

Part One

UNHCR Essential Drugs Policy: rationale and key elements

Rationale for a list of essential drugs

1. It is now well recognized that the implementation of an essential drugs policy is one of the most important components of an effective and efficient health care system. It ensures that safe, effective and affordable drugs reach those who need them, and encourages a more rational and appropriate use of the limited funds available for health care.
2. The importance of essential drug policies for developing countries has been actively supported and promoted by WHO since 1975, resulting in a model list of essential drugs – now individually adapted for use in more than eighty countries. This WHO list is published as *The Use of Essential Drugs*, WHO Technical Report Series, No. 770.

RELEVANCE TO HEALTH PROGRAMMES FOR REFUGEES

3. Just as the introduction of essential drugs policies has been a necessary component of health programmes for many developing countries, it is also particularly relevant in the context of refugee assistance.
4. Standard policies for drug selection, supply and use are clearly necessary in refugee settings because of:
 - the varied locations and circumstances in which refugees are found;
 - the diverse range of health workers involved in refugee health (differences in nationality, training, past experience and clinical expertise);
 - the complex organization of drug selection, supply and use in refugee settings, which involves
 - a wide range of personnel (i.e. procurement officers, programme managers and medical staff),

- many different organizations (i.e. national, international, and non-governmental agencies, drug manufacturers and suppliers),
- differing procedures for drug procurement, supply and distribution, as determined by specific agencies, host Governments and refugee settings.

5. Therefore, in order to clarify UNHCR's position concerning the selection, supply and use of drugs in refugee settings, this document outlines the key components of the UNHCR Essential Drugs Policy.

UNHCR Essential Drugs Policy: key elements

6. An essential drugs policy for refugee populations is based on the following key elements.

- | | |
|--|---|
| <ul style="list-style-type: none">• Refugee health needs• Selection of essential drugs• Drug supply and management | <ul style="list-style-type: none">• Safe and proper use• Quality assurance• Co-ordination• Monitoring and evaluation |
|--|---|

REFUGEE HEALTH NEEDS

7. Despite the diversity of settings in which refugees are found, a review of disease patterns from a wide range of refugee populations has shown that the major health problems facing refugees are remarkably similar, irrespective of location.

8. In addition, because the majority of refugees are of rural origin, and because most refugee camps and settlements are located in rural areas, the main health concerns of refugee groups closely resemble those of rural populations throughout the developing world.

9. Specific areas of concern common to both refugees and rural populations include:

- communicable diseases;
- nutritional disorders;
- health problems of women and children.

10. An appropriate essential drugs policy which focuses on the health needs of refugee populations must clearly place as its first priority the effective prevention and management of these conditions.

Emergencies

11. Often during the emergency phase of a refugee influx (the first two to three months) drug procurement is streamlined by the immediate provision of Emergency Health Kits (EHKs). These EHKs have been designed, tested and revised by WHO, UNHCR and several non-governmental organizations. Even if EHKs are used, normal non-emergency lines of procurement must be planned and set up from the beginning of an emergency situation so that a smooth and timely transition may be effected.

SELECTION OF ESSENTIAL DRUGS

12. By adopting a list of essential drugs, UNHCR gives clear priority to achieving the widest possible coverage of refugee populations with appropriate and cost-effective drugs of proven efficacy and safety.

13. The UNHCR Essential Drugs List is based on the WHO Model List of Essential Drugs (Technical Report Series, No. 770). These drugs have been selected because of their proven efficacy, safety and other advantages, which include:

- feasibility of mass production and procurement at a reasonable cost;
- availability under international non-proprietary (generic) names.

14. Criteria for selection of the drugs specified in the UNHCR List are:

- inclusion in the WHO Model List of Essential Drugs (rare exceptions such as pentazocine are alternative examples of the therapeutic group);
- appropriateness for use in refugee populations, i.e.
 - proven effectiveness in addressing prevalent refugee health problems;
 - suitability for use in treatment facilities established for refugees, and by health personnel in refugee settings;

- consistency with standard drug guidelines in use by other agencies experienced in assisting displaced persons.
15. It is recognized that the treatment needs of specific refugee populations are influenced by many factors. These include:
- the effects of *local diseases* or conditions on drug effectiveness (e.g. malnutrition, liver disease);
 - local or regional differences in *sensitivity and resistance* of micro-organisms, in the case of anti-infective drugs;
 - regional differences in *climate, topography*, and other *environmental factors*;
 - *training* and experience of available health personnel;
 - *health requirements* specified by countries of asylum/resettlement for particular refugee groups (e.g. resettlement-related health procedures);
 - *level of services available locally* in the host country.
16. It is also clear that the diversity in refugee situations results in physical and mental health problems which may be unique to one refugee population, yet of less concern to others.
17. Therefore, the essential drugs list implemented in each individual country should reflect the particular health needs for the targeted refugee population.
18. The list should be finalized by the senior person* designated responsible at a national level for refugee health, and should:
- incorporate national essential drugs policy (if one exists);
 - follow discussions with key health personnel and appropriate managerial staff at all levels;
 - preferentially include only those drugs specified in UNHCR Basic and Specialized Lists.
19. If ever in the judgement of the senior health officer there is a justified need for a drug not specified on the UNHCR List, an appropriate drug on the WHO List can be requested and, if justified, will be approved by UNHCR Headquarters. Furthermore, should there be a justified need for a drug not listed on either the UNHCR or WHO Lists,

* “Senior Person designated responsible at a national level for refugee health” – this may be the UNHCR health co-ordinator designated responsible for refugee health programmes, or senior health officer designated by national health authorities in other settings.

such a request must be directed to UNHCR Headquarters for consideration in the format outlined in annex A.4. This situation should not occur in most circumstances.

20. In refugee situations it is not uncommon for voluntary agencies to receive offers of donated drugs and supplies for use in emergency settings.

21. Prior to accepting such donations, the UNHCR health co-ordinator and national health authorities should clearly specify which drugs are appropriate and needed in an assistance programme, and stress to donors that only these drugs will be accepted for distribution. Donors should be given copies of the UNHCR List and the requirements for labelling and packaging.

22. This is not only to determine that such items are included on the essential drugs list, but also to ensure that minimum quality standards are maintained (this is particularly necessary in the case of expired drugs, those with a limited remaining shelf-life, or items not listed by familiar generic name).

DRUG SUPPLY AND MANAGEMENT

23. The introduction of a standardized drug list is aimed at streamlining activities related to the procurement and overall management of drug supply to refugee camps and communities. However, the successful implementation of an essential drugs policy also depends on the effectiveness of the supply system itself.

24. In refugee settings, an effective and efficient drug management system is clearly essential for:

- | | |
|--|--|
| | due to: |
| • preventing stock surpluses and supply failures | • inappropriate procurement or delays in shipment/delivery |
| • avoiding costly drug losses | • spoilage, expiry and theft. |

25. Therefore, it is essential that procedures for the procurement, storage and distribution of drugs at all levels are clearly specified, implemented and supervised by each agency involved. Each of these procedures is vastly facilitated by strict adherence to a list of essential drugs.

Procurement

26. In refugee settings, drug procurement can occur in different ways:

- through international channels;
- local procurement in country.

However, irrespective of procurement strategy, both international and local procurement procedures should ensure that:

- needed supplies are acquired as inexpensively as possible;
- items obtained comply with minimum quality specifications;
- drug supplies are delivered promptly and safely to central storage facilities.

27. Among the options available is that of drug procurement through UNIPAC, which provides all of the essential drugs at competitive cost and with correct labelling and packaging.

Storage

28. At central storage sites, it is essential that warehouses can be easily maintained, are well ventilated and are organized to ensure the smooth movement of supplies. Pallets should be used for bulk storage wherever possible, and the stock must be arranged systematically in all storage facilities.

Two possible approaches to arranging stock include organization by:

- alphabetical order;
- therapeutic group.

29. *Adequate provision for cold storage is essential.* This includes the use and maintenance of appropriate refrigeration equipment, the training and appointment of qualified cold-chain personnel, and the establishment of standard procedures.

Items which require special cold-storage arrangements include:

- antibiotics – cold room (15°-18° C) in central stores;
- vaccines – cold room (3°-6° C);
- certain vaccines (measles, polio) – freezers (-20° C).

30. Procedures must be clearly specified for the receipt, storage and delivery of supplies, and standardized forms recording the in and out movement of stock must be filed systematically. These include:

- Invoices
- Receiving reports
- Requisition/issue tickets
- Stock record cards
- Bin cards
- Delivery vouchers
- Stock replenishment requests.

31. Central storage facilities should be supervised by personnel who are experienced and qualified in managing medical stores.

It is strongly recommended that an operations manual should be compiled, which specifies lines of authority, logistics flow charts, staffing patterns, and other key information relevant to warehouse management.

32. Adequate security measures should be implemented to prevent unnecessary losses due to pilferage. These include:

- limiting warehouse access to designated store employees;
- ensuring that access to storage areas is only possible through an inner door – rather than direct entrance from the outside;
- ensuring that all doors have secure locks and that clearly understood procedures for key control are implemented;
- setting aside a secure storage area for controlled substances (narcotics should be stored in areas with restricted access);
- conducting periodic unannounced inspections of records and stored stock;
- carrying out annual independent stock-taking, with the verification of receipt and issue records.

33. Combustible items such as alcohol, ether and fuels must be stored separately – preferably in a cool store outside the building. To reduce the risk of fire:

- flammable trash such as cartons and boxes should not be allowed to accumulate in warehouses;
- all central stores should be equipped with fire extinguishers.

34. Field-level storage facilities should ideally protect supplies from:

- humidity
- sunlight
- rodents
- physical damage
- dirt
- theft.

35. Stock control procedures should be clear and simple, as specified by the agency responsible for overall drug management and supply. Wherever possible, stock cards or a simple inventory system should be used to record in-movement of supplies from central regional distribution sites and out-movement to refugee health programmes.

Inventory control

36. The total amount of inventory held at any one time at all points in the supply system can be substantial – and its maintenance costly. Therefore, it is essential that drug inventories for refugee populations are managed as efficiently as possible.

37. In emergency situations, the urgent need for large quantities of medical supplies and drugs rapidly depletes existing stocks. In these conditions, it is clearly more appropriate to use the *Emergency Health Kit*, which is specifically designed to address the health needs associated with large population displacements. However, during this period, activity should be directed to compiling an appropriate list for local use.

38. Later, in more stable refugee settings, it is preferable to introduce more organized methods of inventory control which:

- enable bulk purchasing;
- improve distribution efficiency;
- anticipate variations in seasonal demands for drugs.

In such settings it is recommended that the total inventory comprises:

Working Stock ———→ represents the stock required to meet drug needs *between* deliveries;

and

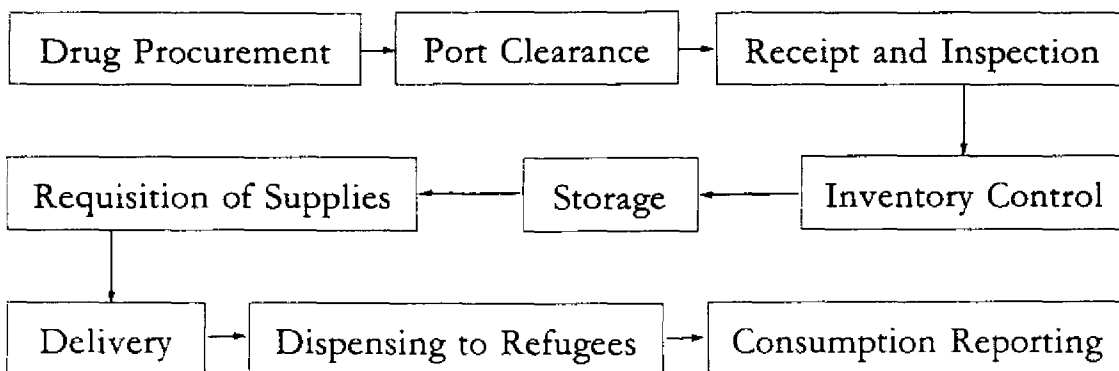
Safety Stock ———→ *protects against stock outs* which may occur if deliveries are delayed, or if the working stock is used at an unexpectedly high rate.
(Reserve Stock)

39. In order to ensure efficient inventory management, it is important that accurate *stock records* are maintained in all central storage facilities. Because the stock record is the basis for key procurement decisions, the personnel responsible for this information should be selected carefully, well trained and closely supervised.

Distribution

40. An efficiently organized and effective drug distribution system is a critical pre-condition for the regular supply of essential drugs to refugee populations.

In many settings it involves the following steps.



41. In order to ensure that a regular supply of good-quality drugs reaches target refugee camps in remote areas it is essential that:

- the drug distribution system is organized. Specifically, this requires clearly understood procedures and designated personnel at all levels for
 - recording the movement of stock,
 - ensuring the safe and systematic storage of drugs and supplies,
 - placing drug requisitions,
 - standardized forms,
 - specified order schedules/deadlines,
 - clearly specified channels of communication,
 - issuing and receiving drug supplies,
 - maintaining inventory control;
- forms recording the movement of drugs from central/regional levels are standardized. This ensures that accountability for movements and verification of drug quality is possible at all levels of the distribution chain;
- transportation resources are used as efficiently as possible. This requires that

- appropriate vehicles/alternative forms of transportation are used and adequately maintained to avoid delivery delays due to accidents or broken parts, and
- delivery conditions are specified wherever possible:
 - delivery schedules should be clarified at all levels (essential for ordering purposes and adequate inventory control at all levels);
 - road conditions and vehicle refuelling needs should be given close attention when evaluating possible transportation routes;
 - when considering the use of independent trucking firms, preference should be given to established companies with a reliable reputation.

SAFE AND PROPER USE

42. It is clear that there are differences in refugee settings with regard to:

- the numbers of health workers, their levels of competence, and range of nationalities involved;
- the specific organization of refugee health services at national levels as well as in camp settings;
- the particular treatment protocols approved for use by health authorities, and those used by agency personnel;
- specific composition of refugee populations by age, ethnicity, socio-economic and cultural status and illness profile.

43. However, the effective use of drugs in all refugee settings depends on:

- effective prescribing practices;
- safe dispensing;
- appropriate drug use and compliance by refugees themselves.

Effective prescribing practices

44. The introduction of an essential drugs list for refugee populations is a key step in the promotion of *rational prescribing practices*. By limiting the range of essential drugs to those recognized for their appropriateness in refugee settings, it ensures the use of effective medications, rather than drugs which are expensive, unsafe or of doubtful value.

45. The introduction of *standard treatment protocols*, used in conjunction with standard symptom/disease definitions, must be compulsory in all refugee communities. This is particularly necessary owing to the numbers of agencies and personnel providing refugee health services, the rapid turnover of expatriate staff, and the wide range of health workers involved. It is the responsibility of the senior health co-ordinator designated by UNHCR to draw up such protocols in consultation with other health staff, taking care to respect national guidelines.

46. An essential pre-condition for the safe and proper use of medicines in refugee settings is *adequate training and supervision* of health personnel.

47. At all technical levels, it is essential that health workers have satisfactorily completed education and training programmes which ensure their safe and proper use of drugs in refugee populations. Such training should ensure knowledge of:

- safe storage procedures;
- clinical indications for use;
- correct dosage;
- precautions and contra-indications;
- adverse effects.

48. The specific range of prescribing responsibility for different levels of health worker may vary according to each particular refugee setting. However, these parameters should be clearly specified by the authorities supervising refugee health services, following discussions with the agencies and field personnel involved.

49. Clear mechanisms for *field-level supervision* of all health workers should be specified. This is particularly important in refugee camps served by multiple agencies or in settings with a large number of community health workers. The importance of adequate supervision cannot be overstated. Wherever possible, it is important that an organized system is set up for health workers to:

- seek advice and assistance;
- review treatment protocols;
- receive regular training;
- replenish supplies and equipment;
- record information – for later analysis.

Safe dispensing

50. To ensure that safe dispensing of medications occurs in refugee settings, appropriate measures should be implemented wherever possible in field-level health centres, clinics and dispensaries.

to guarantee that an effective form of the correct drug is delivered:

- to the right patient;
- in the prescribed dosage and quantity;
- with clear instructions;
- in a package which protects the drug as far as possible.

51. In stable refugee settings, this requires:

- adequate training and supervision of personnel;
- well-organized facilities to ensure efficient dispensing practices;
- clearly understood procedures for
 - counting and pouring medications
 - managing drug supplies and stock;
- adequate and appropriate containers, packaging materials and labels.

52. It is clear that specific procedures for dispensing medicines will differ according to each refugee setting. However, it is essential that the personnel responsible for dispensing are sufficiently trained to provide the correct drugs as prescribed, and are able to give clear and precise advice to refugee patients concerning dosage, duration of treatment and likely side-effects.

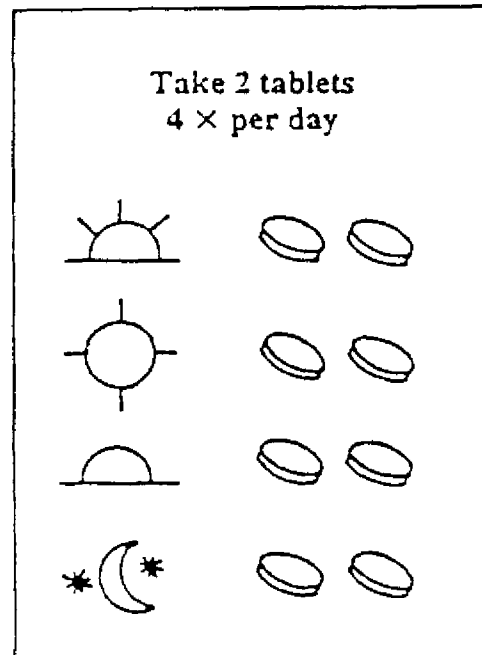
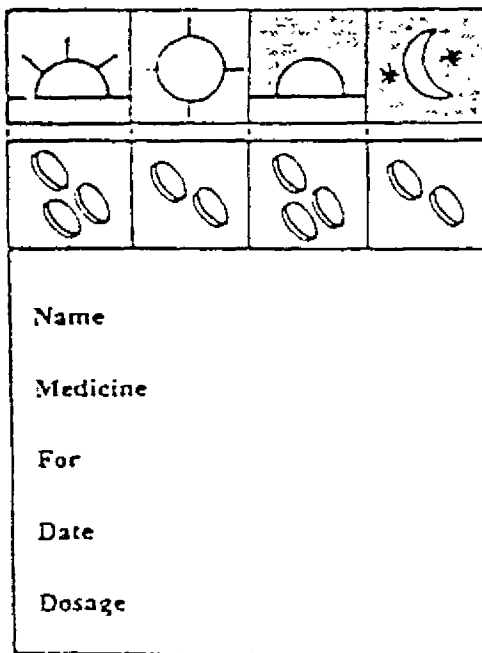
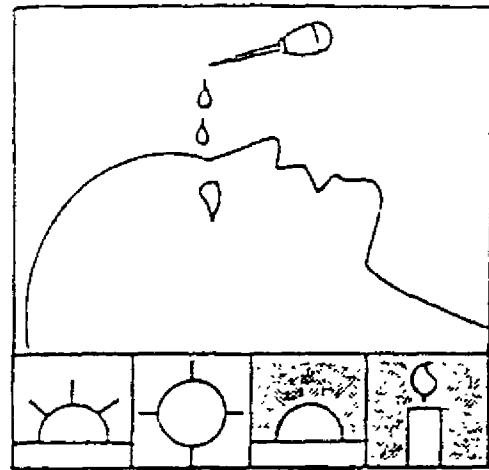
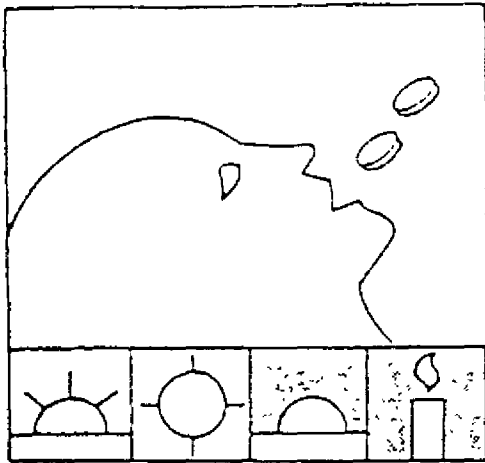
Appropriate drug use and compliance by refugees

53. Compliance is the degree to which patients adhere to medical advice, and take medicines as directed. In refugee settings, assuring compliance is particularly difficult owing to:

- the presence of language barriers, especially when expatriate staff must diagnose and treat refugee patients;

FIGURE 1

Examples of symbolic labelling



For effective and culturally appropriate use, these examples should be adapted for the particular refugee population in which they will be used.

- lack of familiarity for some refugee populations in the use of medications, because of
 - limited previous exposure to modern drugs,
 - previous reliance on traditional systems of healing,
 - low levels of education and literacy;
- the degree of mobility in refugee groups – within camp boundaries, between encampments, and across national borders;
- the frequent disruption of established family structures arising from relocation to a refugee camp;
- the lack of an orderly household numbering system in many large refugee communities, which makes effective home visiting difficult;
- inappropriate previous exposure to drugs, e.g. reliance upon injections.

54. To achieve compliance in refugee communities, measures should be implemented to ensure there is:

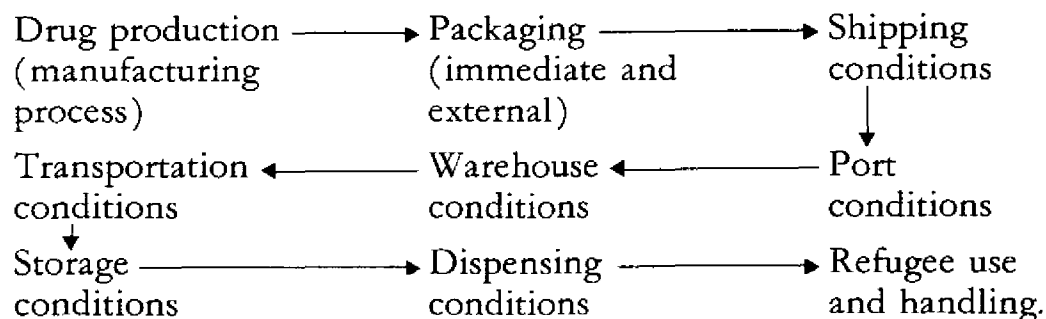
- a basic understanding of refugee beliefs regarding common illnesses, treatments and the effects of modern drugs. Liaison with traditional healers and midwives will assist such an understanding;
- adequate patient education in the use of prescribed medicines, through patient teaching and symbolic labelling for non-literate groups, for instance (see figure 1);
- a mechanism for monitoring actual use of medications in the home (such as trained community health workers making home visits);
- a standardized individual or family health record card as approved by appropriate health authorities. (This is particularly important in mobile refugee populations for whom a centralized record-keeping system is clearly impractical and ineffective.)

QUALITY ASSURANCE

55. One of the pre-conditions for a successful essential drugs programme for refugees is the assurance that all medicines supplied comply with minimum quality specifications regarding:

- safety
- effectiveness
- acceptability.

56. The quality of a final product as consumed by individual refugees in field settings may be determined by many factors, which include:



57. Therefore, it is essential that effective measures are implemented at all stages of manufacture and delivery to ensure that drug quality is maintained. This is particularly important in refugee settings where many months may elapse between date of purchase and actual use. A drug which complies with all laboratory tests upon entry to a tropical country, may become useless within a few months if:

- it has not been properly formulated and manufactured;
- the packaging is inadequate;
- transportation and storage conditions are poor.

58. For both international and local procurement procedures, the following measures to ensure quality assurance of drugs supplied should be implemented wherever possible:

- restricted selection of suppliers;
- inspection of good manufacturing practices;
- standard shipment specifications;
- physical inspection of each shipment;
- packaging;
- labelling;
- shipping and port conditions.

Restricted selection of suppliers

59. When dealing with suppliers other than UNIPAC, purchasing officers are strongly advised to include for consideration only those companies that are licensed by the government of the host country.

60. Care must be taken as some “suppliers” are in fact brokers or distributors who repack the drugs manufactured by another firm.

Labelling must of course still comply with WHO standards (cf. annex E).

61. Furthermore, it is recommended that drug manufacturers or brokers are selected from only those countries which participate in the WHO Certification Scheme: see WHO publication WHO/PHARM/82.4 Rev.3, *Certification Scheme on the Quality of Pharmaceutical Products Moving in International Commerce and Text of Good Manufacturing Practices (GMP)*. This provides a simple administrative mechanism to:

- determine whether a given product has been registered for marketing in the exporting country;
- obtain assurance that the manufacturing plant in which the product is produced
 - is subject to periodic inspection, and
 - conforms to requirements for good practices in the manufacture and quality control of drugs as recommended by WHO.

Inspection for good manufacturing practices

62. It is recommended that suppliers should be able – on request – to provide adequate certification that an individual manufacturer complies with the standards of good manufacturing practices – as specified and enforced by its national drug regulatory authority, or other appropriate regulatory agency.

Standard shipment specifications

63. Suppliers are urged to implement measures which ensure:
- all formulations conform with specifications in the current British or American pharmacopoeia;
 - a certificate of analysis which includes batch number is provided by the manufacturer for each line item supplied;
 - each line item complies with order requirements regarding drug formulation, dosage, unit size and quantity;
 - concordance with packaging and labelling standards presented in annex E;
 - drugs supplied have a minimum two-year shelf-life where appropriate from the time of purchase.

Physical inspection of each shipment

64. For all orders of significant value/size, it is recommended that inspection by a licensed shipping inspectorate should be carried out prior to overseas shipment/local distribution. Such inspections should ensure that each item conforms to specifications regarding physical appearance, and that the following are correct:

- labelling;
- quantities;
- dose forms;
- package size;
- batch numbers;
- certificates of analysis;
- quality of packaging.

Any deficiencies identified at this stage should be drawn to the attention of both the appropriate purchasing officer and the supplier responsible, so that corrective action may promptly be initiated prior to shipment/delivery.

Packaging

65. Suppliers are urged to comply with the packaging conditions listed below to ensure drug quality during shipment.

- ***Within each container***

- Carton sizes should be approximately 60 × 60 × 60 cm or 75 × 60 × 30 cm;
- all individual cartons should be individually banded and labelled;
- no carton should exceed 25 kg in weight;
- cartons should be strong and tri-walled, suitable for stocking and transportation over rough terrain;
- each line item should be packed separately, and not mixed with other items.

- ***Quantities not filling a container***

- These should be packed in strong, banded, wooden crates.

Labelling

66. Suppliers are urged to ensure that manufacturers comply with the following labelling requirements, include drug information sheets and provide information as listed below (see annex E for a complete guide).

- | | |
|---|--|
| - <i>Name</i> | - Generic name |
| - <i>Dosage form</i> | - Per unit (in salt and in base) |
| | - Per millilitre, for injections |
| - <i>For parenteral forms</i> | - Precise route of administration |
| - <i>For oral and parenteral forms</i> | - Clear instructions on preparing solutions, if in powder form |
| - <i>Major contra-indications and precautions</i> | |
| - <i>Manufacture date</i> | |
| - <i>Expiry date</i> | |
| - <i>Batch number</i> | |
| - <i>Name and address of manufacturer</i> | |
| - <i>Storage conditions</i> | - Necessary precautions for certain drugs, e.g. vaccines |
| - Containers should be labelled clearly in the language specified in the terms of contract. | |

Shipping and port conditions

67. It is essential that acceptable storage conditions during shipment are maintained with regard to temperature, humidity, light and cleanliness.

68. On arrival, shipment contents should be inspected by the receiving authority to ensure contract specifications have been complied with prior to delivery to central warehouses.

69. It is important that shipment clearance is expedited as promptly as possible to:

- avoid inadequate or unsafe storage in port facilities;
- avoid delays in delivery of needed supplies;
- prevent damage to heat-sensitive vaccines.

Storage and transportation

70. General recommendations for warehousing and storage and transportation have been already outlined in paragraphs 30 to 35.

CO-ORDINATION

71. As in all aspects of refugee health care, co-ordination remains an issue of central importance in ensuring that refugee populations have access to a safe and adequate supply of essential drugs.

72. In order that an effective drug supply is maintained for refugee populations – even those in remote areas – it is strongly urged that the following components should be introduced at all levels.

For example:

- | | |
|---|---|
| <ul style="list-style-type: none"> • identification of the different organizational levels involved • specification of procedures and responsibilities for each organizational level • clearly understood channels of communication and feedback | <ul style="list-style-type: none"> • international, national, regional, district, field/camp • ordering drugs, procurement activities, safe storage procedures, delivery times • <i>horizontal communication</i> essential between agencies at the the same level (e.g. to co-ordinate timetables for ordering among several agencies in the same camp) • <i>vertical communication</i> essential <i>within agencies</i> at different levels (e.g. submission of inventory reports from field → regional → central level) |
|---|---|

For example:

- designation of specific personnel with clearly defined responsibilities
- establishment of lines of accountability
- standardization of forms for use at all levels
- specification of logistics and drug supply flow charts
- warehouse supervisor
 - procurement officer
 - field-level dispenser
- field-level physician → regional health co-ordinator
- requisition/order forms
 - invoices, issue/receipt forms
 - inventory monitoring forms
- arrival of internationally procured consignment → port clearance

73. Within the context of co-ordination, UNHCR's specific role with regard to drug procurement, distribution and monitoring activities at a national level, will vary in response to the particular way refugee health services are organized.

74. Figure 2 represents UNHCR's relationship with its implementing partners in ensuring that an essential drug supply for refugee populations is established and maintained, irrespective of setting.

MONITORING

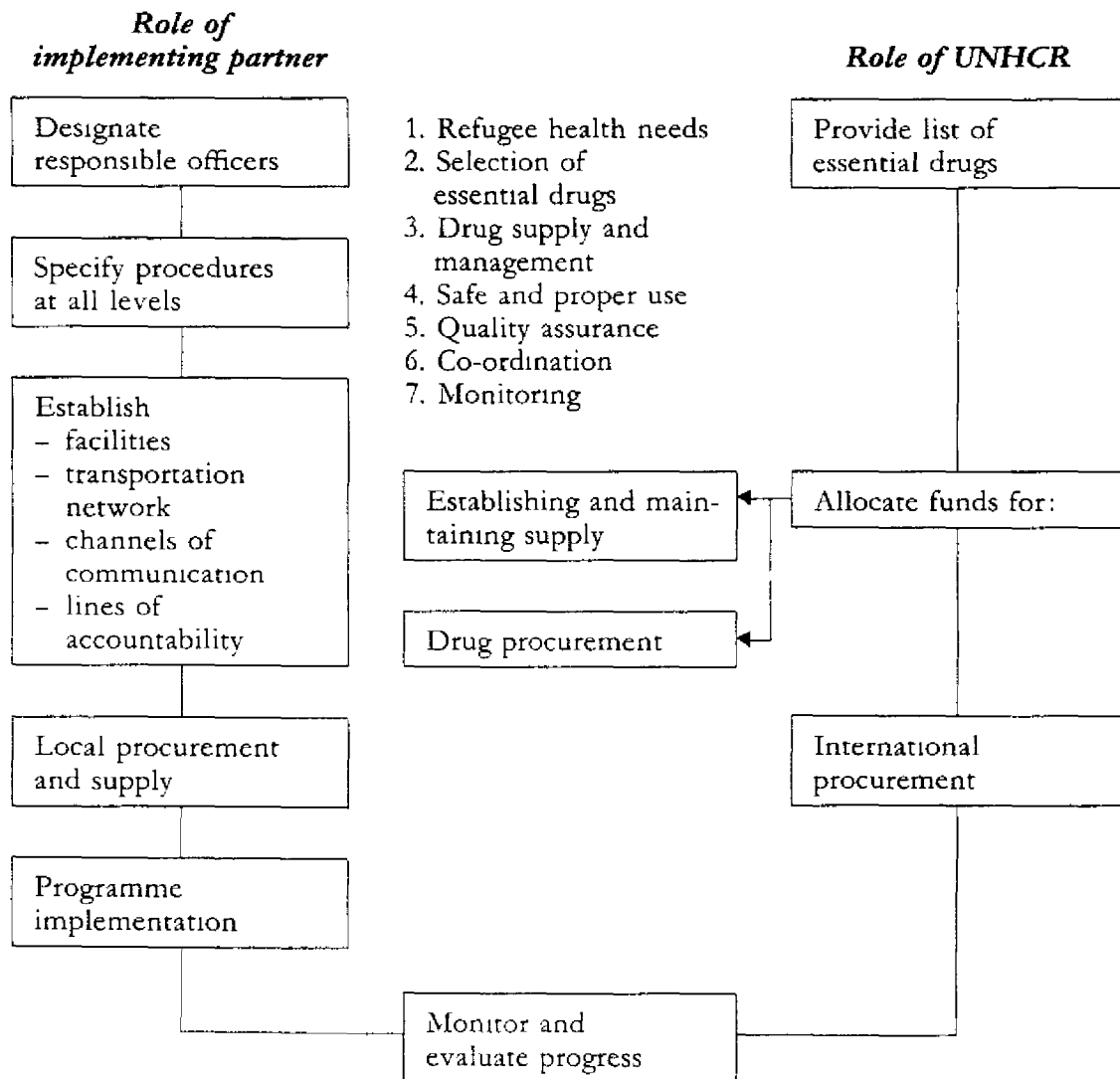
75. A mechanism for monitoring drug supply and use is clearly necessary for an effective essential drugs programme. Guidelines will be contained in a WHO document (at present in draft form only): "Monitoring Methods for National Essential Drugs Programmes".

76. While the selection of appropriate evaluation methods must necessarily reflect the needs and priorities of each national programme, it is strongly recommended that procedures are implemented to:

- determine how effectively the drug supply/management system is operating;
- ensure drugs are being used appropriately and safely in camp settings;
- provide a basis for comparing programme effectiveness over a period of time.

FIGURE 2

UNHCR drug policy



77. At a central level, monitoring can often be computerized using simple spread-sheet software. The following outputs would be useful:

To indicate:

Procurement

- Number of emergency orders placed during the year → Level of inventory control/management
- Value of total purchases → Total procurement expenditures over a period of time
- Value of damaged or lost consignments → Adequacy/security of shipping procedures

Inventory control

- Value of average inventory on hand → Total value of drugs on hand in working and safety stock
- Value of average monthly and annual consumption → Consumption levels (as affected by seasonal/annual needs)

Storage

- Value of drugs lost due to poor handling and storage conditions → Adequacy of storage procedures and facilities
- Value of drugs pilfered or declared unaccountable → Adequacy of security measures in central storage facilities.

78. At regional/district field levels, it is often difficult to determine the precise value of inventory on hand. However, other indicators for measuring the effectiveness of drug supply can be implemented. These include:

To indicate:

Placing requisitions

- Number of individual orders placed for drugs from central stores during the year → Level of inventory control and effectiveness of drug ordering procedures

Inventory control

- Number of stock outs in life-saving drugs → Level of inventory control and effectiveness of ordering/supply system
- Instances of emergency deliveries (number and percentage of all deliveries) → Increased unanticipated demand for specific drugs.

79. At a field level, it is also important to institute appropriate monitoring procedures and safeguards regarding drug use to ensure:

- safe and proper prescribing practices are observed;
- appropriate use by refugees themselves.

80. Safe and proper prescribing practices are most easily achieved if the following steps are implemented (refer paragraphs 42 to 54 for details):

- introduction of standard treatment protocols;
- adequate training and supervision of health personnel in
 - the safe use and storage of drugs,
 - specifying the range of prescribing responsibility for each level of health worker;

- clear mechanisms for field-level supervision which allow health workers
 - to seek advice and assistance,
 - to revise treatment protocols,
 - to receive regular training,
 - to replenish supplies and equipment.

81. It is also essential to introduce a system to monitor the *actual use* of medications by refugees themselves.

(a) This is particularly necessary for:

for example

- patients receiving long-term therapy —————→ refugees with tuberculosis or leprosy
- patients whose conditions can deteriorate suddenly —→ children with diarrhoea and/or multiple infections.

(b) Methods for monitoring home use of drugs include:

- home visiting by community health workers;
- surveillance of local markets for drugs dispensed at health centres and clinics (i.e. as a check both for black-market leakage from health facilities, and the sale of prescribed drugs – rather than their consumption by refugee patients).

CONSUMPTION REPORTING

82. Actual drug consumption by each health facility in a region is one of the most useful items of information to come out of good monitoring. Reporting of consumption can best be done by using the UNHCR order forms (annex A).

These data can be used by the senior health co-ordinator to compare:

- drug consumption with morbidity/mortality patterns;
- drug consumption in different camps or health facilities.

Guidelines for use

83. The list specifies the drugs for use in UNHCR assisted programmes. They have been selected from the WHO Model List of Essential Drugs contained in the report of the WHO Expert Committee on the Use of Essential Drugs (WHO Technical Report Series (TRS), No. 770, 1988).

ORGANIZATION OF UNHCR LIST OF ESSENTIAL DRUGS

84. The drugs which follow are categorized into three lists according to the level of supervision needed for their safe and proper use. These lists have thus been labelled:

- Basic List
- Supplementary List
- Specialized List.

85. The inclusion of a particular drug on the basic as against the supplementary list is only intended for guidance: the senior health coordinator in any given situation will have to decide just which medicines his or her different levels of health workers are able to use. This will vary from region to region, or with time: for example, if tapeworm is discovered to be highly prevalent, niclosamide will have to be moved from List S to List B.

Basic List (“List B”)

86. This is the basic list of drugs from which a general distribution for dispensaries and health centres can be chosen. The drugs are considered appropriate for use by health workers who have completed a satisfactory training programme as approved by the senior health officer, and for whom adequate and clearly defined supervision exists.

87. As a matter of principle, the Basic List does not contain any injectables. Most simple conditions can be managed with oral regimens. Vaccines are in the Supplementary List since storage is usually at a higher-level facility, even if immunization programmes are obviously conducted on an outreach basis with the participation of community health workers.

88. Choice of particular antibiotics and antimalarials to be used by first-level health workers will be made by the senior health co-ordinator in consideration of local endemicity and sensitivity patterns.

Supplementary List (“List S”)

89. This list contains drugs for prescription by more qualified personnel such as physicians or other staff as approved by the senior health officer responsible for refugee health programmes at a national level.

90. It is suggested that these drugs are used only in more elaborate health facilities such as camp health centres/clinics, which:

- are directly supervised by a physician or senior health worker;
- allow for the care and close monitoring of in-patients whenever necessary;
- are adequately equipped to deal with reactions to the drugs listed.

Clearly, the drugs used by more highly trained personnel also include those specified in the Basic List.

Specialized List (“List X”)

91. These items are intended for use in the management of specific conditions such as:

Leprosy	Tuberculosis	Filariasis
Leishmaniasis	Malaria	Schistosomiasis
Contraceptive needs	Snake bite	Meningococcal meningitis
Yellow Fever	Rabies	

92. Because many of the drugs specified in this list require careful supervision and may have serious side-effects, they must be administered only:

- after a protocol for safe and proper use has been approved by appropriate supervisory personnel;
- when the approved protocol is understood and adhered to by field personnel;

- when there is access to advice from qualified health personnel who are experienced in the safe and appropriate use of the drugs listed;
- when provision exists for patients to be followed systematically to ensure
 - adequate compliance with treatment,
 - careful monitoring of each individual's response to medication,
 - prompt recognition of side-effects.

Summary chart of Essential Drugs List

<i>List</i>	<i>Who can use?</i>	<i>Where to use?</i>	<i>Needs?</i>
Basic List	Nurse's aid, Community health worker	- Home visiting - Simple health clinics - Basic camp dispensaries	- Training - Supervision
Basic & Suppl. Lists	Doctors, Senior nurses*	- Larger health centres - Camp health centres providing in-patient care	- Close supervision by senior health worker - Monitoring of in-patients
Specialized List	Doctors, Senior nurses*	- Larger health centres - Camp health centres providing in-patient care in regions where the specific disease entity or need exists	- Approved protocol - Adherence to protocol - Access to specialist advice - Patient supervision

* Under the direction of the supervising physician.

EXPLANATORY NOTES FOR USE OF DRUG REFERENCE NUMBERS

93. The WHO Model List

- (1) The WHO Model List of Essential Drugs (TRS 770) is grouped according to the major therapeutic categories such as: anti-infective drugs, diuretics, dermatological drugs, gastrointestinal drugs, etc.

- (ii) Within some of these major categories, however, subgroups have been specified, for instance:

ampicillin
is one drug classified in the
6.2.1 Penicillins
group which is a subcategory of
6.2 Antibacterials
classified under the broad category of
6. Anti-infective drugs

94. The UNHCR List

- (i) For cross-referencing, each drug in the UNHCR List has been retained in its WHO therapeutic category. For ease of procurement and monitoring, each item has been given a 5-digit UNHCR identifying code: these codes, however, bear no relationship to the therapeutic categories.
- (ii) A prefix can be attached to each code number to indicate to which of the three lists the drug belongs. This is useful at a peripheral level to allow managers to identify what level of health staff will be dealing with a particular item. The prefixes are:
- B – Basic List
 - S – Supplementary List
 - X – Specialized List
- (iii) All drugs from the three lists are consolidated alphabetically in the index and the UNHCR code as well as the list prefix are indicated.

PLACING DRUG ORDERS FOR PROCUREMENT PURPOSES

95. Annex A provides examples of detailed order forms to be used when placing drug requisitions. These are arranged so that they can be used for placing drug orders at all levels of the system, i.e.

- from field camp-level health programmes to central/regional stores
- from national co-ordinating centres to UNHCR headquarters, in the case of international procurement procedures.

96. The three lists are arranged in the following way:

I	II	III	IV	V	VI	VII
UNHCR code	Generic name	Form	Strength	Unit (pack)	Number of units	Total order (number of tabs., amps.)
50117	ether, anaesthetic	inhalation	bottle 1 000 ml	1		
50121	halothane	inhalation	bottle 250 ml	1		
50125	ketamine	inj.	50 mg/ml vial 10 ml	25		
50129	lidocaine	inj.	1% vial 50 ml	12		
50133	acetylsalicylic acid	tab.	300 mg	1 000		
50137	paracetamol	tab.	500 mg	1 000		
50141	probenecid	tab.	500 mg	1 000		

97. It is recommended that the basic format of the order forms listed in annex A be retained for use when requesting drugs for use in camp-level programmes. It is also suggested that this format is used when making drug requisitions through local or international procurement channels. The forms can be photocopied from this manual. Also, the forms will be available on diskette compatible with the UNHCR word processors in the field. Some modification of the forms may be necessary in response to local ordering requirements and administrative needs.

98. Column V shows the unit (pack) size for each item as is normally supplied by manufacturers. This may vary at times, and is given here as an indication only. Camp-level orders may often require less than a full unit (e.g. only 1 vial of ketamine), and the order should be placed by filling the number required in column VII.

99. Column VII refers to the *total order* size required (i.e., the total number of tablets needed). It should be completed by:

- field-level health programme supervisors (for drug requests from camp programmes);
- regional/national programme managers in the case of large national/international requests.

100. For streamlining procurement activities and drug supply at all levels, it is important that column VII should be rounded up as closely as possible to approximate unit/pack size (i.e. “1,000” tablets, rather than “800” for unit size of 1,000 tablets/box), and that order forms are completed as specified in annex A.

Inclusion of drugs listed in the WHO Model List

101. If, in the opinion of the senior health officer, a drug not already specified on the UNHCR list should be added from the WHO Essential Drugs List, it should be the object of a specific request using the form in annex A.2.

Inclusion of drugs not listed in the UNHCR or WHO lists

102. As specified in paragraph 19, medicines not included in either the UNHCR or WHO lists may be used only if approved by UNHCR Headquarters. Requests to include such drugs using the form as specified in annex A.4 should provide clear evidence of need and give essential information.

103. Such drugs, if approved, should not be assigned an identification number, but should be carefully listed in the Specialized List by generic name, route of administration, dosage form and strength. UNHCR Headquarters will issue code numbers for approved items.