

**Minimum Standards**

**in Health Services**

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## **Minimum Standards in Health Services**

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## Minimum Standards in Health Services

### Introduction

The minimum standards for Health Services are a practical expression of the principles and rights embodied in the Humanitarian Charter. The Charter is concerned with the most basic requirements for sustaining the lives and dignity of those affected by calamity or conflict, as reflected in the body of international human rights, humanitarian, and refugee law. It is on this basis that agencies offer their services. They undertake to act in accordance with the principles of humanity and impartiality, and with the other principles set out in the *Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs in Disaster Relief*. The Humanitarian Charter reaffirms the fundamental importance of three key principles:

- \* the right to life with dignity
- \* the distinction between combatants and non-combatants
- \* the principle of non-refoulement

The minimum standards fall into two broad categories: those that relate directly to people's rights; and those that relate to agency processes which help ensure people acquire these rights. Some of the minimum standards combine both of these categories.

### 1 The importance of health services in emergencies

In emergencies, major loss of lives due to increased incidence of diseases and injuries has been documented. Natural disasters (earthquakes, floods, volcanoes etc), warfare and conflicts, and technological disasters tend to result in excess mortality and morbidity<sup>1</sup>. Diseases responsible for such increases have also been identified: measles, diarrhoeas (including dysentery and cholera), acute respiratory infections, malnutrition and malaria (where prevalent). The high incidence of diseases is due to the environmental factors to which populations are exposed, namely overcrowding, , inadequate quantities and quality of water, poor sanitation, inadequate shelter and inadequate food supply.

The main purpose of providing health services to a disaster-affected population is to prevent excess mortality and morbidity. Essential to this is the identification of priorities through rapid assessment, ongoing monitoring and surveillance; interventions must respond to priorities identified by the initial assessment and must be technically sound. Planning, implementation and monitoring should be coordinated among the agencies involved.

Priority should be given to primary health care (PHC) measures including multi-sectoral assistance in key areas (water, sanitation, nutrition, food, shelter). The participation of local health authorities and that of qualified members of the affected population including community workers and home visitors is paramount in carrying out primary health care measures. In most emergency situations, women and children are the main users of health care services, and it is important to seek women's views as a means of ensuring that services are equitable, appropriate and accessible for the affected population as a whole. Women can contribute to an understanding of cultural factors and customs that impact on health, as well as the specific needs of vulnerable people within the affected population. They should therefore participate in the planning and implementation of health care services wherever possible.

## 2 Finding your way around this chapter

The chapter is divided into five sections (analysis, measles control etc), each of which includes the following:

- \* **The minimum standards:** these specify the minimum levels to be attained in each area.
- \* **Key indicators:** these are 'signals' that show whether the standard has been attained. They provide a way of measuring and communicating both the impact, or result, of programmes as well as the process, or methods, used. The indicators may be qualitative or quantitative.
- \* **Guidance notes:** these include specific points to consider when applying the standard and indicators in different situations, guidance on tackling practical difficulties, and advice on priority issues. They may also include critical issues relating to the standard or indicators, and describe dilemmas, controversies or gaps in current knowledge. Filling these gaps will help improve the minimum standards for health services in the future.

Further relevant information, including a select bibliography, is supplied in the Appendices.

The organisation of the chapter reflects the division of activities and responsibilities that commonly occurs in emergency situations. Action in each of these areas contributes to the overall purpose of addressing priority health needs.

Each of the sections is inter-related. The initial health assessment identifies needs, establishes priorities and provides the data to start priority interventions. Data from the ongoing health information system provides trends in morbidity and mortality which serve to detect new problems or to redirect resources. Both the initial assessment and the health information system serve to identify health problems such as malnutrition, communicable diseases or injuries that are addressed and controlled using standards outlined in the control of communicable diseases and the health care services sections. Section 5, human resource capacity and training, applies to all work and deals with issues related to the human capacity required to implement effective health interventions.

Progress in achieving standards in one area determines the importance of progress in other areas. For instance, a good health information system identifies problems and then leads to appropriate control, preventative and curative activities.

Reference to other sectors' technical standards are made where relevant. The purpose of this is to highlight how work in one sector is closely linked to work in other sectors, and that progress in one is dependent on progress in other areas. For example, provision of clean water will reduce diarrhoea, provision of sufficient and appropriate foods will reduce nutritional problems.

#### Note

1. Excess mortality exists when the crude mortality rate (CMR) is higher than the prevailing mortality level of the surrounding population in an emergency setting. In developing countries a CMR higher than 1 death per 10,000 persons per day has been the traditional definition of excess mortality. This threshold is derived from the reported annual CMR in most developing countries, approximately 25 deaths per 1,000 persons, which corresponds to a daily rate of 0.6 per 10,000. The prevailing mortality rate in developed countries may vary from that of developing countries and this needs to be considered during the initial assessment. Calculating the CMR may not be applicable or relevant to a sudden-impact disaster unless there is a long-standing or significant population displacement.

## **The Minimum Standards**

### **1 Analysis**

Interventions that meet the needs of disaster-affected populations must be based on a clear understanding of the current situation, including political and security factors, and anticipated developments. The people affected by the disaster, agencies, donors and local authorities need to know that interventions are appropriate and effective. Analysis of the effects of the disaster and of the impact of the proposed health interventions is therefore critical. If the problem is not correctly identified and understood then it will be difficult, if not impossible, to make the right response.

Standardised methods of analysis that are used across the sectors have great potential to identify rapidly acute humanitarian needs and to ensure that resources are directed accordingly. This section sets out agreed standards and indicators for collecting and analysing information to identify needs, to design interventions, to monitor and evaluate their effectiveness, and to ensure the participation of the affected population.

Analysis starts with an immediate initial assessment. This provides baseline data that measures the impact of the disaster and determines whether and how to respond. It continues through the health information system with monitoring, which identifies how well interventions are meeting needs and whether changes are required. The health information system eventually provides data that can be used to evaluate the overall effectiveness of interventions and to identify lessons for the future.

The sharing of information and knowledge among all those involved, including the affected populations, is fundamental to achieving a full understanding of the problem and coordinated assistance. Documenting and disseminating information from the analysis process contributes to a broad understanding of the adverse public health and other consequences of disasters, and can assist in the development of improved disaster prevention and mitigation strategies.

### **Analysis standard 1: initial assessment**

The initial assessment determines as accurately as possible the health effects of a disaster, identifies the health needs and establishes priorities for health programming.

### **Key indicators**

\* An immediate initial assessment that follows internationally accepted procedures is carried out by appropriately experienced personnel including if possible at least one epidemiologist. Data collection starts before the field assessment using available maps, country profiles etc.

\* The initial assessment is conducted in cooperation with a multi-sectoral team (water and sanitation, nutrition, food, shelter, health), national health authorities, men and women from the affected population and humanitarian agencies intending to respond to the situation.

\* The information is gathered and presented in a way that allows for transparent and consistent decision making. Appendix 2 provides a sample Checklist for Initial Health Assessment. Information gathered usually includes:

- Geographic extent of the impact of the disaster.
- Demographics of the disaster-affected area:

The total disaster-affected population (population denominator is estimated if census is impossible or not available).

Sex and age breakdown of the affected population is collected for two age groups at least (<5 years age group) and (5 and >5 years of age group); if it is feasible to collect more detailed age data, the following breakdown is used: <1, 1-4, 5-14, 15-44, 45+.

Average family or household size including estimates of female- and child-headed households and pregnant and lactating women.

- Information on communicable diseases, injuries and deaths.
- Presence of continuing hazards.
- Nutritional status of affected population.

- Crude mortality rate (CMR) for total population expressed as deaths per 10,000 population per day.
- Under-5 mortality rate (U-5MR) (age specific mortality rate for under five year old age group) expressed as deaths/10,000 /population/day.
- Age and sex specific incidence rates of major problems and diseases.
- Environmental conditions (access to potable water, current level of sanitation, availability and adequacy of shelter, disease vectors etc).
- Availability of food.
- Status and quality of local health infrastructure (services and staffing) and medical supplies.
- Status of transportation system.
- Level of communications network.
- Estimates of external assistance based on preliminary findings.

\* The daily crude mortality rate (CMR) for the total population and the U-5MR are calculated regularly (daily in the early stages of an emergency if necessary, and less frequently thereafter) to allow for detection of sudden changes.

\* In situations of prevailing insecurity, the assessment includes an analysis of factors affecting the personal safety and security of affected populations.

\* The initial assessment team's programming and recommendations aim from the start to prevent excess mortality and morbidity as well as anticipate future public health problems resulting from the ongoing emergency conditions. Recommendations are made on whether or not external assistance is needed to supplement in-country resources. If assistance is required, recommendations are made on priorities and a strategy is outlined for providing needed human and material resources. There is also consideration of:

- The social and political structure of the population including the potential influx of refugees.
- Special attention for groups at risk.
- Access to the affected population.



- Insecurity and violence.
  - Distribution systems.
  - The possible long-term implications and environmental impact of the interventions proposed.
- \* The specific security threats faced by vulnerable groups, especially women and girls, are taken into account in the design of health interventions.
- \* An assessment report is produced that covers key areas and appropriate recommendations which are immediately shared with national and local authorities, representatives from the affected population and participating agencies.

## Guidance notes

1. **Internationally accepted procedures for initial assessment:** see WHO (1999).
2. **Indicators of overall health status:** during the acute phase of an emergency, the crude mortality rate (CMR) for the whole population and the under-5 mortality rate (U-5MR) for children under five years of age are very important indicators of the overall status of the affected population.
3. **Crude mortality rates:** the following method is used to calculate crude mortality rates over short periods of time (<1 month).
  - a) Total the deaths for a given number of days.
  - b) Divide the total by the number of days over which data were gathered - this gives the average number of deaths per day.
  - c) Divide this number by the size of the affected population.
  - d) Multiply by 10,000 for a daily crude mortality rate.
4. **Timeliness:** timeliness is of the essence for the initial assessment, which should be carried out as soon as possible after the disaster. If required there should be an immediate response to critical needs at the same time. A report should be generated as soon as possible after arrival at the site of the disaster, though this depends on the particular event and the wider situation.

**5. People conducting the assessment:** people who are able to collect information from all groups in the affected population in a culturally acceptable manner should be included, especially with regard to gender analysis and language skills. Ideally, there should be a balance in the numbers of men and women taking part.

**6. Assessment procedure:** the logistics of conducting the assessment and the use of internationally recognised standards should be agreed upon by all participants before field work begins and specific tasks contributing to the assessment should be assigned accordingly.

**7. Information gathering:** while there are some emergencies where advance knowledge will determine what actions are necessary, most humanitarian assistance must be based on some assessment data, even if incomplete. There are many different techniques for information gathering and these should be chosen carefully to match the situation and the type of information required. As a general rule, information should be gathered more frequently when the situation is changing more rapidly, and when there are critical developments such as new population movements or an epidemic outbreak of diarrhoea. Initial assessments may be quick and unrefined but analysis improves as more time and data are available through the health information system. As the emergency stabilises, better health information data on pregnant and lactating women, disabled people, elderly people and unaccompanied minors and other groups at risk should become available. However, efforts should be made to gather health information data on the reproductive health needs of the affected population from the start of the emergency response.

**8. Sources of information:** further information for the assessment report can be compiled from other existing literature, relevant historical material, pre-emergency data and from discussions with appropriate, knowledgeable people including donors, agency staff, government personnel, local specialists, female and male community leaders, elders, participating health staff, teachers, traders and so on. National or regional level preparedness plans may also be an important source of information. Group discussions with members of the affected population can yield useful information on beliefs and practices. The methods used for collecting information and the limits of its reliability must be clearly communicated. Information should never be presented in such a way as to provide a misleading picture of the actual situation.

**9. Underlying issues:** an awareness of the rights of those affected by disasters, under international law, should underpin the assessment. Initial assessment and subsequent health information analyses should demonstrate an awareness of underlying structural, political, security, economic, demographic and environmental issues operating in the

area. It is imperative that prior experience and local understanding are taken into consideration when analysing the dynamics and impact of the new emergency. This requires inclusion of local expertise and knowledge in data collection and analysis of resources, capacities, vulnerabilities and needs. The current and pre-emergency living conditions of displaced and non-displaced people in the area and local resources must also be considered.

10. **Groups at risk:** the needs of groups that are at risk of additional harm such as women, adolescents, unaccompanied minors, children, elderly people and people with disabilities must be considered. Gender roles within the social system need to be identified.

11. **Areas of activity:** although each emergency generates particular health needs and problems, the following broad areas of activity are likely to be needed: surveillance of diseases and injuries, control of communicable diseases, measles immunisation, food and nutrition, water, sanitation and shelter. In addition, the initial assessment should indicate the extent of need for: prevention services, curative health care, the referral system, reproductive health, women's and children's health, community services, health education, medical supplies, personnel and the organisational resources required to establish and operate these services in an interrelated and coordinated manner.

### **Analysis standard 2: health information system - data collection**

The health information system regularly collects relevant data on population, diseases, injuries, environmental conditions and health services in a standardised format in order to detect major health problems.

#### **Key indicators**

- \* Surveillance starts at the same time as the initial assessment and ideally uses the existing ongoing local health information system. In some emergencies, a new or parallel system may be necessary and this is determined by the initial assessment team.
- \* Responsibility for organising and supervising the surveillance system is clearly assigned to an individual agency to assure coordination between all partners if the local health authorities cannot serve in this function.
- \* The health information system in the initial stages of the emergency concentrates on demography, mortality and its causes, morbidity and priority programme activities (water, sanitation, food, nutrition, shelter) as specified by the initial assessment.
- \* Mortality data is collected from: health facilities and the community including cemetery staff, shroud distributors and other key informants to assess the daily CMR for the total population and U-5MR (age specific mortality rate for under five year olds). Cause-specific mortality data is also collected.
- \* Morbidity data on injuries, health conditions and diseases is collected from: health facilities providing outpatient services, nutrition centres, feeding programmes and community health workers, in order to calculate: incidence rates for primary causes of injury or illness; age and sex specific incidence rates; and to detect changes or new health problems.
- \* Each health facility providing outpatient services completes the standard surveillance forms for mortality and morbidity providing age, sex, and cause-specific data.
- \* Health service data is collected from participating agencies, local health facilities and community health workers in most emergency situations. Since the kind of data to be collected varies with each emergency, the initial assessment team determines the

priority areas for which data is collected, such as feeding programme coverage, measles immunisation coverage, sexual violence etc.

- \* The local health authority or agency designated with responsibility for the health information system regularly summarises and shares data received from health facilities and the community using standard forms and standard data compilation, entry and analysis methods.
- \* Standard case definitions and standard reporting forms are available and used for every disease to be monitored. Definitions are simple, clear and adapted to available diagnostic means.
- \* People working at reporting sites are trained in the use of standard reporting forms and case definitions. The frequency of reporting is specified and is adapted to the type and phase of the emergency situation.
- \* Communications and logistics systems for disseminating and receiving surveillance reports and feedback are in place or are created.
- \* The health information system is periodically assessed to determine its accuracy, completeness, simplicity, flexibility and timeliness.

## **Guidance notes**

### **1. The health information system serves to:**

- a) Rapidly detect and respond to health problems and epidemics.
- b) Monitor trends in health status and continually address health-care priorities.
- c) Evaluate the effectiveness of interventions and service coverage.
- d) Ensure that resources are correctly targeted to the areas and groups of greatest need.
- e) Evaluate the quality of health interventions.

2. **Reporting:** see Appendix 3 for sample mortality and surveillance forms, Appendix 4 for an example of presentation of mortality data, Appendix 6 for sample water, sanitation and environment forms, and Appendix 7 for sample sexual violence report form. Please refer as well to Water Supply and Sanitation, chapter 1, and Nutrition, chapter 2.

**3. Clinical case definitions:** examples of clinical case definitions for use in some emergency and post-emergency situations are provided below.

- Measles: generalised rash lasting >3 days and temperature >38 C and one of the following: cough, runny nose, red eyes.
- Dysentery: 3 or more liquid stools per day and presence of visible blood in stools.
- Common diarrhoea: 3 or more liquid watery stools per day.
- Cholera: severe, profuse, watery diarrhoea with or without vomiting.
- Acute Respiratory Infection (ARI): cough or difficult breathing >50/minute for infant aged 2 months to <1 year; breathing >40/minute of child aged 1-4 years; and no chest indrawing, stridor or danger signs.
- Malnutrition: for detailed definitions, see Nutrition, chapter 2, Appendix 1.
- Malaria: temperature >38.5C and absence of other infection.
- Meningitis: sudden onset of fever >38.9 C and neck stiffness or purpura.

**4. Sexual violence:** the number of cases of sexual and domestic violence reported to health services and to protection and security officers should be regularly monitored.

#### **Analysis standard 3: health information system - data review**

Health information system data and changes in the disaster-affected population are regularly reviewed and analysed for decision-making and appropriate response.

#### **Key indicators**

\* During the emergency phase, the crude mortality rate (CMR) and incidence rates of major health problems (diseases and injuries) are monitored and analysed regularly for decision-making. However, for some emergencies, the initial assessment team may recommend a less frequent cycle of analysis.

\* Reports of health problems (malnutrition, injuries etc) are rapidly identified, further investigated and appropriate measures immediately instituted to prevent excess mortality from the identified problem(s).

\* Individual cases of diseases of epidemic potential (cholera, measles etc) and/or outbreaks of communicable diseases are investigated as soon as possible and confirmed. Outbreak control measures are instituted if indicated and cases receive appropriate treatment. (See control of communicable diseases standards.)

#### **Analysis standard 4: health information system - monitoring and evaluation**

Data collected is used to evaluate the effectiveness of interventions in controlling disease and in preserving health.

#### **Key indicators**

\* Measures of effectiveness used for evaluation include:

- Decreasing death rate aiming towards less than 1/10,000/day.
- The under-5 mortality rate (U-5MR) is reduced to no more than 2/10,000/day.
- Epidemics/diseases are controlled.
- Injuries and impact of violence are reduced or eliminated.
- Measles vaccination coverage reaches more than 95%.
- There is access to adequate food (see Nutrition, chapter 2 and Food Aid, chapter 3).
- There is access to adequate water (see Water Supply and Sanitation, chapter 1).
- Adequate sanitation facilities are available (see Water Supply and Sanitation, chapter 1).

#### **Guidance notes**

1. **Objective:** the objective of an emergency intervention should be to achieve a CMR of <1/10,000/day and an U-5MR of <2/10,000/day as soon as possible.

2. **Integration:** the health information system should be integrated into the host community system and include health facility and community health workers. Both the affected population and the host community participate in the health information system.

3. **Use of monitoring information:** emergencies are volatile and dynamic by definition. Regular and current information is therefore vital in ensuring that interventions remain relevant. Information derived from continual monitoring of interventions should be fed into reviews and evaluations. In some circumstances, a shift in strategy may be required to respond to major changes in the context or needs of the disaster-affected population.

4. **People involved in monitoring:** when monitoring requires consultation, people who are able to collect information from all groups in the affected population in a culturally acceptable manner should be included, especially with regard to gender and language skills. Women's involvement should be encouraged.

5. **Evaluation:** evaluation is important because it measures effectiveness, identifies lessons for future preparedness, mitigation and humanitarian assistance, and promotes accountability. Evaluation refers here to two, linked processes:

a) Internal programme evaluation is normally carried out by staff as part of the regular analysis and review of monitoring information. The agency must also evaluate the effectiveness of all its interventions in a given disaster situation or compare its interventions across different situations.

b) External evaluation may by contrast be part of a wider evaluation exercise by agencies and donors, and may take place, for example, after the acute phase of the emergency. When evaluations are carried out it is important that the techniques and resources used are consistent with the scale and nature of the intervention or programme, and that the report describes the methodology employed and the processes followed in reaching conclusions.

6. **Links with other sectors:** monitoring and evaluation activities require close cooperation with other sectors (see chapters on Water Supply and Sanitation, Nutrition, Food Aid, Shelter and Site Planning), host authorities and agencies.



### **Analysis standard 5: participation**

The disaster-affected population has the opportunity to participate in the design and implementation of the assistance programme.

#### **Key indicators**

\* Women and men from the disaster-affected population are consulted, and are involved in decision-making that relates to needs assessment, programme design and implementation.

\* Women and men from the disaster-affected population receive information about the assistance programme, and have the opportunity to comment back to the assistance agency about the programme.

#### **Guidance notes**

1. **Equity:** the participation of disaster-affected people in decision-making, programme design and implementation helps to ensure that programmes are equitable and effective. Special effort should be made to ensure the participation of women and balanced male and female representation within the assistance programme. Participation in the health programme may also serve to reinforce people's sense of dignity and worth in times of crisis. It generates a sense of community and ownership which can help ensure the safety and security of those who are receiving assistance, as well as those who are responsible for its implementation.

2. **People can be involved in health services in different ways:** for example through participation in social mobilisation; providing key health information messages to the affected population; early reporting of suspect cases of illness; house-to-house case detection and surveys; registration and support at health events (vaccinations, vitamin A supplementation, ORT at household level or designated community centres, condom distribution, etc.); assisting at health facilities with logistics (crowd control and security) and by assisting in matters relating to language and culture.

3. **Coordination committees:** coordination committees help ensure people's involvement in the assistance programme. Gender, age, ethnicity and socio-economic status should be taken into consideration in order to ensure that committees adequately represent the affected population. Acknowledged political leaders, female and male community leaders and religious leaders should also be represented. The roles and functions of a coordination committee should be agreed upon when it is set up.

4. **Seeking views and opinions:** participation can also be achieved through regular polling and discussions. This can take place during distribution, through home visits or when addressing individual concerns. Group discussions with members of the affected community can yield useful information on cultural beliefs and practices.

## 2 Measles Control

Measles is one of the most contagious and lethal viruses known. Crowded emergency settings and unexpected population movements provide an ideal environment for the rapid and intense transmission of this virus, which can result in high levels of morbidity and mortality, especially among young children.

Measles vaccination campaigns should be assigned the highest priority at the earliest possible time in emergency situations. The necessary personnel, vaccine, cold chain equipment and other supplies to conduct a mass campaign should be assembled at the site of the emergency as quickly as possible. The decision of when to begin the vaccination campaign should be based on epidemiological factors such as whether a mass campaign in the population has taken place recently, level of measles vaccination coverage, and the estimated number of susceptible persons in the affected population. In some instances the initial assessment team may recommend that persons up to 15 years of age or higher be included if there is evidence of high susceptibility in this age group.

### Measles control standard 1: vaccination

In disaster-affected populations, all children 6 months to 12 years old receive a dose of measles vaccine and an appropriate dose of vitamin A as soon as possible.

### Measles control standard 2: vaccination of newcomers

Newcomers to displaced settlements are vaccinated systematically. All children 6 months to 12 old years receive a dose of measles vaccine and an appropriate dose of vitamin A.

## **Key indicators**

- \* Coordination with local health authorities (Expanded Programme on Immunisations - EPI) and involved agencies is established and ongoing.
- \* More than 95% of all children in the target group (including newcomers) are vaccinated. (See Appendix 5 for sample measles vaccination form.)
- \* On-site supply of measles vaccine equals 140% of the target group including 15% for wastage and a 25% reserve stock; projections of vaccine needs for subsequent newcomers are made and vaccine is procured if not already available.
- \* Only vaccines and autodestruct syringes meeting WHO specifications are used.
- \* The cold chain is continuously maintained and monitored from vaccine manufacture to vaccination site.
- \* On-site supply of autodestruct syringes equals 125% of expected target groups including a 25% reserve stock. Sufficient 5ml syringes for diluting multiple dose vials are available. One syringe is required for each vial diluted.
- \* Sufficient WHO-recommended 'safety boxes' are used to store autodestruct and dilution syringes before their disposal. Boxes are disposed of according to WHO recommendations.
- \* On-site supply of vitamin A equals 125% of the target group including a 25% reserve stock if vitamin A is to be provided as part of a mass vaccination campaign.
- \* The date of measles vaccination is entered in each child's health record. Health records for recording vaccinations are provided if possible.
- \* Infants vaccinated prior to 9 months require re-vaccination upon reaching that age.
- \* Health facilities have the capacity to ensure routine ongoing measles vaccination of new arrivals if this is a displaced situation, and to identify infants needing to be re-vaccinated at 9 months.
- \* Relevant messages in the local language are provided to groups of waiting mothers or caregivers on the benefits of measles vaccination, possible side effects, when to return if re-vaccination is indicated and the importance of retaining the health record.
- \* A public information campaign is conducted by community workers before conducting a mass vaccination campaign.

## Guidance notes

1. **Temperature:** vaccines must be maintained at the manufacturer's recommended temperature of <8 C to maintain vaccine potency.
2. **Records:** individual health records for recording measles vaccinations should be provided but may not always be available or issued in an emergency situation; the lack of records should not delay the implementation of measles vaccination activities.
3. **Target group:** it may be necessary to raise the measles target group from 12 to 15 years of age or higher in some areas if there is epidemiological evidence that this higher age group is susceptible. In other instances, the initial assessment may recommend a target group below 12 years of age.
4. **During a mass campaign:** WHO recommends the integration of vitamin A supplementation as follows:

Infants 6-12 months: 100,000 International Units (IU) (repeat every 4-6 months)

children > 12 months: 200,000 IUs (repeat every 4-6 months)

5. **Staffing:** previous experience indicates that staffing for vaccination activities (including administration of vitamin A) should consist of at least one supervisor and one logistics officer who can supervise one or more teams. The following team should be able to vaccinate up to 500-700 persons in approximately one hour, though the number of vaccinators needed will depend on the target population to be immunised: four staff members to prepare the vaccines; two staff members to administer the vaccines; six staff members to register and tally; six staff members to maintain order (crowd control).

### Measles control standard 3: outbreak control

A systematic response is mounted for each outbreak of measles within the disaster-affected population and the host community population.

## Key indicators

\* A single case (suspected or confirmed) warrants immediate on-site investigation which includes looking at the age and vaccination status of the suspect or confirmed case.

\* Control measures include the vaccination of all children 6 months to 12 years of age (or higher if older ages are affected) and the provision of an appropriate dose of vitamin A.

#### **Measles control standard 4: case management**

All children who contract measles receive adequate care in order to avoid serious sequelae or death.

#### **Key indicators**

- \* A community-wide system for active case detection using the standard case definition and referral of suspected or confirmed measles cases is operational.
- \* Each measles case receives vitamin A and appropriate treatment for complications such as pneumonia, diarrhoea, severe malnutrition and meningoencephalitis which cause the most mortality.
- \* The nutritional status of children with measles is monitored, and if necessary children are enrolled in a supplementary feeding programme.

#### **Guidance notes**

1. **EPI vaccines:** because measles vaccination is so important in the early stages of an emergency in many countries, vaccination should not be delayed. In some emergencies other EPI vaccines may be introduced along with measles vaccination, provided measles vaccination is not delayed until other EPI vaccines are available. If only measles vaccination is provided, other EPI vaccines are introduced only when the immediate needs of the disaster-affected population have been met.
2. **In conflict situations:** UNICEF and others have sometimes been successful in getting agreement from the warring parties to a temporary cease-fire, in order to allow a vaccination campaign to be safely conducted.
3. **Re-vaccination:** when mass measles vaccination is indicated and individual records are not available, the immunisation of children who may have previously received vaccine is not harmful. It is more important to re-vaccinate than to leave a child unvaccinated and susceptible.

**4. For measles case management or for treatment of vitamin A deficiency:**

administration of vitamin A contributes to a decrease in mortality and measles sequellae. WHO recommends:

Infants <6 months: 50,000 IU on day one; 50,000 IU on day two

Infants 6-12 months: 100,000 IU on day one; 100,000 IU on day two

Children >12 months: 200,000 IU on day one; 200,000 IU on day two

**5. If measles disease is in the affected population:** it is possible that children who are vaccinated during their incubation period may still develop the disease.

### **3 Control of Communicable Diseases**

The primary causes of morbidity and mortality in a disaster-affected population are measles, diarrhoeal diseases, acute respiratory infections, malnutrition and, in areas where it is endemic, malaria. Other communicable diseases, such as meningococcal meningitis, hepatitis, typhoid fever, typhus and relapsing fever, may cause outbreaks in some settings. Diarrhoeal diseases and communicable diseases such as tuberculosis commonly appear at the onset of an emergency and may also be the first manifest symptoms of HIV/AIDS.

Local health authorities, including community health workers and home visitors, are likely to be in the front line of the control effort, where resources allow, and work in conjunction with health facilities and participating agencies. The affected population plays an important part in disease prevention and control through the application of, and adherence to, good public health practices.

Prevention is a key priority in communicable disease control and therefore successful implementation of other sector activities such as water, sanitation, nutrition, food and shelter is of vital importance. Crowded populations, contamination of water supply, poor sanitation and low quality housing all contribute to the rapid spread of disease. Poor nutrition, particularly among young children, increases susceptibility to disease and contributes to high rates of mortality.

It is also important to consider what measures may be needed for the control and prevention of STDs and HIV. Any measures taken will depend on available epidemiological information concerning the affected population and the nature of the disaster.

#### **Control of communicable diseases standard 1: monitoring**

The occurrence of communicable diseases is monitored.

#### **Key indicators**

\* The responsible surveillance and disease control unit or agency is clearly identified and all participants in the emergency know where to send reports of suspect or confirmed communicable diseases.

- \* Staff experienced in epidemiology and disease control are part of the surveillance and disease control unit or agency.
- \* Surveillance is maintained at all times to rapidly detect communicable diseases and to trigger outbreak response.

### **Control of communicable diseases standard 2: investigation and control**

Diseases of epidemic potential are investigated and controlled according to internationally accepted norms and standards.

#### **Key indicators**

- \* Diseases of epidemic potential are identified by the initial assessment; standard protocols for prevention, diagnosis and treatment are in place and appropriately shared with health facilities and community health workers/home visitors.
- \* Case reports and rumours of disease occurrence are investigated by qualified staff.
- \* There is confirmation of the diagnosis.
- \* Outbreak control measures are instituted and include:
  - Attacking the source, by reducing the sources of infection to prevent the disease spreading to other members of the community. Depending on the disease, this may involve the prompt diagnosis and treatment of cases (eg cholera), isolation of cases (eg viral haemorrhagic fevers, ebola) and controlling animal reservoirs (eg plague).
  - Protecting susceptible groups in order to reduce the risk of infection: immunisation (eg meningitis and measles); better nutrition and, in some situations, chemoprophylaxis for high risk groups (eg malaria prophylaxis may be suggested for pregnant women in outbreaks); safe blood supply and condoms for prevention of sexually transmitted infections and HIV.
  - Interrupting transmission in order to minimise the spread of the disease by improvements in environmental and personal hygiene (for all faeco-orally transmitted diseases), health education, vector control (eg yellow fever and dengue), and disinfection and sterilisation (eg hepatitis B, ebola).



- \* Qualified outreach personnel (community health workers, home visitors) participate in the control measures at community level by providing both prevention messages and proper case management (provision of ORT and drugs, compliance with prescribed treatment, follow-up at home etc) following agreed guidelines.
- \* Public information and health promotion messages on disease prevention are part of control activities.
- \* Community leaders and community health workers/home visitors facilitate access to population groups and disseminate key prevention messages.
- \* Only drugs from WHO's *Essential Drugs List* are used.

## Guidance notes

1. **Internationally accepted norms and standards:** see WHO (1997), listed under Health Information System in the select bibliography.
2. **Rumours:** reports and rumours of outbreaks are common among disaster-affected populations, including refugees, and should always be followed up.
3. **Determining if there is an epidemic:** an epidemic is defined as an excessive number of cases of a given disease in relation to prior experience according to place, time and population. It can sometimes be difficult to decide whether there is an epidemic or not, and criteria for epidemic thresholds should be established (by the surveillance unit) for the diseases for which this is possible. Since many diseases do not have a defined threshold for declaring an epidemic, any suspected or confirmed epidemic must be reported to the responsible surveillance and disease control unit.
4. **Setting up a clinical laboratory is not a priority in most emergencies:** most cases will be diagnosed clinically and treatment will be presumptive or symptomatic. Some infectious agents will need to be identified and sample material will need to be collected for testing and sent to a reference lab. This can be determined by the responsible surveillance and disease control unit.
5. **Control of diarrhoeal diseases:** diarrhoeal diseases represent an important cause of death among disaster-affected populations, mainly because overcrowding, lack of water and poor hygiene and sanitation favour the transmission of this group of diseases. As treatment of common diarrhoea relies on the prevention of dehydration through oral rehydration therapy (ORT), the basic health services in a disaster-affected

setting should include a network of ORT points. Since poor nutritional status further increases the case fatality rate of the disease, all children with diarrhoea must be checked for malnutrition and be managed accordingly. The provision of safe water in sufficient quantity, building of latrines, distribution of soap, and appropriate site planning to avoid overcrowding are the most effective ways of controlling diarrhoea-related morbidity and mortality.<sup>1</sup>

**6. Control of acute respiratory infections (ARI):** in developing countries, 25-30% of deaths among children under five are caused by ARI, and 90% of them are attributable to pneumonia alone. Proper case management is the cornerstone of the prevention of deaths from pneumonia. Clinical diagnosis, based on observation of the child's breathing, has been developed by WHO and UNICEF, and can be used for early recognition of cases in a refugee population. Cotrimoxazole remains the drug of choice because it is easy to administer and cost-effective in the ambulatory treatment of pneumonia.

**7. HIV prevention:** action must be taken in the acute stage following the disaster to minimise risk of infection. The nature of the disaster and the epidemiological situation of the people affected will dictate what HIV/AIDS interventions are called for and what is feasible. A basic response to any emergency must aim to maintain respect for the individual rights of people with HIV infection or AIDS, and to prevent nosocomial transmission of HIV (transmission that takes place in the health facility). The intervention must ensure: safe blood transfusion; access to condoms; availability of materials and equipment needed for universal precautions; and relevant information, education and communication.<sup>2</sup>

**8. Control of dysentery :** *S dysenteriae type 1* (Sd1) infection has been a major public health problem in Latin America, south Asia and central Africa. Unfortunately, Sd1 has proven its extraordinary ability to develop resistance to antibiotics. In some areas today, the only effective antimicrobial agent against Sd1 is ciprofloxacin (5 day regimen), further complicating patient management and increasing the cost of the treatment to a level which may prevent its use on a large scale.

**9. Control of Cholera :** cholera outbreaks are frequently observed in settings in Asia and Africa. When properly managed, cholera case fatality rates can be kept below 1% during outbreaks occurring in refugee settings. Outbreak control is based on active case-finding and appropriate case-management. Severely dehydrated patients receive intravenous (IV) treatment. Mild cholera cases are treated with ORT. A short course of antibiotic therapy can reduce the duration of the disease and is still recommended by

the WHO for severely dehydrated patients. Cholera transmission is reduced by appropriate waste management and water treatment (chlorination). Mass vaccination has never been used for controlling cholera outbreaks, and it is agreed that vaccination would have very little or no impact once the outbreak has started (reactive strategy) and would divert resources from other essential control activities.

**10. Measles control:** measles remains a major cause of childhood mortality throughout the world. While the Expanded Programme on Immunisation (EPI) has achieved satisfactory overall vaccine coverage levels in some countries, coverage levels vary widely among regions of the world. Outbreaks can occur in camp settings and other crowded environments where a concentration of susceptible individuals is an important risk factor for transmission of the virus. High mortality rates occur because of poor nutritional status, vitamin A deficiency and intensive exposure to virus due to overcrowding. High mortality due to measles is preventable and mass immunisation coupled with vitamin A distribution is a top priority in an emergency.

**11. Malaria control:** malaria caused by *plasmodium falciparum* remains the main health hazard in tropical areas all over the world. Even for populations displaced from a highly endemic area, prevention of malaria is based on individual protection with impregnated bednets and community protection through vector control. Mass distribution of mosquito nets impregnated with insecticide can have a significant impact on malaria transmission by reducing the mosquito population and creating a shield effect, thus benefiting even people who do not themselves use nets. Mass chemoprophylaxis has not been recommended because it is extremely difficult to implement and to monitor on a large scale and because it can accelerate the development of drug resistance. The ideal strategy in principle is to treat cases with confirmed parasitaemia, but this is rarely possible in practice. In the absence of laboratory facilities and in highly endemic areas, treatment is often administered on a purely clinical basis. Therapy should be in line with the national malaria programme of the host country but adapted to the epidemiological patterns in the affected population. This is best defined in the post-emergency phase, when epidemiological trends can be better assessed.

**12. For control of rarer or less severe diseases:** see the references provided in the bibliography in Appendix 1; see in particular Médecins Sans Frontières (1997).

**13. Drug resistance:** in some instances, studies will need to be carried out to assess drug resistance.

14. **Burial of the dead:** see guidance note 5 on the dead, in solid waste management standard 2, Water Supply and Sanitation, chapter 1.

#### Notes

1. Notes on control of diarrhoeal disease including dysentery and cholera, ARI, measles and malaria are adapted and modified from *Control of Infectious Diseases in Refugee and Displaced Populations in Developing Countries* by C Paquet and G Hanquet, published in the Bulletin Institut Pasteur, 1998, 96, 3-14.

2. Adapted from *Guidelines for HIV Interventions in Emergency Settings*, published by UNAIDS 1996, reprinted 1998.

## 4 Health Care Services

### **Health care services standard 1: appropriate medical care**

Emergency health care for disaster-affected populations is based on an initial assessment and data from an ongoing health information system, and serves to reduce excess mortality and morbidity through appropriate medical care.

#### **Key indicators**

- \* Interventions are designed to be responsive to the identified major causes of excess death, disease and injuries.
- \* If possible, the local health authorities lead the health care effort and local health facilities are used and strengthened by participating humanitarian agencies. If this is not possible, an external agency leads the effort, works with existing facilities which may require substantial support and coordinates efforts of participating agencies.
- \* All participating humanitarian agencies agree to coordinate with the lead health care authority which is designated at the time of the initial assessment.
- \* The health care system is able to cope with a high level of demand.
- \* The health care system is flexible enough to adapt to changes identified by the health information system.

### **Health care services standard 2: reduction of morbidity and mortality**

Health care in emergencies follows primary health care (PHC) principles and targets health problems that cause excess morbidity and mortality.

#### **Key indicators**

- \* Emergency health care interventions are implemented through the existing PHC system if available. The PHC system includes the following levels of care:
  - Household level.
  - Community level including community health workers and home visitors.
  - Peripheral health facilities (dispensary, health post or health clinic).

- Central health facilities (health centre).
- Referral hospital.
- \* Health care interventions are implemented at the appropriate level of the PHC system. Not every emergency will need all levels of care and the initial assessment can make this determination. If a local health care system does not exist, only those levels needed to prevent excess mortality and morbidity are introduced.
- \* Emergency health care, including treatment of disease and injuries, is provided to the population largely at community level. Some treatment occurs at health facilities and a smaller number of serious cases is sent to referral centres.
- \* Staffing at each level of the PHC system is appropriate to meet the needs of the population and only those levels required to reduce excess mortality and morbidity are used or introduced.
- \* Health professionals from the disaster-affected population are integrated into the health services as much as possible. Outreach workers are selected from the community and reflect the gender and cultural profile of the population as determined during the initial assessment.
- \* All health care providers agree on the common use of standardised procedures for diagnostic techniques and the treatment of the major priority diseases causing excess mortality and morbidity.
- \* The New Emergency Health Kits (1/10,000 population) are used to start the intervention but subsequent drug needs are ordered and follow the WHO recommended Essential Drug List.
- \* The Minimum Initial Service Packages is used from the start of the intervention to respond to the reproductive health needs of the population.
- \* Unsolicited donations of drugs that do not follow guidelines for drug donations are not used and are disposed of safely.
- \* Universal precautions to prevent and limit the spread of infections are taught and practised.
- \* Suitable transportation is organised for patients to reach the referral facilities.

### **Guidance notes**

**1. Availability of health care services:** emergency health care should be available to the disaster-affected population and, if displaced persons are involved, to the host population. The geography, ethnicity, language and gender characteristics of the affected populations need to be considered when implementing interventions.

**2. Services provided at the different levels of the PHC system usually include the following:**

- Family level: some preventive and curative care is provided by the family itself, nearby relatives or by community health workers such as taking medications, administration of oral rehydration therapy (ORT).
- Community level: data collection; ORT, compliance with treatments, home visits and case detection; referral of patients to facilities; health promotion/education, information.
- Peripheral level: first level outpatient services; ORT; dressing; referral of patients to higher level; data collection; vaccinations.
- Central health facility level: diagnoses; outpatient department (first level and referral); dressing and injections; ORT; emergency service; uncomplicated deliveries, reproductive health activities (including family planning, maternal and infant care, safe motherhood services, and treatment and counselling related to sexual and gender-based violence, sexually transmitted infections and HIV/AIDS); minor surgery; pharmacy; health surveillance; basic hospitalisation; referral to hospital; possibly: laboratory, transfusions; ongoing measles immunisations.
- Referral hospital level: surgery; major obstetric emergencies; referral laboratory.

**3. Neo-natal and maternal morbidity and mortality should be prevented by:** establishing ante-natal services for preparing to handle obstetric emergencies; making available and distributing clean delivery kits; ensuring that UNICEF midwife TBA kits or the UNFPA reproductive health emergency kits are available at health centres. Health care providers should plan for the provision of comprehensive reproductive health services by identifying sites for the future delivery of those services.

**4. Staffing:** staffing at each level of a PHC system can vary, but the following are based on general guidelines taken from *Médecins Sans Frontières, Refugee Health, an Approach to Emergency Situations*:

- *Community level*: 1 home visitor for 500-1,000 population; 1 traditional birth attendant for 2,000 population; 1 supervisor for 10 home visitors; 1 senior supervisor.
- *Peripheral health facility level (for approximately 10,000 population)*: total of 2 to 5 workers with a minimum of 1 qualified health worker based on 1 person for 50 consultations per day; locally trained person for ORT, dressing, registering etc.
- *Central health facility level (for approximately 50,000 population)*: 1 doctor for diagnoses, 1 health worker for 50 consultations/day; 1 health worker for 20-30 beds (8 hour shifts); 1 ORT; 1 to 2 for pharmacy; 1 to 2 for dressing/injection/sterilisation. Non-medical staff: 1 to 2 clerks; 1 to 3 guards (8 hour shifts); cleaners.
- *Referral hospital level*: variable: at least 1 doctor; 1 nurse for 20-30 beds (8 hour shifts).

**5. The Minimum Initial Service Package (MISP)**: the MISP is designed to prevent and manage the consequences of sexual violence, reduce HIV transmission, prevent excess neonatal and maternal morbidity and mortality and plan for the provision of comprehensive reproductive health services. The MISP should be implemented by appropriately trained staff from the start of the emergency intervention. Implementation should be coordinated with other agencies and sectors and should include: reporting of cases of sexual violence to health services, supplies for universal precautions (gloves, protective clothing and disposal of sharp objects), sufficient quantities of condoms for the affected population, and clean delivery kits for births.

**6. Universal precautions**: universal precautions to prevent and limit spread of infections should include measures to reduce transmission of HIV. Health staff may need training or retraining in this area. (See also communicable disease control standard 2, investigation and control, guidance note 7, HIV prevention.)

**7. Strengthening local health services**: throughout the emergency and thereafter, humanitarian agencies should aim to strengthen local health services rather than to create separate services. (See human resource capacity and training standard 3, local capacity.)

**8. Use of medical facilities**: consideration should be given to factors affecting the use of, and attendance at, medical facilities. These may include cultural factors, and in conflict situations may also relate to security concerns. Although the impartial provision



of health care should be seen as a neutral act, it is not always perceived as such by warring factions, and health facilities may become the target of attacks. The siting and staffing of facilities should take such concerns into account as far as possible.

#### Note

It should be noted that Caritas Internationalis members cannot endorse: guidance note 7 of the control of communicable diseases section, dealing with condoms; and guidance note 5 of the health care services section, dealing with the Minimum Initial Service Package (MISP).

## 5 Human Resource Capacity and Training

All aspects of humanitarian assistance rely on the skills, knowledge and commitment of staff and volunteers working in difficult and sometimes insecure conditions. The demands placed on them can be considerable, and if they are to conduct their work to a level where minimum standards are assured, it is essential that they are suitably experienced and trained and that they are adequately managed and supported by their agency.

### Capacity standard 1: competence

Health interventions are implemented by staff who have appropriate qualifications and experience for the duties involved, and who are adequately managed and supported.

### Key indicators

- \* All staff working on a health intervention are informed of the purpose and method of the activities they are asked to carry out.
- \* Staff with technical and management responsibilities have access to support for informing and verifying key decisions.
- \* The initial assessment, the design of interventions and key technical decision-making are carried out by staff with relevant technical qualifications (epidemiology, water, sanitation, food, nutrition, shelter, health care expertise) and previous emergency experience.
- \* Staff and volunteers involved in surveillance (as part of assessment, monitoring or review processes) are thoroughly briefed and regularly supervised.
- \* Staff responsible for communicable disease control and for health care interventions in the affected population have previous experience or training and are regularly supervised in the use of recommended treatment protocols, guidelines and procedures.
- \* Staff and volunteers are aware of gender issues relating to the affected population. They know how to report incidents of sexual violence.

- \* Introduction of any new medical supplies or equipment is accompanied by thorough explanation and supervision.
- \* Vaccination programme staff have the demonstrated ability to implement the programme including advising people about the vaccine, side effects and other relevant messages.
- \* Targeted health care procedures have clear written guidelines and protocols.
- \* The treatment of severe disease or injury is supervised by a medically qualified, experienced practitioner with specific training in this area.
- \* Health, nutrition and/or outreach workers who have contact with moderately malnourished individuals or their carers (at home, in feeding centres, in clinics etc), have the demonstrated ability to provide appropriate advice and support.
- \* Health staff have the demonstrated ability to advise mothers and carers on appropriate infant and young child feeding and other priority practices.

#### **Capacity standard 2: support**

Members of the disaster-affected population receive support to enable them to adjust to their new environment and to make optimal use of the assistance provided to them.

#### **Key indicators**

- \* Carers are informed about priority prevention activities such as need for vaccination, use of soap, bednets, latrines and good health seeking behaviours.
- \* All members of the emergency affected population are informed about the availability of community health workers, home visitors and the location of health facilities and services.

#### **Capacity standard 3: local capacity**

Local capacity and skills are used and enhanced by emergency health interventions.

#### **Key indicators**

- \* Local health professionals, health workers, leaders and women and men from the disaster-affected population are included in the implementation of health interventions.

- \* Staff understand the importance of strengthening the capacities of local health systems for long-term benefit.
- \* The skills base within existing local partners and institutions and in the affected population is tapped and strengthened during the course of the humanitarian assistance programme.
- \* Training is provided to community outreach workers.

### **Guidance notes**

1. **See:** ODI/People In Aid (1998), Code of Best Practice in the Management and Support of Aid Personnel.
2. **Link with Nutrition:** see also Nutrition, human resource capacity and training standard 1, in chapter 2.
3. **Staffing:** staff and volunteers should demonstrate capabilities equal to their respective assignments. They should also be aware of key aspects of human rights conventions, international humanitarian law and the Guiding Principles on Internal Displacement (see the Humanitarian Charter).

Providing training and support as a part of emergency preparedness is important to ensure that skilled personnel are available to deliver quality services. Given that emergency preparedness cannot be assured in many countries, humanitarian agencies should ensure that qualified and competent staff are identified and properly prepared before eventual assignment to an emergency situation.

When deploying staff and volunteers, agencies should seek to ensure that there is a balance in the number of women and men on emergency teams.

## **Appendix 1**

### **Select Bibliography**

#### **Initial Health Assessment**

IFRC (1997), Handbook for Delegates. Needs Assessment, Targeting Beneficiaries. International Federation of Red Cross and Red Crescent Societies. Geneva.

MSF (1996), Evaluation Rapide de l'Etat de Santé d'une Population Déplacée ou Réfugiée. Médecins Sans Frontières. Paris.

RHR Consortium (1997), Refugee Reproductive Health Needs Assessment Field Tools. Reproductive Health for Refugees Consortium. New York.

WHO (1999), Rapid Health Assessment Protocols for Emergencies. World Health Organization. Geneva.

UNHCR (1994), People-Oriented Planning at Work: Using POP to Improve UNHCR Programming. UNHCR. Geneva.

#### **Health Information System**

WHO (1997), Communicable Disease Surveillance Kit. World Health Organization. Geneva.

WHO (1999), Recommended Surveillance Standards (WHO/CDS/ISR/99.2). World Health Organization. Geneva.

#### **Measles Control**

WHO (1997), Immunization in Practice. A Guide for Health Workers Who Give Vaccines. Macmillan. London.

WHO (1998), Integration of Vitamin A Supplementation With Immunization: Policy and Programme Implications (WHO/EPI/GEN/98.07). World Health Organization. Geneva.

WHO (1996), Safety of Injections in Immunization Programs. WHO Recommended Policy. (WHO/EPI/LHIS/96.05). World Health Organization. Geneva.

WHO (1997), Surveillance of Adverse Events Following Immunization. (WHO/EPI/TRAM/93.02 Rev.1). World Health Organization. Geneva.

#### **Control of Communicable Diseases**

Benenson, A S (1995), Control of Communicable Diseases in Man. American Public Health Association. Washington, DC. 16th edition.

UNAIDS (1998), Guidelines for HIV Interventions In Emergency Settings. UNAIDS. Geneva.

### **Health Care Services**

MSF (1993), Clinical Guidelines, Diagnostic and Treatment Manual. Médecins Sans Frontières. Paris.

MSF (1997), Refugee Health, An Approach to Emergency Situations. Macmillan. London.

Perrin, P (1996), War and Public Health. Handbook on War and Public Health. International Committee of the Red Cross. Geneva.

UNDP/IAPSO (1999), Emergency Relief Items, Compendium of Basic Specifications. United Nations Development Programme. New York.

UNFPA (1998), The Reproductive Health Kit for Emergency Situations. United Nations Population Fund Emergency Relief Operations. Geneva.

UNHCR (1999), Reproductive Health in Refugee Situations: An Inter-agency Field Manual. United Nations High Commissioner for Refugees. Geneva.

UNCHR (1996), Sexual Violence Against Refugees: Guidelines on Prevention and Response. United Nations High Commissioner for Refugees. Geneva.

WCRWC (1999), Sexual Violence in the Kosovo Crisis: A Synopsis of UNHCR Guidelines for Prevention and Response. Women's Commission for Refugee Women and Children. New York.

WHO (1999), Guidelines for Drug Donations (WHO/EDM/PAR/99.4). World Health Organization. Geneva.

WHO (1999), Guidelines for Safe Disposal of Unwanted Pharmaceuticals in and after Emergencies (WHO/EDM/PAR/99.2). World Health Organization.

WHO (1998) HIV/AIDS and Health Care Personnel: Policies and Practices. World Health Organization. Geneva.

WHO (1998), The New Emergency Health Kit 1998. Lists of Drugs and Medical Supplies for 10,000 people for approximately three months. World Health Organization. Geneva.

UNHCR/WHO(1996), Guidelines for Drug Donations. World Health Organization and United Nations High Commissioner for Refugees. Geneva.

WHO (1998), Essential Drugs. WHO Model List (revised in December 1997), WHO Drug Information Vol 12, No 1. World Health Organization. Geneva.

WHO (1997), WHO Drug Information. Recommended INN list. International Non-proprietary Names for Pharmaceutical Substances. Vol I-III. World Health Organization. Geneva.

### **Human Resources**

Overseas Development Institute/People In Aid (1998), Code of Best Practice in the Management and Support of Aid Personnel. ODI/People In Aid. London.

### **Gender Issues**

WCRWC/UNICEF (1998), The Gender Dimensions of Internal Displacement. Women's Commission for Refugee Women and Children. New York.

## **Appendix 2**

### **Sample Checklist for Initial Health Assessment**

(Adapted from CDC (1992), Famine-Affected, Refugee, and Displaced Populations: Recommendations for Public Health Issues. MMWR (RR-13), July.)

#### **Preparation**

\* Obtain available information on the disaster-affected population and resources from host country ministries and organisations.

\* Obtain available maps or aerial photographs.

\* Obtain demographic and health data from international organisations.

#### **Field Assessment**

\* Determine the total disaster-affected population and proportion of children <5 years old.

\* Determine the age and sex breakdown of population.

\* Identify groups at increased risk.

\* Determine the average household size and estimates of female- and child-headed households.

#### **Health Information**

\* Identify primary health problems in country of origin if refugees are involved.

\* Identify primary health problems in the disaster-affected area if no refugees are involved.

\* Identify previous sources of health care.

\* Ascertain important health beliefs, traditions and practices.

\* Determine the existing social structure and the psycho-social dimensions of the situation.

\* Determine the strengths and coverage of local public health programmes in people's country of origin.



### **Nutritional Status**

- \* Determine the prevalence of protein-energy malnutrition (PEM) in population <5 years of age.
- \* Ascertain prior nutritional status.
- \* Determine hierarchical food allocation practices as they affect the nutritional status of women and different social and age groups.
- \* Determine the prevalence of micronutrient deficiencies in the population <5 years of age.

### **Mortality Rates**

- \* Calculate the overall mortality rate (crude mortality rate - CRM).
- \* Calculate the under-5 mortality rate (age specific mortality rate for children under five years old).
- \* Calculate cause-specific mortality rates.

### **Morbidity**

- \* Determine age, and sex-specific incidence rates of major health problems and diseases that have public health importance, including sexual violence/rape.

### **Environmental conditions**

- \* Determine climatic conditions; identify geographic features; ascertain local disease epidemiology; assess access to affected population; assess the level of insecurity and violence.
- \* Assess local, regional and national food supplies (quantity, quality, types), distribution systems, coordination and services of existing organisations, logistics of food transport and storage, feeding programmes and access to local supplies.
- \* Assess existing shelters and availability of local materials for shelter, access, amount of land and building sites, topography and drainage, blankets, clothing, domestic utensils, fuel, livestock, money.
- \* Identify and assess water sources, quantity, quality, transport and storage.

- \* Assess sanitation including excreta practices, soap, vectors and rats, burial sites.

### **Resources available**

- \* Identify and assess local health services including: access to facilities, health personnel, interpreters, types of facilities/structures, water, refrigeration, generators at facilities, drug and vaccine supplies.

### **Logistics**

- \* Assess transport, fuel, storage of food, vaccines and other supplies, communication.

## Appendix 3

### Sample Weekly Surveillance Reporting Forms

(Actual forms should be established and based on findings and recommendations of the initial assessment)

Site: \_\_\_\_\_ Date: from \_\_\_\_\_ to \_\_\_\_\_

#### 1. Disaster-affected population

- A. Total population at the beginning of week: \_\_\_\_\_
- B. Births this week: \_\_\_\_\_ Deaths this week: \_\_\_\_\_
- C. Arrivals this week (if applicable): \_\_\_\_\_ Departures this week: \_\_\_\_\_
- D. Total population at the end of the week: \_\_\_\_\_
- E. Total population < 5 years of age: \_\_\_\_\_

#### 2. Mortality

Number of Deaths	0-4 years		5+ years		Total
	Males	Females	Males	Females	
Diarrhoeal disease					
Respiratory disease					
Malnutrition					
Measles					
Malaria					
Maternal Factors					
Other-unknown					
<b>Total by age and sex</b>					
<b>Total &lt; 5 years</b>					

Average total mortality rate: M \_\_\_\_\_ F \_\_\_\_\_ Total \_\_\_\_\_

(Deaths/10,000 total population/day averaged for week) by age + sex

Average under-five mortality rate: M \_\_\_\_\_ F \_\_\_\_\_ Total \_\_\_\_\_

(Deaths/10,000 under-fives/day averaged for week)

### 3. Morbidity

Primary symptoms-diagnosis	0-4 years		5+ years		Total
	Males	Females	Males	Females	
Diarrhoea-dehydration					
Fever with cough					
Fever and chills/malaria					
Measles					
Trauma/accident					
Suspected meningitis					
Suspected cholera					
Other/unknown					
Total					

### 4. Comments:

(Please note that these forms may include age specific morbidity and mortality for use by the health information system. The following age groups should be used: <1, 1-4, 5-14, 15-44, 45+.)

## Appendix 4

### Example of Mortality Dataset Presentation

Proportional mortality among Mozambican refugees in Malawi, 1987-89

#### <5 years

Malaria	16%
ARI	10%
Diarrhoea	27%
Measles	17%
Other	30%

#### ≥ 5 years

Malaria	13%
ARI	16%
Diarrhoea	19%
Measles	6%
Other	46%

Source: MSF (1997), Refugee Health, An Approach to Emergency Situations.  
Macmillan. London.

## Appendix 5

### Sample Measles Vaccination Form

Place \_\_\_\_\_ Reported by \_\_\_\_\_

From \_\_\_\_/\_\_\_\_/\_\_\_\_ To \_\_\_\_/\_\_\_\_/\_\_\_\_

#### Mass measles vaccination campaign

Yes \_\_\_\_ No \_\_\_\_

#### Routine measles vaccination in health facilities

Yes \_\_\_\_ No \_\_\_\_

#### Measles vaccination coverage

Yes \_\_\_\_ No \_\_\_\_

Target population:

< 5 years old \_\_\_\_\_

≥ 5 years old \_\_\_\_\_

Total target population: \_\_\_\_\_

No. vaccinated	Mass campaign A		Routine vaccination B		Cumulative measles vaccination coverage*
	No. this week	Cumulative no.	No. this week	Cumulative no.	
< 5 years					
≥ 5 years					
TOTAL					

\* Calculation of the cumulative coverage:  $A+B/\text{target population}$

Comments:

N.B. This form can also be used for another mass vaccination campaign, just change the name.

Source: MSF (1997), Refugee Health, An Approach to Emergency Situations.  
Macmillan. London.

## Appendix 6

### Sample Water, Sanitation and Environment Forms

*(Please note: these forms should be adapted to the particular situation and follow the initial assessment recommendations).*

Place \_\_\_\_\_

Reported by \_\_\_\_\_

From \_\_\_\_/\_\_\_\_/\_\_\_\_

To \_\_\_\_/\_\_\_\_/\_\_\_\_

#### Water

	No. of liters-day	Population	No. of litres/per/day	Objective
Water Supply				
	No. of water points	Population	No. of pers./water point	Objective
Water Supply				

#### Sanitation

	No. of latrines	Population	No. of persons/latrine	Objective
Latrines				

#### Crowding (space-person)

	Surface area in m2	Population	M2 per person	Objective
Crowding				

Comments: \_\_\_\_\_

Source: MSF (1997), Refugee Health, An Approach to Emergency Situations.  
Macmillan. London.

## Appendix 7

### Sample Sexual Violence Report Form

*(Please note: this form should be adapted to the particular situation.)*

#### CONFIDENTIAL

#### Sexual Violence Incident Report Form

Camp: Reporting Officer: Date:

##### 1. Affected Person

Code\*: Date of Birth: Sex:

Address:

Civil Status:

If a Minor: Code/Name of Parents/Guardian:

##### 2) Report of Incident:

Place: Date:  
Time:

Description of incident (specify type of sexual violence):

Persons involved:

##### 3. Actions Taken

Medical examination done      yes      no      By whom:

Major findings and treatment given:

Protection Staff Notified:      yes      no

If no, reasons given:

If yes, actions taken:

Psycho-social counselling given:    yes    no



By whom and actions taken:

#### **4. Proposed Next Steps**

#### **5. Follow-up Plan**

Medical follow-up:

Psycho-social counselling:

Legal proceedings:

\* Code numbers should be used rather than names to ensure confidentiality.