CHAPTER 16
HEALTH AND NUTRITION
CAMP SERVICES
CAMP MANAGEMENT TOOLKIT

CHAPTER | 16 | HEALTH AND NUTRITION

The term camp is used throughout the text to apply to a variety of camps and camp-like settings which include planned camps, self-settled camps, collective centres, reception and transit centres, and evacuation centres.

KEY MESSAGES

- The health status of a camp population is often fragile and many are exposed to a complex array of threats and risk factors for disease and death. The Camp Management Agency, in coordination with the Camp Coordination and Camp Management (CCCM) Cluster/Sector Lead Agency, national health authorities and health partners, should ensure that appropriate needs-based health care services, active case finding and health education are available to all camp residents so as to mitigate their vulnerabilities.

- Reducing loss of life (mortality), illness (morbidity) and disability and contributing to an improved quality of life are the main goals of health services in a camp situation. Health service providers must prioritise addressing the main causes of avoidable illness and death, identify priority gaps and advocate for age, gender and diversity appropriate health interventions.

- Effective health care services must engage the camp population in key decisions from the start and remain an essential part of the overall delivery and evaluation of health services. Health services should be provided with – and not for – the population.

- Measles is one of the most serious health problems encountered in a camp situation and is a leading cause of death in many refugee/Internally displaced person (IDP) emergencies. Initiating a mass measles immunisation campaign is a top priority for health service providers in a camp.

- Prevention of diarrhoea and cholera outbreaks through hygiene promotion and access to safe water must be coordinated with Water, Sanitation and Hygiene (WASH) Cluster/Sector Lead Agency and involve engagement of camp populations.

- Acute malnutrition is known as a major cause of mortality in camp populations, mainly because malnutrition increases vulnerability to disease. A nutrition assessment and implementation of needs-based feeding programmes are important initial activities in the camp in order to ensure vulnerable groups and those with specific needs receive special attention, as appropriate.

- While the Camp Management Agency is often not a health specialist, its key role is to ensure that concrete steps are taken with health providers to limit the impact of epidemics. The quality of camp management can be a major determinant of life and death to a camp population.

- As the Camp Management Agency is often the first point of contact for camp residents or camp leaders when health emergencies occur, these types of requests for health care should be promptly referred and responded to.

INTRODUCTION

Health is a state of complete physical, mental and social well-being. Reducing loss of life (mortality), reducing illness (morbidity) and disability, as well as contributing to an improved quality of life, are the goals of health services in a camp situation. Refugees/IDPs living in a camp environment are often faced with overcrowded living conditions, inadequate food and shelter, unsafe water, inadequate health care services, lack of immunity to the diseases of a new environment and poor sanitation. They may have arrived in the camp already in a frail state from disease or may have pre-existing medical conditions. Other circumstances such as hunger, persecution, physical violence and emotional distress raise camp populations’ health vulnerabilities and enable diseases, either alone or in combination with malnutrition, to result in high mortality or morbidity rates.

Good health can be challenging to maintain or achieve in a camp setting but can be accomplished with multi-sector interventions. Required activities include:

- improving the environment and living conditions of the camp population by decreasing overcrowding
- proper excreta disposal
- ensuring adequate food and water supplies
- vector control
- providing adequate shelter
- health education and training on key messages.

The health sector contributes to the goal of reducing mortality, reducing morbidity and disability and thus increasing quality of life via the implementation of preventive measures and appropriate case management of diseases within a neutral, impartial, independent and humane environment. Activities include:

- ensuring an early and adequate warning and disease surveillance system is in place
- ensuring an early and adequate response when data suggests the occurrence of an outbreak
- putting in place coordination and planning mechanisms so that information is shared and translated into effective and timely decision-making and action planning
- implementing a basic primary healthcare with adequate staffing and necessary supplies to ensure early and appropriate treatment of the main diseases
- provision of health education on prevention of disease and maintenance of good health to all persons living or working in the camp, using acceptable age, cultural and language appropriate methods.

The various phases of camp life begins at the onset of displacement and lasts until a durable solution is implemented. The emergency phase is associated with the onset of displacement that forces individuals to seek refuge outside of their home areas or countries. The emergency phase can be characterised by:

- high mortality rates (over 1 death/10,000 population/day)
The ideal is not always feasible in the emergency phase of a camp environment and there are often significant constraints to delivering basic services. However, every possible effort should be made to ensure that services remain camp population-centered, and to implement effective practices, even with limitations in staffing, material resources, support systems, security, funding and coordination. Emergency services are specific to each camp environment. Services challenging to sustain in the medium to long-term are often justified until mortality rates are brought under control.

The second phase, or post-emergency phase, is marked by greater stability. Mortality rates have lowered to less than one death/10,000 population/day and minimum standards for basic needs such as food, water and shelter have usually been met. This phase is a chance to expand and improve health services established during the emergency phase, and to develop, strengthen and see the benefits of health education programmes.

In the third and final phase durable solutions are identified, and camp inhabitants leave the camp. In certain situations, interim solutions may include temporary transfer to another camp location or settlement with better facilities until a durable solution is found. In this phase issues around information management such as information campaigns, referrals, data protection and confidentiality of medical records need consideration. Handover/decommissioning of health care facilities in the camp, and an assessment of health care provision in areas of return and/or resettlement, are required. The health care needs of the camp population during camp closure and the returns/resettlement process need to be planned, especially for those with impaired mobility and other specific health care needs.

This chapter will present health care issues that a Camp Management Agency needs to be aware of in order to support the coordination of the health sector and monitor interventions of health service providers as required in the various phases of a camp life cycle.

**KEY ISSUES**

**ROLES AND RESPONSIBILITIES**

The Camp Management Agency is the overall coordinating and monitoring body in the camp, but generally a health service provider coordinates the health sector. This health service provider is therefore primarily responsible for the planning, implementation, management and monitoring of health services. If there are several health service providers, including governmental, non-governmental and/or privately-run health facilities operating within the camp, the Camp Management Agency should work with relevant national authorities and the Health Cluster/Sector Lead Agency to establish a lead health agency in the camp.

The primary roles and responsibilities of the Camp Management Agency are:

- understanding key terminologies and strategies of health services in camp situations in order to interpret results of reports from health services providers
- disseminating information updates on health issues and alerting relevant coordination bodies about any gaps and duplications
- using this information to advocate for appropriate responses to health issues in the camp
- supporting and coordinating with the lead health agency on any matters which may require additional assistance
- addressing and referring urgent health care requests to health care providers.

The primary roles and responsibilities of the lead health agency in camps are:

- coordinating with national health authorities in all aspects of the health services within the camp
- facilitating cooperation among all health service providers to ensure appropriate implementation and monitoring of health services agreed in coordination meetings
- collecting age and gender disaggregated information from the health service providers and generating reports on relevant health issues
- disseminating information on health issues to other relevant sectors and agencies
- coordinating with the Camp Management Agency.

Both agencies are responsible for ensuring that the level and quality of health services provided by all health agencies adhere to locally or internationally accepted standards and medical ethics.
to have all relevant information for planning and decision-making, but other health service providers should also be provided with information.

In these situations, health coordination meetings should occur on a regular basis and be managed by the lead health agency. These meetings should collect and disseminate health information between providers and generate important information to feed to camp coordination meetings convened by the Camp Management Agency. Health meetings should happen on a weekly or monthly basis, sometimes daily during epidemic outbreaks. Communication channels should also enable the health agencies providing services within the camp to share information or concerns with the lead health agency when needed for emergency issues.

**HEALTH COORDINATION MEETINGS**

It is advantageous to hold health coordination meetings a few days before general coordination meetings so that key points can be raised in a timely fashion with all sectors and the Camp Management Agency.

The following sections of this chapter will highlight key terminology and aspects of health strategies and services in a camp and explain important points for supervising and coordinating health services. Additional roles and responsibilities of the Camp Management Agency and the lead health agency are included.

**VOICE FROM THE FIELD - COORDINATION BETWEEN NATIONAL HEALTH AUTHORITIES AND HEALTH RELIEF AGENCIES**

National health officials resist assessment findings or health interventions which reflect poorly on the government or the nation. The Camp Management Agency should advocate for necessary interventions and appropriate standards, always seeking to maintain a functional working relationship with the authorities.

**ASSESSMENTS**

An initial assessment coordinated by the lead health agency in cooperation with the Camp Management Agency and the national health authorities will identify health needs, services available and gaps. The results of the assessment will establish priority and evidence-based interventions and inform about implementation strategies, including whether to support established services or if new services are required.

It is important that the assessment team is experienced, as objective as possible and independent of political or other influences. Ideally, the initial assessment, whenever possible included within a multi-sectoral assessment, should be completed within three days of forming a camp or within three days of arrival at an already established camp. If there is time to plan for a camp set-up, and people arrive in a moderate and manageable stream, then health screening for each person can constitute an initial assessment.

**ELEMENTS OF A HEALTH ASSESSMENT**

**General Information**

Key information includes background of the displacement, population size disaggregated by age and gender and availability of health services, food and water. Accurate population figures are important for meaningful health statistics.

**Identification of Priority Health Issues**

Information collected includes an estimation of mortality rates and causes of mortality, morbidity data on the most common diseases, presence of diseases with epidemic potential (such as cholera, shigellosis, measles and meningitis), prevalence of acute malnutrition and data on vaccine coverage. Mortality rates offer the best indicator for assessing the severity of a situation and understanding the causes of mortality. They are key to guiding initial interventions.

**The Presence and Activities of UN, Government and Non-Governmental Actors in the Health Sector**

The initial assessment should give an overview of who is present in the camp, which services are offered or planned to be offered by each organisation, what is their operational capacity and what areas their services will cover. In very large camps health agencies may offer the same services in different zones of the camp. This overview is essential in order to maximise resources available and prevent overlapping services.

Existing health services within or outside the camp should be explored and their ability to provide health care to the camp population identified. This includes identifying and ensuring access to a referral hospital, a referral laboratory for specimen analysis and already established medical services. The team should identify the qualified health personnel available from the national health authorities and health relief agencies already present within the camp, as well as camp residents with health qualifications. Their level of training should also be assessed.

**NEEDS ASSESSMENTS**

The Camp Management Agency facilitates and coordinates with other cluster/sector partners in conducting rapid or specific needs assessments especially at the onset of the crisis. For example, the lead health agency will usually initiate mapping of available health services and specific health resources using the Global Health Cluster and WHO’s Health Resources Analysis and Mapping System (HeRAMS) tool and the 3Ws (Who is doing What and Where). The 2012 Inter-Agency Standing Committee (IASC) Multi-Cluster/Sector Initial Rapid Needs Assessment (MIRA) tool has also been used by various clusters in recent emergencies.
population densities are risk factors that facilitate transmission of the virus and may contribute to outbreaks even in areas with high immunisation coverage. In addition, poor health and poor nutritional status of measles-infected persons are associated with high rates of mortality. For these reasons, even if the initial assessment finds no measles cases, mass immunisation for measles is a top priority.

National health authorities maintaining an Expanded Programme of Immunisation (EPI) should be involved in the coordination and implementation of a mass vaccination campaign from the outset. A mass immunisation campaign is principally a logistics exercise. It is the Camp Management Agency and the lead health agency’s responsibility to ensure that all systems coordinate in order to reach the goal of close to universal coverage. United Nations Children’s Fund (UNICEF) and WHO usually support national authorities and other partners to ensure that all children are immunised against measles in emergency situations.

Ideally, all children from six months to 14 years of age should be vaccinated, regardless of previous vaccination status. This non-selective vaccination strategy has the following advantages:

- A second dose of the measles vaccine does not have adverse effects and can improve the immunological response.
- The vaccination campaign can cover the population rapidly, while checking individual vaccine cards is time consuming.
- There is less possibility of error, like cards read incorrectly or sibling cards being switched.

However, vaccine availability, funding, human resources and local measles epidemiology may influence the choice of the groups covered. If it is impossible to immunise the entire camp population, then the following groups should be vaccinated, in this order of priority:

- malnourished or sick children aged six months to 12 years who are enrolled in feeding centres or in-patient wards
- all other children aged six–23 months
- all other children aged 24–59 months
- all other children aged 60 months–14 years of age.

Vaccination of children under six months of age is not recommended as there is a risk of interfering with maternal antibodies. Measles vaccination programmes in stable situations...
vaccinate only to age five, but due to the high risk environment in camp situations the recommendation extends to children aged 14. Mass measles immunisation campaigns should be coupled but not delayed by Vitamin A distribution to children aged six months to 14 years. Vitamin A supplementation has been shown to markedly reduce measles-associated mortality.

Campaigns are required. This campaign has the following elements:

- Information and education campaigns: Camp populations should be informed in their local language(s) about location of vaccination posts, information about the vaccine, risks involved and the importance of receiving the vaccine.
- Training of immunisation teams: Some team members do not have to be qualified health workers as comprehensive training can prepare them for the campaign.
- Immunisation posts: There should be one or two vaccination posts per 10,000 people as distance to vaccination posts is a potential obstacle to immunisation and multiple posts dispersed within the camp are preferable to a centralised facility.
- Outreach activities: Community health workers can move through the camp during the campaign and refer children to the immunisation posts.
- Immunisation cards: These are issued to every child. If a child is between six and eight months old it should be clearly indicated on the card, and explained to the caregiver that a second vaccine should be given at the age of nine months.
- Reporting: A daily record should be made of the numbers vaccinated per day (and per site) and the number of doses used.

Measles vaccination can occur on arrival in the camp. However, if this is not possible because the population is settled or is overwhelming reception centres, then a mass immunisation campaign is required. This campaign has the following elements:

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To support universal precautions – the set of procedures designed to prevent transmission of human immunodeficiency virus (HIV), hepatitis B virus (HBV), and other blood borne pathogens when providing first aid or health care – sufficient quantities of auto-destruct syringes, designed to make reuse impossible, and safety boxes for sharps disposal should be available.

Effective measles mass campaigns depend on dedicated teams composed of trained health personnel as vaccinators and volunteers with no specific health training assigned to do crowd control, screening children and recording/tallying. Under normal circumstances, a team of two vaccinators together with three to four volunteers can vaccinate 300 to 400 children per day.

**OTHER VACCINES FOR EPIDEMIC-PRONE DISEASES**

Unlike the measles vaccine, all other mass vaccination campaigns should be initiated only after confirmation of an epidemic-prone disease in the camp and an epidemic threshold, a point at which an outbreak is declared and mass vaccination can be considered, has been reached. The lead health agency should confer with national health authorities, officials and experts in communicable disease when considering whether to start a mass immunisation vaccination campaign for epidemic-prone diseases, as the methodology for vaccination differs according to context. Some important vaccine preventable epidemic-prone diseases include:

- **Bacterial meningitis** – caused by the pathogen Neisseria meningitidis and commonly referred to as meningococcal meningitis. Clinical features include a sudden onset with fever, intense headache, stiff neck and occasional vomiting and irritability. As the infection is usually transmitted
person-to-person via aerosols in crowded situations, the epidemic threshold is lower in a camp situation. The priority group for vaccination is children aged between two and ten.

Yellow fever causes very serious epidemics with high mortality rates. The virus is spread to humans via mosquito vectors. Clinical features include a sudden onset of fever, headache and backache, muscle pain, nausea and vomiting and red eyes. These clinical symptoms appear in the acute phase and can be confused with many other diseases. A period of remission follows and then a toxic phase where the patient presents with jaundice (yellowing of the skin) two weeks after onset of the first symptoms. There may also be bleeding from the gums, nose, in the stool and vomit. A vaccine can be given to everyone in the camp from the age of two months and gives immunity for at least ten years.

**Epidemic Threshold and Outbreak**

An epidemic threshold is how many cases of a disease must be confirmed in order to declare an outbreak. A low epidemic threshold indicates that the environment is more sensitive to the transmission of epidemic-prone diseases.

**Routine Immunisation: Expanded Programme of Immunisation (EPI)**

In the post-emergency phase, a complete EPI programme should be an integral part of the longer term health care programmes. The standard EPI programme consists of measles, diphtheria, pertussis (whooping cough) and tetanus toxoid (DPT), oral polio (OPV) and Bacille Calmette-Guerin (BCG) vaccines. All children under five should receive necessary immunisations for their relevant age groups. This programme should not be started unless:

- the population is expected to remain stable, tentatively after six months but still depending on the context
- the human and material resources, such as cold chains, are adequate for implementation
- a plan exists for integration into the national immunisation programme.

Routine immunisations should be offered via fixed immunisation points such as a hospital, health centre, health posts, feeding centres or screening/registration centres. Each of these points should check vaccination status via vaccination cards and vaccinate children on the spot if vaccine facilities are available, or otherwise refer them to an immunisation point. Outreach activities via community health workers should also check vaccination status and refer to immunisation points.

**Nutritional Requirements**

When calculating energy requirements and designing food rations in a camp, 2,100 kcal/person/day is the initial planning figure in the emergency phase. An increase in the kilocalories/person/day of general rations should be considered if:

- there is a disproportionate number of adult men, as adult men require more kilocalories per day to maintain optimal nutritional status
- there are widespread illness, epidemics, general malnutrition and/or a crude mortality rate (CMR) > 1. (CMR is defined as deaths per 10,000 per day)
- there are increased activity levels among the entire population, like when a food-for-work programme is implemented in the camp and labour-intensive work is undertaken
- the average temperature is below 20°C.

**Voice from the Field - Malnutrition in Drought Situations**

In 2011, the drought in several areas of the Horn of Africa resulted in very high malnutrition rates. Aid agencies provided food supplements loaded with micro-nutrients such as fortified biscuits, powders and pastes high in nutrients and calories, for people moving or without the ability to cook.
There are two categories of malnutrition, acute and chronic. Chronic malnutrition is associated with malnutrition over a long period of time and is not associated with high rates of mortality. Acute malnutrition is the category that contributes to high morbidity and mortality rates in a camp and is thus what should be assessed during the emergency phase. Severe acute malnutrition (SAM) can present itself in different forms:

- **marasmus**: Characterised by severe wasting of fat and muscle, which the body breaks down for energy. This is the most common form of protein energy malnutrition in an emergency.

- **kwashiorkor**: Characterised primarily by oedema (swelling due to an accumulation of fluid in intercellular spaces of the body usually beginning in the feet and legs) and sometimes accompanied by changes in hair colour to greyish or reddish. Clinical features also include apathetic and irritable demeanour and a lack of appetite.

- **marasmic kwashiorkor**: Characterised by a combination of severe wasting and oedema.

Vitamins and minerals are also needed for adequate functioning of the body and protection against disease. Vitamins B, C, A and D and minerals such as iron, sodium, iodine, zinc, magnesium and potassium are the major nutrients the body needs in order to function properly. Micronutrient deficiencies can lead to an increased risk of mortality, morbidity, blindness, adverse birth outcomes and susceptibility to infection. With food distributions in camps it is imperative to verify that people are provided with appropriate micronutrients. Special groups with specific micronutrient needs include pregnant women, lactating mothers and young children. The general food ration should provide required micronutrients, which is normally achieved by adding some fortified food commodities (for example, iodised salt, fortified grains or vegetable oil enriched with Vitamin A). However, it may still be necessary to provide micronutrient supplementation through the health system (for example, iron tablets for pregnant women and Vitamin A for children).

For more information on food distribution, see Chapter 13, Food Security and Non-Food Items.

**ASSESSMENT AND SURVEILLANCE OF NUTRITIONAL STATUS**

A nutrition survey will quantify the acute malnutrition in the population and is used to establish the degree of emergency for the delivery of food aid and to plan complementary food interventions. It is also baseline data used for comparison with future surveys to monitor the situation over time. An initial assessment of the nutritional status of the camp population should be done as soon as possible in the emergency phase and should be supervised by a nutritionist. The survey should measure a representative sample of children aged from six to 59 months. When the age of a child is difficult to ascertain height in the range 65 cm-110 cm is the inclusion criteria. The measurements collection during the survey should include:

- **weight and height**: These two measurements used to calculate the weight for height (WFH) index of each child is an objective assessment of acute malnutrition. This index is expressed as a Z score. The Z score is a standard deviation from a reference population.

- **age and gender of child**: Z score formulas are different for males and females and recording age verifies the inclusion criteria.

- **presence of oedema**: Defined above, bilateral oedema indicates severe malnutrition even without a corresponding WFH Z score.

Additional measurements to be collected as deemed necessary are:

- **mid upper arm circumference**: MUAC is a rapid, simple measurement of the left arm circumference at the midpoint between the elbow and shoulder. It can be a predictor of the immediate risk of death from malnutrition. However, this measurement has a high risk of error and it should be part of a two-step screening process. If a child falls below a certain cut-off circumference, then s/he is referred to a WFH measuring post where a second measurement is taken for inclusion in a selective feeding programme.

- **body mass index**: BMI measurements can be used in adolescents (persons> 137 cm) and non-pregnant adults to determine malnutrition. Adults and adolescents are usually at less risk than young children from malnutrition, but in specific contexts it may be necessary to include this age group. The formula is calculated as [weight in kg / (height x height in m)] = BMI.

**Global Acute Malnutrition (GAM) includes both moderate and severe acute malnutrition.**

There are no specific rules for repeated nutritional surveys, but it is recommended in the emergency phase that a nutritional survey be repeated as often as necessary and as resources allow. Where food supply systems are weak, there may be influxes of more people and thus a greater risk of epidemics and elevated mortality rates. Additional surveys can expand the indicators to include assessment such as of micronutrient deficiencies or measles vaccination status according to the priorities of the evolving situation.
A displaced population fled an insecure area in East Africa. Those who arrived first established a self-settled camp and new arrivals settled in ever-widening circles around its periphery. There was no systematic population count or organisation of households and the camp population fluctuated on a daily basis. A cluster sampling technique was implemented for a nutrition survey, but only started measuring children from the centre of the camp. Those households on the periphery had spent longer on their journey to the camp, including longer periods without proper food or basic health services. The results of the nutritional survey were reviewed by the lead health agency and malnutrition levels were low. No complementary nutritional programmes were implemented. However, there were needs among the newly arrived population which were not measured. Were the most vulnerable and at highest risk for malnutrition properly represented in the survey? What questions could the Camp Management Agency have asked to the nutritional survey team before making programmatic decisions? Could corroborative data from health facilities have raised alarms?

Survey results are relevant and useful only if sampling procedures are standardised and properly applied to ensure that the individuals measured are representative of the whole population and that the results are comparative over time.

**SELECTIVE FEEDING PROGRAMMES**

There are two types of feeding programmes:

- **Blanket/General Supplementary Feeding**: feeding of all affected population without targeting specific population groups
- **Selective Feeding Programmes**: supplementary (for moderately malnourished) and therapeutic (for severely malnourished) feeding programmes
  - Supplementary Feeding: provision of an additional food ration for moderately malnourished children or adults ‘targeted SF’, or to the most nutritionally vulnerable groups, labeled ‘blanket SF’
  - Therapeutic Feeding: provision of medical and dietary treatment to those with severe acute malnutrition.

The hierarchy of nutrition interventions prioritises the provision of basic food rations to the majority of the population over intensive, specialised nutritional support to malnourished individuals. Once the majority of the population has access to adequate quantities of food, the second priority is to provide high quality supplementary food to individuals with acute/moderate malnutrition. When adequate supplementary rations are available for the majority of people affected by moderate/acute malnutrition, therapeutic care for those with severe/acute malnutrition can then be effective. Persons with specific needs, such as pregnant women, infants, children, nursing mothers and older people, may be included in supplementary and therapeutic feeding programmes even if they do not qualify as acutely malnourished.

Selective feeding programmes can be implemented in two ways: feeding at health centres or take home rations for supplementary feeding. In the case of the latter, rations are increased to take into account sharing at household level.

Below is a decision chart for the implementation of selective feeding programmes. Please note that this should be used only as a guide and should be adapted to local camp situations.

<table>
<thead>
<tr>
<th>Finding</th>
<th>Action required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food availability at household level below 2,100 kcal per person per day and/or inadequate micronutrient availability</td>
<td>Unsatisfactory situation&lt;br&gt;• improve general rations until food availability and access can be made adequate.</td>
</tr>
<tr>
<td>Malnutrition prevalence 15% or more or 10–14% with aggravating factors</td>
<td>Serious Situation&lt;br&gt;• general rations (required if the refugees/IDPs are entirely dependent on food aid and not required if the situation is limited to groups with specific needs)&lt;br&gt;• blanket supplementary feeding for all with specific needs and groups at risk especially young children and pregnant and lactating women&lt;br&gt;• therapeutic feeding programmes for severely malnourished individuals.</td>
</tr>
<tr>
<td>Malnutrition prevalence 10–14% or 5–9% with aggravating factors</td>
<td>Risky Situation&lt;br&gt;• general food rations only if the refugees/IDPs are entirely dependent on food aid&lt;br&gt;• supplementary feeding targeted at individuals as malnourished in groups with specific needs&lt;br&gt;• therapeutic feeding programmes for severely malnourished individuals.</td>
</tr>
<tr>
<td>Malnutrition prevalence under 10% with no aggravating factors</td>
<td>Acceptable Situation&lt;br&gt;• general food rations only if the camp population is entirely dependent on food aid&lt;br&gt;• no need for supplementary feeding&lt;br&gt;• attention for malnourished individuals through regular community services</td>
</tr>
</tbody>
</table>
NEW METHODOLOGIES IN THERAPEUTIC FEEDING PROGRAMMES

WHO, WFP, the United Nations Standing Committee on Nutrition (SCN) and UNICEF have highlighted new evidence that about three-quarters of children with severe acute malnutrition - those who have a good appetite and no medical complications, can be treated at home with fortified, Ready-to-Use Therapeutic Foods (RUTFs). These are soft nutrient and energy-rich foods that can be eaten by children over the age of six months without adding water, thereby reducing the risk of bacterial infection. RUTFs provide the nutrients required to treat a severely malnourished child at home, without refrigeration, and even where hygiene conditions are unsatisfactory. This community-based approach to severe malnutrition may be considered by the health service providers in camp environments with severe malnutrition.

FEEDING PRACTICES FOR INFANTS AND YOUNG CHILDREN

Mortality among infants and children is highest in an emergency phase when conditions are the most threatening. Exclusive breastfeeding for infants up to six months of age is recommended. From six months to the age of two it is recommended that breastfeeding continues while adequate supplementary foods are added. Supporting caregivers and channeling scarce resources to meet the nutritional needs of infants and young children in the camp are priority. Guidance on breastfeeding and complementary feeding for mothers living with HIV/AIDS have different and specific recommendations.

The following activities can reduce malnutrition amongst infants and children:

- Community health workers (CHWs) should identify vulnerable households with infants, young children, pregnant women or nursing mothers.
- Priority registration for food distribution should be negotiated for persons with specific needs and members of groups at risk.
- Sheltered breastfeeding stations should be organised near registration and distribution points.
- Women can be recruited to provide encouragement and practical assistance on feeding practices to households with infants and small children.
- Those responsible for unaccompanied children need to be identified and should receive appropriate food supplementation, such as breastmilk substitutes for orphaned infants.

VOICE FROM THE FIELD - INTEGRATION OF THERAPEUTIC FEEDING PROGRAMMES WITH EXISTING CLINICAL HEALTH SYSTEMS

A nutritional survey of a camp found Global Acute Malnutrition rates of 14 per cent with Severe Acute Malnutrition rates of 3.5 per cent. Consequently, plans were made to establish a therapeutic feeding programme in a referral hospital. However, the plan was revised during a coordination meeting with the Camp Management Agency, which revealed that a government health centre within the camp already had an in-patient therapeutic feeding programme for severely malnourished children with medical complications. Unfortunately, practices were out of date and default rates (number of children leaving the feeding programme before their discharge date) were 55 per cent. Support was provided to the government health centre and the health lead agency also worked with the clinical officer and supervisor to update protocols and teach staff appropriate methodologies for therapeutic feeding centres. The lesson learned here was that support to existing services, instead of setting up parallel systems, increases the long-term capacity of government health staff to treat severe malnutrition.

HEALTH WORKFORCE

CHWs are trained in hygiene, first aid, immunisation, active case finding, health referrals and other essential primary health care services. They are a critical workforce in any emergency health response and have relevant cultural and language skills, and may be identified from the camp population.

STRUCTURE OF HEALTH CARE SERVICES

The structure of health care services in a camp should offer active case finding, early diagnosis and appropriate treatment of the priority diseases. It is essential to coordinate with and support established health structures. However, in most camp situations the high number of patients using the services, especially during the emergency phase, may overwhelm national state or private health services, even when supported. Therefore, it may be necessary to implement a new health structure. Regardless of the strategy, health services in a camp structured according to the following four-tier model have proven successful in various conditions.

- Outreach activities: community health workers and trained birth attendants provide outreach activities. Their duties include home visiting, identification and referral of sick persons and malnourished children, identification of pregnant women for referral to reproductive health services, basic health education and mortality data-gathering for the health information system.
Peripheral facilities: Health posts should provide basic consultations, basic curative care (no injectable medications and a limited essential drug list), oral rehydration therapy (ORT), dressings for wounds, a locked pharmacy, simple sterilisation facilities and data collection.

<table>
<thead>
<tr>
<th>Health Structure Level</th>
<th>Position</th>
<th>Staffing Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach activities at community level</td>
<td>Community Health Worker</td>
<td>One per 500-1000 population</td>
</tr>
<tr>
<td></td>
<td>Traditional Birth Attendant (TBA)</td>
<td>One per 2,000 population</td>
</tr>
<tr>
<td></td>
<td>Supervisor</td>
<td>One per 10 Community Health Workers/TBA</td>
</tr>
<tr>
<td></td>
<td>Senior Supervisor</td>
<td>One</td>
</tr>
</tbody>
</table>

Central facility: This should provide a 24-hour service with in-patient and out-patient services. Basic laboratory services may be available, but this is not the priority in the emergency phase.

<table>
<thead>
<tr>
<th>Health Structure Level</th>
<th>Position</th>
<th>Staffing Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripheral health facility</td>
<td>Total staff</td>
<td>Two to Five</td>
</tr>
<tr>
<td>One for approximately 10,000 population</td>
<td>Qualified health worker</td>
<td>At least one, based on a maximum of 50 consultations per worker per day</td>
</tr>
<tr>
<td></td>
<td>Non-qualified staff</td>
<td>At least one for ORT, dressings, registrations and administration</td>
</tr>
</tbody>
</table>

Referral Hospital: The health system within the camp must be able to refer patients to hospitals for advanced services. A referral hospital should provide emergency surgical and obstetric care, laboratory and X-ray services and treatment of severe diseases. Only in very specific cases, when a referral hospital is not available or is overwhelmed, for example by many war-wounded surgical cases, should a camp/field hospital be established. Normally only a small number of patients will require referral. Therefore a local referral hospital should be supported instead of setting up a parallel structure within the camp.

<table>
<thead>
<tr>
<th>Health Structure Level</th>
<th>Position</th>
<th>Staffing Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral Hospital</td>
<td>Variable</td>
<td>Variable</td>
</tr>
<tr>
<td></td>
<td>Doctor with surgical skills</td>
<td>At least one</td>
</tr>
<tr>
<td></td>
<td>Nurse</td>
<td>At least one: 20-30 beds per shift</td>
</tr>
</tbody>
</table>
CHAPTER | 16 | HEALTH AND NUTRITION

HEALTH SERVICES FREE OF CHARGE

In emergencies, preventive and curative health services should be provided free of charge to refugees and displaced populations. Evidence has shown that systems of cost recovery in developing countries at best recover five per cent of costs, and act as barriers to those most in need of health services. Local populations living nearby may also be offered extended free-of-charge services, and this should be negotiated with the health authorities in line with national policy.

VOICE FROM THE FIELD - FACILITATING COORDINATED REFERRALS TO AND FROM HOSPITALS AND CAMP SERVICES IN HAITI

In sudden onset natural disasters or man-made emergencies, existing public services including temporary field hospitals soon become overstretched in their capacity to provide urgent medical and surgical treatment with demand far exceeding availability. This overload persists for a certain period of time where the remaining functional hospitals report congestion and significant backlog of patients ready for discharge but unable to leave hospital wards or makeshift parking lots because they are newly homeless, unable to return to their destroyed houses, lack means of transport to return to preferred communities or camp settlements and/or are unable to secure medical follow-up after discharge because of the distance between camp settlements and rehabilitation and wound care services. Following the Haiti 2010 earthquake, an agency responded to this service gap by working with the Camp Management Agency, health and shelter partner agencies to establish an assisted hospital discharge and referral mechanism to decongest hospitals, link patients’ needs with available services, navigate timely referrals and ensure transportation and adequate placement in camps that had access to medical and rehabilitative health services.

Qualified health workers are defined as formally trained clinical providers, such as physicians, nurses, clinical officers or medical assistants. However, in a camp setting it may be difficult to recruit formally-trained clinical staff. Staff without formal clinical training may be able to perform certain clinical duties with additional support and careful supervision. There also may be camp residents who have received formal training from their home countries but whose qualifications are not recognised by host country national health authorities. In these cases, it is important for the health agencies and the Camp Management Agency to discuss with national health authorities the possibility of employing such individuals in clinical jobs if necessary.

TRAINING

It is essential that if a mix of health staff recruited among the camp population and local government are working together in a health facility, initial training should be provided to clarify case definitions and appropriate protocols for case management.

In the emergency phase, it is not a priority to establish a laboratory in the camp. The key priority is to identify an established referral laboratory where specimens collected for outbreak investigation (for example shigellosis and cholera) may be sent. Most patients presenting to camp health facilities in the emergency phase can be treated based on a clinical diagnosis derived from protocols. Before blood transfusion services commence within the camp a laboratory that tests all blood for HIV must be established.

HUMAN RESOURCES

Staff salaries and incentives should be addressed from the outset of recruitment. In principle, all staff working on a daily basis with clearly identified responsibilities and defined working hours should receive salaries or incentives. The Camp Management Agency should support the lead health agency in coordinating all health actors in the camp, ensuring all are adhering to the same standards.

When recruiting staff for health services the order of preference for selection is: camp population, experienced nationals from the local host community and only then outsiders. Most camp situations will require a mixture of these sources, but it is important to remember that health services are being developed with, and not for, the camp population. Women are an important part of the health system within the camp. They should be encouraged to apply for health care jobs. Health services dominated by men may discourage use or acceptance by the primary users who are mostly women.

The percentage of women recruited and trained to provide health services should correspond to the percentage of women in the camp.
Even if national health authorities’ case definitions and protocols are utilised, regular refresher training for local staff is highly recommended, offering an opportunity to harmonise and ensure that all staff are carrying out responsibilities in the same way.

Training all health workers and non-health workers assisting in health care in proper universal precautions is essential when managing health systems within a camp. Health agencies should ensure that all clinical staff have logistical supplies, like sharps disposal containers, appropriate quantities of disposable needles and syringes, so as to ensure universal precautions are carried out. The basic concepts of universal precautions are:

- All workers should wash hands thoroughly with soap and water, especially after contact with body fluids or wounds.
- Protective gloves and clothing should be used when there is a risk of contact with blood or other potentially infected body fluids.
- Safe handling and disposing of waste material, needles and other sharp instruments is essential together with properly cleaning and disinfecting medical instruments before their use with other patients.

**Sufficient WASH facilities and adequate equipment for universal precautions are essential in all health facilities, even small health posts.**

**Health services have to be flexible. If an outbreak occurs, the need for curative care may be very high and additional human and material resources will be required.**

**LOGISTICS AND SUPPLY**

During the initial assessment of a camp, all available medical materials should be documented. If these resources are inadequate for the camp population’s health needs and additional resources cannot be sourced from national authorities or other health actors, this gap should be immediately flagged.

Following medium or large scale emergencies, medicines and replenishable medical supplies are usually made immediately available by national health authorities and agencies to allow for predictable and efficient response. The WHO 2011 Inter Agency Emergency Health Kit ensures that a standardised and quickly obtainable source of essential medicines and supplies adequately meets health care needs of 10,000 people for three months. These kits could be secured through WHO and other health partners. Similarly the United Nations Population Fund (UNFPA) Inter Agency Reproductive Health Kit for Use in Crisis Situations provides essential supplies to address different reproductive health needs. However, these kits should only be used in the short term and a regular supply of essential medicines and materials should be identified to stock all health facilities in the camp as soon as possible.

Health facility site planning, infection control, referral transport, cold chain maintenance and medical store/pharmacy issues also need to be considered when planning health care structures.

**HEALTH INFORMATION SYSTEM (HIS) MONITORING AND SURVEILLANCE OF COMMUNICABLE DISEASES AND HEALTH CARE SERVICES**

Health information systems should be implemented as soon as health care services are initiated. There are three methods of data collection:

- routine reporting of consultations on a weekly or monthly basis, including an alert system to report epidemic-prone diseases
- outbreak investigations, collected on an ad hoc basis when an outbreak is suspected
- surveys, implemented when routine reporting is delayed or for specific data collection, for example, nutrition or vaccination household surveys.

As soon as health care systems are in place and consultations performed, routine reporting should be established. Case definitions should be developed for each health event or disease and all health workers should be trained in them, especially the epidemic-prone diseases. Case definitions and the HIS should follow the definitions and systems of the host country. If these are inadequate or not available, these systems need to be formulated in cooperation with the national health authorities.

In routine reporting from health centres health workers provide data on the number of consultations (morbidity) and deaths (mortality) from diseases disaggregated by age (under five and over five) and gender. Where possible, it is usually recommended to further break down the age categories, for example, zero to four years, five to 11 years, 12 to 17 years, 18 to 59 years, 60+ years of age. This will allow the identification of health needs related to age-groups, for example adolescents and older people, and assist the design of tailored health interventions.

All levels of a health system, including the central health facility, health post or field hospital should contribute data. Community health workers active in the camp should also submit mortality figures, but not morbidity figures because they refer these cases to the appropriate health facility. Mortality figures from the community health workers contribute to the health post statistics from their respective zones.

The morbidity and mortality surveillance forms should highlight epidemic-prone diseases such as bloody diarrhoea, acute watery diarrhoea, suspected cholera, lower respiratory tract infections, measles, meningitis and malaria. Alert thresholds for epidemic-prone diseases should be established and communicated to all health actors in the camp. One designated health worker should tally all consultations seen at the end of each day. When an alert threshold is reached, this person initiates an outbreak alert report to the lead health agency. Time is crucial when reporting on epidemic-prone diseases. Delays in outbreak response can increase mortality within the camp.
When collecting health data, patient confidentiality and data protection must be ensured. All information regarding the patient, her/his history, condition, treatment and prognosis is discussed only between the patient, the health provider and the supervisors. No staff member should share patient information with others not directly involved in patient care without the patient’s permission. In the emergency phase, training health care workers in issues around patient and data confidentiality should be completed.

Practically, this is often not the case. It is the responsibility of the Camp Management Agency and/or the lead health agency to ensure that all staff undergo proper training in confidentiality and protection of data issues during the post-emergency phase if it has not already been done in the emergency phase. It is highly advisable that health agencies brief their staff on policies, guidelines and appropriate reporting mechanisms to ensure confidentiality if they come across sensitive health information. Health care workers should also be provided with appropriate logistical support to maintain confidentiality, such as cupboards with locks, registration books with appropriate covers and rooms available for private consultations.

OUTBREAK INVESTIGATION

Reports and alerts of outbreaks are usually frequent in camp environments. Each and every report should be followed up by the lead health agency or a designated outbreak response team. Diagnosis must be confirmed either by laboratory testing or by clinical presentation, depending on the disease and context.

Epidemics often follow a pattern. Cases are fewer at the beginning of an outbreak, crescendo to a peak and then fade. However this is not always the case. Once an outbreak is declared, the lead health agency should graph daily or weekly cases of the disease. This graph uses the ‘number of cases’ on the vertical axis and the time in ‘days’ or ‘weeks’ on the horizontal axis. Interpreting the curve should be done cautiously, but it can give an indication of the future of the epidemic and enable resources to be mobilised appropriately. The implications of the epidemiological curve should be explained to all health actors in the camp.

CONTROL OF COMMUNICABLE DISEASES AND EPIDEMICS

OUTBREAK RESPONSE

The lead health agency in coordination with the Camp Management Agency should initiate epidemic contingency plans when an outbreak is declared. Health and other implicated service providers must be ready to react to epidemics and the lead health agency should have contingency plans in place before an outbreak occurs in order to prevent high morbidity and mortality rates. A contingency plan should include:

- verifying stocks of vaccines and materials, for example intravenous fluids and specific antimicrobials (medication for treating bacterial infections)
- maintaining an updated map of all actors in the camp and their available supplies and human resources.

Training for active/passive case finding and appropriate reporting mechanisms should be continually reinforced. Standard protocols for prevention, diagnosis and treatment must be made available to all health staff regarding the priority com-
Communicable diseases in the camp and specifically the epidemic-prone diseases. These protocols should be harmonised with the local health authorities or adapted from WHO guidelines and agreed by all health actors.

Many communicable diseases surface in camp situations such as cholera, typhus, relapsing fever, tuberculosis, typhoid fever, yellow fever, meningococcal meningitis and hepatitis. As the cause-specific mortality rates of these diseases during the emergency phase are usually minimal, a response is indicated if an alert threshold has been reached. In the post-emergency phase, health services able to respond to the above communicable diseases may be implemented as appropriate. The following is a synopsis of the priority communicable diseases to be addressed during the emergency phase and their appropriate case management and outbreak responses.

**DIARRHOEAL DISEASES**

Diarrhoeal diseases are a leading cause of morbidity and mortality in a camp environment. In camp situations, diarrhoeal diseases have accounted for more than 40 per cent of deaths in the acute phase of the emergency.

The Camp Management Agency, in coordination with the relevant service providers, should ensure rapid implementation of prevention methods such as clean water, adequate latrine coverage, distribution of soap and education on proper personal hygiene practices, promotion of food safety and breastfeeding. Uncomplicated, non-bloody diarrhoea can normally be managed with appropriate rehydration methods, but in a camp environment it is important to always train staff, including health volunteers, and monitor for the epidemic-prone diarrhoeal diseases like shigellosis and cholera.

Shigellosis, also known as bacillary dysentery, is an acute bacterial disease affecting the large and small intestines. The most severe form of the disease and the cause of outbreaks in camp settings is Shigella dysenteriae Type 1 (Sd1) presenting as acute bloody diarrhoea. Transmission occurs through contaminated food and water and from person-to-person contact and is highly contagious. Case fatality rates can be as high as ten per cent without prompt and effective treatment.

The Camp Management Agency should ensure that all health staff are trained to suspect cholera when:

- a patient over five years of age develops severe dehydration from acute watery diarrhoea, usually with vomiting
- any patient over two years of age has acute watery diarrhoea in an area where there is an outbreak of cholera.

Cholera is asymptomatic in 90 per cent of cases, but these asymptomatic carriers actively pass the bacteria in stools. About 20 per cent of those who are infected with Vibrio cholerae develop the acute, watery diarrhoea and of some 10 to 20 per cent develop severe watery diarrhoea with vomiting. The number of cases can rise rapidly because the incubation period is extremely short (two hours to five days). One confirmed case of cholera indicates an outbreak. Cholera treatment centres for case management should be established and a WASH prevention programme initiated.

**STOP CHOLERA SPREADING**

Once cholera is suspected in a camp, the spread of the bacteria should be prevented through early detection, confirmation of cases, appropriate treatment, isolation of patients and dissemination of hygiene messages using local languages and culturally appropriate methods.

Vibrio cholerae is an acute bacterial disease causing profuse watery diarrhoea sometimes coupled with projectile vomiting. If these patients are not promptly treated, the life cycle of the disease results in loss of large amounts of fluid and salts leading to severe dehydration and death within hours. The transmission mode is faecal-oral and it is often transmitted by contaminated food or water.
Case management for cholera includes treatment of dehydration via oral rehydration salts and/or intravenous fluids. The use of antimicrobials is not essential for the treatment of cholera and should only be used for severe cases or when bed occupancy or stocks of intravenous fluids are expected to reach critical levels.

For more information on the prevention and control of diarrhoeal diseases, see Chapter 14, Water, Sanitation and Hygiene.

**ACUTE RESPIRATORY INFECTIONS (ARI)**

ARIs of the upper respiratory tract include the common cold and those of the lower respiratory tract include pneumonia. Lower respiratory tract infections (LRTIs) are a significant cause of morbidity and mortality in camp situations. The Camp Management Agency should therefore ensure that trained health workers are able to recognise the signs and symptoms of pneumonia and diagnose, treat or refer cases as quickly as possible. Community health workers should be trained to refer all children with a cough and/or breathing difficulties to the health post for further investigation. WHO recommends the following for appropriate case management of LRTIs:

- Signs of malnutrition should be assessed. Malnutrition increases the risk of death from pneumonia.
- Severely malnourished children must be referred to inpatient care at a referral hospital.
- Management of pneumonia consists of antimicrobial therapy, but choice of antimicrobial depends on national protocols and available drugs.
- If protocols or drugs are not available from the national health authorities, then oral cotrimoxazole can be used for most cases. For severe pneumonia, injectable antimicrobials can be used such as penicillin, ampicillin or chloramphenicol.
- Supportive measures, such as oral fluids to prevent dehydration, continued feeding to avoid malnutrition, measures to reduce fever and protection from cold are all essential.

**MEASLES**

Measles is a highly communicable viral infection spread person-to-person via respiratory droplets which damage the immune system. Deaths most frequently occur from complications of co-morbidities, accompanying but unrelated diseases, such as pneumonia, diarrhoea and malnutrition. The Camp Management Agency, in cooperation with relevant health agencies, should ensure that all staff working in close contact with the camp population are educated regarding the initial symptoms in order to facilitate early referral and case management. They should know that initial signs and symptoms are high fever, cough, red eyes, runny nose and Koplik spots (small white spots on the inner lining of the cheeks and lips). A red, blotchy rash may also appear behind the ears and on the hairline spreading to the entire body. All those found with these initial signs and symptoms should be referred to the closest health facility for symptomatic management and should have their nutritional status monitored for possible enrolment in selective feeding programmes. It is not necessary however to isolate cases in an emergency situation.

**MALARIA**

Four species of the parasitic disease termed malaria develop in humans, but Plasmodium falciparum is of prime public health importance, especially when managing a camp in sub-Saharan Africa.

The disease is transmitted by the bite of the female anopheles mosquito, which mainly attack during the night. Simplified case definitions to be used in an emergency are:

- Uncomplicated malaria is characterised by fever or history of fever in the previous 48 hours, with or without symptoms of headache, back pain, chills, nausea, vomiting, diarrhoea or muscle pain where other obvious causes of fever have been excluded. In a high malaria risk area or season, all children under five with fever or history of fever should be classified as having malaria. In a low malaria risk area or season, children with fever or history of fever should be classified as having malaria and given an anti-malarial only if they have no runny nose (a sign of acute respiratory infection), no measles or other obvious sign of fever such as pneumonia or a sore throat. In the low-risk areas, parasitological confirmation is recommended.
- Severe malaria is characterised by the fever and symptoms of uncomplicated malaria but with associated neurological signs such as disorientation, convulsions, loss of consciousness and/or severe anaemia, jaundice, spontaneous bleeding, pulmonary oedema and/or shock.

The Camp Management Agency should recognise that in the emergency phase of a camp, laboratory diagnosis for malaria is usually not feasible. Thus diagnosis and treatment should be based on clinical symptoms coupled with knowledge of the risk of malaria in the camp area. As soon as laboratory services can be established, diagnosis should be confirmed, unless there is a malaria epidemic in which case clinical diagnosis is acceptable. Rapid diagnostic tests, although expensive, can be useful during the emergency phase to confirm malaria cases in a low malaria risk area or season before appropriate laboratory services can be established.

Effective treatment for malaria should be implemented with current knowledge of the drug resistance patterns in the camp area. In camp situations where mortality from malaria is high, drug combinations with artemisin (ACT) are recommended. These combination drugs are increasingly used as first-line treatments in many countries and are rapidly effective in most areas. If the national health authorities do not use ACT as a first-line treatment, and no recent efficacy studies on their recommended first-line drug have been conducted, then ACT is recommended. Coordination with the national health authorities is imperative and may require lengthy discussions in order to implement ACT in a camp situation. If there are high treatment failure rates and high case fatality rates for malaria, it is recommended that the lead health agency and/or Camp Management Agency, together with the Cluster/Sector Lead Agency, should advocate for change in the drug regime with the national health authorities.

The first health priority in an emergency is to implement early diagnosis and effective treatment for malaria. Additionally, barrier methods for mosquito bite prevention, for example insecticide-treated mosquito nets, are important to implement, but after the above priorities have been accomplished. Community distribution of treated nets in the emergency phase of
A camp is only recommended when the camp residents are already in the habit of using nets because of the behavioural change needed to make the intervention a success. If treated nets are distributed, new and long-lasting ones should be chosen. Vector control activities and extended distributions of personal protection against mosquito bites is important. So is Intermittent Preventive Treatment (IPT), a dose of anti-malarial medication given to pregnant women on a regular basis, to prevent malaria throughout the pregnancy.

For more information on vector control activities, see Chapter 14, Water, Sanitation and Hygiene.

**HUMAN IMMUNODEFICIENCY VIRUS (HIV)/ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)**

Vulnerability to HIV/AIDS is intensified during an emergency. Social norms regulating behaviour can be weakened. Fragmentation of families threatens stable relationships. Displacements may bring populations with different HIV prevalence rates into contact. Displaced persons may have been forced to submit to unprotected survival sex. Health structures may be stressed and have inadequate supplies to prevent the transmission of HIV, such as universal precautions supplies or condoms. As well, in camps with large numbers of arriving war-wounded, HIV infection can be passed via blood transfusions. HIV can be transmitted via four main modes:

- sexual intercourse with an infected partner, especially in the presence of a sexually transmitted infection
- contaminated needles (needle stick injuries, injections)
- transfusion of infected blood or blood products
- mother-to-child transmission during pregnancy, labour and delivery or through breastfeeding.

The Camp Management Agency should ensure that the response to HIV/AIDS is multi-sectoral. The lead health agency in cooperation with the Camp Management Agency should supervise and ensure a minimum set of interventions are initiated by health service agencies in the camp to mitigate the transmission of HIV. Beyond the context of the immediate crisis HIV/AIDS influences the life and situations of persons and their social networks for years to come.

In accordance with guidelines prepared by the Joint United Nations Programme on HIV and AIDS (UNAIDS) for addressing HIV in humanitarian settings (2010), the inter-sectoral HIV response should include the following minimum interventions within preparedness, minimum initial and expanded responses:

- raising HIV awareness
- providing a safe blood supply, by having HIV testing of blood before transfusion, and avoiding all non-essential blood transfusions
- adhering to universal precautions
- providing basic HIV education materials
- providing good quality condoms, preferably free of charge, via appropriate channels as identified during the rapid initial assessment
- offering syndromic sexually-transmitted infection (STI) treatment, an approach which treats STIs according to signs and symptoms, requiring no laboratory confirmation
- managing the consequences of gender-based violence
- ensuring safe maternal deliveries.

HIV services during the post-emergency phase should expand to more comprehensive interventions related to preventing HIV transmission, as well as providing support, care and treatment to those living with HIV/AIDS and their families. These should include:

- services or strategies to prevent sexual violence
- post-exposure prophylaxis
- information, education, communication materials for high-risk groups
- voluntary counseling and testing
- services for preventing mother-to-child transmission of HIV.

Palliative and home-based support and care should be provided for people living with AIDS. Other care and treatment interventions for people living with HIV include prophylaxis and treatment of opportunistic infections and antiretroviral therapy.

**DISPOSAL AND MANAGEMENT OF DEAD BODIES**

Natural disasters, sudden onset or prolonged conflict situations as well as diseases, epidemics and malnutrition often result in large numbers of deaths. The management of dead bodies in general, as well as in camps, is one of the difficult aspects of a crisis response. The collection and disposal of dead bodies is crucial and should be carried out quickly in appropriate ways to mitigate possible social and political implications as well as to avoid emotional or psychological distress among those who have lost family members, among camp communities and also among rescue and recovery workers.

Health related risks are normally negligible even in emergency situations and cultural obligations and traditions should not be foregone except in rare circumstances. The primary concern of the teams in charge of body disposal should be to carry out the cultural and religious obligations and traditions required, rather than potential disease transmission.

Contrary to popular belief, evidence suggests that dead bodies, particularly those who died as a result of physical trauma, for example natural disasters, accidents or armed conflict, are not likely to result in disease outbreaks such as typhoid fever or cholera or plague. However, if these bodies are not disposed of properly, gastroenteritis or food poisoning syndrome may occur if there is contamination of water sources such as wells, streams and aquifers.
In medical epidemics, special precautions should be taken to prevent disease transmission from dead bodies to other members of the community. Bodies should be handled whenever possible by medical staff. Vehicles used for transport of bodies should be disinfected after use. Limits should be placed on the size of gatherings and risks of practices, such as washing of the dead should be communicated to the community. WHO Technical Note for Emergencies No. 8 outlines specific practices in the event of cholera, Ebola, typhus and plague. Under all circumstances WHO Guidelines on Disposal of Dead Bodies in Emergency Conditions suggest adherence to the following principles:

- prioritise the living over the dead
- dispel myths about health risks posed by corpses
- identify and tag corpses
- provide appropriate mortuary services
- reject unceremonious and mass disposal of unidentified corpses
- respond to the wishes of the family
- respect cultural and religious observances
- protect communities from the transmission of medical epidemics.

REPRODUCTIVE HEALTH (RH)
Reproductive health services should be provided in a camp environment as an integral part of primary health care services. Providing appropriate services can overcome the complications of pregnancy and delivery which are the leading causes of death and disease among refugee/IDP women of child-bearing age. A RH response in the emergency phase of a camp is necessary.

Quality RH services provided by trained staff should be available in the camp. Use of them should be left to the decision of each individual. As RH services affect very personal aspects of a persons’ life, they must be implemented in a culturally appropriate manner, considering the religious and ethical values of the camp population. Those providing the services should provide an enabling environment where those seeking services can feel comfortable and secure. The following minimum reproductive health interventions should be provided in the emergency phase:

- A reproductive focal person/agency should be identified to supervise all services within the camp and bring issues and information to health coordination meetings.
- All pregnant women, birth attendants and midwives should be identified within the camp and issued with clean delivery kits: a square metre of plastic sheet, a bar of soap, a razor blade, a length of string and a pictorial instruction sheet. Multiple kits should be provided to birth attendants and midwives and a system established to replenish them as needed. Health facilities and trained midwives should be issued with professional midwife delivery supplies using WHO’s New Emergency Health Kit.
- A referral facility and transport should be identified for obstetric emergency transfers.
- A medical response should be provided to survivors of sexual violence, including emergency contraception as appropriate via the health facilities (small quantities are available in the WHO New Emergency Kit).
- Community leaders, pregnant women, birth attendants and community health workers should start community education on indications for referral.

As soon as feasible, comprehensive services for antenatal, delivery and postpartum care must be organised. These must include family planning services, information on sexually transmitted infections (STIs), vaccinations (tetanus toxoid) and well-baby clinics. The objectives of comprehensive RH services include:

- ensuring all pregnant women attend antenatal clinics at least four times during pregnancy for antenatal care
- health education and early detection and management of complications of pregnancy
- ensuring all women have access to clean, safe delivery attended by a skilled health worker
- providing post-natal care to all newborn infants
- promoting, protecting and supporting early, exclusive (up to six months), and sustained (up to two years) breast-feeding
- ensuring all women receive basic post-natal care through home visits and referral for complications
- managing the complications of spontaneous or induced abortion and reducing the incidence of unsafe abortion
- providing family planning services as needed
- preventing HIV transmission through universal precautions
- providing prevention of mother-to-child transmission (PMTCT) of HIV
- preventing and reducing sexual transmission of STIs and HIV/AIDS.

MENTAL HEALTH AND PSYCHOSOCIAL SUPPORT
Emergencies create a wide range of problems experienced at the individual, family, community and societal levels. Every individual will experience the same event in a different manner and will have different resources and capacities to cope with that event. Psychosocial problems in emergencies are highly interconnected, yet they may be predominantly social or psychological in nature.
Mental health and psychosocial needs in emergencies encompass far more than psychological conditions like PTSD or disaster-induced depression. A selective focus on these two problems is inappropriate because it overlooks many other mental health and psychosocial support needs in emergencies and may ignore individual, family and community resources and coping mechanisms.

Psychosocial support should be cross-cutting in all services provided in camps. Camp Management Agency and all health actors must have essential knowledge of protecting psychosocial well-being and be aware of Do No Harm principles and psychological first aid. They need to acknowledge that camps will have people with pre-existing mental disorders. In emergencies, the percentage of people with severe mental disorders seems to increase by one per cent over the baseline. About ten per cent of people have mild to moderate mental disorders. This may rise to 15 per cent in emergencies. In most situations, people recover naturally, healing without outside intervention. To assess and assist people with mental disorders, the Camp Management Agency should facilitate access to clinical mental health care, whether delivered within or outside camps. Preferably, such services are attached to general health or social services (for adults) or to schools (for children). An expected subset of the people with mental disorders need specialised care.

While it is understood that the provision of mental health services does not lie within the responsibility or capacity of the Camp Management Agency, some key actions are nevertheless identified:

- All actors should be trained to confidentially identify and refer people who seem very confused, unable to care for themselves or who have attempted suicide. The collection of information should be dignified and confidential and further assessed by trained mental health professionals. It is important to ensure that people with specific needs are protected by family members or neighbours and referred immediately to health providers. There must be special living arrangements for those formerly living in psychiatric institutions.
- Mental health providers in camps should be encouraged to learn about and, where appropriate, collaborate with local, indigenous and traditional healing systems.
- Support must be provided to holistic mental health-specialised care in camps when needed, avoiding single-service mental health centres. Clinical mental health care, when made available, should focus on emergency-induced mental health problems and also cover pre-existing mental health problems.
- Favor the engagement of mental health agencies, which could grant sustainable mid-term therapeutic pathways.

### HEALTH EDUCATION

All persons in the camp should have access to health information that allows them to protect and promote their own health status and that of their children. Women, men, adolescents and children should understand how their bodies work and how they can maintain good health in an unfamiliar environment. Dissemination of health information is usually done via health education programmes and should be initiated with the first activities in a camp. Although health education is primarily disseminated via community-based outreach programmes, every contact the health system has with an individual should be an opportunity for health information dissemination. The following should be remembered:

- Health education in the camp should be context specific and take into account the health-seeking behaviours of the population as well as their personal health beliefs.
- The messages and materials should be formulated in local languages with options for non-literate populations.
- Information provided should concentrate on the priority diseases within the camp, major health risks for these diseases, the availability and location of health services and promotion of behaviours that protect and promote good health.
- Education on feeding- and care practices of infants and children should be implemented as this is critical in preventing malnutrition and diseases.
- The lead health agency and the Camp Management Agency should coordinate health education messages to ensure that all health service providers in the camp are providing consistent and accurate messages.
- Health service providers should conduct regular assess-
ments of the effectiveness of the health messages to the
target audience and those who implement them.

- Health messages can be expanded during the post-
emergency phase to include messages coinciding with
comprehensive health services implemented in the camp.

**VOICE FROM THE FIELD - EFFECTIVE HEALTH AGENT IN HAITI**

In Haiti, oral-rehydration-post health workers, known as
‘brigadiers’, were selected from IDP camps and became
effective health agents to sustain community based
efforts in preparation for expected cholera outbreaks
during the rainy season in 2012. They were trained in
how to reactivate first line treatment, to sensitise camp
residents about prevention of cholera, to decontami-
nate and to conduct monitoring and surveillance in the
camps.

**HEALTH PRIORITIES AT CAMP CLOSURE**

The closure of a camp is complex and requires coordination
from all sectors. The lead health agency and Camp Manage-
ment Agencies coordinating activities during this planning
phase should remember:

- Epidemics of communicable diseases with high mortality
  should warrant the camp remaining open. Those affected
  should be treated in the area of transmission as camp
closure and movement out to a larger population may
  spread the disease further.
- Health facility utilisation rates and total population re-
  maining in the camp are indicators for planning to phase
down health services, like decreasing the number of in-
  patient beds and outreach activities.
- Health services must be available until every camp resi-
  dent has left. Usually those last to leave the camp, such
  as women delayed by childbirth, malnourished children
  and older people, have the greatest health needs.

The camp population should be aware of health services avail-
able to them on leaving the camp. The Camp Management
Agency and the lead health agency should coordinate with the
national health authorities in areas where the population will
return to gather and share information. Information gathered
should be disseminated to the population before leaving the
camp. This is more difficult in cases where camp residents
subsequently scatter to diverse areas and will require a more
detailed plan of action.

Ideally, health examinations should take place before depar-
ture, particularly for the very young, older people, pregnant
women and those with physical and mental disabilities. How-
ever, this may be difficult in camps where return is spontane-
ous. When health assessment prior to departure is possible,
information campaigns should have clear objectives as this
can be misinterpreted as a way to prevent persons from lea-
ving the camp or to gather confidential health data for report-
ing to areas of return.

Objectives for pre-departure health examinations include:

- Providing information, facilitating referral and correct
  management for groups with specific needs such as the
  malnourished, pregnant women and people with disabili-
ties while maintaining the confidentiality and securing,
  where possible, the written consent of the individual,
  parents or other legal guardian for minors with mental
  health conditions.
- Recognising the need to remain in treatment or continui-
  ty of care upon arrival at destination site. Travel assis-
tance may be needed. The consequences of deciding to
  return must be considered. Special vehicles, wheelchairs,
stretchers, feeding programmes and medical escorts may
  be needed to take them to their area of return.
- Identification of persons who should be referred to spe-
  cific health services in their area of return. A referral letter
  should be issued to each person identified in the language
  of their area of return. Persons receiving treatment must
  receive extra supplies of medications.
- Identification of children who need referral for immuni-
sations ensuring the confidentiality of medical records and
  destruction of any outdated or unwanted documentation.

**PRE-DEPARTURE HEALTH CHECKS**

Simple pre-departure health checks ensure
that the person is fit to travel by road, sea, or air. The
health checks minimise risks associated with the
movement for the individual and the receiving host
communities, and facilitate access to health care
services at the destination site.

**VOICE FROM THE FIELD - CONTINUITY OF HEALTH CARE AND REFERRAL
PROCESS ACROSS INTERNATIONAL BORDERS**

The sudden onset of crisis in Libya in 2011 resulted
in a massive outflow of people across the borders of
neighbouring countries. Hundreds of thousands of
vulnerable displaced and conflict-affected persons
including refugees were stranded in the Choucha
border camp in Tunisia. They were provided rapid-
fitness-to-travel health checks before departure and
some received treatment or were hospitalised until
their medical conditions had stabilised. Medical es-
corts accompanied them to their countries of destina-
tion and handed over to receiving health authorities
or family members.
CHECKLIST FOR A CAMP MANAGEMENT AGENCY

✓ The Camp Management Agency ensures that all health service providers within the camp have a Memorandum of Understanding (MoU) with the national health authorities outlining roles and responsibilities for health services implementation, exit strategies and the extent of assistance from already existing health facilities.

✓ Health services are coordinated between agencies and with national health authorities via information sharing and regular meetings.

Assessments

✓ A rapid health needs assessment is completed using age and gender disaggregated information within three days of the arrival of the first camp residents. Those conducting the assessment have appropriate training and relevant experience and have no political or affiliations compromising perceptions of their neutrality. The results of this assessment should be used to inform a health response.

✓ A context-specific, comprehensive assessment is repeated within one to three weeks after the initial health assessment to steer health care strategies. Assessments are periodically repeated thereafter as required.

✓ Mapping of health service providers in the camp is regularly updated, including what their activities are and where they are working. The health sector usually initiates the 3Ws – Who is doing What and Where.

Vaccinations

✓ A well-monitored mass measles vaccination campaign is organised together with agencies and national authorities for all children aged from six months to 14 years of age in the camp.

✓ It is determined whether other mass vaccination campaigns should be initiated, such as against yellow fever and/or bacterial meningitis.

✓ Routine immunisations (EPIs) are established as part of the overall health care strategy for the camp as soon as emergency health care strategies are in place.

Nutrition

✓ A nutrition survey of children aged 6-9 months is initiated to quantify the degree of acute malnutrition in the camp population.

✓ Additional nutrition surveys are implemented at regular intervals to monitor changes in the malnutrition rates.

✓ All persons in the camp are food secure and their energy and micronutrient requirements are met. If not, general or selective feeding programmes are initiated. The general food ration should provide all camp residents with adequate energy and micronutrients. The supplementary food ration is to provide vulnerable groups and those with specific needs with additional support.

✓ Health service providers train staff on strategies ensuring appropriate feeding practices of infants and young children, for example exclusive breastfeeding of infants from birth to six months of age.

Structure of Health Care Services

✓ Health structures within the camp are designed to provide health services for all levels of care.

✓ All health service providers use a common and agreed referral system to hospital to avoid creating parallel mechanisms.

✓ All health service providers implement health policies, use clinical definitions and diagnostic protocols and prescribe essential medicines in line with national health authority guidelines or, if not deemed appropriate, with international standards.

✓ Standards are ensured for recruitment, training and supervision of staff, both local and international, such as guidelines on salary and incentives, and all health service providers abide by them.

✓ Materials are in place for adequate practice of universal precautions and training of staff of all health agencies in them is supervised.

✓ The overall supply and logistic systems to health service providers in the camp is supported. If resources are inadequate there is advocacy for assistance via the CCCM/Health Cluster/Sector Lead Agency.

Health Information Systems (HIS)

✓ The establishment of effective health information management and coordination systems with all health service providers in the camp is ensured.

✓ The training of all health agencies in routine reporting forms, identification of epidemic-prone diseases, alert thresholds and protocols for outbreak reporting is supported.

Control of Communicable Diseases and Epidemics

✓ One health agency is appointed to coordinate disease outbreak response. The outbreak response is planned by identifying a referral laboratory for confirmation of specimens and maintaining and disseminating an epidemic contingency plan with all concerned sectors. The contingency plan should include pre-positioned stocks and mapping of all resources available for outbreaks.

✓ Standards and clinical protocols for priority communicable diseases (diarrhoeal diseases, acute respiratory infections, measles and malaria) are developed and disseminated, expanding to all context-specific diseases during the post-emergency phase.

✓ Evidence-based and harmonised treatments are advocated for.

✓ The training of all health agencies is ensured, using agreed guidelines for clinical definitions, diagnoses and treatment of communicable diseases.

✓ Services are expanded for those living with HIV/AIDS in the post-emergency phase to include support, care and possibly treatment as well as developing a comprehensive information campaign targeted towards prevention of HIV transmission and awareness of HIV services.

Reproductive Health

✓ An organisation or individual is identified as focal point for the reproductive health response in the camp.

✓ The minimum package of reproductive care is available to all health service providers, according to phase, and reproductive care services in the camp are supervised.

✓ Clean delivery kits are available and distributed.

✓ Professional midwife delivery supplies are available at health centres and a referral system to manage obstetric emergencies is established.
The consequences of sexual violence are prevented and managed, specifically ensuring that a medical response to survivors of sexual violence is available and the camp population know about it.

Mental Health and Psychosocial Support (MHPSS)
Activities at any level of intervention include Psychological First Aid (PFA), Do No Harm training for general humanitarian workers, family and community mobilisation, recreation activities, counselling services and facilitation of referrals of mental health conditions to trained specialists.

Health Education
Health agencies are assisted to assess the health situation and target population to identify the most important problems to address through health education communication strategies.
The most appropriate channels and tools for communicating are used with the target population.
Evaluation and supervision activities are planned to monitor and measure the effectiveness of the health education strategy.

Health Issues at Camp Closure
Basic health services within the camp remain operational until every camp resident has left.
Planned phase-down of health services, based on health facility utilisation rates coupled with total population remaining in the camp, is ensured.
Information is coordinated with health service providers in areas of return and exchanged when possible.
Information campaigns inform the camp population of services available in areas of return and how to access them on arrival.
Activities for health examinations, referrals for continuity of care and coordinated information campaigns are in place to give proper messages to the camp population regarding rationales for health-related interventions.

TOOLS
TOOLS AND REFERENCES
All tools and references listed below are available on the electronic Camp Management Toolkit either on the USB memory stick accompanying every hardcopy or from the website: www.cmtoolkit.org.

- Global Health Cluster and World Health Organization (WHO), 2009. Health Resources Analysis and Mapping System (HeRAMs)
- Inter-Agency Standing Committee (IASC), 2012. Multi-Cluster/Sector Initial Rapid Needs Assessment (MIRA) tool
- 3W Who does What Where.
  Http://www.humanitarianresponse.info
- United Nations Agency for Refugees (UNHCR). Expanded Programme of Immunization, Module 7

REFERENCES
- Médecins Sans Frontières (MSF), 2004. Cholera Guidelines
- MSF, 2006. Rapid health assessment of refugee or displaced populations
- UNICEF, 2013. Cholera Toolkit
- Women’s Commission for Refugee Women and Children, 2006. Minimum Initial Service Package (MISP) for Reproductive Health
- WHO, 2011. Inter Agency Emergency Health Kit