 tab		
6 x 4 tab		
5. benzyl benzoate 25%, lotion		
6. chlorhexidine 5%, solution		
7. ferrous sulfate + folic acid 200 mg + 0.4 mg tab		
8. gentian violet, powder		
9. ibuprofen 400 mg scored tab		
10. ORS, sachets		
11. paracetamol 100 mg tab		
12. paracetamol 500 mg tab		
13. tetracycline 1% eye ointment		
14. quinine sulfate 300 mg tab		
15. zinc sulfate 20 mg dispersible tab		

\* For example: 10 + 30 + 20...



# Annex 5. Sample health card

HEALTH CARD										Card No.						
CARTE DE SANTE										Carte No.						
										Date of registration Date d'enregistrement						
Site Lieu					Section/House No. Section /Habitation No.			Date of arrival at site Date d'arrivée sur le lieu								
Family name Nom de famille						Given names Prénoms										
Date of birth or age Date de naissance ou âge				Or Ou		Years Ans		Sex Sexe		M/F		Name commonly known by Nom d'usage habituel				
CHILDREN'S RECORDS	Mother's name Nom de la mère							Father's name Nom du père								
	Height Taille				Weight Poids				Percentage weight/height Pourcentage poids/taille							
	Feeding programme Programme d'alimentation															
	Immunization Rougeole		Date		1		2		BCG Date				Others Autres			
Immunization Polio		Date				DPT Polio Date		1		2		3				
WOMEN'S RECORDS	Pregnant Enceinte		Yes/No Oui/Non		No. of pregnancies No. de grossesses				No. of children No. d'enfants				Lactating Allaitante		Yes/no Oui/Non	
	Tetanus Tétanos		Date		1		2		3		4		5			
	Feeding programme Programme d'alimentation															
OBSERVATIONS	General (Family circumstances, living conditions etc.) Générales (Circonstances familiales, condition de vie, etc.)							Health (Brief history, present condition) Médicales (Résumé de l'état actuel)								

**The Interagency Emergency Health Kit 2006**

DATE	CONDITION (Signs/symptoms/diagnosis)	TREATMENT (Medication/dose time)	COURSES (Medication due/given)	OBSERVATIONS (Change in condition) NAME OF HEALTH WORKER
	ETAT (Signes/symptômes/diagnostic)	TRAITEMENT (Médication/durée de la dose)	APPLICATION (Médication requise/effectuée)	OBSERVATIONS (Changement d'état) NOM DE L'AGENT DE SANTE



## Annex 6. Guidelines for suppliers

### Specifications for medicines and medical devices

1. Medicines, and medical devices - renewable and equipment - in the kit should comply with specifications given in UNICEF web catalogue where items specifications are updated on line, at:  
<http://www.supply.unicef.dk/Catalogue/>
2. Suppliers should purchase as much as possible from manufacturers which are pre-qualified by WHO. The list of pre-qualified manufacturers and products can be found on <http://mednet3.who.int/prequal/>
3. Medicines, and medical devices - renewable and equipment - in the kit should comply with specifications and advice given in *Interagency Guidelines for drug donations. Revised 1999*. World Health Organization Geneva (WHO/EDM/PAR/99.4).
4. Suppliers should contact WHO/Procurement Services (Annex 11) for the latest specifications of Rapid Diagnostic Tests (RDTs), and information on the most appropriate tests for use in different regions (see also <http://www.who.int/malaria/>).

### Packaging

1. The tablets or capsules should be packed in sealed waterproof containers with replaceable lids, protecting the contents from light and humidity.
2. There will be "no objection" against blister packaging provided it will be waterproof and protecting the contents from light and humidity where applicable.
3. Liquids should be packed in unbreakable leak-proof bottles or containers.
4. Containers for all pharmaceutical preparations must conform to the latest edition of internationally recognized pharmacopoeial standards.
5. Ampoules must either have break-off necks, or sufficient files must be provided.
6. Each basic unit should be packed in one carton with the malaria module packed separately. The supplementary unit must be packed in cartons of a maximum weight of 50 kg each.
7. Medicines, infusions, renewable medical devices and medical devices, and other equipment should all be packed in separate cartons, with corresponding labels. The cartons should preferably have two handles attached.

8. Each carton must be marked with labels permitting identification and classification of each carton within the kit. The word "BASIC" must be printed on each label for the basic unit.

## **Packing list**

Each consignment must be accompanied by a list of contents, stating the total number of cartons and for each carton, the following should be clearly specified:

1. name of each product;
2. batch number of each product;
3. quantity of each product; and
4. expiry date of each product, especially for pharmaceutical products.

## **Information slips**

Each basic unit carton and a number of the supplementary unit cartons should contain an information slip in, at least, three languages (English, French, Spanish) which reads as follows:

### **English**

"The Interagency Emergency Health Kit 2006 is primarily intended for displaced populations without medical facilities; it may also be used for initial supply of primary health care facilities where the normal system of provision has broken down. It is **not** intended as a re-supply kit and, if used as such, may result in the accumulation of items and medicines which are not needed.

It is recognized that some of the medicines, medical devices contained in the kit may not be appropriate for all cultures and countries. This is inevitable as it is a standardized emergency kit, designed for worldwide use, which is prepacked and kept ready for immediate dispatch.

The kit is not designed for immunization programmes, cholera, meningitis or specific epidemics such as those caused by Ebola virus, SARS and avian flu virus."

### **French**

<< Le Kit Sanitaire d'Urgence Inter-institutions 2006 est principalement destiné aux populations déplacées n'ayant pas accès à un système de soins médicaux. Il peut également être utilisé pour donner des soins de santé primaires, partout où le système habituel n'est plus fonctionnel. Il ne doit **en aucun cas** servir de réapprovisionnement car cela pourrait entraîner une accumulation inappropriée de matériel médical et de médicaments.

Dans la mesure où ce kit est standardisé, destiné à être utilisé dans le monde entier et préconditionné afin d'être distribué immédiatement en cas de nécessité,

il est inévitable qu'une partie du matériel médical et des médicaments qu'il contient ne conviennent pas à tous les pays et à toutes les cultures.

Ce kit n'est ni conçu pour les programmes de vaccination, choléra, méningite, ni pour des épidémies spécifiques comme celles dues au virus Ebola, SARS et le virus de la grippe aviaire. >>

## **Spanish**

<< El botiquín médico de emergencia interorganismos 2006 está destinado principalmente a las poblaciones desplazadas carentes de servicios médicos; podrá utilizarse también para la prestación inicial de servicios de atención primaria de salud donde el sistema normal de prestación esté paralizado. **No** tiene por objeto reabastecer el botiquín, pues si se utiliza con este fin ello puede dar lugar a que se acumulen artículos y medicamentos innecesarios.

Se reconoce que algunos de los suministros y medicamentos contenidos en el botiquín pueden no ser apropiados en todos los contextos culturales y países. Esto es inevitable, ya que se trata de un botiquín estándar de emergencia destinado para su uso en todo el mundo, preempaquetado y listo para su envío inmediato.

El botiquín no está destinado a los programas de inmunización ni a combatir el cólera, la meningitis o epidemias particulares como la provocada por el virus de Ébola, SRAS y la gripe aviar. >>



## Annex 7. Other kits for emergency situations

The following additional kits covering immunization, nutrition and reproductive health may be provided after assessment of needs. Please see Annex 11 for the addresses of Médecins Sans Frontières (MSF), OXFAM, and the United Nations Population Fund (UNFPA).

### Immunization

#### Immunization kit for 10,000 immunizations by 5 teams

The kit may be used for mass immunization campaigns for epidemic prevention or control (measles, meningitis and yellow fever, etc...) It is composed of cold chain, logistic and medical devices divided into 7 modules, including a generator, refrigeration, cold chain transport and equipment, logistics, stationery, and medical device renewable items. Vaccines must be ordered separately.

MSF code: KMEDKIMM3-

### Nutrition

#### Nutrition kits

OXFAM and MSF have developed kits for nutritional support. The nutritional kits contain the necessary equipment to set up a nutritional programme. The MSF anthropometric kit is different from the one from Oxfam (Kit 1). The other kits developed both by Oxfam and MSF have different codes but are comparable. The nutrition kits will be packed and labelled by Oxfam.

#### Survey kits for measuring weight and height of children

This kit contains equipment for measuring weight and height of children to assess nutritional status and materials needed for nutritional surveys by two teams.

OXFAM anthropometric kit - **Kit 1**

MSF anthropometric kit code: KMEDKNUT4M-

#### Registration kits

These kits contain material needed for registering children and record keeping for nutritional programmes.

OXFAM registration kit for supplementary feeding (wet) - **Kit 2A**

MSF registration kit for supplementary wet feeding, 250 beneficiaries  
code: KMEDMNUT61-

OXFAM registration kit for supplementary feeding (dry) - **Kit 3A**

MSF registration kit for supplementary dry feeding, 500 beneficiaries  
code: KMEDMNUT71-

OXFAM registration kit for therapeutic feeding- **Kit 4A**  
MSF registration kit for therapeutic feeding, 100 severely malnourished children  
code: KMEDMNUT51-

### **Supplementary feeding (wet) kit**

Designed for 250 people, moderately malnourished children or other vulnerable groups and includes feeding and cooking equipment. Recent guidelines discourage the use of wet supplementary feeding programmes but do recommend that they are only implemented when populations have limited access to fuel and water, where security conditions place people at risk when taking rations home, or for groups who are in need of additional food but are unable to cook for themselves.

OXFAM Supplementary Feeding (wet) - **Kit 2**  
MSF Nutrition, supplementary wet feeding, 250 beneficiaries  
code: KMEDMNUT62-

### **Supplementary feeding (dry) kit**

Designed for 500 people, moderately malnourished children or other vulnerable groups and includes equipment for mixing and distributing food. It is not intended for general food distribution of an entire population in need of food aid.

OXFAM Supplementary Feeding (dry) - **Kit 3**  
MSF Nutrition, supplementary dry feeding, 500 beneficiaries  
code: KMEDMNUT72-

### **Therapeutic feeding kit**

Designed for therapeutic feeding of 100 severely malnourished children. The kit should only be used by trained staff who are able to recognize and respond to the main health problems associated with severe malnutrition. There should be access to medical care as the kit contains no medicines.

OXFAM Therapeutic Feeding - **Kit 4**  
MSF Therapeutic Feeding, 100 severely malnourished children  
code: KMEDMNUT52-

## **Reproductive health**

### **Interagency reproductive health kits for crisis situations**

The reproductive health kits prepared by UNFPA provide the supplies needed to implement basic reproductive health services during the early phase of a crisis.

### **The RH kits are designed for a varying population for 3 months**

There are 12 kits divided into three blocks:

**Block 1: Six kits for use at the community and primary health care level for a population of 10,000 people for 3 months. They contain mostly disposable medical devices and equipment.**

#### **Kit 0 - Administration kit**

To facilitate administration and training activities.

#### **Kit 1 - Condoms kit**

120 gross (17,280) male condoms with 400 safe sex leaflets;

3.8 gross (540) female condoms with 25 use leaflets.

**Kit 2 - Clean delivery kit**

200 individual packets containing items and pictorial instruction sheet for home delivery plus material for traditional birth attendants.

**Kit 3 - Rape treatment kit**

Management of the immediate consequences of sexual violence with appropriate medicines and supplies: basic treatment after a rape and PEP treatment for HIV (including treatment for children).

**Kit 4 - Oral and injectable contraception**

To respond to women's needs for hormonal contraception.

**Kit 5 - Treatment of sexually transmitted infections**

To diagnose and treat STIs in people presenting with complaints.

**Block 2: Five kits for use at primary health care and referral hospital levels, designed for a population of 30,000 people for 3 months**

**Kit 6 - Clinical delivery kit**

To perform normal deliveries, repair episiotomies and perineal tears under local anesthetics and stabilize women with obstetric complications (eclampsia and haemorrhage) before transfer to a referral unit, for trained personnel, midwives, nurses with midwifery skills and medical doctors.

**Kit 7 - Intra-uterine device kit**

To place IUDs either as contraception or as emergency contraception, and to remove IUDs and provide preventive antibiotic treatment, for trained personnel.

**Kit 8 - Management of miscarriage and complications of abortion**

To treat the complications arising from miscarriage and unsafe abortion, including sepsis, incomplete evacuation and bleeding, for trained personnel.

**Kit 9 - Suture of tears vaginal/cervical and vaginal examination kit**

To allow vaginal examination and suturing of cervical and vaginal tears, for trained personnel, midwives, physicians, nurses with midwifery skills.

**Kit 10 - Vacuum extraction delivery kit**

To assist in vaginal delivery by using manual vacuum extraction method to deliver the newborn.

**Block 3: Two kits designed for referral surgical/obstetric level for 150,000 people for 3 months.**

**Kit 11 - Referral level kit for reproductive health (part A+B)**

Medical devices, renewable and equipment and medicines for use at the referral level for caesarian sections, resuscitation of mothers and babies, treatment of complications of sexually transmitted infections, and complications of pregnancy and delivery.

**Kit 12 -Blood transfusion kit**

To perform safe blood transfusion after testing for HIV, syphilis and hepatitis B and C.





## Annex 8. Guidelines for Drug Donations<sup>56</sup>

### Selection of drugs

- 1. All drug donations should be based on an expressed need and be relevant to the disease pattern in the recipient country. Drugs should not be sent without prior consent by the recipient.**

#### Justification and explanation

This provision stresses the point that it is the prime responsibility of the recipients to specify their needs. It is intended to prevent unsolicited donations, and donations which arrive unannounced and unwanted. It also empowers the recipients to refuse unwanted gifts.

#### Possible exceptions

In acute emergencies the need for prior consent by the recipient may be waived, provided the drugs are amongst those from the WHO Model List of Essential Drugs that are included in the UN list of emergency relief items recommended for use in acute emergencies ([http://www.iapso.org/pdf/erc\\_vol2.pdf](http://www.iapso.org/pdf/erc_vol2.pdf)).

- 2. All donated drugs or their generic equivalents should be approved for use in the recipient country and appear on the national list of essential drugs, or, if a national list is not available, on the WHO Model List of Essential Drugs, unless specifically requested otherwise by the recipient.**

#### Justification and explanation

This provision is intended to ensure that drug donations comply with national drug policies and essential drugs programmes. It aims at maximizing the positive impact of the donation, and prevents the donation of drugs which are unnecessary and/or unknown in the recipient country.

#### Possible exceptions

An exception can be made for drugs needed in sudden outbreaks of uncommon or newly emerging diseases, since such drugs may not be approved for use in the recipient country.

- 3. The presentation, strength and formulation of donated drugs should, as much as possible, be similar to those of drugs commonly used in the recipient country.**

#### Justification and explanation

Most staff working at different health care levels in the recipient country have been trained to use a certain formulation and dosage schedule and cannot constantly change their treatment practices. Moreover, they often have insufficient training in performing the necessary dosage calculations required for such changes.

<sup>56</sup> Reprinted from: Interagency guidelines for drug donations. Revised 1999. Geneva: World Health Organization; WHO/EDM/PAR 99.4.

## Quality assurance and shelf-life

- 4. All donated drugs should be obtained from a reliable source and comply with quality standards in both donor and recipient country. The WHO Certification Scheme on the Quality of Pharmaceutical Products Moving in International Commerce should be used.**

### Justification and explanation

This provision prevents double standards: drugs of unacceptable quality in the donor country should not be donated to other countries. Donated drugs should be authorized for sale in the country of origin, and manufactured in accordance with international standards of Good Manufacturing Practice (GMP).

### Possible exceptions

In acute emergencies the use of the WHO Certification Scheme may not be practical. However, if it is not used, a justification should be given by the donor. When donors provide funds to purchase drugs from local producers, those which comply with national standards should not be excluded on the sole grounds that they do not meet quality standards of the donor country.

- 5. No drugs should be donated that have been issued to patients and then returned to a pharmacy or elsewhere, or were given to health professionals as free samples.**

### Justification and explanation

Patients return unused drugs to a pharmacy to ensure their safe disposal; the same applies to drug samples that have been received by health workers. In most countries it is not allowed to issue such drugs to other patients, because their quality cannot be guaranteed. For this reason returned drugs should not be donated either. In addition to quality issues, returned drugs are very difficult to manage at the receiving end because of broken packages and the small quantities involved.

- 6. After arrival in the recipient country all donated drugs should have a remaining shelf-life of at least one year. An exception may be made for direct donations to specific health facilities, provided that: the responsible professional at the receiving end acknowledges that (s)he is aware of the shelf-life; and that the quantity and remaining shelf-life allow for proper administration prior to expiration. In all cases it is important that the date of arrival and the expiry dates of the drugs be communicated to the recipient well in advance.**

### Justification and explanation

In many recipient countries, and especially under emergency situations, there are logistic problems. Very often the regular drug distribution system has limited possibilities for immediate distribution. Regular distribution through different storage levels (e.g. central store, provincial store, district hospital) may take six to nine months. This provision especially prevents the donation of drugs just before their expiry, as in most cases such drugs would only reach the patient after expiry. It is important that the recipient official responsible for acceptance of the donation is fully aware of the quantities of drugs being donated, as overstocking may lead to wastage. The argument that short-dated products can be donated in the case of acute emergencies, because they will be used rapidly, is incorrect. In emergency situations the systems for reception, storage and distribution of drugs are very often disrupted and overloaded, and many donated drugs tend to accumulate.

**Additional exception**

Besides the possible exception for direct donations mentioned above, an exception should be made for drugs with a total shelf-life of less than two years, in which case at least one-third of the shelf-life should remain.

**Presentation, packing and labelling**

- 7. All drugs should be labelled in a language that is easily understood by health professionals in the recipient country; the label on each individual container should at least contain the International Nonproprietary Name (INN) or generic name, batch number, dosage form, strength, name of manufacturer, quantity in the container, storage conditions and expiry date.**

**Justification and explanation**

All donated drugs, including those under brand name, should be labelled also with their INN or the official generic name. Most training programmes are based on the use of generic names. Receiving drugs under different and often unknown brand names and without the INN is confusing for health workers and can even be dangerous for patients. In the case of injections, the route of administration should be indicated.

- 8. As much as possible, donated drugs should be presented in larger quantity units and hospital packs.**

**Justification and explanation**

Large quantity packs are cheaper, less bulky to transport and conform better to public sector supply systems in most developing countries. This provision also prevents the donation of drugs in sample packages, which are impractical to manage. In precarious situations, the donations of paediatric syrups and mixtures may be inappropriate because of logistical problems and their potential misuse.

- 9. All drug donations should be packed in accordance with international shipping regulations, and be accompanied by a detailed packing list which specifies the contents of each numbered carton by INN, dosage form, quantity, batch number, expiry date, volume, weight and any special storage conditions. The weight per carton should not exceed 50 kilograms. Drugs should not be mixed with other supplies in the same carton.**

**Justification and explanation**

This provision is intended to facilitate the administration, storage and distribution of donations in emergency situations, as the identification and management of unmarked boxes with mixed drugs is very time- and labour-intensive. This provision specifically discourages donations of small quantities of mixed drugs. The maximum weight of 50 kilograms ensures that each carton can be handled without special equipment.

## Information and management

- 10. Recipients should be informed of all drug donations that are being considered, prepared or actually under way.**

### **Justification and explanation**

Many drug donations arrive unannounced. Detailed advance information on all drug donations is essential to enable the recipient to plan for the receipt of the donation and to coordinate the donation with other sources of supply. The information should at least include: the type and quantities of donated drugs including their International Nonproprietary Name (INN) or generic name, strength, dosage form, manufacturer and expiry date; reference to earlier correspondence (for example, the letter of consent by the recipient); the expected date of arrival and port of entry; and the identity and contact address of the donor.

- 11. In the recipient country the declared value of a drug donation should be based upon the wholesale price of its generic equivalent in the recipient country, or, if such information is not available, on the wholesale world-market price for its generic equivalent.**

### **Justification and explanation**

This provision is needed solely to prevent drug donations being valued in the recipient country according to the retail price of the product in the donor country. This may lead to elevated overhead costs for import tax, port clearance and handling in the recipient country. It may also result in a corresponding decrease in the public sector drug budget in the recipient country.

### **Possible exception**

In the case of patented drugs (for which there is no generic equivalent) the wholesale price of the nearest therapeutic equivalent could be taken as a reference.

- 12. Costs of international and local transport, warehousing, port clearance and appropriate storage and handling should be paid by the donor agency, unless specifically agreed otherwise with the recipient in advance.**

### **Justification and explanation**

This provision prevents the recipient from being forced to spend effort and money on the clearance and transport of unannounced consignments of unwanted items, and also enables the recipient to review the list of donated items at an early stage.

## Annex 9. Model Regulatory Aspects of Exportation and Importation of Controlled Substances

### Introduction

Organizations involved in the provision of medical supplies in emergency situations are often faced with serious difficulties in providing narcotic and psychotropic medicines because of the regulatory requirements concerning their exportation and importation. The lack of these medicines results in additional human suffering by depriving those in need of adequate pain relief and sedation. This makes these medicines an essential part of medical supply in emergency situations.

The *Basic Unit* of the Interagency Emergency Health Kit 2006 does not contain any substances that are regarded as narcotics or psychotropics, so they are not under international control and will not require additional formalities for international transport.

However, the *Supplementary Unit* contains several substances under international control, and other substances in it are under discussion for future control. Also, certain countries have additional national regulations for medicines not under international control.

**Substances from the Kit under international control are *morphine injection 10mg/ml, 1 ml-ampoule; diazepam injection 5mg/ml, 2 ml-ampoule* and *phenobarbital tablets 100mg*. Morphine requires import and export licences in any case. For the two other substances this may vary with the country.**

**Some countries have brought additional substances under their national regulations. This could be the case in some countries for *ketamine injection 50mg/ml 10 ml-vial, promethazine tablets 25 mg, promethazine injection 25 mg/ml, 2ml-ampoule* and *chlorpromazine injection 25mg/ml, 2ml-ampoule*.**

**At present there is an assessment going on, in order to decide whether ketamine needs to be brought under international control.**

There are three international treaties that control narcotic and psychotropic substances:

- UN Single Convention on Narcotic Drugs (1961, amended by protocol of 1972)
- UN Convention on Psychotropic Substances (1971)
- UN Convention against the Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988).

These treaties are quite complex and it would go too far to go into details here. For the really interested, their texts can be found at the website of the International Narcotics Control Board (INCB) ([www.incb.org](http://www.incb.org)).

Those who need to consult the most recent lists of scheduled substances can find them at this website too.

## **Standard procedure for international transfer of narcotic and psychotropic substances**

The international transportation of narcotic medicines and psychotropic substances is "exportation" from one country and "importation" to the other one. This requires an export authorization from the authorities of the sending country as well as an import authorization from the authorities of the receiving country. The export authorization is granted only *after* the issue of the import authorization.

As such, the import/export authorization system makes the quick international transportation of controlled medicines to sites of emergencies virtually impossible. In addition, countries have to estimate their narcotic drug consumption in advance and send the estimates to the INCB. Only after the INCB has received an estimate for a substance from a receiving country, the sending country will grant an application for an export authorization. It will be clear that the rigorous application of the estimate system can further complicate the procedure, especially in situations of suddenly risen demands.

*This procedure takes too long to meet the acute need for relief in emergency situations -from several weeks up to many months. This will be even more true when the control authorities in the receiving country are struck themselves by the disaster.*

## **Procedure to be followed in disaster relief**

Model guidelines were prepared to enable adequate procurement of controlled substances in disaster relief. The procedures would allow suppliers to ship controlled medicines internationally in emergency situations at the request of recognized agencies providing humanitarian assistance without prior export/import authorizations. The defined procedures are acceptable to the control authorities and the INCB.

The INCB has advised control authorities that emergency humanitarian deliveries are considered as being consumed in the exporting country. This makes that no additional estimate has to be sent by the authorities of the receiving country. (As the sent amounts are usually relatively small in comparison to the domestic use of the sending country, in most cases the existing estimation is large enough to comprise the amount sent, and hence, the sending country has no additional estimations to submit to the INCB either.)

*The INCB recommends to limit control obligations in emergency situations to the authorities of exporting countries.<sup>57</sup>*

---

<sup>57</sup> This principle was endorsed by the UN Commission on Narcotic Drugs in 1995, and was further reinforced by its resolution entitled "Timely provision of controlled medicines for emergency care" adopted at the 39th session in 1996. This and a similar resolution adopted by the 49th session of the World Health Assembly requested WHO to prepare model guidelines to assist national authorities with simplified regulatory procedures for this purpose, in consultation with the relevant UN bodies and interested governments. (Model Guidelines for the International Provision of Controlled Medicines for Emergency Medical Care, WHO/PSA/96.17).

## Who should do what?

The *operator*<sup>58</sup> should make a written request for emergency supplies of controlled substances to the *supplier*<sup>59</sup>, using the attached model form. The operator is responsible for:

- ◆ selection of suppliers;<sup>60</sup>
- ◆ information provided on the form;
- ◆ actual handling of controlled medicines at the receiving end or adequate delivery to the reliable recipient;
- ◆ reporting to the control authorities of the receiving country (whenever they are available) as soon as possible;
- ◆ reporting to the control authorities of the receiving country on unused quantities, if any, when the operator is the end-user or to arrange for the end-user to do so;
- ◆ reporting to the control authorities of the exporting country through the supplier, with copy to the INCB, any problems encountered in the working of emergency deliveries.

Before responding to the request from the operator, the *supplier* should be convinced that the nature of the emergency justifies the application of the simplified procedure without export/import authorizations. The supplier is also responsible for:

- ◆ submitting immediately a copy of the shipment request to the control authorities of the exporting country;
- ◆ submitting an annual report on emergency deliveries and quantities of medicines involved as well as their destinations, with copy to the INCB;
- ◆ reporting to the control authorities of the exporting country, with copy to the INCB, any problems encountered in the working of emergency deliveries.

The *control authorities of the exporting country* should inform their counterpart in the receiving country (whenever they are available) of the emergency deliveries.

---

<sup>58</sup> Operators: organizations engaged in the provision of humanitarian assistance in health matters recognized by the control authorities of exporting countries.

<sup>59</sup> Suppliers: supplier of medicines for humanitarian assistance at the request of an operator (either a separate entity or a department of an operator).

<sup>60</sup> Suppliers should be limited to those recognized by the control authorities of exporting countries. They should at least have:

- adequate experience as a supplier of good quality emergency medical supplies;
- managerial capability to assess the appropriateness of requests for the simplified procedure from operators;
- adequate level of stock and a responsible pharmacist;
- sufficient knowledge about the relevant international conventions;
- standard agreement with the control authorities of exporting countries (see attached document with outlines for the agreement).

The *control authorities of the receiving country* have the right to refuse the importation of such deliveries.

## **Outline of standard agreement between supplier and control authorities of exporting countries<sup>61</sup>**

The standard agreement should at least cover:

### **1. Criteria for acceptance of shipment requests from operators (a model form is attached at the end).**

The criteria for immediate acceptance of shipment requests from operators should at least specify the essential information to be furnished to the supplier concerning:

#### ***a. credibility of the requesting operator***

A pre-determined list of credible operators ought to be prepared. A credible operator should (i) be an established organization; (ii) have adequate experience for international provision of humanitarian medical assistance; (iii) have responsible medical management (medical doctor(s) or pharmacist(s)); and (iv) appropriate logistic support.

#### ***b. nature of the emergency and the urgency of the request***

A statement to the supplier on the nature of the emergency by the operator, or if appropriate, by a UN agency.

#### ***c. availability of control authorities in the receiving country.***

#### ***d. diversion prevention mechanism after delivery***

Indicate if the requesting operator itself is the user of the supplies. If not, the name and organization of the person responsible for receipt and internal distribution of the supplies should be indicated. As far as possible, the recipients in the receiving country should be identified.

### **2. Timing and mode of reporting to the control authorities and the INCB**

When control authorities are available in the receiving country, they should be notified as soon as possible by the control authorities of the exporting country and the operator of a consignment of the emergency delivery, while their import authorization may not have to be required under the circumstances of an emergency situation.

Suppliers should inform the control authorities of the exporting country of each emergency shipment being made in response to a request from an operator so that the control authorities can intervene if necessary.

Suppliers should submit to the control authorities of the exporting country an annual report on emergency deliveries and quantities of medicines involved as well as their destinations in duplicate, so that one copy can be forwarded to the INCB.

---

<sup>61</sup> When an operator is also a supplier, the agreement will be between the operator and the control authorities.



Suppliers, or operators through the suppliers, should inform the control authorities of the exporting countries, with copy to the INCB, of any problems encountered in the working of emergency deliveries.

**3. Other relevant matters**

As appropriate, the agreement may include provisions on other relevant matters such as inspection and guidance by the control authorities. Although the quantities involved would be rather small, it may touch upon estimated/assessed requirements based on the principle that the medicines provided should be regarded as having been “consumed” in the exporting country.

## Shipment request/notification form for emergency supplies of controlled substances

### Operator:

Name: .....  
Address: .....  
Name of the responsible medical director/pharmacist: .....  
Title: .....  
Phone No. .... Fax No. ....

### Requests the supplier:<sup>62</sup>

Name: .....  
Address: .....  
Responsible pharmacist: .....  
Phone No. .... Fax No. ....

### For an emergency shipment<sup>63</sup> of the following medicine(s) containing controlled substances:

*Name of product (in INN/generic name) and dosage form, amount of active ingredient per unit dose, number of dosage units in words and figures*

*Narcotic medicines as defined in the 1961 Convention (e.g. morphine, pethidine, fentanyl)  
[e.g. morphine injection 1 ml ampoule; morphine sulfate corresponding to 10 mg of morphine base per ml; two hundred (200) ampoules]*

.....  
.....  
.....  
.....

*Psychotropic substances as defined in the 1971 Convention (e.g. buprenorphine, pentazocine, diazepam, phenobarbital)*

.....  
.....  
.....  
.....

*Others (nationally controlled in the exporting country, if applicable)*

.....  
.....

---

<sup>62</sup> If the operator is exporting directly from its emergency stock, it should be considered as a supplier.

<sup>63</sup> Emergency deliveries do not affect the estimate of the recipient country since they have already been accounted for in the estimate of the exporting country.

**To the following recipient (whichever applicable):**

Country of final recipient: .....  
Responsible person for receipt: .....  
Name: .....  
Organization/Agency:.....  
Address: .....  
Phone No. .... Fax No. ....

**For use by/delivery to:**

Location: ..... Organization/Agency .....  
.....  
.....

**Consignee (If different from above e.g. transit in a third country):**

Name: ..... Organization/Agency .....  
Address: .....  
Phone No. .... Fax No. ....

**Nature of the emergency (Brief description of the emergency motivating the request):**

.....  
.....  
.....

**Availability of, and action taken to contact the control authorities in the receiving country:**

.....  
.....

I certify that the above information is true and correct. My Organization will:

- ◆ Take responsibility for receipt, storage, delivery to the recipient/end-user, or use for emergency care (strike out what is not applicable) of the above controlled medicines;
- ◆ Report the importation of the above controlled medicines as soon as possible to the control authorities (if available) of the receiving country;
- ◆ Report the quantities of unused controlled medicines, if any, to the control authorities of the receiving country (if available), or arrange for the end-user to do so (strike out what is not applicable).

Title:.....Date: .....  
Location: .....  
(Signature)



## Annex 10. References

The books and documents referenced below may be obtained (some are priced others are free of charge) from the respective organizations - contact details are provided in Annex 11 or can be found on the organizations' websites.

### Medicines

WHO. **Electronic Essential Medicines Library and WHO Model Formulary**

URL: <http://mednet3.who.int/EMLib/wmf.aspx>

WHO. **WHO Model List of Essential Medicines.**

<http://www.who.int/medicines/publications/essentialmedicines/en/index.html>

### Medicine management

UNHCR. **UNHCR Drug Management Manual 2006. Policies, Guidelines, UNHCR List of Essential Drugs.** UNHCR, Geneva, 2006

<http://www.unhcr.org/cgi-bin/teXis/vtx/publ/opendoc.pdf?tbl=PUBL&id=43cf66132>

John Snow, Inc./DELIVER. **Logistics Handbook: A Practical Guide for Supply Chain Managers in Family Planning and Health Programs.** 2004

[http://portalprd1.jsi.com/portal/page?\\_pageid=93,3144386,93\\_3144425&\\_dad=portal&\\_schema=PORTAL](http://portalprd1.jsi.com/portal/page?_pageid=93,3144386,93_3144425&_dad=portal&_schema=PORTAL)

John Snow, Inc./DELIVER in collaboration with WHO. **Guidelines for the Storage of Essential Medicines and Other Health.** Arlington, VA: John Snow, Inc./DELIVER; 2003.

[http://portalprd1.jsi.com/portal/page?\\_pageid=93,3144386,93\\_3144425&\\_dad=portal&\\_schema=PORTAL](http://portalprd1.jsi.com/portal/page?_pageid=93,3144386,93_3144425&_dad=portal&_schema=PORTAL)

### Communicable diseases

WHO. **Communicable Disease Control in Emergencies - A Field Manual.** WHO/CDS/2005.27. ISBN 92 4 154616 6

<http://bookorders.who.int/bookorders/anglais/home1.jsp?sesslan=1>

WHO. **Guidelines for the control of shigellosis, including epidemics due to *Shigella dysenteriae* type 1.** World Health Organization, Geneva 2005. (ISBN 92 4 159233 0)

<http://whqlibdoc.who.int/publications/2005/9241592330.pdf>

WHO/Department of Child and Adolescent Health and Development. **The treatment of diarrhoea - A manual for physicians and other senior health workers.** World Health Organization, Geneva, 2005. (ISBN 92 4 159318 0)

[http://www.who.int/child-adolescent-health/New\\_Publications/CHILD\\_HEALTH/ISBN\\_92\\_4\\_159318\\_0.pdf](http://www.who.int/child-adolescent-health/New_Publications/CHILD_HEALTH/ISBN_92_4_159318_0.pdf)

WHO. **Environmental health in emergency situation. A practical guide. Control of communicable diseases and prevention of epidemics.** World Health Organization, Geneva, 2002.  
[http://www.who.int/water\\_sanitation\\_health/hygiene/emergencies/em2002chap11.pdf](http://www.who.int/water_sanitation_health/hygiene/emergencies/em2002chap11.pdf)

## **General public health**

MSF. **Refugee health: an approach to emergency situations.** London: Macmillan; 1997. ISBN 0-333-72210-8  
[http://www.msf.org/source/refbooks/msf\\_docs/en/Refugee\\_Health/RH1.pdf](http://www.msf.org/source/refbooks/msf_docs/en/Refugee_Health/RH1.pdf)

WHO. **Environmental health in emergencies and disasters: a practical guide.** Geneva: World Health Organization; 2003. ISBN 92 4 154 541 0  
[http://www.who.int/water\\_sanitation\\_health/emergencies/emergencies2002/en/index.html](http://www.who.int/water_sanitation_health/emergencies/emergencies2002/en/index.html)

UNHCR. **Water manual for refugee situations.** Geneva: Office of the United Nations High Commissioner for Refugees; 1992

## **Child health**

WHO. **Child health in emergencies. 2003**  
<http://www.who.int/child-adolescent-health/publications/pubemergencies.htm>

WHO. **Report of consultative Meeting to Review Evidence and Research Priorities in the Management of Acute Respiratory Infections (ARI).** Geneva 29 September - 1 October 2003. WHO/FCH/CAH/04.2.  
[http://www.who.int/child-adolescent-health/New\\_Publications/CHILD\\_HEALTH/WHO\\_FCH\\_CAH\\_04.2.pdf](http://www.who.int/child-adolescent-health/New_Publications/CHILD_HEALTH/WHO_FCH_CAH_04.2.pdf)

WHO. **Technical updates of the guidelines on the Integrated Management of Childhood Illness (IMCI). Evidence and recommendations for further adaptations.** World Health Organization, Geneva 2005.  
[http://www.who.int/child-adolescent-health/New\\_Publications/IMCI/ISBN\\_92\\_4\\_159348\\_2.pdf](http://www.who.int/child-adolescent-health/New_Publications/IMCI/ISBN_92_4_159348_2.pdf)

## **HIV and STIs**

IASC. **Guidelines for HIV interventions in emergency settings.** Inter-Agency standing committee . Geneva: Joint United Nations Programme on HIV/AIDS; 2003.

WHO. **Guidelines for the management of sexually transmitted infections.** Geneva: World Health Organization; 2003. ISBN 92 4 1546263. URL:  
[http://www.who.int/reproductive-health/publications/rhr\\_01\\_10\\_mngt\\_stis/](http://www.who.int/reproductive-health/publications/rhr_01_10_mngt_stis/)

## **International travel and health**

WHO. **International travel and health.** Geneva: World Health Organization; 2005. ISBN 92 4 1580364  
<http://www.who.int/ith/en/>

## **Malaria**

WHO. **Guidelines for the treatment of malaria.** Geneva: World Health Organization; 2006. ISBN 92 4 154694 8. WHO/HTM/MAL/2006.1108.  
<http://www.who.int/malaria/docs/TreatmentGuidelines2006.pdf>

WHO. **Malaria control in complex emergencies. An Interagency field handbook.** Geneva: World Health organization; 2005. ISBN 92 4 159389 X. WHO/HTM/MAL/2005.1107  
[http://www.who.int/malaria/docs/ce\\_interagencyfhbook.pdf](http://www.who.int/malaria/docs/ce_interagencyfhbook.pdf)

## Mental health

WHO. **Tool: Rapid Assessment of Mental Health Needs of Refugees, Displaced and other Populations affected by Conflict and Post-Conflict Situations.** Geneva: World Health Organization; 2001. MNH/MHP/99.4 rev.1  
<http://www.who.int/hac/techguidance/pht/7405.pdf>

## Nutrition

WHO. **Guiding principles for feeding infants and young children during emergencies.** Geneva World Health Organization; 2004. ISBN 92 4 154606 9.  
<http://whqlibdoc.who.int/hq/2004/9241546069.pdf>

## Reproductive health

UNFPA. **Inter-agency reproductive health kits for crisis situations, 3<sup>rd</sup> edition.** Draft April 2005.

WHO/UNHCR. **Clinical management of survivors of rape. Developing protocols for use with refugees and internally displaced persons. Revised edition.** Geneva, World Health Organization; 2005. Eng: ISBN 92 4 159263 X.  
FR: ISBN 92 4 259263 3  
[http://www.who.int/reproductive-health/publications/clinical\\_mngt\\_survivors\\_of\\_rape/clinical\\_mngt\\_survivors\\_of\\_rape.pdf](http://www.who.int/reproductive-health/publications/clinical_mngt_survivors_of_rape/clinical_mngt_survivors_of_rape.pdf)

UNHCR. **Sexual and gender-based violence against refugees, returnees, and internally displaced persons: guidelines for prevention and response.** Geneva: Office of the United Nations High Commissioner for Refugees; May 2003. URL:<http://www.unhcr.ch/cgi-bin/taxis/vtx/protect/opendoc.pdf?tbl=PROTECTION&id=3f696bcc4>

UNFPA. **Reproductive Health for Communities in Crisis.** UNFPA Emergency Response, 2001  
[http://www.unfpa.org/upload/lib\\_pub\\_file/78\\_filename\\_crisis\\_eng.pdf](http://www.unfpa.org/upload/lib_pub_file/78_filename_crisis_eng.pdf)

UNFPA/UNHCR/WHO. **Reproductive health in refugee situations: an interagency field manual:** Geneva: Office of the United Nations High Commissioner for Refugees; 1999  
<http://www.unfpa.org/emergencies/manual/>

## Tuberculosis

WHO. **TB/HIV a clinical manual 2004.** Geneva: World Health Organization; 2004. 2<sup>nd</sup> edition. WHO/HTM/TB/2004.329. URL:  
[http://www.who.int/tb/publications/who\\_htm\\_tb\\_2004\\_329/en/index.html](http://www.who.int/tb/publications/who_htm_tb_2004_329/en/index.html)

WHO. **Treatment of tuberculosis: guidelines for national programmes.** 3<sup>rd</sup>.edition. Geneva: World Health Organization; 2003. WHO/CDC/TB/03.313 URL:  
[http://whqlibdoc.who.int/hq/2003/WHO\\_CDS\\_TB\\_2003.313.pdf](http://whqlibdoc.who.int/hq/2003/WHO_CDS_TB_2003.313.pdf)

WHO/UNHCR. **Tuberculosis Control in Refugee Situations: an Interagency Field Manual.** Geneva: World Health Organization; 1997. WHO/TB/97.221  
[http://whqlibdoc.who.int/hq/1997/WHO\\_TB\\_97.221.pdf](http://whqlibdoc.who.int/hq/1997/WHO_TB_97.221.pdf)





## Annex 11. Useful addresses

### Partners

**Ecumenical Pharmaceutical Network**  
Community Initiatives Support Services International  
P.O. Box 73860  
Nairobi  
Kenya  
Tel: +254 20 444 4832/5020  
Fax: +254 20 444 5095/444 0306  
E-mail: [epn@wananchi.com](mailto:epn@wananchi.com)  
<http://www.epnetwork.org/>

**International Committee of the Red Cross**  
19 Avenue de la Paix  
CH-1202 Geneva  
Switzerland  
Tel. +41 22 734 6001  
Fax: +41 22 733 2057  
E-mail: [www.icrc.org](http://www.icrc.org)  
<http://www.icrc.org>

**International Federation of Red Cross and Red Crescent Societies**  
17 Chemin des Crêt  
Petit Saconnex  
P.O. Box 372  
CH-1211 Geneva  
Switzerland  
Tel: +41 22 730 4222  
Fax: +41 22 733 0395  
E-mail: [secretariat@ifrc.org](mailto:secretariat@ifrc.org)  
<http://www.ifrc.org>

**International Organization for Migration**  
17 route des Morillons  
P.O. Box 71  
CH-1211 Geneva 19  
Switzerland  
Tel: +41 22 717 9111  
Fax: +41 22 7986150  
E-mail: [info@iom.int](mailto:info@iom.int)  
<http://www.iom.int>

**John Snow, Inc.**

JSI Logistics Services  
1616 N Fort Myer Drive, 11<sup>th</sup> floor  
Arlington VA 22209  
United States of America  
Tel: +1 703 528 7474  
Fax: +1 703 528 7480  
E-mail: [info@jsi.com](mailto:info@jsi.com)  
<http://www.jsi.com> or <http://www.deliver.jsi.com>

**Médecins Sans Frontières**

Belgium Office  
94 rue Dupré  
B-1090 Brussels  
Belgium  
Tel: +32 2 474 7474  
Fax: +32 2 474 7575  
E-mail: [info@msf.be](mailto:info@msf.be)  
<http://www.msf.be/>

**Merlin**

207, Old Street, 12<sup>th</sup> floor  
London EC1V 9NR  
United Kingdom  
Tel: +44 20 7014 1600  
Fax: +44 20 7014 1601  
E-mail: [www.merlin.org.uk](http://www.merlin.org.uk)  
<http://www.merlin.org.uk>

**OXFAM**

Oxfam House  
John Smith Drive  
Cowley  
Oxford OX4 2JY  
United Kingdom  
Tel: +44 1865 473 727  
E-mail: <http://www.oxfam.org.uk/contact>  
<http://www.oxfam.org.uk>

**United Nations Children's Fund**

UNICEF House  
3 United Nations Plaza  
New York, New York 10017  
United States of America  
Tel: +1 212 326 7000  
Fax: +1 212 887 7465  
E-mail: [www.unicef.org](http://www.unicef.org)  
<http://www.unicef.org>

**United Nations High Commissioner for Refugees**

Case Postale 2500  
CH-1211 Geneva 2 Dépôt  
Switzerland  
Tel: +41 22 739 8111  
Fax: +41 22 731 9546  
E-mail: <http://www.unhcr.org>  
<http://www.unhcr.org>

**World Council of Churches**

Christian Medical Commission, Churches' Action for Health  
150 Route de Ferney  
P.O. Box 2100  
CH-1211 Geneva 2  
Switzerland  
Tel: +41 22 791 6111  
Fax: +41 22 791 0361  
E-mail: [koa@wcc-col.org](mailto:koa@wcc-col.org);  
<http://www.wcc-coe.org>

**United Nations Population Fund**

UNFPA/HRU  
11 Chemin des Anémones  
CH-1219 Geneva  
Switzerland  
Tel: +41 22 917 8315  
Fax: +41 22 919 8016  
E-mail: [hru@unfpa.org/](mailto:hru@unfpa.org/)  
Website: [www.unfpa.org](http://www.unfpa.org)

**World Health Organization**

20, Avenue Appia  
CH-1211 Geneva 27  
Switzerland  
Tel: +41 22 791 2111  
Fax: +41 22 791 3111  
E-mail: [info@who.int](mailto:info@who.int)  
Website: [www.who.int](http://www.who.int)

## Suppliers

### **Centrale Humanitaire Médico-pharmaceutique**

4 voie militaire des Gravanges

F-63100 Clermont-Ferrand

France

Tel: +33 4 73982481

Fax: +33 4 73982480

E-mail: [contact@chmp.org](mailto:contact@chmp.org)

<http://www.chmp.org>

### **IDA Foundation**

Slocherweg 35

1027 AA Amsterdam

PO Box 37098

NL-1030 AB Amsterdam

The Netherlands

Tel: +31 20 403 3051

Fax: +31 20 403 1854

E-mail: [info@idafoundation.org](mailto:info@idafoundation.org)

<http://www.idafoundation.org>

### **Missionpharma**

Vassingerodvej 9

3540 Lyngø

Denmark

Tel.: +45 4816 3200

Fax: +45 4816 3248

E-mail: [info@missionpharma.com](mailto:info@missionpharma.com)

<http://www.missionpharma.com>

### **MSF - Supply**

Preenakker 20

B-1785 Merchtem

Belgium

Tel.: +32 52 2610 00

Fax: +32 52 2610 04

E-mail: [office-msfsupply@msf.be](mailto:office-msfsupply@msf.be)

<http://www.msfsupply.be>

### **Medical Export Group**

Papland 16

P.O. Box 598

4200 AN Gorinchem

The Netherlands

Tel: +31 20 403 3051

Fax: +31 20 403 1854

E-mail: [sales@meg.nl](mailto:sales@meg.nl)

<http://www.meg.nl>

**United Nations Children's Fund - Supply Division**

UNICEF Plads  
Freeport  
DK-2100 Copenhagen Æ,  
Denmark  
Tel: +45 35 37 35 27  
Fax: +45 35 26 94 21  
E-mail: [supply@unicef.org](mailto:supply@unicef.org)  
<http://www.unicef.org/supply>

**UNFPA Nordic Office**

Procurement services  
Midtermolen 3  
DK-2100 Copenhagen  
Denmark  
Tel: +45 35 467 000  
Fax: +45 35 467 018  
E-mail: [nordic.office@unfpa.dk](mailto:nordic.office@unfpa.dk)  
<http://nordic.unfpa.org/>

**World Health Organization**

Procurement Services  
20, Avenue Appia  
CH-1211 Geneva 27  
Switzerland  
Tel: +41 22 791 2111  
Fax: +41 22 791 0746  
<http://www.who.int/>

**United Nations Development Programme**

Interagency Procurement Services Office  
Midtermolen 3  
P.O. Box 2530  
DK-2100 Copenhagen Ø  
Denmark  
Tel: +45 35 46 7000  
Fax: +45 35 46 7001  
E-mail: [registry.iapso@undp.org](mailto:registry.iapso@undp.org)  
[www.iapso.org/](http://www.iapso.org/)



## Feedback form

The purpose of this form is to seek your opinion about the contents of the **Interagency Emergency Health Kit 2006**. Any remarks, suggestions or recommendations you may have are welcomed. We will use your written feedback about the kit during the next revision of its contents which is planned for 2008. Your input will be acknowledged.

Please send your feedback either by post to WHO, Department of Medicines Policy and Standards, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland; or by fax: +41 22 791 4167 or e-mail: [everardm@who.int](mailto:everardm@who.int)

### Feedback on the Interagency Emergency Health Kit 2006 Emergency situation

Please describe briefly the situation in which you used the Interagency Emergency Health Kit 2006.

Date/period and year: .....

Country: .....

Kind of emergency situation: .....

.....

Your qualification and position: .....

.....

#### I. Content of the basic unit

##### Selected medicines

1. Are the contents of the basic unit appropriate for the needs of the displaced population in terms of the selected medicines?  Yes  No

If **no**, which medicines are inappropriate?:

If **no**, which medicines are missing?:

##### Selected renewable medical supplies

2. Are the contents of the basic unit appropriate for the needs of the displaced population in terms of the selected renewable medical supplies?  Yes  No

If **no**, which renewable medical supplies are inappropriate?:

If **no**, which renewable medical supplies are missing?:

##### Selected health equipment

3. Are the contents of the basic unit appropriate for the needs of the displaced population in terms of the selected health equipment?  Yes  No

If **no**, which health equipment is inappropriate?:

If **no**, which health equipment is missing?:

## II. Content of the supplementary unit

### Selected medicines

4. Are the contents of the supplementary unit appropriate for the needs of the displaced population in terms of the selected medicines?  Yes  No

If no, which medicines are inappropriate?:

If no, which medicines are missing?:

### Selected renewable medical supplies

5. Are the contents of the supplementary unit appropriate for the needs of the displaced population in terms of selected renewable medical supplies?  Yes  No

If no, which renewable medical supplies are inappropriate?:

If no, which renewable medical supplies are missing?:

### Selected health equipment

6. Are the contents of the supplementary unit appropriate for the needs of the displaced population in terms of selected health equipment?  Yes  No

If no, which health equipment is inappropriate?:

If no, which health equipment is missing?:

## III. Information

7. Does the booklet *IEHK 2006* provide appropriate information and instructions to understand the emergency health kit's guiding principles?  Yes  No

If no, why not?

8. Does the booklet *IEHK 2006* provide appropriate treatment guidelines for the use of the contents of basic units?  Yes  No

If no, why not?

9. Are all sections of the booklet *IEHK 2006* relevant?  Yes  No

If no, what would you take out?:

If no, what would you like to see included?:

10. Are all annexes of the booklet *IEHK 2006* relevant?  Yes  No

If no, what would you take out?:

If no, what would you like to see included?:

11. Was there any technically inaccurate or incomplete information?  Yes  No

If yes, what?:

12. What are your 3 suggestions to improve the contents of the kit and the booklet *IEHK 2006* for the next update?

- 1.
- 2.
- 3.

*Thank you for your feedback.*