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APPENDIX B

- B.1.0 UNHCR Standard Order Format
- B.1.1 Basic List - for Field Use
- B.1.2 Specialised List
- B.1.3 Basic List: Example for International Ordering

- B.2.0 Proposed format when submitting drug requisitions - from camp level - to regional/central stores (appropriate when orders are made from a central camp pharmacy), for drugs not included in UNHCR Standard List.

APPENDIX B.1.1

Order No.: _____

UNHCR STANDARD BASIC LIST

Order Date: _____

Order Needed by (date):* _____

Date of Last Order: _____

Order No.: _____

Date Received: _____

Camp Name: _____

Location: _____

Pop.: _____

Coordinating Agency:* _____

Agencies Involved.* _____

Ordered by: _____
(name & title of person filing order)

_____ (signature)

_____ (date)

_____ (organisation/agency)

where applicable

	Drug Identif. Number	Generic Name	Dose Form	Strength	Unit/Pack Size	Total Order Size (i.e. total # amps, tabs)	Number of Units/Pack Size Required
1	1.1-1	ether, anaesthetic	inhalation				
2	1.1-3	halothane	inhalation				
	1.1-4	ketamine	inj	50mg/ml			
	1.2-2/1	lidocaine	inj	1%/50ml			
5	2.1-1/1	acetylsalicylic acid	tab	300mg			
	2.1-6/1	paracetamol	tab	500mg			
	2.1-8	probenecid	tab	500mg			
8	3-1/1	chlorphenamine	tab	4mg			
9	3-2/2	dexamethasone	inj	4mg/ml			
0	3-3/1	epinephrine	inj	1mg/ml			
1	3-4/1	prednisolone	tab	5mg			
12	4.1-2	ipecacuanha	syrup				
3	4.2-1	atropine	inj	1mg/ml			
4	4.2-4	naloxone	inj	4mg/ml			
15	5-1	diazepam	inj	5mg/ml			
15	5-3/1/a	phenobarbital	tab	50mg			
7	5-3/2	phenobarbital	syrup	15mg/5ml			
18	5-4/1/a	phenytoin	tab	25mg			
19	6.1-1	mebendazole	tab	100mg			
0	6.1-2	niclosamide	tab	500mg			
1	6.1-3/1	piperazine	tab	500mg			
22	6.1-3/2	piperazine	syrup	500mg/5ml			
3	6.2-3	metronidazole	tab	200mg			
4	6.3.1-1/1/a	ampicillin	cap	250mg			
25	6.3.1-1/2	ampicillin	powder/oral soln	250mg/5ml			
26	6.3.1-1/3	ampicillin	powder/inj	500mg			
7	6.3.1-2	benzathine benzylpenicillin	inj	2.4miu/5ml			
28	6.3.1-3/b	benzylpenicillin	powder/inj	5miu/vial			
29	6.3.1-4/1	cloxacillin	cap	500mg			

	Drug Identif. Number	Generic Name	Dose Form	Strength	Unit/Pack Size	Total Order Size (i.e. total # amps, tabs)	Number of Units/Pack Size Required
30	6.3.1-5/1	phenoxymethylpenicillin	tab	250mg			
1	6.3.1-5/b	procaine benzylpenicillin	powder/inj	3miu/vial			
2	6.3.2-1/1	chloramphenicol	cap	250mg			
33	6.3.2-1/2	chloramphenicol	powder/inj	1gm/vial			
4	6.3.2-2/1	erythromycin	tab	250mg			
5	6.3.2-2/2	erythromycin	oral susp	125mg			
36	6.3.2-2/3	erythromycin	powder/inj	500mg/vial			
37	6.3.2-3/b	gentamicin	inj	40mg/ml			
3	6.3.2-7/1	sulfadimidine	tab	500mg			
3	6.3.2-8/b	sulfamethoxazole+trimethoprim	tab	400mg+80mg			
40	6.3.2-9	tetracycline	cap	250mg			
1	6.5.2/a	griseofulvin	tab	125mg			
2	6.5.3/2	nystatin	pessary	100,000iu			
43	6.7-1/1	chloroquine	tab	150mg			
44	6.7-1/2	chloroquine	syrup	50mg/5ml			
5	6.7.3/1	quinine	tab	300mg			
46	6.7-3/2	quinine	inj	300mg/ml			
47	10.1-1/1	ferroussulfate	tab	60mg iron			
3	10.1-1/2	ferroussulfate	powder/oral susp	15mgfe/0.6ml			
3	10.1-2	ferroussulf.+folic acid	tab	60mg+200mg			
50	11.1-1	dextran 70	inj soln	6%			
71	12.1-1	glyceryl trinitrate	sub ling	0.5mg			
2	12.1-3/1/b	propranolol	tab	40mg			
53	12.3-1	hydralazine	tab	50mg			
54	12.3-2	hydrochlorothiazide	tab	50mg			
5	12.4-1/1	digoxin	tab	0.25mg			
5	12.4-1/2	digoxin	oral soln	0.05mg/ml			
57	12.4-1/3	digoxin	inj	0.25mg/ml			
3	13.1-1	benzoic acid+salicylic acid	oint	6%+3%			
3	13.2-1	gentian violet	crystals				
60	13.2-2	neomycin+bacitracin	oint	5mg+500iu			
61	13.3-2	calamine lotion	lotion				
2	13.3-3	hydrocortisone	oint	1%			
3	13.6-1	benzyl benzoate	lotion	25%			
64	13.6-2	lindane	cream/lotion	1%			
5	14.1-1	fluoroscain	eyedrops	1%			
5	15-1	chlorhexidine	solution	5%			
67	15-2	iodine	solution	2.5%			
68	16-2/1	furosemide	tab	40mg			
3	16-2/2	furosemide	inj	10mg/ml			
70	17.1-1/1	aluminium hydroxide	tab	500mg			
71	17.2-1/1/b	promethazine	tab	25mg			
2	17.2-1/2	promethazine	syrup	5mg/5ml			
3	17.4-1	atropine	tab	1mg			
74	17.5-1	senna	tab	7.5mg			
75	17.6.2-1	oral rehydration salts	sachet	27.9gm/litre			
5	18-2/1/b	dexamethasone	tab	4mg/vial			
77	18.1-1	hydrocortisone	powder/inj	10mg/vial			
78	18.5-1/9	insulin-soluble	inj	50iu/ml			
3	18.5-2/a	intermediate acting insulin	inj	40iu/ml			
79	18.5-3	glibenclamide	tab	5mg			
81	18.7-1	norethisterone	tab	5mg			

	Drug Identif. Number	Generic Name	Dose Form	Strength	Unit/Pack Size	Total Order Size (i.e. total # amps, tabs)	Number of Units/Pack Size Required
82	18.8-1/a	levothyroxine	tab	0.05mg			
3	21.1-3	tetracycline	eye oint	1%			
4	21.3-1	tetracaine	eyedrops	0.5%			
85	22-1/1	ergometrine	tab	0.2mg			
6	22-1/2	ergometrine	inj	0.2mg/ml			
7	24-2/1	chlorpromazine	tab	100mg			
88	24-2/3	chlorpromazine	inj	25mg/ml			
9	24-3	diazepam	tab	5mg			
0	25.1-1/1	aminophylline	tab	100mg			
91	25.1-1/2	aminophylline	inj	25mg/ml			
92	25.1-2/1	salbutamol	tab	4mg			
3	26.2-1	potassium chloride	tab	600mg			
4	26.2-1	sodium lactate comp soln	inj soln	500ml			
95	26.2-2	glucose	inj soln	5%isotonic/ 50%hypert.			
6	26.2-4	potassium chloride	inj soln				
97	26.2-6	sodium chloride	inj soln	0.9%			
98	26.3-1/9	water for inj	inj	2ml			
9	26.3-1/b	water for inj	inj	5ml			
.00	26.3-1/c	water for inj	inj	10ml			
101	27-1	ascorbic acid	tab	100mg			
02	27-5/1/b	retinol	tab	60mg(200,000iu)			
.....							
<u>Vaccines</u>							
103	19.2-7	tetanus antitoxin	inj	50,000iu			
04	19.3.1-1	BCG vaccine (dried)	inj				
.05	19.3.1-2	D.P.T. vaccine	inj				
106	19.3.1-3	diphtheria-tetanus vacc.	inj				
07	19.3-1.4	measles vaccine	inj				
08	19.3-1-6	poliomyelitis vacc. (live)	oral soln				
109	19.3.1-7	tetanus vaccine	inj				

APPENDIX B.1.2

Order No.: _____

UNHCR SPECIALISED LIST

Order Date: _____

Order Needed by (date):* _____

Date of Last Order: _____

Order No.: _____

Date Received: _____

Camp Name: _____

Location: _____

Pop.: _____

Coordinating Agency:* _____

Agencies Involved:* _____

Ordered by: _____
 (name & title of person filing order) (signature) (date)

 (organisation/agency)

where applicable

	Drug Identif. Number	Generic Name	Dose Form	Strength	Unit/Pack Size	Total Order Size (i.e. total # amps, tabs)	Number of Units/Pack Size Required
1	6.3.3-1/a	clofazimine	cap	50mg			
2	6.3.3-1/b	clofazimine	cap	100mg			
	6.3.3-2/a	dapsone	tab	50mg			
	6.3.3-2/b	dapsone	tab	100mg			
5	6.3.3-3/a	rifampicin	cap	150mg			
	6.3.3-3/b	rifampicin	cap	300mg			
	6.3.4-1	ethambutol	tab	100mg			
8	6.3.4-2	isoniazid	tab	100mg			
9	6.3.4-3	pyrazinamide	tab	500mg			
	6.3.4-3	streptomycin	powd/inj	1gm/vial			
	6.3.4-5/a	thioacetazone+isoniazid	tab	50mg+100mg			
12	6.3.4-5/b	thioacetazone+isoniazid	tab	150mg+300mg			
	6.4-1	diethylcarbamazine	tab	50mg			
	6.6-1	pentamidine	powd/inj	200mg/vial			
15	6.6-2	sodium stibogluconate	inj	33%/30ml			
16	6.7-2/a	primaquine	tab	7.5mg			
	6.7-2/b	primaquine	tab	15mg			
18	6.8-1	metrifonate	tba	100mg			
19	6.8-2/1	oxamniquine	cap	250mg			
	6.8-3	praziquantel	tab	600mg			
	6.9-1	melarsoprol	inj	3.6% soln			
22	6.9-2	suramin sodium	powd/inj	1gm/vial			
23	18.3-1/a	ethinylestradiol +levonorgestrel	tab	0.03mg+0.15mg			
24	18.3-1/b	ethinylestradiol +levonorgestrel	tab	0.05mg+0.25mg			
	18.3-2	ethinylestradiol +norethisterone	tab	0.05mg+1.0mg			
26	18.4-1	ethinylestradiol	tab	0.05mg			
	27-4	pyridoxine	tab	25mg			

Drug Identif. Number	Generic Name	Dose Form	Strength	Unit/Pack Size	Total Order Size (i.e. total # amps, tabs)	Number of Units/Pack Size Required
<u>Vaccines</u>						
8	antivenom sera	inj				
9	meningococcal vaccine	inj				
30	rabies vaccine	inj				
1	yellow fever vaccine	inj				

APPENDIX B.1.3

UNHCR STANDARD ORDER FORMAT

Proposed format when submitting drug requisitions from national programmes to UNHCR for international procurement

IN THE INTERESTS OF STREAMLINING PROCUREMENT, AND COST EFFECTIVE PURCHASING, IT IS STRONGLY RECOMMENDED THAT

Programmes with multiple camps standardise ordering schedules/deadlines with field personnel wherever possible, so that orders are based on national needs, rather than those of individual camps

APPENDIX B.1.3

Order No.: _____

UNHCR STANDARD BASIC LIST

Order Date: _____

Order Needed by (date): _____

Date of Last Order: _____

Order No.: _____

Date Received: _____

Country Name: _____

Refugee Population: _____

Ordered by: _____
(name & title of person filing request)

_____ (signature)

_____ (date)

_____ (organisation/agency)

FOR EXAMPLE

Drug Identif. Number	Generic Name	Dose Form	Strength	Unit/Pack Size	Total Order Size (i.e. total # amps, tabs)	Number of Units/Pack Size Required
1.1-1	ether, anaesthetic	inhal		---		
1.1-3	halothane	inhal		---		
1.1-4	ketamine	inj	50mg/ml	10mlamps	20amps	20amps
1.2-2	lidocaine	inj	1%/50ml	100/box	500	5boxes
2.1-1/1	acetylsalicylic acid	tab	300mg	1000/box	10,000	10boxes
2.1-6/1	paracelanol	tab	500mg	1000/box	8,000	8boxes
2.1-8	probenecid	tab	500mg	100/bot.	500	5bottles
3-1/1	chlorphenamine	tab	4mg	1000/box	8,000	8boxes
3-2/2	dexamethasone	inj	4mg/ml	1mlamps	200	200amps

APPENDIX B.2.0

UNHCR ESSENTIAL DRUGS LIST

REQUEST FOR DRUGS NOT INCLUDED ON:
- UNHCR ESSENTIAL DRUGS LIST

PLEASE COMPLETE ALL RELEVANT SECTIONS OF THIS FORM:

*Country: _____ Refuge Group: _____ Location: _____ Pop : _____

i. Generic Name: _____

. Specify the dosage form(s) and strengths that you wish to include:

Dosage form	Strength(s)	Dosage form	Strength(s)
Tablet	___ _____	Capsule	___ _____
Syrup	___ _____	Oral Soln	___ _____
Ointment/Cream	___ _____	Injectable	___ _____
Suppos	___ _____	Other	___ _____

3. Recommended dosages and length of treatment:

- paediatric _____
- adult _____

i. Clinical indications for use of drug: _____

. State reasons for inclusion on UNHCR list: _____

. List contraindications, precautions and side effects associated with use/abuse of proposed drug: _____

7. Specify conditions under which the drug will be used:

- camp(s) where it will be used: _____
- level(s) of health worker authorised to prescribe drug: _____
- health facilities in which it will be used: _____
- access to personnel skilled in use of drug: _____

(name & title of person making request)

(signature)

(date)

(organisation/agency)

APPENDIX C

GLOSSARY OF USEFUL TERMS

Batch -- The quantity of drug produced in one production run.

Bin Card -- Card bearing record of receipts, issues, and balances held in the stores. The bin card is kept in the warehouse with the physical stock.

Bioavailability -- The rate and extent of absorption of a drug from its specific dosage form. This is measured by the concentration/time curve in the circulation system or by excretion in the urine.

Brand Name -- The registered trademark name given to a specific drug product by its manufacturer.

Bulk Purchasing -- Procurement of drugs in large quantities in order to obtain lower unit prices. Generally done in a bid system in which all drugs are identified by their medical (generic, INN) name.

Certificate of Manufacture -- A document accompanying a commercial invoice which is presented to the buyer's bank -- usually a part of the requirements of a letter of credit -- certifying that the products have been manufactured, are ready for shipment, and are in safekeeping.

Clinical Pharmacist -- An individual trained in pharmacy, usually at the bachelor level, who has had specialized training in the uses, side effects, warnings, and dosages of medications for human use.

Clinical Pharmacologist -- A physician who has had specialized training in the use, side effects, warnings, and dosages of medications for human use.

Cold Chain -- A system of freezers, refrigerators, dry ice carriers, and other devices needed to maintain proper temperature for vaccines from the point of manufacture to the point of administration.

Combination Drug -- A pharmaceutical product containing more than one active ingredient.

Compliance -- The degree to which patients adhere to medical advice and take medicines as directed.

Cost-effectiveness -- The relationship between cost, as measured in monetary value, and effectiveness, as measured in terms of specific performance indicators. A cost-effective practice is one in which the effectiveness seems to justify the cost.

Course-of-therapy Prepackaging -- Prepackaging of drugs in sealed plastic bags, each bag containing a complete course of treatment for that drug, as established by standard treatment norms. The package usually contains a complete label with instructions for use.

Dosage Form -- The form of a completed pharmaceutical product as it is administered to a patient, for example, a tablet, oral solution, capsule, or injection.

Drug -- Any product used in prevention or treatment, including vaccines, oral rehydration sachets, tablets, capsules, injectables, and galenicals.

Drug Formulation -- Composition of a dosage form, including the characteristics of its raw materials, and the operations required to process it.

Effectiveness -- The degree to which a drug supply system provides the required services.

Efficacy -- The ability of a drug to produce scientifically proven therapeutic effects.

Efficiency -- The extent to which effectiveness is achieved while minimizing costs.

Expiration Date -- The date appearing on a drug product and established by the manufacturer, beyond which the manufacturer will not guarantee the potency, purity, uniformity, or bioavailability of the product.

First-in/First-out Procedure -- A method of inventory management in which the first products received are the first products issued. This method minimizes the chance of drug expiration.

Formulary -- A list of approved or recommended drugs compiled by an individual practitioner or a group of medical and scientific professionals for the purpose of a specific medical practice or supply system.

GMP (Good Manufacturing Practices) -- Performance standards for pharmaceutical manufacturers established by the World Health Organization and many national governments; include criteria for personnel, facilities, equipment, materials, manufacturing operations, labeling, packaging, quality control, and in most cases, stability testing.

Generic Name -- The official name of a drug, regardless of the manufacturer. The generic or "medical" name is generally the International Nonproprietary Name (INN) established by a body of the World Health Organization.

Inventory -- The stock kept on hand at any point in order to protect against uncertainty, permit bulk purchasing, minimize waiting time, increase transportation efficiency, and buffer against seasonal fluctuations.

Inventory Control -- The function of supply management which aims at providing sufficient stocks of drugs at the lowest costs possible.

Inventory Taking -- A periodic activity in which a physical count is made of the stock and compared with inventory control records.

Irrational Prescribing -- Extravagant prescribing, overprescribing, incorrect prescribing, multiple prescribing, or underprescribing of medications, as compared to good standards of treatment.

Level-of-use -- A classification of drugs according to the medical practitioners who use them and the clinical facilities at which they are used.

Open Tender -- The formal procedure by which quotations for the supply of drugs under their medical (generic) names are invited from any manufacturer or representative on a worldwide basis, subject to the terms and conditions specified in the tender invitation.

Pallet -- A transportable flat storage base, with or without sides, designed to hold and move quantities of storage by mechanical handling methods, chiefly forklift devices.

Pharmacist -- An individual who has received bachelor level training in pharmaceutical sciences, dispensing practices, industrial pharmacy, and other aspects of pharmacy.

Port Clearing -- The process of locating items in port, obtaining the proper import documentation, paying the necessary fees, and inspecting the drugs for damage during transit.

Potency -- The extent to which a drug contains the specified amount of the active ingredient.

Prescribing -- The act of determining what medication the patient should have and the correct dosage and duration of the treatment.

Procurement -- The process of acquiring supplies, including those obtained by purchase, donation, and manufacture.

Purity -- The extent to which drugs are free from potentially harmful contaminants, significant quantities of other drugs, bacteria, or other micro-organisms.

Quality Assurance -- The management activities required to assure that the drug which reaches the patient is safe, effective, and acceptable to the patient.

Receiving Report -- A document indicating when items were received, from whom, the total quantity in the shipment, and the amount of damaged or lost stock.

Safety Stock -- The buffer, cushion, or reserve stock kept on hand to protect against stockouts caused by delayed deliveries or markedly increased demand.

Shelf Life -- The length of time a material may be stored without affecting the usability, safety, purity, or potency of the item.

Specifications -- A precise description of an item to be procured, including any special requirements.

Stockout -- Complete absence of an item that is normally expected to be on hand.

Symbolic Labeling -- A system for providing written instructions for patients using sketches and other graphic representations.

Uniformity -- The characteristic of drugs by which their consistency, colour, shape, and size do not vary from one dose to the next.

Working Stock -- That part of the inventory which fluctuates between zero and the order quantity. The other component of inventory is the Safety Stock.

APPENDIX D

LIST OF RESOURCES/USEFUL PUBLICATIONS

- Battersby, Anthony How to look after a health centre store
Appropriate Health Resources and Technologies Action
Group Ltd. (1983)
- Dörner, G; et al Management of Drug Purchasing, Storage and
Distribution. Manual for developing countries
Drugs Made in Germany Vol. 28, No.1 (1985)
(available free of charge from:
International Federation of Pharmaceutical
Manufacturers Associations (IFPMA),
67, rue de St. Jean,
1201 Geneva,
Switzerland.)
- Management Sciences Managing Drug Supply: the selection, procurment,
for Health distribution and use of pharmaceuticals in primary
health care (1981).
- World Health - The selection of essential drugs: Report of a WHO
Organization Expert Committee Technical Report Series 615 (1977).
- The use of essential drugs; Model List of Essential
Drugs. Second Report of the WHO Expert Committee,
Technical Report Series 722 (1985).
- Conference of Experts on the Rational Use of Drugs,
25-29 November 1985, Nairobi, Kenya.
- Report of an Informal Working Group on Educational
Material for Patients, DAP/85-10 (1985).
- Helling-Borda, M. The Essential Drugs Concept and its Implementation
Published in "Health in developing countries"
International Colloquium, organized by the Royal
Academy of Medicine of Belgium, Koninklijke Academie
voor Geneeskunde van Belgic, 28-29 October 1983,
pp 169-186.

APPENDIX E

EXPLANATORY NOTES
ON DRUGS LISTED ON UNHCR LIST

I = Indications SE = Side-Effects CI = Contra-Indications

1.0 ANAESTHETICS

1.1 General anaesthetics

1.1-1 ether, anaesthetic; inhalation

I: maintenance of anaesthesia, occasionally used in
 paediatrics
SE: postoperative nausea, vomiting
Note: explosive & flammable

1.1-3 halothane: inhalation

I: maintenance of anaesthesia in major surgery;
 supplements anaesthetic action; widely used in
 children
SE: hypotension, possible disturbances of liver function;
 rarely jaundice in obese patients
Note: very expensive

1.1-4 ketamine: injection, 50mg/ml 10ml vial

I: induction and maintenance of anaesthesia; used in
 shock; used in children
SE: high incidence of hallucinations in adults
CI: hypertension, history of mental illness
Note: use promethazine in adults to prevent hallucination

1.2 Local anaesthetics

1.2-2/1 lidocaine: injection, 1% (hydrochloride) in vial

I: local anaesthesia, dental anaesthesia;
SE: mental excitement, allergy, cardiac arrest,
 hypotension
CI: hypovolaemia, complete heart block
Caution: hepatic impairment, epilepsy, elderly or debilitated,
 impaired cardiac conduction
Note: do not use epinephrine (adrenaline) for digital
 anaesthesia

2.0 ANALGESICS

2.1 Non-opioids

2.1-1/1 acetylsalicylic acid: tablet, 300mg

I: headaches, colds, fever of unknown origin, sprains, strains, rheumatic pains
SE: heartburn, nausea, dizziness, abdominal pain, allergy
CI: infants under 1 yr, pregnancy (at term), patients with history of ulcer or gastro-intestinal bleeding

2.1-6/1 paracetamol tablet: 500mg

I: when acetylsalicylic acid is contraindicated, lumbosacral pain
SE: liver damage in prolonged use or over-dosage
CI: patients with severe liver and kidney damage

2.1-8 probenecid: tablet, 500mg

I: use with procaine benzyl penicillin in treating gonorrhoea

2.2 Opioid analgesics

2.2- pentazocine: injection, 30mg (as lactate)/ml, 1ml ampoule

I: moderate to severe pain
SE: dizziness, nausea, constipation, sedation, dependence, hallucinations
CI: patients dependent on narcotics, cardiac failure, arterial or pulmonary hypertension
Note: potent, careful in patients with liver disease, in late pregnancy, and in children under 1 yr

3.0 ANTIALLERGICS

3-1/1 chlorphenamine: tablet, 4mg (maleate)

I: mild allergic reactions (itching/pruritis), cough
SE: drowsiness, headache, urinary retention, dry mouth, blurred vision, gastro-intestinal disturbances
CI: hepatic disease
Note: avoid in combination with alcohol, barbiturates, hypnotics, sedatives and tranquilisers; it could be substituted by promethazine

- 3-3/2 dexamethasone: injection, 4mg (sodium phosphate) in 1ml ampoule
- I: suppressing corticotrophin secretion; replacement therapy, cerebral oedema; serious allergic reactions
- SE: less resistance to infection, muscle wasting, diabetes mellitus, hypertension, hypokalaemia, osteoporosis, psychosis, cataracts, moon face, suppression of growth, etc.
- Note: has many side effects; long-term treatments should be supervised by a specialist; only use in small quantities
- 3-3/1 epinephrine: injection, 1mg (as hydrochloride) in 1ml ampoule
- I: serious allergic reactions (anaphylaxis shocks), severe asthma
- SE: hypertension, anxiety, tachycardia
- CI: if pulse - 120/min, in infants below one year
- Note: not to be given intravenously; not to be given with tricyclic antidepressants, digoxin or quinidine
- 3-4/1 prednisolone: tablet, 5mg
- I: anti-inflammatory, chronic treatment of corticoids
- SE: same as dexamethasone
- 4.0 ANTIDOTES
- 4.1 General antidotes
- 4.1-2 ipecacuanha: syrup, with 0.14% ipecacuanha alkaloids calculated as emetine
- I: poisoning
- SE: large doses may lead to persistent vomiting and bloody diarrhoea, ulceration of stomach and intestine
- Note: not to be used after poisoning with caustic agent or petroleum product; not to be used in cases in a state of shock and coma; should not be given after milk or charcoal. To be used under medical supervision
- 4.2 Specific antidotes
- 4.2-1 atropine: injection, 1mg in 1ml ampoule
- I: poisoning by insecticides
- SE: dry mouth, confusion, tachycardia, dry skin, urine retention
- Note: careful in patients with glaucoma, enlarged prostate, paralytic ileus
- 4.2-4 naloxone: injection, 0.4mg (hydrochloride)
- I: antidote for pethidine or pentazocine
- Note: physical dependence

5.0 ANTIPILEPTICS

5-1 diazepam: injection, 8mg/ml in 2ml ampoule

I: acute convulsions, epilepsy (status)
SE: impairment of alertness, fatigue, habituation,
respiratory depression
CI: coma, sensitivity and glaucoma
Note: careful use in: elderly and debilitated patients,
respiratory depression and pregnancy

5-3/1/a phenobarbital: tablet, 50mg syrup, 15mg/ml
(5.3/2)

I: epilepsy (grand-mal, petit-mal)
SE: drowsiness, ataxia, respiratory and circulatory
failure in overdose

5-4/1 phenytoin: tablet, 25mg

I: grand-mal epilepsy
SE: gum hypertrophy, megaloblastic anaemia, ataxia and
nystagmus, lymphadenopathy, rashes

6.0 ANTIINFECTIVES

6.1 Anthelmintics

6.1-1 mebendazole: tablet, 100mg

I: worms other than tape worm and roundworm
SE: rarely abdominal pain, diarrhoea
CI: pregnancy; children under 2 yrs (or <10kg); patients
who have experienced allergic reactions to it
Note: broad spectrum

6.1-2 niclosamide: tablet, 500mg

I: tapeworm
SE: rarely abdominal pains, nausea, vomiting

6.1-3/1 piperazine: tablet, 500mg

6.1-3/2 piperazine: syrup, 500mg hydrate/5ml

I: roundworms (ascaris)
SE: nausea, vomiting, diarrhoea, lack of muscular
coordination, abdominal pain; rarely dizziness,
allergy, rash
CI: epilepsy, renal failure, liver disease
Note: caution in impaired renal function, psychiatric
states, neurological disease

6.2 Antiamoebic

6.2-3 metronidazole: tablet, 200mg

- I: chronic diarrhoea, acute amoebic dysentery, vulvo-vaginitis
SE: nausea, drowsiness, headache, rashes, dizziness, ataxia, transient epileptiform seizures with high doses
CI: pregnancy (1st trimester) and lactating mothers; patients with history of blood disease, and in patients with acute CNS disease

6.3 Antibacterials

6.3.1 Penicillins

6.3.1-1/1/a ampicillin: capsule 250mg

6.3.1-1/2 ampicillin: powder for oral suspension, 250mg (anhydrous)/5ml

6.3.1-1/3 ampicillin: powder for injection, 500mg (as sodium salt) in vial

- I: severe pneumonia, severe gonorrhoea, severe pelvic inflammatory disease, acute otitis media, post-partum infection (injection used in special cases of meningitis)
SE: sensitivity reactions to penicillin, anaphylactic shock in hypersensitive patients
CI: penicillin hypersensitivity

6.3.1-2 benzathine benzylpenicillin: injection, 1.44g benzylpenicillin (2.4MIU/5ml in vial)

- I: syphilis
SE: same as for ampicillin
CI: same as for ampicillin

6.3.1-3/b benzylpenicillin: injection, 3.0g (5MIU) (as sodium or potassium salt) in vial

- I: in intravenous treatment, when high doses required (amoebic infections, endocarditis, serious pneumococcal infections)
SE: same as for ampicillin
CI: same as for ampicillin

6.3.1-4/1 cloracillin: capsule, 500mg (as sodium salt)

- I: staphylococcal infections
SE: same as for ampicillin
CI: same as for ampicillin
Note: to be given under medical supervision

- 6.3.1-5/1 phenoxymethylpenicillin: tablet, 250mg (as potassium salt)
- I: acute bronchitis, acute otitis media, dental abscess
SE: same as for ampicillin
CI: same as for ampicillin
- 6.3.1-6/b procaine benzylpenicillin: powder for injection (3g= 3MIU)
- I: acute tonsillitis and quincy, gonorrhoea, pelvic inflammatory disease, boils, cellulitis, abscess, breast abscess
SE: same as for ampicillin
CI: same as for ampicillin
Note: in case of allergy shock, epinephrine must be injected at once; do not use in newborn babies unless no other penicillin or ampicillin is available (in emergencies)
- 6.3.2 Other antibacterial drugs
- 6.3.2-1/1 chloramphenicol: capsule, 250mg
6.3.2-1/2 chloramphenicol: injection, 1g (as sodium succinate) in vial
- I: typhoid fever
SE: leucopenia, thrombocytopenia, irreversible aplastic anaemia, neuritis, nausea, vomiting, diarrhoea
CI: pregnancy, breast-feeding
Note: potent, potentially toxic, broad-spectrum antibiotic, reserved for life-threatening infections; avoid repeated courses and prolonged treatment; periodic blood counts required; caution in neonates
- 6.3.2-2/3 erythromycin: powder for injection, 500mg (as lactobionate) in vial
6.3.2-2/2 erythromycin: oral suspension, 125mg (as stearate or ethylsuccinate)/5ml
- I: alternative to penicillin in hypersensitive patients
SE: nausea, vomiting, diarrhoea after large doses
CI: liver disease
Note: caution in hepatic impairment
- 6.3.2-3/b gentamicin: injection, 40mg (as sulfate)/ml in 2ml vial
- I: after other antibiotics have failed, septicaemia, neonatal sepsis, meningitis, CNS infections
SE: vestibular damage, reversible nephrotoxicity
CI: pregnancy
Note: caution in breast-feeding, renal impairment

6.3.2-7/1 sulfadimidine: tablet, 500mg

I: lower urinary infections, urethritis
SE: nausea, vomiting, rashes, blood disorders, allergic reactions
CI: pregnancy, children under 6 weeks, renal/hepatic failure, jaundice, blood disorders
Note: take blood counts in prolonged treatment, maintain adequate fluid intake, renal impairment, breast-feeding

6.3.2-8/b sulfamethoxazole + trimethoprim: tablet, 400mg + 80mg

I: severe lower urinary infections
SE: same as for sulfadimidine
CI: same as for sulfadimidine

6.3.2-9 tetracycline: capsule, 250mg

I: chronic bronchitis, other V.D.
SE: nausea, vomiting, diarrhoea, allergic reactions rare
CI: renal failure, pregnant and lactating mothers, children under 8 yrs

6.3.3 Antileprosy drugs

6.3.3-1/a clofazimine: capsule, 50mg

6.3.3-2/b clofazimine: capsule, 100mg

I: leprosy
SE: nausea, giddiness, headache, diarrhoea, blue-black
CI: hepatic and renal impairment

6.3.3-2/a dapsone: tablet, 50mg

6.3.3-2/b dapsone: tablet, 100mg

I: leprosy
SE: vomiting, headache, nausea, insomnia, allergic dermatitis, hepatitis, anorexia, etc.
CI: pregnancy; careful use in cardiac pulmonary disease, or breast-feeding

6.3.3-3/a rifampicin: tablet, 150mg,

6.3.3-3/b rifampicin: tablet, 300mg,

SE: gastro-intestinal symptoms, influenza-like symptoms, liver impairment and jaundice
Note: follow national guidelines

6.3.4 Antituberculosis

6.3.4-1 ethambutol: tablet, 100mg

I: tuberculosis
SE: peripheral neuritis, visual defects
CI: very young/elderly patients

- 6.3.4-2 isoniazid: tablet, 500mg
I: tuberculosis
SE: hypersensitivity, peripheral neuritis (treat with pyridoxine)
CI: liver disease caused by other drugs
- 6.3.4-3 pyrazinamide: tablet, 500mg
I: tuberculosis
SE: nausea and vomiting; liver impairment and jaundice
CI: jaundice
- 6.3.3-3/a rifampicin: tablet, 150mg
6.3.3-3/b rifampicin: tablet, 300mg
I: tuberculosis
SE: refer to explanatory notes in antileprosy drugs 6.3.3
CI: refer to explanatory notes in antileprosy drugs 6.3.3
- 6.3.4-4 streptomycin: injection, 1g (as sulfate) in vial
I: tuberculosis
SE: hearing and balance problems, hypersensitivity reactions, renal impairment
CI: pregnancy
- 6.3.4-5/a thiacetazone + isoniazid: tablet, 50mg + 100mg
6.3.4-5/b thiacetazone + isoniazid: tablet, 150mg + 300mg
I: tuberculosis
SE: hypersensitivity, gastrointestinal symptoms, jaundice, peripheral neuritis
CI: jaundice, liver disease caused by other drugs
- Note: all anti-leprosy and anti-tuberculosis drugs may give adverse side effects, some potentially serious
- o They should only be made available through TB/leprosy programmes which are integrated with other health services, supervised by qualified personnel, and with clearly specified protocols for use.
 - o These drugs should only be provided to patients registered in the treatment programme to ensure close patient management.
 - o Special caution is required when these drugs are used in pregnancy.
- 6.4 Antifilarial drugs
- 6.4-1 diethylcarbamazine: tablet, 50mg (citrate)
I: filarial infections
SE: nausea, dizziness; allergic reaction with fever, rashes and malaise may occur after first dose

- 6.4-2 suramin sodium: powder for injection, (1g in vial)
(see antitrypanosomals)
- 6.5 Antifungal drugs
- 6.5-2/a griseofulvin: tablet, 125mg
I: ringworm infections, special dermatoses
SE: headache, nausea, vomiting, rashes, photosensitivity
CI: liver failure, porphyruria
- 6.5-3/2 nystatin: pessary, 100,000IU
I: severe vaginal discharge, monilia vaginal infection
SE: nausea, vomiting, diarrhoea
- 6.6 Antileishmaniasis
- 6.6-1 pentamidine: injection, 200mg in vial
I: visceral leishmaniasis, trypanosomiasis (visceral)
- 6.6-2 sodium stibogluconate: injection, 33% 30ml vial
I: visceral leishmaniasis
SE: toxic for heart and liver
Note: solution must be protected from light
- 6.7 Antimalarial drugs
- 6.7.1/1 chloroquine: tablet, 150mg
6.7.1/2 chloroquine: syrup, 50mg (as phosphate or sulfate)/5ml
I: malaria
SE: headache, nausea, vomiting, diarrhoea, blurring of vision in long-term use
CI: renal/hepatic insufficiency, severe blood or gastrointestinal disease; concomitant use of phenylbutazone
- 6.7-2/a primaquine: tablet, 7.5mg (as phosphate)
6.7-2/b primaquine: tablet, 15mg (as phosphate)
6.7-3/1 quinine: tablet, 300mg (as bisulfate)
6.7-3/2 quinine: injection, 300mg (as dihydrochloride)/ml in 2ml amp.
I: severe malaria
SE: headache, nausea, abdominal pain, rashes, buzzing in the ears, disturbances of vision; some people are allergic to quinine
CI: haemolysis, tinnitus, optic neuritis
Note: tablet can be used for mild cases in areas where plasmodium falciparum is resistant to chloroquine

6.8 Antischistosomal drugs

6.8-1 metrifonate: tablet, 100mg

I: schistosomiasis haematobium
SE: nausea, vomiting, headache, possible haemolysis in subjects with glucose-6-phosphate dehydrogenase deficiency
CI: pregnant women

6.8-2 oxamniquine: capsule, 250mg

I: schistosomiasis haematobium
Note: toxicity is insignificant

6.8-3 praziquantel: tablet, 600mg

I: schistosomiasis haematobium, mansoni and japonicum
SE: no serious toxicity; nausea, fever, giddiness, abdominal pain
CI: none; because this is a new drug, avoid use in pregnant and lactating mothers and in infants

6.9 Antitrypanosomal

6.9-1 melarsoprol: injection, 3.6% solution

I: trypanosomiasis (cerebral)
Note: very toxic; must only be given under medical supervision

6.6-1 pentamidine: injection, 200mg in vial

(Refer 6.6-1: Antileishmaniasis)

6.4-2 suramin sodium: powder for injection, 1g in vial

I: trypanosomiasis (special cases)
Note: nephrotoxic; must be given under medical supervision; routine urine tests needed to detect albumine casts, which, if present, contra-indicate further suramin treatment

10.0 DRUGS AFFECTING THE BLOOD

10.1 Antianaemia drugs

10.1-1/1 ferrous sulfate: powder for oral suspension (15mg iron/0.6ml)

10.1-1/2 ferrous sulfate: tablet, equivalent to 60mg iron

I: iron deficiency anaemia
SE: large doses often produce gastro-intestinal irritation, vomiting and diarrhoea

- 10.1-2 ferrous sulfate + folic acid: tablet, 60mg + 200mg
- I: pregnant and lactating women
SE: same as for ferrous sulphate
- 11.0 BLOOD PRODUCTS AND BLOOD SUBSTITUTES
- 11.1 Plasma substitute
- 11.1-1 dextran 70: injectable solution, 6%
- I: post-partum bleeding, blood volume expansion
Note: careful use in patients with congestive heart failure and renal disease; intravenous gelatin preparations are also effective, and can be substituted; however, neither product should be used when shock is caused by haemorrhage or severe sodium depletion
- 12.0 CARDIOVASCULAR DRUGS
- 12.1 Antianginal drugs
- 12.1-1 glyceryl trinitrate: tablet, (sublingual) 0.5mg
- I: prophylaxis and treatment of angina, congestive heart failure
SE: headache, flushing, dizziness, postural hypotension, tachycardia
- 12.1-3/1/b propranolol: tablet, 40mg (hydrochloride)
- I: hypertension, angina, arrhythmias, thyrotoxicosis; secondary prevention after myocardial infarction
SE: bradycardia, heart failure, bronchospasm, G.I. disturbances
CI: asthma, heart failure, peripheral vascular disease
- 12.3 Antihypertensive drugs
- 12.3-1 hydralazine: tablet, 50mg (hydrochloride)
- I: for use in treating moderate to severe hypertension, when combined with a beta-adrenoceptor blocking drug or diuretic hypertensive crisis
SE: postural hypotension, tachycardia, fluid retention, nausea and vomiting
- 12.3-2 hydrochlorothiazide: tablet, 50mg
- I: oedema, hypertension
SE: rashes, thrombocytopenia
CI: renal failure
Note: may cause hypokalaemia; aggravates diabetes and gout; care is needed when used during pregnancy

- 12.1-2/1/b propranolol: tablet, 40mg (hydrochloride)
(Refer to 12.1-2 Antianginal drugs)
- 12.4 Cardiac glycosides
- 12.4-1/1 digoxin: tablet, 0.25mg
12.4-1/2 digoxin: oral solution, 0.05mg/ml
12.4-1/3 digoxin: injection, 0.25mg/ml in 2ml ampoule
- I: heart failure, supraventricular arrhythmias
SE: nausea, vomiting, arrhythmias, heart block
Note: careful in recent infarction, hypothyroidism; reduce dosage in the elderly and in renal failure
- 12.5 Drugs used in shock or anaphylaxis
- 3-3/1 epinephrine: injection, 1mg (as hydrochloride) in 1ml ampoule
(Refer 3-3 Antiallergics)
- 13.0 DERMATOLOGICAL DRUGS
- 13.1 Antifungal drugs
- 13.1-1 benzoic acid + salicylic acid: ointment/cream, 6% + 3%; 25g tube
- I: fungal skin infections
Note: apply often; may cause discomfort
- 13.2 Antiinfective drugs
- 13.2-1 gentian violet: crystals
- I: antiinfective
- 13.2-2 neomycin + bacitracin ointment, 5mg neomycin sulfate + 500IU bacitracin zinc/g; 20g tube
- I: bacterial skin infections
Note: high risk of skin allergy; no improvement suggests allergy to drug
- 13.3 Antiinflammatory and antipruritic drugs
- 13.3-2 calamine lotion
- I: antiinflammatory agent
- 13.3-3 hydrocortisone: ointment/cream, 1% (acetate); 15g tube
- I: eczema and allergic dermatitis; haemorrhoids and proctitis
Note: apply sparingly when long-term use unavoidable

13.4 Scabicides and pediculicides

13.6.1 benzyl benzoate: lotion, 25%

I: scabies
Note: all household members should be treated

13.6-2 lindane: cream or lotion, 1%

I: lice
Note: do not apply more than once weekly; lindane is very powerful, and may cause poisoning if used too frequently

14.0 DIAGNOSTIC AGENTS

14.1 Ophthalmic drugs

14.1-1 fluorescein eye drops, 1% (sodium salt)

I: foreign body in eye

15.0 DISINFECTANTS

15-1 chlorhexidine: solution, 5% (digluconate) for dilution

15-2 iodine: solution, 2.5%

I: minor cuts, abrasions, bruises, lacerations
Note: sensitivity may occur; avoid contact with ears, mucous membranes and meninges

16.0 DIURETICS

16-2/1 furosemide: tablet, 40mg

16-2/1 furosemide: injection, 10mg/ml in 2ml ampoule

I: oedema, oliguria due to renal failure
SE: rashes, tinnitus and deafness in impaired renal function
CI: liver cirrhosis

12.3-2/16-3 hydrochlorothiazide: tablet, 50mg

(Refer 12.3 Antihypertensive drugs)

17.0 GASTROINTESTINAL DRUGS

17.1 Antacids and other antiulcer drugs

17.1-1/1 aluminium hydroxide: tablet, 500mg

I: heartburn, gastritis, indigestion

17.2 Antiemetics

17.2-1/1/b promethazine: tablet, 25mg (hydrochloride)

17.2-1/2 promethazine: syrup, 5mg/ml

I: nausea, vomiting

SE: drowsiness, headache, dry-mouth, blurred vision,
gastro-intestinal disturbances

CI: hepatic disorders; avoid simultaneous use with
alcohol, barbiturates, hypnotics, sedatives and
tranquilisers

17.4 Antispasmodic drugs

17.4-1 atropine: tablet, 1mg (sulfate)

4.2-1 atropine: injection, 1mg (sulfate) in 1ml ampoule

(Refer 4.2 Specific antidotes)

17.5 Chathartic

17.5-1 senna: tablet, 7.5mg (sennosides)

I: constipation

CI: intestinal obstruction, prolonged use, pregnancy,
children under 6 years; dehydrated children

17.6 Drugs used in diarrhoea

17.6.2 Replacement solution

17.6.2-1 oral rehydration salts: sachet, 27.5g/litre

I: acute diarrhoea, gastroenteritis

18.0 HORMONES

18.1 Adrenal hormones and synthetic substitutes

3-2/2 dexamethasone: injection, 4mg (sodium phosphate) in 1ml ampoule

3-2/1/b dexamethasone: tablet, 4mg

18.1-1 hydrocortisone: powder for injection, 10mg (as sodium succinate)
in vial

3-4/1 prednisolone: tablet, 5mg

(Refer dexamethasone; Antiallergics, 3-2)

18.3 Contraceptives

18.3-1/a ethinylestradiol + levonorgestrel: tablet, 0.03mg + 0.15mg

18.3-1/b ethinylestradiol + levonorgestrel: tablet, 0.05mg + 0.25mg

18.3-2 ethinylestradiol + noresthisterone: tablet, 0.05mg + 1.0mg

Refer to guidelines specified by national family planning
authorities in country concerned.

18.4 Estrogens

18.4-1 ethinylestradiol: tablet, 0.05mg

I: menopausal symptoms
SE: nausea and vomiting, weight gain, breast tenderness, sodium retention, retention with oedema, altered liver function, chloasma, depression
CI: estrogen-dependent malignancies, history of thromboembolism, liver disease, endometriosis
Note: caution needed when used in pregnancy, diabetes, epilepsy, heart or kidney disease, history of jaundice

18.5 Insulins and other antidiabetic agents

18.5-1/a insulin: injection, 40IU/ml in 10ml vial

18.5-2/a intermediate acting insulin: injection, 40IU/ml in 10ml vial

I: diabetes mellitus
SE: local inflammatory reactions; overdose causes hypoglycaemia
Note: must be administered under close medical supervision

18.5-3 glibenclamide: tablet, 5mg

I: diabetes mellitus
SE: loss of appetite, nausea, vomiting; sensitivity reactions include fever, rashes and jaundice
CI: impaired adrenal, liver, kidney and thyroid function; pregnancy; diabetes complicated by surgery, coma or severe infection

18.7 Progestogens

18.7-1 norethisterone: tablet, 5mg

I: dysfunctional uterine bleeding
SE: nausea, weight gain, depression, headache, altered menstrual cycles
CI: undiagnosed vaginal bleeding, missed or incomplete abortion; impaired liver function

18.8 Thyroid hormones

18.8-1 levothyroxine: tablet, 0.05mg (sodium salt)

I: hypothyroidism
SE: arrhythmias, anginal pain, tachycardia, cramps in skeletal muscles, restlessness, diarrhoea, weight loss
CI: angina, cardiovascular disorders

22.0 OXYTOCICS

22.1/1 ergometrine: tablet, 0.2mg (maleate)

22.1/2 ergometrine: injection, 0.2mg (maleate) in 1ml ampoule

I: for control of post-partum haemorrhage, and bleeding following abortion

SE: nausea, vomiting, transient hypertension

CI: 1st and 2nd stages of labour; vascular disease; impaired liver and kidney function

Note: cautions - toxæmia, hypertension and sepsis

24.0 PSYCHOTHERAPEUTIC DRUGS

24-2/1 chlorpromazine: tablet, 25mg (hydrochloride)

24-2/3 chlorpromazine: injection, 25mg (hydrochloride)/ml in 2 ml ampoule

I: schizophrenia and related psychoses; for tranquilising and emergency control in behavioural disturbances