

MODULE 8

HEALTH ASSESSMENT AND THE LINK WITH NUTRITION

Part 1: Fact sheet

Part 2: Technical notes

Part 3: Trainer's guide

Part 4: Training resource list

Harmonised Training Package (HTP):
Resource Material for Training on
Nutrition in Emergencies. Version 2, 2011



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Module 8: Health assessment and the link with nutrition

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The Harmonised Training Package (HTP): Resource Material for Training on Nutrition in Emergencies

What is the HTP?

The Harmonised Training Package: Resource Material for Training on Nutrition in Emergencies (the HTP) is a comprehensive documentation of the latest technical aspects of Nutrition in Emergencies (NiE). The word **Harmonised** reflects the pulling together of the latest technical policy and guidance, the word **Training** refers to its main application and the word **Package** refers to the bringing together of the subject matter into one place. It is organised as a set of modules by subject, each containing technical information, training exercises and a resource list for use in training course development.

The HTP is an initiative of the IASC Global Nutrition Cluster (GNC) and has been endorsed by the GNC and its member's agencies. In 2007, the IASC GNC commissioned the UK based partnership, NutritionWorks, to develop a training resource to facilitate capacity development in the NiE sector. HTP Version 1 was launched in 2008. HTP Version 2 update in 2010/11 was funded under an USAID OFDA grant to the UK based charity, the Emergency Nutrition Network (ENN). The update was undertaken in an ENN/NutritionWorks collaboration, with NutritionWorks responsible for overall coordination and editorial management, and editorial oversight and module production supported by the ENN.

What the HTP is not

The HTP is not a ready-to-use training course. It cannot be used as an 'off the shelf' package; rather, it should be used as a resource package during a process of course development by experienced trainers.

Who is the HTP for?

The HTP is a primarily a **resource for trainers** in the NiE sector and it can be used by individuals to increase their technical knowledge of the sector. It is designed to provide trainers from any implementing agency or academic institution with information from which to design and implement a training course according to the specific needs of the target audience, the length of time available for training and according to the training objectives. It is written in clear English and will be available in other languages in the future.

How is the HTP organised?

The HTP is organized into four sections containing a total of 21 modules which can be used as stand-alone modules or as combined modules depending on the training needs.

Section 1: Introduction and concepts

1. Introduction to nutrition in emergencies
2. The humanitarian system: Roles, responsibilities and coordination
3. Understanding malnutrition
4. Micronutrient malnutrition
5. Causes of malnutrition

Section 2: Nutrition needs assessment and analysis

6. Measuring malnutrition: Individual assessment
7. Measuring malnutrition: Population assessment
8. Health assessment and the link with nutrition
9. Food security assessment and the link with nutrition
10. Nutrition information and surveillance systems

Section 3: Interventions to prevent and treat malnutrition

11. General food distribution
12. Management of moderate acute malnutrition
13. Management of severe acute malnutrition
14. Micronutrient interventions
15. Health interventions
16. Livelihoods interventions
17. Infant and young child feeding
18. HIV/AIDS and nutrition
19. Working with communities in emergencies

Section 4: Monitoring, evaluation and accountability

20. Monitoring and evaluation
21. Standards and accountability in humanitarian response

Each module contains 4 parts which have a specific purpose as follows:

Part 1: The Fact Sheet – provides an overview of the module’s topic and is designed for non-technical people to obtain a quick overview of the subject area.

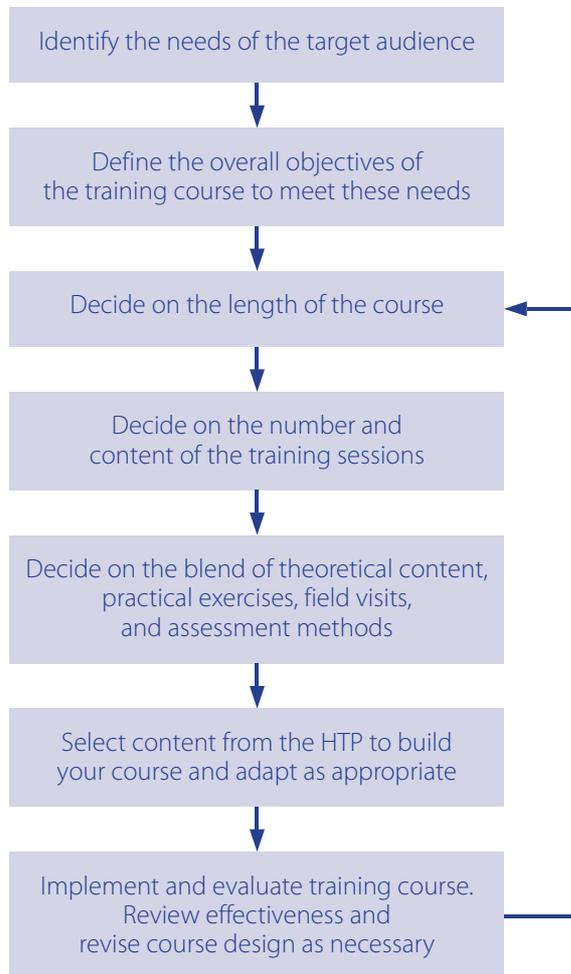
Part 2: The Technical Notes – for trainers and trainees, provides detailed technical guidance on current policies and practice.

Part 3: The Trainers’ Guide – aims to help trainers develop a training course and provides tips and tools which can be adapted to the specific training context.

Part 4: Resources – lists of relevant available resources (including training materials) for the specific technical area.

How to use the HTP

The HTP should be used during a process of course development. The process of course development involves a number of steps and these are summarised in the diagram below.



PART 1: FACT SHEET

The fact sheet is the first of four parts contained in this module. It provides an overview of health assessments in emergencies and the link with nutrition. Part 2 provides detailed technical information on health assessments in emergencies and links with nutrition. Part 3 provide guidance on how to design a training course and give examples of exercise that the trainer may use/adapt in training on health assessment and links with nutrition. Part 4 of the module provides a list of key resources related to health assessment in emergencies, including guidelines and manuals, a list of training courses, training materials and useful websites. Words in italics are defined in the glossary.

Introduction

Assessments are a vital component of planning and implementing an emergency response and a variety of health assessments will be undertaken during [the various phases of an emergency](#) to assess: the health status and the risks for the affected population; the availability and capacity for provision of services; and the health system performance. Given the close links between health and nutrition status and programming, it is essential that staff conducting emergency assessments approach the work from a holistic perspective: nutrition staff should ensure that key health issues are appropriately included/considered in nutrition assessments; while health staff must ensure key nutrition issues are appropriately included/considered in health assessments. Other sectors which influence health and nutrition status will also need to be considered (E.g. *food security*, shelter availability, water supply and sanitation).

The link between *undernutrition* and health

Undernutrition has multiple causes. It is not simply due to lack of food but is closely linked to the presence of diseases resulting from an unhealthy environment, inadequate health services and a poor social and care environment.

Infectious diseases often suppress *immunity* and can cause undernutrition, while undernutrition itself leaves an individual more open to infections. Common childhood diseases such as *measles*, *acute respiratory infections* and *diarrhoea* often occur in emergencies. Therefore strategies should be put rapidly in place for the prevention, identification and treatment of these diseases. Inadequate reproductive health (RH) services will have a negative impact on the nutritional status of both mothers and children and so it is important to ensure appropriate provision of basic RH services is adequately supported in an emergency scenario.

Why are health assessments important in an emergency?

In emergency situations the health environment often deteriorates rapidly. An emergency-affected population may be living in overcrowded situations with inadequate shelter and may not have access to adequate food supplies, clean water or sanitation facilities, or access to basic preventative and curative health services. In addition, the population may have been subjected to psychological trauma as a direct result of the emergency, while in a conflict situation there will be an increased incidence of physical trauma/injury. The health of an emergency-affected population is impacted by all of these issues and so health assessments and interventions must consider and appropriately address them.

Different types of health assessments

Over the years a wide variety of tools and methodologies have been developed for health assessments in emergencies, incorporating many different types of assessments, focussing on various aspects and objectives, to be conducted over the course of an emergency. The Health Cluster Guide developed by the Global Health Cluster (GHC) outlines four different phases of an emergency and the various types of information collection and assessment to be undertaken during each phase.

While it is important to appreciate the various phases of an emergency and that different data is required at these different phases, it is also important to recognise that in practice the phases are not so clear cut; and the essential issue to understand is that **health information collection/assessment is a process** and that each assessment activity should be built on previous assessment activity, to give a deeper understanding of the situation and needs, but not replicate previous assessment(s).

The GHC has also defined three core areas of health information needs for planning, implementing and monitoring an emergency health response – the health status and the risks for the affected population; the availability and capacity for provision of services; and the health system performance (at community and facility levels) – and suggests some tools and methodologies for collecting/analysing the information in relation to each of the three core areas.

The United Nations Inter-Agency Standing Committee (IASC) cluster approach aims to improve coordination and response to humanitarian emergencies. Three clusters, namely health, nutrition and WASH (water, sanitation and hygiene), have collaboratively developed a tool for Initial Rapid Assessments (IRA), which will assist with multi-agency (involves several agencies) and multi-sector (involves several technical sectors) assessments approach, ensuring that in the initial stages of an emergency the inter-linked health and nutrition needs of emergency-affected people are met through integrated analysis and response.

An Early Warning and Response System should be rapidly established for Disease Surveillance Systems to detect selected *epidemic*-prone conditions and implement immediate outbreak control measures. As an emergency progresses, more in-depth and specialised subsector assessments and surveys will be conducted, and a Health Information System (HIS) should be established to inform decisions on response and monitor impact of interventions.

Key messages

1. A variety of health assessments will be undertaken during the various phases of an emergency to assess the health status and the risks for the affected population; the availability and capacity for provision of services; and the health system performance.
2. Assessment is a process not a single activity event. Initial and Rapid Assessments provide the basis for subsequent in-depth assessments that deepen understanding from (but do not repeat) earlier assessments.
3. Coordinated multi-sector assessment and analysis of an emergency affected population is essential to identify the health and nutrition status of the population and risks for the population and to prioritise programming interventions.
4. Important assessments to make in an emergency include:
 - *Crude Mortality Rate* and *Under-Five Mortality Rate*, as these are indicators of the overall health status of a population
 - Morbidity trends in the emergency-affected population, including the main changes in morbidity from the pre-disaster situation, to provide an understanding of the main health risks.
 - Provision of child health care services and reproductive health care (RH). Children's access to basic services for prevention and treatment of infections will have a positive impact on nutritional status, while adequate RH services will have a positive impact on both maternal and child health and nutrition status. Furthermore, many of the nutrition interventions will be implemented with/through these services.
5. An Early Warning and Response System (EWARS) is rapidly required (may be built around pre-disaster EWARS) to detect selected epidemic-prone conditions and implement immediate outbreak control measures as needed.
6. It is important that assessors appropriately consider specific groups vulnerable to health and nutrition problems in an emergency, including those with chronic diseases such as HIV&AIDS, unaccompanied elderly and unaccompanied children.
7. Gender based violence and mental health and psychosocial issues will also impact the nutritional status of infants and young children and should be assessed.
8. Assessors should also consider other gender issues in relation to health when conducting assessments. As soon as possible data should be disaggregated by age and sex. A detailed breakdown may not be possible at the early stage of an emergency, nevertheless it is essential to differentiate the **needs** of adults/children and men/women immediately.
9. Up to date information is required on a continuous basis during a crisis to inform decisions on response and monitor the effects of health interventions. The HIS should be built on the existing system and adapted to the context of the crisis as necessary.
10. In the initial phase of an emergency, HIV prevention is addressed through implementation of the Minimum Initial Service Package (MISP) for Reproductive Health. However, after the initial response there is need for reestablishment of core HIV-related services, so an assessment of the needs of the emergency-affected population for HIV treatment, care and support and an assessment of the capacity of existing health services to provide priority services, should be conducted.
11. Health assessments are conducted using a variety of qualitative and quantitative methods. The selection and mix of methods used depends on the type of information required

PART 2: TECHNICAL NOTES

The technical notes are the second of four parts contained in this module. They provide an overview of health assessments and the link with nutrition. The technical notes are intended for people involved in nutrition programme planning and implementation. They provide technical details, highlight challenging areas and provide clear guidance on accepted current practices. Words in italics are defined in the glossary.

Summary

There are strong links between health and nutrition status. *Undernutrition* and infectious diseases are closely linked and reproductive health status impacts the nutritional status of both mothers and children. Nutrition programming in emergencies (prevention, promotion and treatment) is conducted through the health system by a variety of health and nutrition staff.

Given the close links between health and nutrition status and programming, it is essential that staff conducting assessments approach the work from a holistic perspective: nutrition staff should ensure that key health issues are appropriately included/considered in nutrition assessments, while health staff must ensure key nutrition issues are appropriately included/considered in health assessments. Other sectors which influence health and nutrition status will also need to be considered (E.g. *food security*, shelter availability, water supply and sanitation).

These technical notes are based on the following references and the Sphere standard in the box below:

- The Sphere Project (2011). *Humanitarian Charter and Minimum Standards in Humanitarian Response*, Chapters 1,2 and 5, (The Core Standards; Minimum Standards in Water Supply, Sanitation and Hygiene Promotion; and Minimum Standards in Health Action)
- United Nations Inter-agency Standing Committee (UN-IASC) Health, Nutrition and WASH Clusters (2009). *Initial Rapid Assessment (IRA) Tool*. IASC.
- Connolly, M. A. (ed.) (2005). *Communicable disease control in emergencies, a field manual*. Geneva: WHO.
- The Johns Hopkins University & International Federation of Red Cross and Red Crescent Societies (2008). *Public Health Guide for Emergencies*, 2nd edition. Baltimore: The Johns Hopkins University and IFRC.
- IASC Global Health Cluster (2009). *Health Cluster Guide*
- Interagency Working Group (2010). *Interagency Field Manual for Reproductive Health in Humanitarian settings*
- IASC (2006). *Gender Handbook in Emergency Action*
- IASC (2010). *Guidelines for addressing HIV/AIDS in humanitarian settings*
- IASC (2007). *Guidelines on Mental Health and Psychosocial Support in Emergency Settings*

Introduction

In emergency situations the health environment often deteriorates rapidly. An emergency-affected population may be living in overcrowded situations with inadequate shelter and may not have access to adequate food supplies, clean water or sanitation facilities or access to basic preventative and curative health services. In addition, the population may have been subjected to psychological trauma as a direct result of the emergency, while in a conflict situation there will be an increased incidence of physical trauma/injury. The health of an emergency-affected population is impacted by all of these issues and so health assessments and interventions must consider and appropriately address them.

Key messages

1. A variety of health assessments will be undertaken during the various phases of an emergency to assess the health status and the risk for the affected population; the availability and capacity for provision of services; and the health system performance.
2. Assessment is a process not a single activity event. Initial and Rapid Assessments provide the basis for subsequent in depth assessments that deepen understanding from (but do not repeat) earlier assessments.
3. Coordinated multi sector assessment and analysis of an emergency-affected population is essential to identify the health and nutrition status of the population and potential risks and to prioritise programming interventions.
4. Important assessments to make in an emergency include:
 - *Crude Mortality Rate (CMR)* and *Under-Five Mortality Rate (U5MR)* as these are indicators of the overall health status of a population.
 - Morbidity trends in the emergency-affected population, including the main changes in morbidity from the pre-disaster situation, to provide an understanding of the main health risks.
 - Provision of child health care services and reproductive health care (RH). Children's access to basic services for prevention and treatment of infections will have a positive impact on nutritional status while adequate RH services will have a positive impact on both maternal and child health and nutritional status. Furthermore, many of the nutrition interventions will be implemented with/through these services.
5. An *Early Warning And Response System (EWARS)* is rapidly required (may be built around pre-disaster EWARS) to detect selected *epidemic-prone* conditions and implement immediate outbreak control measures as needed.
6. It is important that assessors appropriately consider specific groups vulnerable to health and nutrition problems in an emergency, including those with chronic diseases such as HIV&AIDS, unaccompanied elderly and unaccompanied children.
7. Gender based violence, mental health and psychosocial issues will also impact the nutritional status of infants and young children and should be assessed.
8. Assessors should also consider other gender issues in relation to health when conducting assessments. As soon as possible data should be disaggregated by age and sex. Detailed breakdown may not be possible at the early stage of an emergency, nevertheless it is essential to differentiate the **needs** of adults/children and men/women immediately.
9. Up to date information is required on a continuous basis during the crises to inform decisions on response and monitor the effects of health interventions. The Health Information System (HIS) should be built on the existing system and adapted to the context of the crisis as necessary.
10. In the initial phase of an emergency HIV prevention is addressed through implementation of the Minimal Initial Service Package (MISP) for Reproductive Health. However, after the initial response there is need for reestablishment of core HIV-related services, so an assessment of the needs of the emergency-affected population for HIV treatment, care and support and an assessment of the capacity of existing health services to provide priority services should be conducted.
11. Health assessments are conducted using a variety of qualitative and quantitative methods. The selection and mix of methods used depends on the type of information required.

Sphere Core Minimum Standard 3 – Assessment

The priority needs of all people affected by disaster are identified through a systematic assessment of the context, risks to life with dignity and the capacity of the affected people and relevant authorities to respond.

There are strong links between health and nutrition. The framework of the causes of maternal and child undernutrition and its consequences (See figure 1) is a useful starting point in understanding these links and the need to analyse and address the issues using a multi-sectoral approach, to prevent excess mortality and morbidity and undernutrition in an emergency context.

Nutrition programming in emergencies includes prevention (E.g. micronutrient *supplementation*), promotion (E.g. optimal *Infant and Young Child Feeding (IYCF)* practices) and treatment (E.g. therapeutic care and supplementary feeding) and each of these components is conducted through the health system, at both facility and community level, by a variety of health and nutrition cadres. Nutrition programming can flounder if managers simply add emergency nutrition activities to the regular work load of health staff without considering the existing skills, experience and workload of staff members and developing strategies to support establishment of nutrition interventions.

A variety of health and nutrition assessments will be undertaken during the various phases of an emergency to assess: the health and nutritional status of the population; the potential health and nutritional risks; the availability of and capacity for provision of services; and the health system performance.

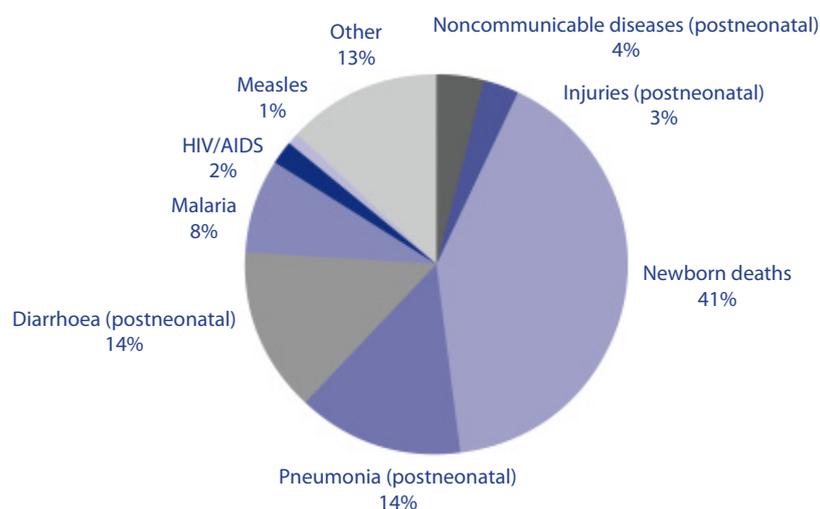
Findings from these various assessments will be used to plan appropriate interventions and monitor their effectiveness.

Given the close links between health and undernutrition and health and nutrition programming it is essential that staff conducting assessments approach the work from a holistic perspective: nutrition staff should ensure that key health issues are appropriately included/considered in nutrition assessments, while health staff must ensure key nutrition issues are appropriately included/considered in health assessments. Other sectors which influence health and nutrition status will also need to be considered (E.g. food security, shelter availability, water supply and sanitation).

The link between undernutrition and health

The World Health Organisation (WHO) estimates that undernutrition contributes to more than one third of all child deaths 0-59 months¹. Leading causes of death in under-five children are pneumonia, diarrhoea and health problems during the first month of life. A child's risk of dying is highest in the neonatal period, the first 28 days of life. About 40% of child deaths under the age of five take place during the neonatal period and safe childbirth and effective neonatal care are essential to prevent these deaths.

Figure 1: Major cause of death in new-borns and children WHO 2008



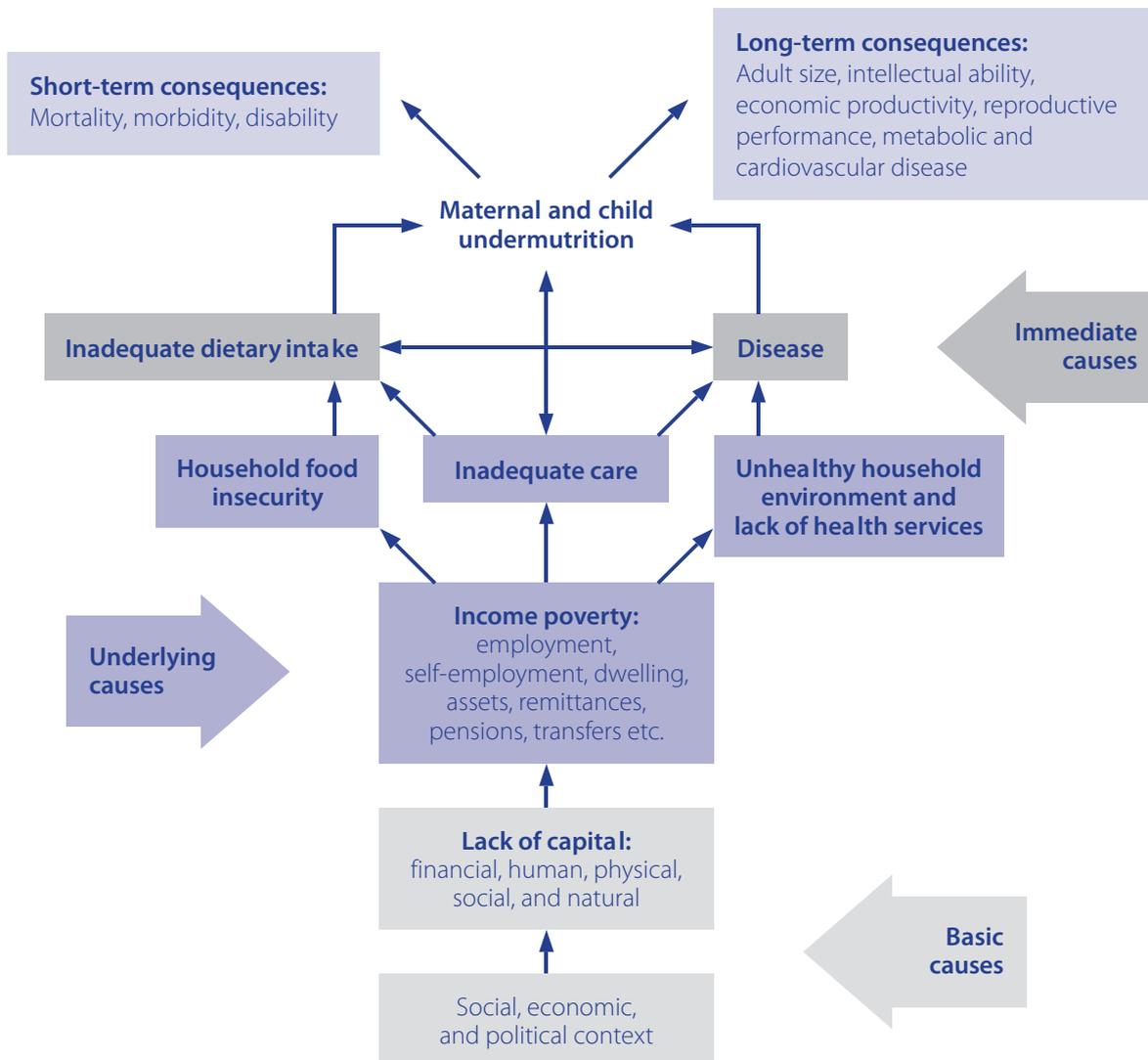
Source: World Health Statistics 2010, WHO

Preterm birth, birth asphyxia (lack of breathing at birth), and infections cause most neonatal deaths. From the end of the neonatal period and through the first five years of life, the main causes of death are pneumonia, diarrhoea, *malaria*. Undernutrition is the underlying contributing factor in over one third of all child deaths 0-59 months, making children more vulnerable to severe disease.

The conceptual framework of the causes of maternal and child undernutrition and its consequences was developed to facilitate greater understanding about the multiple and interrelated causes of undernutrition. It is shown in figure 2 and discussed in detail in Module 15.

¹ WHO World Health Statistics 2010

Figure 2: Framework of the causes of maternal and child undernutrition and its short term consequences



Source: Lancet series on Maternal and Child Undernutrition 2008 – adapted from United Nations Children’s Fund (1997), *Conceptual framework for analysing the causes of malnutrition*, UNICEF, New York.

The framework clearly illustrates the multiple causes of undernutrition at various levels.

The immediate causes of undernutrition are inadequate dietary intake (in terms of quantity and quality) and disease. There is a reciprocal relationship between these two immediate causes and the interplay between the two tends to create a vicious cycle: where a child is undernourished, immunity to infection is compromised, thus the child may fall ill and then undernutrition worsens, leading to further reduction in resistance to illness. Children who enter this undernutrition – infection cycle can quickly fall into a potentially fatal spiral, as the severity and duration of illnesses increases and one condition feeds off the other.

The underlying causes of undernutrition are household food insecurity, inadequate maternal and child care practices; unhealthy household and environment (including water and sanitation) and lack of health services.

The basic causes of undernutrition include the lack of resources and deficiencies in the management of available resources (including financial, human and physical) and these factors are ultimately determined by the larger political, economic and social context.

Emergencies directly impact the basic and underlying causes of undernutrition.

This framework is a useful starting point in understanding the links between health and nutrition and the need for multi-sector assessment and the multi-sector interventions to prevent mortality and morbidity and undernutrition in an emergency context:

- Prevention of undernutrition is as important as treatment of undernutrition – food security interventions will have an impact on the health and nutritional status of a population in both the short and long term.
- Provision of adequate living facilities will go a long way towards preventing outbreaks of measles and *acute respiratory infection* in children, which will subsequently have a positive impact on the nutritional status of the children
- Provision of adequate water and sanitation facilities will significantly contribute to prevention of outbreaks of diarrhoea, which will subsequently have a positive impact on the nutritional status of the children
- Adequate provision of basic health services to treat the major common childhood diseases will also have a positive impact on nutritional status of the children

Case example 1: Inadequate health care in Democratic Republic of Congo: 2006

The volatile security situation in the Democratic Republic of Congo in 2006 caused displacement and food insecurity. In one district, levels of acute malnutrition at the end of 2006 were estimated at 11.3 per cent, with severe acute malnutrition levels at 3.2 per cent. Mortality rates for children under age five were high at 2.07/10,000/day.

Inadequate health care due to a disruption of supplies and services and steep increases in the cost of medicine was seen to be a major cause of the high levels of acute malnutrition. Only 0.9 per cent of children surveyed had proof of having had a measles vaccination, although 50 per cent claimed to have been vaccinated.

Source: World Food Programme, 2006.

Case example 2: Inadequate health care and poor health care practice in Darfur 2004

Following mass population displacement in West Darfur an International NGO established a Community-Based programme for Management of Acute Malnutrition. Significant contributory factors to the high levels of acute malnutrition in children were clearly recognised as being lack of provision of basic child health care services, poor infant and young child feeding and care practices and inadequate quality and quantity of water supply.

Source: Forsythe V personal communication

Major causes of excess morbidity and mortality in emergencies

The major causes of excess morbidity and mortality in emergencies are: *Acute respiratory infections, diarrhoeal diseases, malaria* (Where prevalent), *measles* and *undernutrition*. Other communicable diseases such as meningococcal disease, tuberculosis and typhoid, have also caused large-scale epi-demics among emergency-affected populations. Both trauma and Reproductive Health issues significantly contribute to excess morbidity and mortality in emergencies, while gender based violence (GBV) and its consequences, including HIV, are a concern. Mental health and psychosocial issues also contribute to excess morbidity.

A more extensive list of common diseases in emergencies has been attached (Annex 1).

Because undernutrition and disease are closely linked, there is likely to be an increase in the incidence of infectious diseases, especially among young children and other vulnerable groups, as the general nutritional situation worsens. This illness can subsequently contribute to further deterioration in nutritional status of the population.

Although the above table highlights the major causes of excess morbidity and mortality it should be recognised that **the patterns of morbidity and mortality vary significantly from context to context**. Increased rates of morbidity and mortality due to communicable diseases occur more frequently in association with complex emergencies than with acute onset natural disasters.

Table 1: Major causes of excess morbidity and mortality in emergencies - contributing factors and preventative measures

Disease	Major contributing factors	Preventative measures
Acute respiratory infections	<ul style="list-style-type: none"> Inadequate shelter – crowded with poor ventilation Lack of blankets and clothing Indoor cooking – in living area Undernutrition (Preventative measures listed in last row) 	<ul style="list-style-type: none"> Minimum living space <i>standards</i> and proper shelter Adequate clothing, sufficient blankets
Diarrhoeal diseases	<ul style="list-style-type: none"> Overcrowding Contaminated water and food Poor personal hygiene Poor washing facilities Poor sanitation Lack of soap Undernutrition 	<ul style="list-style-type: none"> Adequate living space Public health education Distribution of soap Good personal and food hygiene Safe water supply and sanitation
Malaria	<ul style="list-style-type: none"> New environment – area with higher endemic levels/strain to which the refugees are not immune Interruption of vector control measures Increased population density Stagnant water Flooding Inadequate health care services Undernutrition 	<ul style="list-style-type: none"> Destruction of mosquito breeding places, larvae and adult mosquitoes by spraying Provision of mosquito nets Drug prophylaxis (E.g., pregnant women and young children according to national protocols)
Measles	<ul style="list-style-type: none"> Overcrowding Measles vaccination coverage below 90% Undernutrition 	<ul style="list-style-type: none"> Minimum living space standards Immunization of children with distribution of Vitamin A –immunization from 6 months up to 15 years (rather than the more usual 5 years) is recommended because of the increased risks from living conditions.
Undernutrition	<ul style="list-style-type: none"> All the above+ Maternal malnutrition Inadequate IYCF Inadequate care practices Food insecurity Inadequate household food distribution Illness/infections 	<ul style="list-style-type: none"> All the above+ Promote optimal maternal care (Including education, health care, micronutrient supplementation and food security) Promote optimal IYCF and care practices Ensure food security (Quality and quantity) Provision of accessible basic health services

Source: Adapted from WHO (2005) *Communicable diseases Control in emergencies, a field manual*

However, while in many complex emergencies communicable diseases and undernutrition are the major causes of morbidity and mortality, in other complex emergencies violent trauma/physical injury is a major cause of morbidity and mortality. Earthquakes can also cause high numbers of physical injuries and consequently deaths.

Reproductive Health

The health and nutritional status of pregnant women will significantly impact the health, wellbeing and nutritional status of infants; and inadequate provision of reproductive health care contributes significantly to excess morbidity in emergencies.

Inadequate diet (Quality and quantity) in pregnancy, lack of micronutrient supplementation, and/or multiple pregnancies (Due to lack of utilisation of, or availability of, appropriate family planning services) will contribute to poor intra-uterine growth, *low birth weight* of a baby and subsequent suboptimal growth and development of a child. Teenage pregnancy will also affect the health of the infant – a baby is much more likely to be born with low birth weight if the mother is in her teens.

Malaria in pregnancy increases the risk of miscarriage and will also contribute to low birth weight of a baby; while inadequate provision of quality antenatal, safe delivery, post natal and new-

born care results in very high rates of maternal, newborn and neonatal deaths (neonatal period 0-28 days).

Gender Based Violence includes sexual violence such as rape, sexual abuse, sexual exploitation and forced prostitution; domestic violence; forced and early marriage; harmful traditional practices (such as female genital mutilation and honour crimes); and trafficking². While sexual violence has been recognised as part of war the nature and extent of GBV varies from context to context and although GBV in emergencies is under-reported, it has been widely documented in many humanitarian settings.

“Approximately 50 000 to 64 000 internally displaced women in Sierra Leone reported experiencing sexual violence at the hands of armed combatants. And half of internally displaced women who had face to face contact with combatants reported experiencing sexual violence.

The majority of Tutsi women in Rwanda’s 1994 genocide were exposed to some form of gender based violence: of those, it is estimated that between 250,000 and 500,000 survived rape.”

Source: Inter-Agency Field Manual on Reproductive Health in Humanitarian Settings 2010

The physical consequences of GBV include unintended pregnancies; unsafe and complicated abortions; adverse pregnancy outcomes, including miscarriage; low birth weight and foetal death; Sexually Transmitted Infections (STIs) including HIV and Urinary Tract Infections (UTIs). The psychological consequences of GBV include anxiety disorders, such as post-traumatic stress disorder, depression, feelings of inferiority, inability to trust, fear, increased substance abuse, sleep disturbance, eating disorders, sexual dysfunction and suicide. GBV also has a major impact on the social health of individuals and the community, in terms of stigma, isolation and rejection (including by husbands and families); loss of women’s potential income, interrupted education of adolescents; and homicide (e.g. honour killings). These consequences (physical, psychological and social health) all impact negatively on the nutritional status of infants and young children.

HIV

A significant proportion of people affected by emergencies are people living with HIV.³ Humanitarian crises, which are often linked to displacement, food insecurity and poverty, increase *vulnerability* to HIV and negatively affect the lives of people living with HIV.

The factors that determine HIV transmission during a humanitarian crisis are complex and depend on the context. Existing gender inequalities may be further exacerbated, making women and children disproportionately more vulnerable to HIV, e.g. sex work and sexual exploitation may increase as a

consequence of loss of livelihood and lack of employment opportunities. Population displacement may lead to separation of family members and breakdown of community cohesion and of the social and sexual norms that regulate behaviour. Women and children may be used by armed groups and may be particularly vulnerable to HIV infection as a result of sexual violence and exploitation, while rape may be used as a weapon of war.

Pre emergency HIV services may be disrupted during humanitarian crises – people may no longer have access to information about HIV prevention, to Voluntary Counselling and Testing (VCT), to condoms or to services for Prevention of Mother to Child Transmission (PMTCT). People living with HIV may suffer due to disruption of services for treatment of opportunistic infections and for *antiretroviral therapy* (ART). Their health is put at risk as nutritional needs are not met and palliative and home based care may be disrupted.

Breakdown in reproductive health services leading to lack of availability of family planning services, antenatal and safe delivery services, and treatment of STIs may also accelerate the spread of HIV in emergencies.

The impact of an emergency on mothers and other carers living with HIV (as above) may impact their ability to provide optimal nutrition and care for the children in their care and subsequently affect the nutritional status of those children.

² Inter-Agency Working Group on Reproductive Health in Crisis (2010) *Field Manual on Reproductive Health in Humanitarian Settings*

³ IASC Guidelines for addressing HIV in Humanitarian Settings 2010

Mental Health

Mental health and psychological problems occur in all humanitarian situations. The horrors, losses and uncertainties the emergency-affected population is exposed to in both conflict-related and natural disasters erode normal protective supports, increase risk of diverse problems and amplify pre-existing problems of social justice and inequality. Natural disasters generally have a disproportionate impact on poor people: e.g. in many flood situations it is the poor who were living in relatively dangerous places who are most seriously affected.

Many people show resilience and have the ability to cope relatively well with the horrors, losses and uncertainties that an emergency brings. It is the numerous interacting social, psychological and biological factors which influence whether people develop problems or exhibit resilience and cope.

IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings (2007) describe mental health and psychosocial problems in emergencies as predominately social or psychological in nature but add that that they are generally interconnected.

Post traumatic mental and psychological stress on a mother may impact her ability to provide optimal nutrition and care for her children and subsequently affects the nutritional status of the children.

Availability and capacity for provision of health services in emergencies

(See module 15 for full discussion on health interventions in emergencies and links to nutrition)

Health care is a critical determinant for survival in a disaster. In many developing countries, the *healthcare system* is unable to deliver affordable, high quality care to all those who need it. Access to good health services is often limited and the capacity to deliver is poor due to a lack of resources and management problems. Frequently, the worst services are found in the poorest, most remote parts of the country. In emergencies, health systems that are already overstretched can be easily overwhelmed and require substantial support or temporary replacement services to meet the needs of the impact of an emergency.

In some emergency situations health facilities may have been destroyed by conflict and/or looting, whereas in other situations, while the physical health facilities may be in existence, there are inadequate numbers of trained health staff in post; staff may be reluctant to come to remote areas and/or may have left the area due to conflict; or existing staff simply cannot cope with the increased workload due to the impact of the emergency.

The role of the health sector/operational health agencies in emergencies is to provide essential health services that effectively reduce health risks.

Essential health services are priority health interventions (Curative, preventative and promotional) that are effective in addressing the major causes of excess morbidity and mortality.

Prioritisation of health services in an emergency requires a clear understanding of the affected community's prior health status, needs, health risks, available resources and capacities. In the initial stages of an emergency – when mortality rates are elevated or there is a risk that they could soon rise, priority interventions must focus on survival needs, including basic medical care. Once survival needs have been adequately met a more comprehensive range of health services should be developed/re-established.

The way health interventions are planned, organised and delivered in response to an emergency can either enhance or undermine the existing health system and its future recovery and development, so implementation of essential services should be carried out in a way that supports and strengthens the health system and does not undermine it.

Sphere outlines the **health systems** requirement in emergencies in line with the WHO health system model with six building blocks/functions:

- Health service delivery,
- Human resources,
- Drugs and Medical supplies,
- Health financing systems,
- Health information management system (HIS),
- Coordination

Priority health interventions will vary according to the context, type of disaster and its impact but should be based on evidence-based practices for public health benefit. The health services should be established at the various levels of the health system – household/community, peripheral health facilities, central health facilities and referral hospital – and should be designed to support existing health systems, structures and providers.

It is essential to ensure that health services address the health need of vulnerable groups and that vulnerable people have equal access to health services.

Agencies have an obligation to train and support health workers. Health professionals and other health workers from the affected population should be integrated into the health service system as/where appropriate. A variety of community level health cadres play an essential role in health and nutrition service provision (both preventative and curative) in developing countries and their role is equally essential in emergency response situations. While community health workers/volunteers and traditional birth attendants provide an invaluable service to the community, they require support and supervision, and this becomes even more critical in an emergency response when they can be central to assisting with basic health provision and preventative activities at community level.

Drug donations should only be accepted if they are on the essential drug list and meet international standards (Quality).

Basic health care should be provided free of charge to disaster-affected populations.

The HIS should be built upon the existing HIS whenever possible, however when the existing system is inadequate a new or parallel system may be developed.

Representatives of the Ministry of Health (MOH) should lead the health sector response whenever possible as Chair or Co-Chair of the Health Cluster (Foot note on health cluster to be inserted).⁴ Where MOH lacks the capacity to plan and lead the response, the Cluster Lead Agency (Usually WHO) should take the lead and support the active engagement of the MOH.

Sphere outlines the **essential health services** in emergencies under the six most important areas:

- Communicable diseases (including outbreaks),
- Child health,
- Sexual and Reproductive health,
- Injuries,
- Mental health and
- Non-communicable diseases.

General principles and guidance on Assessments in humanitarian crises (All sectors)

It is essential that personnel conducting health assessments in emergencies are familiar with Sphere general guidelines on assessments and that health assessments are conducted in close coordination with other humanitarian partners.

The Sphere Project provides general information about assessments in humanitarian crises in *The Core Standards* chapter. The Technical Chapters provide specific technical information related to the technical area. Each Chapter (Core and technical sector) outlines standards, key actions, key indicators and guidance notes⁵.

Sphere Core Minimum Standard 3 – Assessment

The priority needs of all people affected by disaster are identified through a systematic assessment of the context, risks to life with dignity and the capacity of the affected people and relevant authorities to respond.

Sphere Guidance Notes

Sphere guidance notes on assessment outline the following issues:

- The importance of collaborative pooling of available pre-disaster information for initial and rapid assessments. Information on context (E.g. political, social, economic, security, conflict) and population (E.g. culture, education, health, spirituality).
- Assessment is a process not a single event – Initial and Rapid assessments provide the basis for subsequent in-depth assessments that deepen (but do not repeat) earlier assessments. Repeated assessment of sensitive protection concerns such as gender based violence can be more harmful than beneficial to communities and individuals (See Sphere protection section).

⁴ The Cluster Approach was introduced in 2006/2007 as part of the Humanitarian Reform process. The Global Health Cluster (GHC), led by WHO, is mandated to build global capacity in humanitarian response. The country level health cluster should serve as a mechanism for organisations to work together to harmonise efforts and use available resources efficiently for the benefit of the affected population under the guidance of the Health Cluster Coordinator, usually from WHO.

⁵ Sphere Project (2011) Sphere Handbook; *Humanitarian Charter and Minimum Standards in Humanitarian Response*.

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- While detailed disaggregation of data is rarely possible initially, never the less it is of critical importance to identify the different needs and rights of children and adults of all ages. At the earliest opportunity, further disaggregate by sex and age: 0-5 male/female, 6-12 male/female, 13-17 male/female; and then in 10 year brackets and by sex.
- Sources of primary information include direct observation, focus group discussion, surveys, discussion with as wide a range of people and groups as possible (E.g. local authorities, male and female community leaders, older men and women, health staff, teachers, traders and other humanitarian agencies). Special efforts are needed to include the old, the housebound and other people/groups less easily assessed but often at risk, such as those with disabilities, children and youth, who may be targeted as child soldiers or subjected to gender based violence.
- Speaking openly may be difficult or dangerous for some people. Children are unlikely to talk in front of adults and in most cases women and girls should be consulted separately to men. Aid workers engaged in collection of information from people who have been abused or violated should have the necessary skills and systems to do so safely and appropriately. In conflict areas information could be misused and place people at further risk and/or compromise an agency's ability to operate. Only with an individual's consent may information about an individual be shared with other agencies.
- While some people may be vulnerable because of individual factors such as age (Old and young), in others vulnerability is more due to social and contextual factors – so it is important to assess factors which contribute to vulnerability such as discrimination and marginalisation (I.e. low status and power of women and girls), social isolation, poverty, ethnicity, religious or political affiliations.
- Assessment information on population movement and numbers should be cross-checked, validated and referenced by as many sources as possible. If multi-sector assessments are not initially possible, pay extra attention to linkages with other individual sectors, protection and cross-cutting assessments.
- There are many assessment checklists available based on agreed humanitarian standards. Use of checklists enhance the coherence and accessibility of data to other agencies, ensure that all key areas have been examined and reduce organisational or individual bias. In some responses a common inter-agency assessment format will have been developed prior to a disaster, or agreed

during the response. In all cases, assessment should clarify the objectives and methodology to be used and generate impartial information about the impact of the crisis on those affected.

- A mix of quantitative and qualitative methods appropriate to the context should be used. Assessment teams should, as far as possible, be composed of a mix of women and men, generalists and specialists, including those with skills in the collection of gender-sensitive data and communicating with children. Teams should include people familiar with the language(s) and area who are able to communicate with people in culturally acceptable ways.
- Communities have capacities for coping and recovery – some are sustainable and positive, whilst others may be considered “distressed coping mechanisms” with potentially long term harmful consequences. Assessments should identify the positive strategies that increase resilience as well as the causes of damaging strategies.
- An assessment of the safety and security of disaster-affected and host populations should be carried out in all initial and subsequent assessments, identifying threats of violence and any forms of coercion or denial of subsistence or basic human rights.
- Assessment reports provide invaluable information to other humanitarian agencies and should be shared to increase the transparency of response decisions. Regardless of variations in individual agency design, assessment reports should be clear and concise and enable users to identify priorities for action and allow comparative analysis if required.

Types and approaches to coordinated assessments

In an effort to improve the coordinated assessment process, the IASC approved the establishment of a Needs Assessment Task Force (NATF) in 2009, which has been working on operational guidelines for Coordinated Assessments in Humanitarian Crises. The following section has been taken from the NATF draft guidelines.⁶

Coordinated assessments are those which are planned and carried out in consultation with other humanitarian partners, with the results shared with the wider humanitarian community to judge (and then plan to meet) the needs of the entire disaster affected population. Such assessments may be carried out jointly or by a single agency, but are coordinated with other humanitarian actors to avoid gaps and overlaps and to maximise the usefulness of the assessment results.

⁶ Operational Guidance for Coordinated Assessment NATF draft guidelines 2010 – to be updated and finalised.

Table 2: NATF framework for coordinated assessments

Phase/timeframe	Assessment type	Methodology
Phase 0 Before crises	Joint contingency planning based on cluster contingency plan	Joint contingency planning process (Using secondary data)
Phase 1 First days	Initial assessments resulting in preliminary scenario definition within 3 days	Use of pre crises information, initial reports from the field, media reports, flyovers and satellite imagery, Quick visits and rapid assessments, as feasible, using Key Informant Interview (KII), Observation and Focus Group Discussion (FGD)
Phase 2 First 2 weeks	Multi-cluster rapid assessment: maximum 12 days including report Single agency coordinated rapid assessments	Secondary Data and primary data through purposive sampling using a single data collection form adapted to context
Phase 3 Second 2 weeks	In depth multi-cluster/sector and single cluster/sector assessments Single agency coordinated in depth assessments	Qualitative and quantitative data collection through purposive and representative sampling methods, using harmonized cluster/sector specific tools
Phase 4 Second months+	In-depth multi-cluster/sector and single cluster/sector assessments Single agency coordinated in-depth assessments	Community and/or household surveys, FGD, monitoring systems, individual level data including personally identifiable data triangulation

Many of the challenges of assessment, particularly in relation to large-scale quick onset emergencies, are linked to gaps in coordination. **Recurring problems highlighted repeatedly in Evaluations and After Action Reviews include:**

- Duplication and gaps in assessment – too much data collected from the same people and places in easily accessible areas, whereas remote areas are not visited
- Assessment data is not sufficiently shared and even when it is shared the lack of compatible methodologies and formats make the results difficult to compare and analyse
- The capacity to collate and analyse data and communicate the results is limited so the analysis is incomplete and arrives too late to be useful
- Potentially useful resources (baseline data ect) that were available prior to the disaster are insufficiently used
- Rapid multi sector assessments try to gather too much information about a variety of sectoral and cross cutting issues, causing delays in the data processing and analysis and in the dissemination of the results
- Disincentives to engage in coordinated assessment processes, both because of demands on the time of busy staff and competition between agencies for funding, given the direct link between assessment information and fundraising

- Lack of clarity about who will do what and where during assessment following a disaster event

Joint planning, information sharing and good multi-cluster co-ordination and cooperation are essential in conducting any type of coordinated assessment since all sectors/clusters link and influence each other.

NATF categorises the main types of coordinated assessments in humanitarian crises:

Joint assessments are those in which more than one agency conduct the assessment together, using one agreed methodology. The primary data strategy, collection and analysis are aligned into a single process between all stakeholders involved. This could involve multiple clusters, or a number of agencies within a single cluster. Furthermore, NATF makes a distinction between the initial assessment (First 72 hours), a rapid assessment (First 2 weeks) and the subsequent in-depth assessments.

Single agency assessments can and should also be conducted in a coordinated fashion. Single agencies can conduct their own assessments coordinated with other stakeholders either through harmonisation or by use of a coordinated design, common operational data set and joint planning.

The NATF framework for coordinated assessments outlines the various types of assessment that should be carried out during each of the four phases of an emergency.

Table 3: Different types of health information to be collected during each of the four phases of an emergency (Adapted from GHC and NATF draft guidelines)

Phases	Days	Type of Assessment	Methodologies
One	0-3	Initial Rapid Health Assessment	Secondary data review of pre-crisis info and initial reports, quick visits, KII, FGD (With community and health facility representatives) and Observation.
Two	4-15	Follow up Rapid Health Assessment	Secondary data review, KII, FGD, Observation, Review of Health Facility (HF) information (Staffing profile, number of consultations, morbidity trends and existence/capacity of Early Warning and Response System (EWARS)/Disease Surveillance System (DSS)
Three	15-45	In-Depth Health Assessment, Sub Sector Assessments, surveys and on-going surveillance Depending on context and findings from the initial assessments (Day 0-15) additional assessments and surveys may be conducted (See column four)	HF assessment (Facilities, staffing, services, Quality of Care (QOC) and access) Various surveys/studies using both purposive and representative sampling (Nutrition, Mortality and Morbidity rates, Reproductive Health (RH), Mental Health (MH)). EWARS and DSS to be established from/ strengthen existing pre-crisis systems
Four	45+	As above days (15-45) plus additional special studies/surveys/analysis Depending on context and findings from assessments conducted (Day 0-45) additional assessments, surveys and studies may be conducted (See column four)	As in phase 3 – HF assessment (Facilities, staffing, services, QOC and access) Various surveys/studies using both purposive and representative sampling (Nutrition, Mortality and Morbidity rates, RH, MH), EWARS and DSS Additionally – Special studies/surveys, e.g. Sexual Violence, Safe motherhood, IYCF practices, Knowledge, Attitude and Practices (KAP)/behaviour surveys, Micronutrient surveys; Routine monitoring systems

The table 2 is useful to illustrate the various purposes of assessments in the different phases of an emergency, however it is recognized that in practice the timeframe will vary according to context and that there is not usually a clear separation between the different phases.

Health Assessments in an Emergency

Over the years a wide variety of tools and methodologies have been developed for health assessments in emergencies, incorporating many different types of assessments, focussing on various aspects and objectives, to be conducted over the course of an emergency.

The Cluster Approach was introduced in 2006/2007 as part of the Humanitarian Reform process. The Global Health Cluster (GHC) led by WHO is mandated to build global capacity in humanitarian response by i) providing guidance, tools, standards and policies; ii) establishing systems for rapid deployment of experts; iii) building partnerships to implement and promote the work.

The country level health cluster should serve as a mechanism for organisations to work together to harmonise efforts and use available resources efficiently for the benefit of the affected population, under the guidance of the Health Cluster Coordinator, usually from WHO.

The Health Cluster Guide developed by the GHC⁷ outlines four different phases of an emergency and the various types of information collection and assessment to be undertaken during each phase.

It is important to appreciate the various phases of an emergency and that different data is required at these different phases. However it is also important to recognise that in practice the phases are not so clear cut. The essential issue to understand is that **health information collection/assessment is a process** and that each assessment activity should

build on previous assessment activity to provide a deeper understanding of the situation and needs, not replicate previous activity.

The Global Health Cluster has also defined three core areas of health information needs for planning, implementing and monitoring an emergency health response; and suggests some tools and methodologies for collecting/analysing the information in relation to each of the three core areas.

Table 4: GHC – Core areas of health information needs

A) Health Status and Risks	B) Health Resources and Services Availability	C) Health System Performance
Current health status of affected population groups (Major mortality, morbidity and their causes) and risks to health status of population (E.g. potential outbreaks/interruption of services/critical disease control programmes)	Initial focus on facilities, personnel, supplies and services of national health authorities, other national and non-state actors and international partners Later, when initial acute phase is over and especially when promoting recovery, the above and also other health management system components (Management systems, financing etc.)	The coverage and quality (Effectiveness) of the services currently available The access (Physical and temporal) that men, women, boys and girls have to those services and their utilization of them
Initial Rapid Assessment (IRA) Early Warning and Response System (EWARS)	Health Resources Availability and Mapping System (HeRAMS)	Health Information System (HIS) Various surveys and studies
In-depth health & sub-sector assessments of health status and risk, resource and service availability and health system performance including access (would include Nutrition, Mortality, various RH & MH studies, Health Facility and Outreach Capacity, Communicable disease of interest e.g. Malaria, (Including treatment and laboratory capacity), IYCF practice and other infant/community KAP/behaviour surveys, community perceptions of service provision etc.).		

A) Health status – and health risk

The primary goals of humanitarian response in humanitarian crises are to prevent and reduce excess mortality and morbidity and the health status of a population is a key indicator of the severity of the overall situation following an emergency. The IASC NATF has identified Crude Mortality Rate (CMR), Under-five Mortality Rate (U5MR), *Global Acute Malnutrition Rate* (GAM) and Severe Acute Malnutrition (SAM) as Top Level Outcome Indicators for assessing and monitoring an emergency situation.

The major causes of excess mortality and morbidity in emergencies are: *Acute respiratory infections, diarrhoeal diseases, malaria* (Where prevalent) and measles and undernutrition. The interplay between these common illnesses and undernutrition makes it essential that health and nutrition planners and managers consider both.

Other communicable diseases such as cholera, meningococcal disease, tuberculosis, typhoid, have caused large scale epidemics among emergency affected populations and trauma, including gender based violence, is another cause of illness and death in emergencies.

There are multiple links between reproductive health and nutrition. Good reproductive health status and provision of reproductive health services in emergencies will have a positive impact on the health and survival of mothers and the nutritional status of infants.

While the links between mental health and nutrition are not obvious, nevertheless they exist. Mental health illness is likely to impact a mother's ability to provide optimal feeding and caring practices for an infant. Thus it is important for nutrition planners and managers to ensure that RH and MH issues are considered during assessment.

⁷ Health Cluster Guide IASC GHC 2009

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People living with HIV may suffer due to disruption of services for treatment of opportunistic infections and for ART. Their health may also be put at risk as nutritional needs are not met and palliative and home based care may be disrupted, so it is important to ensure that their health and nutrition needs are considered during assessment.

Assessing and monitoring mortality and morbidity

Assessing and monitoring mortality and morbidity rates and the main causes of mortality and morbidity in a population is essential to monitor trends in overall health status of population, to plan and implement appropriate interventions (Promotional, preventive and curative services) and subsequently, to monitor the impact of these interventions.

Calculation of deaths CMR and U5MR

This statement in an assessment report is not very helpful: *“We have an emergency here, there have been 44 deaths.”* It could be 44 deaths over the last 3 months, or 44 deaths yesterday. It could be 44 deaths out of a population of 100,000 or it could be out of a population of 100.

Always express deaths as CMR and/or U5MR.

A CMR is the rate of death in the entire population (all causes, both sexes and all ages). A CMR that is double the pre disaster baseline indicates a significant public health emergency. When the baseline is unknown or of doubtful validity, agencies should aim to maintain the CMR at least below 1.0/10,000/day – one death/per 10,000 pop/per day (Sphere Minimum Standards in Health Action chapter).

This is calculated by starting with the total number of deaths in a specific time period, dividing by the total population, multiplying by 10,000 and dividing by the number of days in the time period.

$$\frac{\text{Total number of deaths during time period}}{\text{Total population}} \times \frac{10,000 \text{ people}}{\text{Number of days in time period}}$$

More sensitive than the CMR is the U5MR – the rate of death among children below five years of age (both sexes) in the population. An U5MR double the pre disaster baseline also indicates a significant public health emergency. Again, when the baseline is unknown or of doubtful validity, agencies should aim to maintain the U5MR at least below 2.0/10,000/day (Sphere Minimum Standards in Health Action chapter).

This is calculated by totalling the number of deaths in children below five years of age, dividing by the total number of children below five years of age, multiplying by 10,000 and dividing by the number of days in the time period.

$$\frac{\text{Total number of deaths in children <5 years during time period}}{\text{Total number of children <5 years}} \times \frac{10,000 \text{ people}}{\text{Number of days in time period}}$$

Where the baseline CMR and U5MR are unknown Sphere Baseline Reference Mortality Data by Region may be used (See Annex 2).

Involvement of the local population in mortality calculations is essential as they will be aware of deaths in a community – religious leaders will handle funerals and community leaders may keep a registration of deaths.

Mortality

The (CMR) and Under-5 Mortality (U5MR) are the most useful indicators to assess and monitor the severity of an emergency situation and the general health status of the population. In an emergency scenario CMR and U5MR are expressed per day.

It is preferable to express the data as a rate, rather than a simple number since this aids comparisons between areas and over time. However, in the early stages of disasters (particularly rapid onset disasters), when population and other data is not available/unreliable it may be necessary to estimate the population figure.

Mortality data from MOH and other health facilities should be monitored, however it is important to appreciate that most deaths are happening in the community rather than at a health facility.

Counting graves is another way of measuring mortality, for example, in a new camp for displaced persons or refugees. This may be done as part of an initial assessment and also part of assessing the situation long-term, such as in Case example 3 below.

Case example 3: Mortality estimates from grave counting Somalia: 2006

Six months after the massive arrival of displaced persons at Hoddur, Somalia, 5900 graves were counted for a population of 28,000. This meant that in six months, 19 per cent of the initial population (28,000) had died, which corresponded to a CMR of 11.5. (5,900 divided by 28,000, multiplied by 10,000 divided by 183 days). The high CMR signalled the seriousness of the emergency.

Source: Médecins Sans Frontières (2006) *Rapid health assessment of refugee or displaced populations*, MSF, Paris.

Case example 4: Retrospective mortality data: Sudan 2004

WHO and the Sudan Ministry of Health carried out a retrospective mortality study in Darfur in 2004 and reported the CMR to be 1.5 deaths per 10,000 people per day in North Darfur and 2.9 per 10,000 people in West Darfur. Such high rates were a cause for concern. The mortality rate for children <5 years of age was reported to be: 2.5/10,000/day in North Darfur and 3.1 in West Darfur.

Source: World Health Organization (2004), *Retrospective Mortality Survey Among the Internally Displaced Population, Greater Darfur, Sudan*, WHO, Geneva.

Retrospective mortality surveys are sometimes conducted in the absence of available mortality data, using a cluster sampling methodology. However these surveys require significant time and human resources (which may not be the best use of resources in earlier stages of an emergency) and if the recall period is long, the validity of the results will be reduced.

Standardized Monitoring and Assessment of Relief and Transitions (SMART) is an inter-agency initiative, which aims to assist agencies to carry out, analyse, interpret, and report on survey findings in a standardized manner while maintaining the reliability of nutrition/health data. Furthermore, it provides a mean for decision-makers to better prioritize programme activities and interventions in the most vulnerable groups.

This initiative was launched in 2002 by a network of organizations and humanitarian practitioners including donors, policy-makers, leading experts in emergency epidemiology and nutrition, food security, early warning systems, and demography.

In brief, the SMART methodology is an improved survey method **based on the two most vital, basic public health indicators for the assessment of severity in humanitarian crisis – namely the nutritional status of children under-five and the mortality rate of the population**. These indicators are useful for prioritizing resources as well as for monitoring the extent to which the relief system is meeting the needs of the population, and thus the overall impact of the relief response.

In order to standardize and simplify the collection of high quality data, a survey manual was collaboratively developed to be used as a tool in conjunction with accompanying analy-

tical software called Emergency Nutrition Assessment (ENA). The manual was designed for use by field staff with limited epidemiological and statistical knowledge. Training materials are also available on the website⁸.

To reiterate, the main goal of SMART is to make the survey process as easy as possible for the field staff and as reliable as possible for the decision-makers. It is recognized as being a critical step in improving worldwide emergency assessment.

Interpreting mortality data

Where the CMR and/or U5MR are raised it is important to determine the main causes of excess mortality so it is necessary to also calculate cause-specific mortality rates. It is also essential to disaggregate CMR&U5MR by sex and age. Are there disproportionate deaths (generally and cause specific) among women, girls, boys, and/or men? And is so what are the reasons?

While assessing CMR and U5MR and monitoring trends in the CMR and U5MR is essential, it is important to recognise that in many situations these are “late indicators” as conditions need to be bad for CMR and U5MR to increase to double the pre-crisis baseline. While some sudden onset disasters, such as earthquakes, are likely to have high mortality rates immediately, in other situations it may take a while for the impact of the consequences of the disaster (Such as displacement, overcrowding in camps, inadequate food, shelter, health services, water and sanitation facilities) to affect mortality rates.

While mortality is a late indicator, it is nevertheless important to include it in an initial assessment and to interpret the findings in relation to other data, such as measles vaccination rate, *food availability*, and the water and sanitation situation.

⁸ www.smartindicators.org

Practical challenges in assessing mortality rates

There are a number of practical challenges when assessing the mortality rates in emergencies. Firstly, it is necessary to know the total population to calculate the denominator. However, emergencies often result in displacement and we do not have an exact population figure, in which case it will be necessary to estimate a population figure. Secondly, deaths may be under-reported – refugees and displaced people may not want to report a death in the family as they want to continue receiving the food ration – or they may be exaggerated in efforts to attempt to receive more assistance. It is therefore very important to triangulate mortality data, using a variety of sources.

Sphere provides two templates for mortality surveillance

(Sphere Minimum Standards in Health Action Chapter, Appendix 2). See Annex 4.

Form 1: **Summary of numbers of death** by cause, age and sex classification. Sphere emphasises that deaths should not be reported solely from health facilities, but should include reports from site managers, religious leaders, community workers, women's groups and referral hospitals.

Form 2: **Data recorded for each individual death**. This form should be used when there is time to record data on individual deaths. This allows for greater analysis by location/facility utilisation etc. As with Form 1 deaths should not be reported solely from health facilities, but should include reports from site managers, religious leaders, community workers, women's groups and referral hospitals.

Morbidity

It is essential to determine the number of cases/incidence rates of the main causes of morbidity in the population and the main changes in morbidity from the pre disaster situation. Where possible (and as soon as possible) data on incidence rates of major diseases should be disaggregated by age and sex.

Information on morbidity of the population may be obtained from discussion with community leaders and health workers as well as from audit of health facility consultation records.

When in existence, information on morbidity may be obtained from a functional DSS/EWARS. In a crisis situation a very responsive system is required to rapidly detect selected epidemic-prone conditions and implement immediate outbreak control measures when needed. An EWARS is needed with weekly routine reporting and immediate reports of specified critical conditions by regular health facilities and all health and medical relief teams. In the early stages of a humanitarian crisis EWARS should be built around existing pre-disaster DSS. Specific expertise should be mobilised, usually through WHO, to establish and support implementation of the EWARS as soon as possible after the onset of an emergency. Numbers of children presenting with SAM may be included as one of the selected

conditions to monitor, however it is essential that a clear case definition of SAM is agreed and understood by the responsible clinicians, otherwise the information is not standardised and will lead to confusion and inaccuracy in reporting. SAM is defined by low *weight-for-height* (WFH) and/or low *Mid-Upper Arm Circumference* (MUAC)⁹ and/or the presence of bilateral pitting oedema. Cut off points for anthropometric measurements for the diagnosis of SAM are WFH <-3 z-score or MUAC <11.5cm.

The GHC EWARS software tool and a Health Information and Nutrition Tracking System software tool developed by WHO and used to capture and analyse the data generated by EWARS, may be obtained from the GHC website Tools Section.

Sphere provides a sample template for routine morbidity reporting and a sample template for EWARS (See Sphere Minimum Standards in Health Action Appendix 2). See Annex 4.

Assessing Health Risks

In addition to the health status it will be important to identify/ assess and monitor health risks to the population including:

- a) Pre-existing health problems in the disaster-affected population prior to the disaster – in country of origin for refugees and area of origin for Internally Displaced Persons (IDPs).
- b) Current existing risks to health of the disaster-affected population including:
 - Risk of potential outbreaks due to the consequences of the disaster – e.g. inadequate water supply and sanitation facilities and inadequate quality/quantity of food ration, poor planning of camp design/shelter,
 - Gaps in health service delivery
 - Gaps in communicable diseases control programmes (See next section)
 - Risk of sexual violence
 - Poor infant and young child feeding and care practices
 - Micronutrient deficiencies

⁹ Refer to HTP Module 6: Measuring Malnutrition, for measurements (weight, height/length and MUAC) and WFH index

Case example 5: Lugufu refugee camp, Tanzania – Challenges of assessing mortality rates

Following an influx of newly arrived refugees to an established camp in Tanzania in 1999 the CMR and U5MR increased significantly in the camp. However as these rates did not exceed Sphere benchmarks (CMR <1 death per 10,000 per day and U5MR <2 deaths per 10,000 per day) the situation was not defined as an acute emergency.

As this had been an on-going emergency pre influx CMR and U5MRs rates were known. When a retrospective study was conducted six months into the influx it compared data during the influx against the pre influx period (i.e. pre disaster baseline). This showed that the CMR and U5MR had more than doubled during the influx (2.4 and 2.7 respectively) and so the situation should have been considered an acute emergency and had warranted investigation and intervention much earlier.

The fundamental concept for the designation of an emergency phase of a complex emergency is not the magnitude of the mortality but an increase in the non-emergency baseline rate that is serious enough to require immediate action. This case example illustrates this and shows that the application of standards must be viewed within the context of each specific situation.

Source: Tally L. Speigel P. Girgis M. (2001), *An Investigation of increasing mortality among Congolese refugees in Lugufu refugee camp Tanzania, May-June 1999*: Journal of Refugee studies, Vol. 14, No 4.

Diarrhoea is one of the major causes of excess morbidity in emergencies and severe diarrhoea in a child will quickly affect nutritional status. Therefore to prevent undernutrition it is essential to assess the living conditions, water supply, sanitation facilities, and hygiene practices of a disaster affected population and to plan for provision of appropriate facilities/services and health promotion activities in line with best international practice (As per Sphere guidelines).

Measles is a serious communicable disease in any situation however it is of particular importance in emergencies and has significant links with undernutrition. Children with measles lose their appetite and many also suffer from diarrhoea, therefore vulnerability to undernutrition will increase. At the same time undernourished children who are not vaccinated are more vulnerable to measles. In situations where the health system was weak pre-disaster it is likely that childhood immunisation coverage is low, thus there is a serious risk of measles outbreak, which will subsequently impact on negatively on the nutritional status of children. It is therefore critical to assess the measles vaccination coverage rate of the disaster-affected population and also the capacity of the health system (Next section) to implement an appropriate measles vaccination campaign and/or routine services as appropriate.

Initial Rapid Assessment (IRA) tool¹⁰

An IRA tool has been developed collaboratively by the Health, Nutrition and Water, Sanitation and Hygiene (WASH) clusters. The tool includes an Aid Memoire, an Assessment Form, a Guide and a Data Entry and Analysis Tool. The final version IRA developed in 2009 has an eleven page assessment form with six sections:

- Population description Size, type (i.e. displaced or refugee), movement, vulnerable groups etc.)
- Shelter and essential non-food items,
- Water supply,
- Sanitation and hygiene,
- Food security and nutrition,

- Health risks and health status
- Health facility outreach assessment

The IRA Aid Memoire recommends that the IRA be initiated as soon as possible after the onset of a new sudden onset crisis (Within 72 hours/maximum 1 week), and that the whole process, including analysis and preparation of the report, is completed within 1-3 weeks. However, it is recognised that in most situations it is unlikely to be feasible to complete the whole assessment form (IRA 2009 version) comprehensively during an initial rapid assessment and certainly not if trying to complete the initial assessment within 72 hours as per NATF guidelines (Draft). Nevertheless, the IRA is a very useful template and assessors should aim to consider the **key issues from each of the six sections in the initial assessment** and gather all of the information on the IRA assessment form during initial and follow up rapid assessment(s).

¹⁰ See www.who.globalhealthcluster.org/tools section

Case example 6: Lack of comprehensive public health assessment in Darfur 2004

Following mass population displacement in Darfur an International Non-Governmental Organisation (INGO) sent a team to assess the situation in one of the states in May 2004. The team spent a month in the state, discussing the situation and potential responses with UN agencies and other INGOs. The INGO then initiated a Non Food Item (NFI) distribution in part of the north of the state in June/July 2004.

By July, high levels of malnutrition and mortality were being reported and projected by agencies around the main town¹¹. To address the situation the INGOs worked with the MOH and UN agencies to divide up the state geographically and target a spectrum of services including NFIs, health, nutrition and general food distribution.

The INGO established a Community-Based programme for Management of Acute Malnutrition (CMAM) in a number of IDP camps around the town. The INGO then conducted a rapid general assessment in part of the north of the state and on the basis of this assessment expanded CMAM service to this area. A specific nutrition assessment was not conducted at this stage and although basic health services were not available in this area the INGO did not establish basic health services.

During a project review 9 months after the initial intervention, staff members highlighted the fact that lack of provision of basic child health care services, poor infant and young child feeding and care practices, and inadequate quality and quantity of water supply were major contributory factors to the high levels of acute malnutrition in children.

While provision of adequate quantity and quality water was being addressed, poor IYCF and care practice and lack of provision of basic child health care services were not being addressed/supported in the north of the state where the INGO was implementing CMAM services.

The project review showed very good results in terms of beneficiary default and cure rates; however the appropriateness of the intervention, particularly in the north of the state, was questioned.

While there were certainly cases of acute malnutrition presenting for treatment, the overall GAM and SAM levels were not as high as predicted and a vertical nutrition programme in the absence of a wider health intervention made it impossible to address the underlying health problems.

“We are running a nutrition project when there are wider health problems which need to be addressed to reduce morbidity generally and to prevent acute malnutrition” (Staff member).

Recognising this as a major problem the INGO began to provide limited basic health care services informally alongside nutrition services. A comprehensive public health assessment of the area was commissioned and based on this the INGO established a wider Primary Health Care (PHC) programme to address reproductive, maternal and child health and nutrition holistically. This experience helped to change organizational policy on the need to view nutrition in emergencies within the context of the wider public health context.

Source: Forsythe V personal communication.

In addition to problems with coordination (See page 16), other common errors during initial rapid assessments include:

- The assessment team lacks the expertise needed.
- The estimated size of the target population – the critical denominator – is unreliable.
- The survey *sample* does not accurately represent the affected population.
- The assessment report does not consider the affected population's perceived needs.
- Causes of death are incorrectly attributed to the disaster even for slow-onset disasters, such as drought and famine.
- Assessment reports are not written up.¹²

After the floods in Pakistan in 2010 a Multi Cluster Rapid Assessment was conducted. MUAC was included in the health section of this assessment, however as the staff conducting the assessment had not been adequately trained to accurately measure MUAC, the results were inaccurate and unusable. (Personal Comment Edith Cheung UNICEF).

¹¹ MSF/EpiCentre had conducted a survey in several camps in and around the main town and reported a GAM of 25%. Additionally WHO released mortality figures that indicated emergency level following a survey carried out in May/June 04.

¹² John Hopkins and Red Cross/ Red Crescent (2008), Public Health Guide for emergencies.

Implementation of IRA in Haiti

Following the earthquake in Haiti in January 2010 a Multi-Agency Initial Rapid Assessment was conducted using the IRA (2009 version) as the template.

Reports of the process of implementation of the IRA in Haiti have revealed a number of challenges including:

- Many of the staff used to carry out the assessment did not have the necessary experience or appropriate technical background(s) to conduct the task.
- The IRA tool (2009 version) was not appropriately adapted, was too long, and the activity was conducted more as a survey rather than as a rapid assessment.
- Although the assessment provided a massive amount of information, it was difficult to interpret and use operationally.
- Difficulties with data entry and analysis resulted in the late release of findings with some of the information being out of date and not relevant by the time the report was released.

Some of the reported advantages of use of the IRA in Haiti include:

- It provided solid evidence of the vulnerability of the elderly as a group and the report was used as tool to successfully advocate for resources to address their priority needs.
- It helped bring about a process of strong collaboration between the various sectors and partners

Sources: Challenges – Report of Global Health Cluster Meeting Geneva June 2010, www.who.int/hac/global_health_cluster/events/en/index.html;
Advantages - Ververs, M. personal communication.

Lack of appropriate experience of staff conducting an IRA following the earthquake in Haiti has also been identified as a problem (Report of Global Health Cluster Meeting Geneva 2010, www.who.int/hac/global_health_cluster/events/en/index.html).

Use of the IRA facilitating much greater interagency collaboration and coordination was also reported by NGOs following the post-election violence in Kenya in 2008.¹³

Guidelines and principles for conducting an initial rapid health assessment

Planning and coordination – It is essential that an IRA is planned and conducted in coordinated fashion. The geographical area for assessment and the assessment format to be used should be agreed with the key partner agencies/health cluster lead agency (See next section for tools).

The need for planning and coordination of assessments

In a conflict area of Sri Lanka, which had become accessible, a sign was found outside a house, which read: *We have eight people living here, five children, we have three blankets, two buckets and we want no more questions!*

Source: Lloyd, A., personal communication

Gender and skills mix of team – Assessment teams should if possible be composed of a mix of male /female assessors, ideally with a mix of skills, generalists/specialists, including members with ability to collect gender-sensitive information and to communicate with children. Teams should include people familiar with the area, the people and the language. Where the team does not speak the language of the population then it is essential to have translators; again a mix of male/female translators is required.

Activity prior to site visit – There are several important activities to be conducted prior to travelling to an area to conduct an assessment.

- Collect and rapidly review available secondary data on the area to be visited (including pre-crisis situation and current in-crisis situation).
- Ensure team has thorough briefing on how the assessment will be undertaken and how reports should be written up
- At district level interview local government and line ministry staff, international and national agencies already in the area to find out more about i) the conditions before the crisis – including how services were organised ii) the extent to which services have been affected and the most affected areas, iii) main impact of the crisis, and iv) relief activities underway or planned

¹³ Merlin report (2010) *Workshop to improve effective NGO participation in humanitarian coordination mechanisms*, Nairobi.

Working with translators is challenging. Prior to the assessment it will be necessary to thoroughly brief translators on objectives of the assessment, on the methodology to be used and on key health and nutrition terminologies.

Selecting sites to visit – In most cases it will be necessary to choose a small number of sites to visit in the available time. Selection of sites to visit should be made that will enable the team **to understand the situation in the affected area as a whole**. From secondary data and KII determine if the impact is similar across the whole area and for all population groups. If so, randomly select a number of areas to visit; if not it will be necessary to map out the areas where impacts are believed to be different and to select a number of sites representing the worst affected areas and also some sites representing areas that are less affected.

Use of qualitative and quantitative methods

A mixture of qualitative and quantitative methods should be used during initial assessment.

Qualitative data should be obtained through a variety of methods:

Key Informant Interviews should be held with local authority representatives (Male and female), government staff, various relevant health facility staff, operational agencies, traders, male and female community representatives (Religious leaders, teachers etc.), community organisations etc.

Focus group discussions: select groups in relation to specific issues to be discussed, e.g. mother and carers to discuss child feeding and care practices/health seeking behaviour; patients waiting for consultation at health facilities regarding service availability/access.

Observation of area: transact walks through the area not following roads, or paths, to observe the overall situation/condition. Key points for observation are water collection points, food and non-food distribution points/queues, latrines and washing facilities, health facilities, grave sites.

If possible, also visit a few households (Selection may be random or purposive) to see the situation at household level.

Health facility visits: Observe facilities – physical state of facility, number of staff present, availability of equipment and drugs, queues waiting for treatment.

Quantitative data may be obtained from records held by local authorities/camp managers /community leaders, health facilities.

Disaggregation of data

While detailed breakdown by sex/age may not be possible in the very initial stages of emergency, it is essential to differentiate the needs of adults/children and men and women immediately.

Involvement of the community

It is important to ensure adequate involvement of broad community representatives in the assessment process, ensuring that women are actively involved, as well as including other marginalised and maybe less visible groups, particularly ethnic groups, the disabled or elderly.

Assess the capacity of the community

Communities have different capacities for coping with emergencies. It is important to ensure an assessment identifies existing and potential community support mechanisms and strategies to strengthen these mechanisms.

Analysis of data

At the end of each day of assessment the team should meet to discuss and compare findings:

- Triangulation of information from various sources will minimise bias and error, e.g. do findings from FGD with community leaders validate information provided by health facility staff?
- Analysis of cause and effect should also be conducted; morbidity and mortality data interpreted in light of other findings, e.g. impact of living conditions on Acute Respiratory Infections (ARIs), impact of water supply and sanitation facilities on diarrhoea rates.

Assessment Reports

Clear and concise assessment reports should be prepared by the assessment team on conclusion of the IRA. The report should outline the geographical area covered; objectives and methodology; overall general situation in the area; and key findings and recommendations. All IRA assessment reports (be they single agency or multi agency) should be shared with health cluster partners:

- To increase transparency
- To help build the overall bigger picture of the humanitarian situation in the affected area (Beyond the assessment area)
- To enable humanitarian partners to identify priorities for action

Various health assessments and studies conducted **as an emergency situation progresses** will provide more in depth information on the health status and morbidity of the population.

Assessing vulnerable persons/groups in humanitarian crises (summarised from Sphere guidelines¹⁴)

Being young, or old, a woman or a person with a disability or HIV, does not in itself make a person vulnerable or increase their risk. Rather it is the interplay of social and cultural factors on these issues which contribute to increased vulnerability and risk: an unaccompanied young child is much more vulnerable and at risk than a child in the care of responsible parents; similarly an elderly person in poor health who lives alone and has no income is much more vulnerable, or at risk, than someone of similar age and health status living within an extended family with an income.

A vulnerability/capacity analysis helps ensure that a disaster response supports those who have a right to assistance in a non-discriminatory manner and those who need it most. This requires understanding of the context and how a crisis impacts particular groups in different ways due to pre-existing vulnerabilities (E.g. being very poor or discriminated against); their exposure to various threats (Gender based violence); and disease incidence/prevalence.

Disasters will often make pre-existing inequalities worse and support for people's *coping strategies* and recovery capacities is essential. Access to social, legal, financial and psychosocial support and the various physical, cultural, economic and social barriers faced in accessing these services must be analysed and appropriately addressed.

Actions to ensure the rights and capacities of all vulnerable people are considered include:

- Optimise people's participation, ensure that all representative groups are included, especially those which are less visible (Persons with communication or mobility difficulties, stigmatised youth and other under-represented groups)
- Disaggregate data by sex and age during assessment as an important element in ensuring that the health sector adequately considers the diversity of the population
- Ensure that the right to information on *entitlements* is communicated in a way that is inclusive and accessible to all members of the community.

Gender issues in relation to health in emergencies (Summarised from IASC gender handbook¹⁵)

In a crisis situation, the health of women girls, boys and men is affected differently. Social, cultural and biological factors increase the risks faced by women and girls. Available data suggests a pattern of gender differentiation in terms of exposure to and perceptions of risk, preparedness, response and physical and psychological impact.

Women and girls are often at increased risk of violence and may be unable to access assistance and/or make their needs known. They may be insufficiently included in community consultation and decision-making processes and thus their health needs are not met. Men may have to suffer other disadvantages because of gender differentiation, e.g. men's role as protectors may result in risk taking during and after an emergency.

Health programmes must meet the different needs and address the potential barriers that people may face and ensure that women and men can access services equally. Assessments therefore must include gender analysis.

The IASC Gender guidelines outline a number of Key Actions for conducting assessments to ensure gender equality programming in the health sector, and is a useful tool for assessors to ensure gender issues are appropriately addressed in health assessments:

- Ensure assessment teams include female assessors and translators
- Collect and disaggregate data by sex and age and apply gender analysis
- Find out which groups are hard to reach (Physical and social access) and/or marginalised, and the barriers preventing access
- Identify community response mechanisms to psychosocial problems and strengthen those that can support individuals
- Identify local practices and beliefs about caring for the sick in the community (Including home based care) and if these practices particularly burden women, girls, boys or men
- Map location, capacity and functional status of health facilities and public health programmes, including sex-specific essential services for women and men (E.g. reproductive health services for women and men)

¹⁴ The Sphere Project (2011), *Humanitarian Charter and Minimum Standards in Humanitarian Response*

¹⁵ IASC Gender Handbook 2007

TECHNICAL NOTES

- Identify existing trained health professionals in the community (Keeping in mind they may not be working due to family responsibility) and enable them to return to work, through provision of transport, security, child care, flexible work schedules as needed.
- Compile an inventory of local groups and key stakeholders in the health sector, including gender theme groups (Traditional healers, women's organisations), to find out what is being done where, by whom and for whom
- Assess availability of medical drugs and equipment for the provision of basic health services for women and men
- Ascertain the availability of standardised protocols, guidelines and manuals in line with current international guidance and find out if they include provision for equitable access for women, girls, boys and men to services and benefits. If not apply international standards
- Conduct qualitative assessments to determine perceptions about health services provided to the community and identify recommendations to address their concerns.
- Involve women, girls, boys and men from the outset, including those who belong to vulnerable groups, in health assessments and priority setting, programme design, interventions and evaluations.
- With the community, analyse the impact of the crisis on women, girls, boys and men, to identify physical and mental health needs and ensure equal access to health services
- Provide childcare support to enable women and men – especially those from single parent headed households to participate in meetings.

HIV

In a humanitarian crisis HIV should be viewed as a priority cross-cutting issue and appropriately addressed in all aspects and stages of the response. The IASC HIV guidelines outline nine

areas/sectors which should be actively engaged in HIV activity in a humanitarian crisis¹⁶:

- HIV awareness-raising and community support
- Health
- Protection
- Food security, nutrition and livelihood support
- Education
- Shelter
- Camp coordination and camp management
- Water, sanitation and hygiene
- HIV in the workplace

HIV-related issues should be integrated into all sectoral initial rapid assessments and the needs assessment data should be disaggregated by age and sex. Emergency-specific HIV needs should be assessed to determine which interventions are required, the scale of assistance needed, the priority interventions (And how resources should be allocated).

From the HIV awareness-raising and community support perspective, pre-crisis and existing prevention programmes and community support groups should be identified. These groups should be utilised for dissemination of appropriate messages and materials on prevention of HIV and GBV; availability of services for responding to GBV and provision of HIV treatment and care; and how to access ART.

After the initial assessment and establishment of initial responses the local HIV local situation should be further assessed to enable development of an appropriate expanded prevention and awareness programme (See module 15 for more details).

From a health perspective, implementation of the Minimum Initial Service Package (MISP) for reproductive health in emergencies including reduction of HIV transmission, is a Sphere standard; and *is designed to be implemented without a needs assessment*, since documented evidence already justifies its use.

The MISP, which includes reduction of HIV transmission as a component, outlines actions needed to respond to the priority lifesaving reproductive health need of a population (Including people living with HIV) in the early phase of an emergency.

Continuation of ART for those already on treatment pre-crisis (Including PMTCT) is included in MISP and should be considered a priority intervention and part of the minimum initial response to HIV even in the acute phase of an emergency.

In addition, the MISP includes prevention of excess neonatal and maternal morbidity and mortality, the prevention and clinical management of sexual violence, and coordination and planning activities, as critical minimum actions.

¹⁶ Inter-Agency Standing Committee (2010), *Guidelines for addressing HIV/AIDS in humanitarian settings*; UN, New York

After the initial response is established there is a need for re-establishment of core HIV-related services for the emergency-affected population. An assessment of the needs of the emergency-affected population for HIV treatment, care and support services and an assessment of the capacity of the existing health and social system to provide priority services should be conducted. Core HIV services should then be planned and implemented as soon as possible, taking into account the local context and priorities, the epidemiological profile of the population and the capacity of the sector/system to provide planned interventions/services (See module 15 for more details).

B) Health resources and services available

An assessment/analysis of the health system is required to determine the capacity of the system and to identify major constraints in the delivery of and access to health services.

This encompasses health care at the four different levels of the health care system:

- Household/community level
- Health post
- Health centre
- Hospital

Assessment of service provision will include:

- Number of, and physical status of, functional facilities managed by all providers
- Type of care provided (By sub-sector/component) and access (pre-disaster and current)
- Number and skills of available health staff
- Capacity of, and functional status of, existing public health programmes, e.g. Expanded Programme on Immunisation (EPI), RH, Nutrition
- Availability of supplies and equipment
- QOC – utilisation of standard diagnostic and treatment protocols and availability of key essential drugs in line with protocols for common diseases
- Supervisory system in place (Pre-disaster and current)
- Activity of various humanitarian actors involved in health (Specific focus of activity and geographical area)
- Available health budgets and financing mechanisms.

It will also be important to assess the capacity of the MOH at various levels to adequately support the health response in terms of:

- Technical capacity
- Logistical capacity, and
- Coordination skills

Nutrition programming in emergencies includes prevention (E.g. micronutrient supplementation), promotion (E.g. optimal IYCF practices) and treatment (E.g. therapeutic care and supplementary feeding) and each of these components is conducted through the health system, at both facility and community level, by a variety of health and nutrition cadres.

Thus it is essential for nutrition planners/managers to understand the capacity of the health system and the major constraints to delivery of and access to the health and nutrition services. Equally, it is essential that health assessment teams, planners and managers ensure nutrition staff and nutrition services are adequately considered in health assessments and planning of interventions at facility and community level.

Health Resources Availability Mapping System (HeRAMS) was developed in 2008 in Darfur, Sudan to assess and monitor health sector resource availability and health service provision by both the international and local agencies involved in responding to the humanitarian crisis. Based on this experience, HeRAMS evolved as a generic tool of the Global Health Cluster to be used in countries implementing the cluster approach to assist Health Cluster Coordinators and partners in assessing and monitoring the availability of health resources and the level of health services provided to the population affected by a humanitarian crisis. HeRAMS tool and additional information may be obtained from the GHC website, Tools Section.

HeRAMS is an interactive software-based information system that aims to rapidly capture and process the information at health facility level and community levels and to provide decision makers with timely, relevant, and reliable information about the available health resources and services provided.

HeRAMS encompasses three information areas: a) Health Facility Infrastructure and Mobile Clinics; b) Health Personnel; c) Health Services.

a) Health Facility Infrastructure and Mobile Clinics

This section is designed to collect set information related to the health facility infrastructure, including:

HF Location: precise specification of the location of the HF (static and mobile) to the lowest possible level (i.e. State# Locality# Administrative Unit# Settlement/Village), plus the coordinates of the HF (longitude and latitude)

HF Premises: includes the type of HF in relation to the PHC classifications (i.e. Primary Health Care Unit (PHCU) or Primary Health Care Centres (PHCC), etc.), the status of HF (Whether it is functioning or not), the nature of the HF building (whether it is permanent or a temporary building), the service coverage of the HF (Whether the HF is serving an IDP camp or a settlement, or both), and the inpatient capacity of the HF (Number of beds).

HF Management: indicates the health partners who run the HF, in terms of the main owner and manager of the facility and the supportive partners, if any.

b) Health Personnel

This section is designed to collect information about the health and nutrition staff working in the HF and in the community within the catchment area of the HF.

HF based staff: the medical cadre that run the HF, *such as Medical Officer (MO), Medical Assistant (MA), Nurses, Midwives*, etc.

Community based staff: categorised as voluntary workers (E.g. Village Volunteers) and paid workers (E.g., *Community Health Workers, Village Trained Midwives*)

c) Health Services

This section is designed to collect information in line with the GHC Health Service Check List – which categorises:

- the level of care (community, primary and secondary care)
- the nine sub sectors (General clinical services; Child health; Nutrition; Communicable diseases; STI& HIV/AIDS; Maternal and new born health; Sexual violence; Non-communicable diseases, injuries and mental health; and Environmental health) and
- the specific health service interventions by sub-sector to be implemented at each level of care.

See Annex 3, HeRAMS diagram, outlining levels of care, initial essential service package by sub-sector and health service checklist.

In a country where a health cluster is in situ the intention would be to utilize the HeRAMS system for mapping of health facilities, services and staff. It is the responsibility of the Health Cluster Coordinator (HCC) to lead this process, ensuring appropriately skilled staff members have responsibility for setting up and running the system and ensuring the tool has been contextualised to the specific country context (correct administrative boundary and health facility classifications, and clearly defined classifications of various health cadres).

Health Service and Infrastructure Assessment Guideline and Checklist

Key points to consider in assessment of health services and infrastructure have been outlined in Connelly M, A (editor) *Communicable Disease Control in Emergencies*¹⁷. The following Guideline and Checklist has been adapted from the Field Manual.

Access

- Access by the affected population to local, pre-existing health services (may be affected by finance, geographical distance, cultural or security issues)
- Ability of local health services to absorb the influx of people affected by the emergency

Facilities

Numbers, names and types of health facilities [available in the catchment area](#) e.g. clinics, hospitals, feeding centres and laboratories, and which services are provided at each facility, e.g. reproductive health, surgery, EPI, X-rays, mental health, community health, HIV and AIDS prevention and treatment, nutrition services.

For each facility it will then be necessary to gain understanding of

- Level of support – Ministry of Health or NGOs (May also be supported by religious institutions)
- Level of functioning
- Level of damage (Or rendered non-operational)
- Number of beds including maternity beds – total and occupied currently
- Average number of outpatients seen per day – 6 months ago and current
- Average number of deliveries during 1 week – 6 months ago and current
- Availability of operating theatres
- Numbers, type, size and capacity of health facilities set up for the displaced population if separate (E.g., tent, local material)

¹⁷ WHO, Connelly, M.A (ed.) (2005) *Communicable disease control in emergencies: A Field Manual*; Geneva, WHO

- Adequacy of water supply, vaccine cold chain (Freezers and refrigerators), generators or town electricity, toilets and waste disposal facilities and food for patients or malnourished.

Health personnel

- Per health facility above, types and numbers of health personnel and relevant skills and experience present in the hosting area – 6 months ago and current (Different emergencies will have different implications for staffing: in a refugee situation, there may be qualified staff within the refugee population)
- Health care staff also affected by disasters and thus either partly incapacitated (Family deaths, loss of housing and other assets) or died in the disaster; those in action are often totally exhausted when international agencies arrive to assess and set up programmes
- Health workers present among the displaced population, including traditional healers, traditional midwives/traditional birth attendants, doctors and nurses, laboratory technicians, and water and sanitation engineers
- Availability of interpreters

Drug and vaccine supplies

- Availability of essential drugs and medical supplies, considering the most common diseases seen in disasters
- Availability of the Interagency Emergency Health Kit (IEHK 2006) which contains antibiotics, and other drugs and medical supplies for 10,000 people for approximately 3 months; (Although it may not have enough drugs for chronic diseases)
- Storage and stock record for drugs and other supplies (And check expiry date for drugs)
- Availability of functioning cold chain, essential vaccines and vaccination equipment (E.g., measles vaccines, anti-tetanus sera, tetanus toxoid and injection material)

When visiting health facilities assessors should also observe:

- The general cleanliness of the facility,
- The record-keeping system,
- How patients are assessed and treated,
- Whether standard case definition and protocols are being followed, and
- Whether Integrated Management of Childhood Illness (IMCI) is being used for case management.

Assessors should also explore the system for referral of patients to hospitals and to other community health services and the system for supervision of the health facility.

C) Health system performance

Up to date information is needed on the continuous basis through a crises to inform decisions on response actions and monitor the effects of health interventions.

Information is best gathered through a combination of methods, including

- Regular reports from all health facilities
- Regular reports from a carefully defined selection of health facilities serving as *sentinel sites* for some specific indicators
- Regular community-based reporting
- Periodic and ad-hoc one off surveys

During a crisis a Health Information System (HIS) should be built on an existing HIS, adapting to the context of the crisis as necessary. The Cluster Lead Agency or another cluster partner should take responsibility for monitoring and leading efforts to re-establish an appropriate HIS where needed.

The UN High Commission for Refugees (UNHCR) has developed a HIS system for standardised facility-based disease surveillance in refugee settings and supporting comprehensive data collection across the primary health care system. The key pillars of the HIS system are

- Standards and indicators – minimum data set for routine surveillance and support for data collection across PHC system
- Tools and guidelines – standardized toolkit of data collection and reporting tools and a manual and training materials to support frontline staff to collect and report data
- Management and use of data – simple database software to support data management and promotion of data ownership and use at all levels of health management.

In 2009 this HIS was in use in 85 camps in 17 countries for 1.5 million refugees. The system is now being piloted in a context of IDP and non-camp situations. Software for this HIS system can be accessed via the GHC website, Tools Section (http://www.who.int/hac/global_health_cluster/guide/tools/en/index.html).

Various health assessments and studies conducted **as an emergency situation progresses** will provide more in-depth information on health status and risks for the affected population; health resources and services availability; and health system performance, including:

a) Knowledge, Attitudes and Practice/Behaviour (KAP) Assessment

Following a disaster it will be important to assess community behaviours impacting the health status of the population generally and also in relation to specific population groups and, where required, to introduce appropriate behaviour change strategies.

The huge scale of use of traditional practices (Cutting and burning) for treatment of malnourished children and the subsequent late presentation of these children for conventional treatment was identified through KII with carers during a one day assessment of a camp in North Darfur, Sudan in 2009.

Forsythe V. personal comment

Depending on the concerns identified during the Initial Rapid Assessment about KAP and infant morbidity trends, more in depth assessment of KAP may be required to obtain more detailed information on common KAP and identified problems, to refine programme planning and to obtain baseline data against which changes in KAP may be measured.

Further in-depth assessment of KAP may be carried out, using a variety of qualitative and quantitative methods/tools. The selection and mix of quantitative and qualitative methodologies to be used is dependent on the objective of the study. (Refer to HTP module 19, Working with communities in emergencies, for more details on this subject; also refer to Behaviour Change Communications in Emergencies – a Toolkit, UNICEF: www.unicef.org/ceecis/BCC_full_pdf.)

b) Infant and Young Child Feeding Assessment

IYCF practices should be considered as part of the initial and follow up rapid assessments (Under health risks) to get a picture of the IYCF practices of the population at the very early stages of an emergency.

WHEN AVAILABLE, data on **pre-emergency feeding practices** provides important background information against which to compare changes resulting from the emergency (possible sources include: Demographic and Health Surveys (DHS), UNICEF Multiple Indicator Cluster Surveys (MICS), NGO surveys).

If data on pre-emergency feeding practices is not available then this information should be sought as part of a rapid assessment using KII, and assessors should compare the information obtained from different informants.

Focus on obtaining information on pre-emergency feeding practices on a few key behaviours, e.g.:

- Initiation of breastfeeding: When?
- *Exclusive breastfeeding* (EBF): For how long?; fluids/foods commonly introduced that interfere with EBF in the first 6 months

This should be considered as part of the initial and follow up rapid assessments (Under health risks) to get a picture of major behaviours impacting the health of the population in the early stages of an emergency. This information may be obtained through observation, KII and FGD with mothers, carers, community representatives and health care workers.

- Introduction of semi- and solid (Complementary) foods: when, what, why?
- Percentage of infants not breastfed: 0 up to 6 months; 6 up to 12 months
- *Artificial feeding* 0 up to 6 months: percentage of infants artificially fed

Methods and Sources: KII with health personnel familiar with infant feeding behaviours (Women leaders, etc.).

In terms of the current (emergency) situation it will be important to consider the following issues as part of a rapid assessment:

1. **Population demographics:** note especially if there are large numbers of orphaned/unaccompanied children, an over-representation of female population, single mothers with children or pregnant women in the population.
2. **Reported problems** with feeding (and malnutrition) and recent (post-emergency) **changes** in feeding practices, and how they are being **handled**, e.g.:
 - Breastfeeding (BF) difficulties
 - Problems accessing enough food (Familiar foods, foods suitable as complementary foods, problems with food preparation or feeding) for young children.
3. **Conspicuous availability of *Breast Milk Substitutes* (BMS), bottles, teats, etc.** (Get information on sources, if these have been introduced post-emergency) in commodity pipeline; local purchase/donations; etc.)
4. **Assistance/Resources:** Who is currently providing assistance? Who else is available to provide assistance? Are there any IYCF (or related) programs operating in the area?

Methods and Sources: observation, KII with health personnel and community representatives including women leaders, FDGs with mothers, health personnel working with infants, other relevant groups assisting the community.

It is important that IYCF expertise is used in analysis and to help determine immediate action and next steps, including follow up assessment.

Where appropriate, depending on the concerns raised by the Initial Rapid Assessment about IYCF practices and infant morbidity trends, more in-depth studies on IYCF practices may be required to obtain more detailed information and identify problems, to refine programme planning and to obtain baseline data against which changes in practices may be measured.

The selection and mix of quantitative and qualitative methodologies to be used is dependent on the objective of the study.

Where it is considered appropriate to conduct an IYCF survey, this may be carried out as a standalone activity, or conducted as part of/in conjunction with other relevant health surveys within the community, e.g. nutrition, reproductive health or KAP/Behaviour surveys. A set of standard questions has been developed for use in surveys to calculate globally-agreed IYCF indicators. See the following references for more details: Care USA (2010), IYCF practices collecting and using data – A Step by Step Guide; and USAID, UC Davies, WHO, UNICEF, IFPRI (2008), Indicators for Assessing IYCF practices. Also visit www.ennonline.net/ife for full information and a wide range of resources on Infant Feeding in Emergencies.

c) Reproductive Health Assessment

Reproductive Health should be considered as part of the initial and follow up rapid assessments (under health status and health risk; and health facility and outreach assessment). Assessors should enquire about:

- The total number of births (In the last 7 days) and number of those conducted with a skilled attendant
- Reports of sexual violence (Number of cases in the last 7 days)

- The number (And location) of people requiring MISP RH
- The number (And location) of health care staff providing (or capable of providing) MISP
- RH supply system in existence and the potential to establish one

This information may be obtained through observation, KII and FGD with community representatives, health care workers and women (Of reproductive age).

Various in-depth RH assessments and studies should then be conducted to get a clear picture in terms of RH risks within the population; functional services and available resources to provide services at facility level; existing and potential community support mechanisms.

Specific assessments may be conducted for each aspect/components of RH programming:

- Adolescent Reproductive Health,
- Family Planning,
- Maternal and Newborn Care,
- Comprehensive Abortion Care,
- Gender Based Violence,
- Sexually Transmitted infections
- HIV

Guidelines on conducting RH Assessments are provided in the Inter-Agency field Manual on Reproductive Health in Humanitarian Settings 2010 by the Interagency Working Group on Reproductive Health in Crises.

There are multiple links between RH and nutrition – optimal child spacing, provision of antenatal care including micronutrient supplementation, and optimal nutrition in pregnancy all contribute to the nutritional status of an infant. While optimal IYCF practices, and specifically, early initiation of breastfeeding and exclusive breastfeeding to six months should be promoted during pregnancy and immediately after delivery by RH staff.

Child Health and Nutrition managers should coordinate with RH managers to ensure that appropriate nutrition interventions are incorporated into routine RH services, as well as linking with community groups and other support services to link IYCF and other child care practices with various initiatives/services to support mothers/carers who have been subjected to GBV.

d) Mental Health and Psychosocial Assessment

Mental Health should be considered as part of the initial and follow-up rapid assessments (under health status and health risk; and health facility and outreach assessment). Assessors should look for/enquire about psychological trauma distress and available social support mechanisms. This information may

be obtained through observation, KII and FGD with community representatives and health care workers.

In-depth Mental Health and Psychosocial (MHPS) Assessment(s) should then be conducted to get a clear picture of the current situation in terms of

The links between mental health and nutrition are perhaps not so obvious, nevertheless they do exist. Mental illness is likely to impact an individual's capacity to take care of themselves and their family, while a mother who is suffering from a mental health issue may be unable to provide optimal feeding and caring practices for an infant.

Nutrition planners/managers may be able to work with MHPS providers to link IYCF and other child care practices with various initiatives/services to support mothers/carers who are suffering from mental health and psychosocial issues.

- Mental Health and Psychosocial problems within a population
- Previous and existing community mechanisms to support mental health and psychosocial issues
- Functional services and available resources to provide MHPS services

- Programming needs and opportunities

Guidelines on conducting MHPS Assessments are provided in IASC (2007), MHPS guidelines in emergency settings (http://www.who.int/mental_health/emergencies/guidelines_iasc_mental_health_psychosocial_june_2007.pdf).

Annex 1: Table to demonstrate common diseases that may increase in emergencies. Adapted from UNHCR handbook for emergencies (2000)

The shaded areas are the diseases which are the major killers and are more directly linked to malnutrition so are priorities for assessments.

Disease	Major contributing factors	Preventative measures
<i>Acute respiratory infections</i>	<ul style="list-style-type: none"> Inadequate shelter – crowded with poor ventilation Lack of blankets and clothing Indoor cooking – in living area Undernutrition (Preventative measures listed in last row) 	<ul style="list-style-type: none"> Minimum living space standards and proper shelter Adequate clothing, sufficient blankets
<i>Diarrhoeal diseases</i>	<ul style="list-style-type: none"> Overcrowding Contaminated water and food Poor personal hygiene Poor washing facilities Poor sanitation Lack of soap Undernutrition 	<ul style="list-style-type: none"> Adequate living space Public health education Distribution of soap Good personal and food hygiene Safe water supply and sanitation
<i>Malaria</i>	<ul style="list-style-type: none"> New environment – area with higher endemic levels/strain to which the refugees are not immune Interruption of vector control measures Increased population density Stagnant water Flooding Inadequate health care services Undernutrition 	<ul style="list-style-type: none"> Destruction of mosquito breeding places, larvae and adult mosquitoes by spraying Provision of mosquito nets Drug prophylaxis (E.g., pregnant women and young children according to national protocols)
Measles	<ul style="list-style-type: none"> Overcrowding Measles vaccination coverage below 80% Undernutrition 	<ul style="list-style-type: none"> Minimum living space standards Immunization of children with distribution of Vitamin A –immunization from 6 months up to 15 years (rather than the more usual 5 years) is recommended because of the increased risks from living conditions.
<i>Meningococcal meningitis</i>	<ul style="list-style-type: none"> Overcrowding in areas where disease is endemic (Often has local seasonal pattern) 	<ul style="list-style-type: none"> Minimum living space standards Immunisation only after expert advice when surveys suggest necessity
<i>Tuberculosis</i>	<ul style="list-style-type: none"> Overcrowding Malnutrition High HIV prevalence 	<ul style="list-style-type: none"> Minimum living space standards (But where it is endemic it will remain a problem) Immunisation
<i>Typhoid</i>	<ul style="list-style-type: none"> Overcrowding Poor personal hygiene Contaminated water supply Inadequate sanitation 	<ul style="list-style-type: none"> Minimum living space standards Safe water, proper sanitation Good personal, food and public hygiene and public health education <p><i>WHO does not recommend vaccination as it offers only low, short-term individual protection and little or no protection against the spread of the disease.</i></p>

TECHNICAL NOTES

The shaded areas are the diseases which are the major killers and are more directly linked to malnutrition so are priorities for assessments. (continued)

Disease	Major contributing factors	Preventative measures
<i>Worms especially hookworms</i>	<ul style="list-style-type: none"> • Overcrowding • Poor sanitation 	<ul style="list-style-type: none"> • Minimum living space standards • Proper sanitation • Wearing shoes • Good personal hygiene
<i>Scabies (Skin disease caused by burrowing mites)</i>	<ul style="list-style-type: none"> • Overcrowding • Poor personal hygiene 	<ul style="list-style-type: none"> • Minimum living space standards • Enough water and soap for washing
<i>Xerophthalmia (Vitamin A deficiency)</i>	<ul style="list-style-type: none"> • Inadequate diet • Following acute prolonged infections, measles and diarrhoea 	<ul style="list-style-type: none"> • Adequate dietary intake of vitamin A. If not available, provide vitamin A-fortified food. If this is not possible, provide vitamin A supplements. • Immunisation against measles; systematic prophylaxis for children, every 4 months to 6 months
<i>Anaemia</i>	<ul style="list-style-type: none"> • Malaria, hookworm, poor absorption or insufficient intake of iron and folate 	<ul style="list-style-type: none"> • Prevention/treatment of contributory disease • Correction of diet including food fortification
<i>Tetanus</i>	<ul style="list-style-type: none"> • Injuries to un-immunised population • Poor obstetrical practice causes neonatal tetanus 	<ul style="list-style-type: none"> • Good first aid • Immunisation of pregnant women and subsequent general immunisation within EPI • Training of midwives and clean ligatures scissors, razors, etc.
<i>Hepatitis</i>	<ul style="list-style-type: none"> • Lack of hygiene • Contamination of food and water 	<ul style="list-style-type: none"> • Safe water supply • Effective sanitation • Safe blood transfusions
<i>STIs/HIV</i>	<ul style="list-style-type: none"> • Loss of social organisation • Poor transfusion practices • Lack of information 	<ul style="list-style-type: none"> • Testing for syphilis during pregnancy • Testing of all blood before transfusion • Ensuring adherence to universal precautions • Health education • Availability of condoms • Treating partners

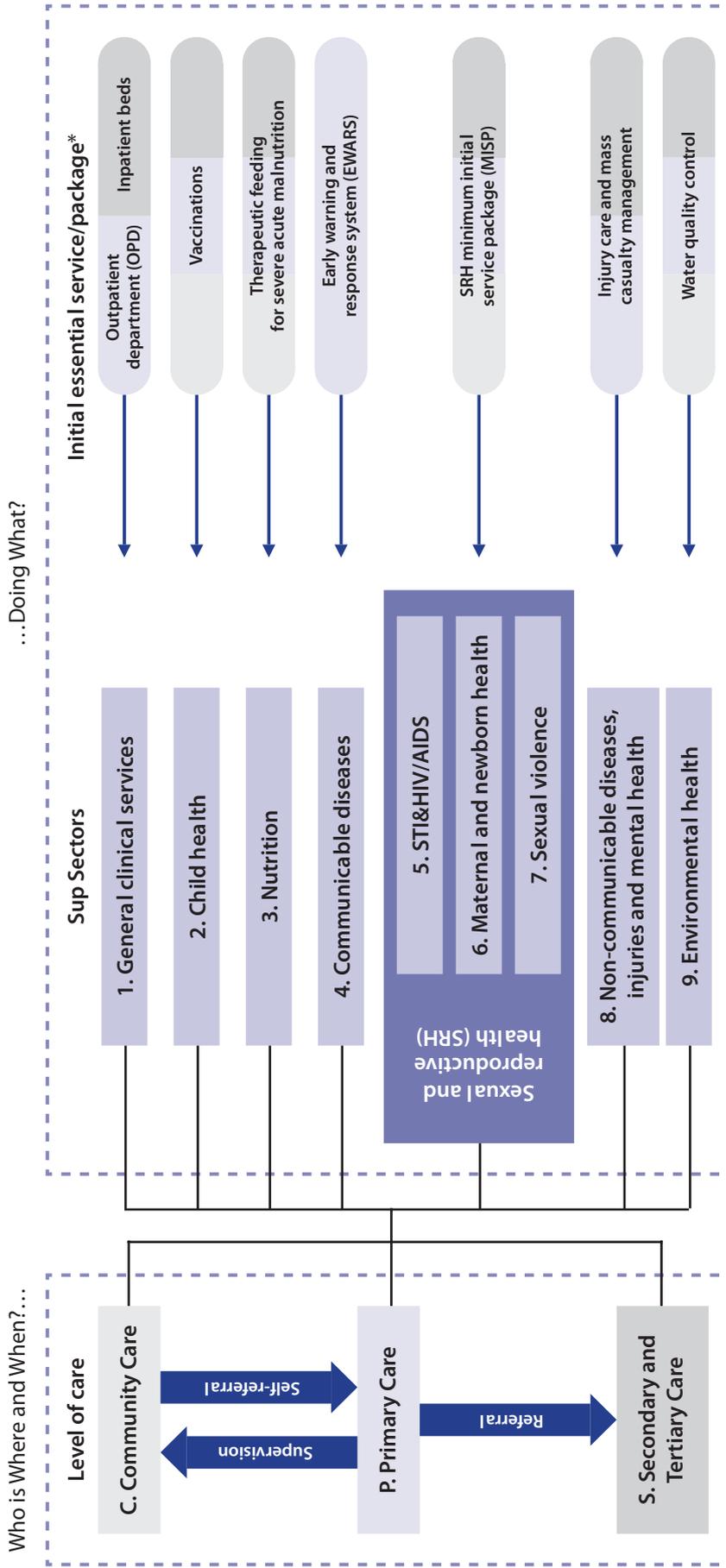
Annex 2: Baseline reference mortality data by region

Region	CMR (deaths/ 10,000/day)	CMR emergency threshold	U5MR (deaths/ 10, 000 U5s/day)	U5MR emergen- cy threshold
Sub-Saharan Africa	0.41	0.80	1.07	2.10
Middle East and North Africa	0.16	0.30	0.27	0.50
South Asia	0.22	0.40	0.46	0.90
East Asia and Pacific	0.19	0.40	0.15	0.30
Latin America and Caribbean	0.16	0.30	0.15	0.30
Central and Eastern European Region/CIS and Baltic States	0.33	0.70	0.14	0.30
Industrialised countries	0.25	0.50	0.03	0.10
Developing countries	0.22	0.40	0.44	0.90
Least developed countries	0.33	0.70	0.82	1.70
World	0.25	0.50	0.40	0.80

Source: UNICEF's *State of the World's Children 2009* (Data from 2007). This table is found in Sphere Health Action chapter (Page 17, version 20/09.2010)

Annex 3: Health resources Availability Mapping System

Health Resources Availability Mapping System (HeRAMS)



What is initial – HeRAMS
 The standard Health Cluster tool to be used during the first days/weeks of an acute crisis for the collection, collation and analysis of health sector information in affected areas, aggregated by administrative level (e.g. district or sub-district) on the number of active health partners; functioning health facilities (By type) and key health staff (Physician, nurse, midwives) as well as on the availability of initial essential health services.

What is HeRAMS
 The standard Health Cluster tool that should be used as soon as possible and throughout the duration of a crisis for the collection, collation and analysis of health sector information for each facility, mobile clinic or site with community-based interventions in order to monitor the availability of resources. There are: key characteristics of the points of delivery (Urban/rural area, IDP refugee camp) and of the facilities (functioning/non functioning, temporary/permanent, active health partner(s), management, other), number of staff (By type) and availability of services as per the list of 62 services (See reverse)

* The indicated initial essential services or packages are intended as the minimum response that has to be present at the beginning of any crisis. The services proposed for child health, nutrition, communicable and non-communicable diseases and environmental health sub-sectors may be changed with other priority service(s) as required by the nature of the crisis and/or the local context for the other sub sectors the recommended services or package should be in place in full before further expansion of the others services of the respective sub sectors.



HEALTH SERVICE CHECK LIST

By level of care, by health sub-sectors, for health facility/mobile clinic/community-based interventions at each point of delivery

		Health sub sectors	Health Services (RH MISP Services in bold)		Y N
C. Community Care	C0	Collection of vital Statistics	C01	Deaths and births	
			C02	Other: e.g. population movements; registry of pregnant women, newborn children	
	C2	Child Health	C21	IMCI community component: IEC of child care taker + active case findings	
			C22	Home based treatment of: Fever/malaria, ARI/pneumonia, dehydration due to actual diarrhoea	
			C23	Community mobilization for and support to mass vaccination campaigns and/or mass drug administration/treatment	
	C3	Nutrition	C31	Screening of acute malnutrition (MUAC)	
			C32	Follow up of children enrolled in supplementary/Therapeutic feeding (Trace defaulters)	
			C33	Community therapeutic care of acute malnutrition	
	C4	Communicable diseases	C41	Vector control (IEC+impregnated nets+in/out door insecticide spraying)	
			C42	Community mobilization for and support to mass vaccinations and/or drug administration/treatment	
C43			IEC on locally priority diseases (E.g. TB self referral, malaria self referral, others)		
C5	STI&HIV/AIDS	C51	Community leaders advocacy on STI/HIV		
		C52	IEC on prevention of STI/HIV infections and behavioural change communication		
		C53	Ensure access to free condoms		
C6	Maternal and newborn health	C61	Clean home delivery, including distribution of clean delivery kits to visibly pregnant women, IEC and behavioural change communication, knowledge of danger signs and where/when to go for help, support breast feeding		
C8	Non communicable diseases, injuries and mental health	C81	Promote self-care, provide basic health care and psychosocial support, identify and refer severe cares for treatment, provide needed follow-up to people discharged by facility-based health and social services for people which chronic health conditions, disabilities and mental health problems.		
C9	Environmental health	C91	IEC on hygiene promotion and water and sanitation, community mobilization for clean up campaigns and/or other sanitation activities		
P. Primary Care	P1	General clinical services	P11	Outpatients services	
			P12	Basic laboratory	
			P13	Short hospitalization capacity (5-10 beds)	
			P14	Referral capacity: Referral procedures, means of communication, transportation	
	P2	Child health	P21	EPI: Routine immunization against all national target diseases and adequate cold chain in place	
			P22	Under 5 clinic conducted by IMCI-trained health staff	
			P23	Screening of under nutrition/malnutrition (Growth monitoring of MUAC of W/H, H/A)	
	P3	Nutrition	P31	Management or moderate acute malnutrition	
			P32	Management of severe acute malnutrition	
	P4	Communicable diseases	P41	Sentinel site of early warning system of epidemic prone diseases,outbreak response (EWARS)	
			P42	Diagnosis and treatment of malaria	
			P43	Diagnosis and treatment of TB	
P44			Other local relevant communicable diseases (E.g. sleeping sickness)		

HEALTH SERVICE CHECK LIST (continued)

Health sub sectors		Health Services (RH MISP Services in bold)		Y	N	
P. Primary Care	Sexual and Reproductive Health Area	P5 STI&HIV/AIDS	P51	Syndromic management of sexually transmitted infections		
			P52	Standard precautions: disposable needles and syringes, safety sharp disposal containers, Personal Protective Equipment (PPE), sterilizer, P91		
			P53	Availability of free condoms		
			P54	Prophylaxis and treatment of opportunistic infections		
			P55	HIV counselling and testing		
			P56	Prevention of mother-to-child HIV transmission (PMTCT)		
			P57	Antiretroviral treatment (ART)		
		P6 Maternal and newborn health	P61	Family planning		
			P62	Antenatal care: assess pregnancy, birth and emergency plan, respond to problems (Observed and/or reported), advice/counsel on nutrition and breastfeeding, self care and family planning, preventive treatment(s) as appropriate		
			P63	Skilled care during childbirth for clean and safe normal delivery		
			P64	Essential newborn care:basic newborn resuscitation + warmth (Recommended method: Kangaroo Mother Care – KMC) + eye prophylaxis + clean cord care + early and exclusive breast feeding 24/24&7/7		
			P65	Basic essential obstetric care (BEOC): Parenteral antibiotics + oxytocic/anticonvulsivant drugs + manual removal of placenta + removal of retained product with manual vacuum aspiration (MVA) + assisted vaginal delivery 24/24&7/7		
			P66	Post partum care: Examination of mother and newborn (Up to 6 weeks), respond to observed signs, support breast feeding, promote family planning		
			P67	Comprehensive abortion care: Safe induced abortion for all legal indications, uterine evacuation using MVA or Medical methods, antibiotic prophylaxis, treatment of abortion complications, counselling for abortion and post-abortion contraception		
	P7 Sexual violence	P71	Clinical management of rape survivors (Including psychological support)			
		P72	Emergency contraception			
		P73	Post-exposure prophylaxis (PEP) for STI&HIV Infections			
	P8 Non Communicable diseases, injuries and mental health	P81	P81	Injury care and mass casualty management		
			P82	Hypertension treatment		
			P83	Daibetes treatment		
			P84	Mental health care: support of acute distress and anxiety, front line management of severe and common mental disorders		
	P9 Environmental health	P91	Health facility safe waste disposal and management			
	S. Secondary and Tertiary Care	S1 General clinical services	S11	Inpatients services (Medical, paediatrics and obstetrics and gynaecology wards)		
S12			Emergency and elective surgery			
S13			Laboratory services (Including public health laboratory)			
S14			Blood bank service			
S15			X-ray service			
S2 Child health		S21	Management of children classified with severe/very severe diseases (Parenteral fluids and drugs, O2)			
S6 Mental and newborn health		S61	Comprehensive essential obstetric care: BEOC + caesarean section + safe blood transfusion			
S8 Non communi-cable diseases, injuries and mental health		S81	Disabilities and injuries rehabilitation			
		S82	Outpatient psychiatric care and psychological counseling			
		S83	Acute psychiatric inpatient unit			

Annex 4: Sphere sample forms for mortality and morbidity surveillance and EWARS.**Mortality Surveillance Form 1***

Site

Date from Monday: To Sunday:

Total population at beginning of this week:

Births this week: Deaths this week:

Arrivals this week (If applicable): Departures this week:

Total population at the end of week: Total under 5 years population:

	0-4 yrs		5+ yrs		Total
	male	female	male	female	
Immediate cause					
Acute lower resp. infection					
Cholera (Suspected)					
Diarrhoea – bloody					
Diarrhoea – watery					
Injury – non – accidental					
Malaria					
Maternal death – direct					
Measles					
Meningitis (Suspected)					
Neonatal (0-28 days)					
Other					
Unknown					
<i>Total by age and sex</i>					
Underlying cause					
AIDS (Suspected)					
Malnutrition					
Maternal death – indirect					
Non-Communicable Diseases (Specify)					
Other					
<i>Total by age and sex</i>					

* This form is used when there are many deaths and therefore more detailed information on individual deaths cannot be collected due to time limitations.

- Other causes of mortality can be added according to context and epidemiological pattern.
- Age can be further disaggregated (0-11 mths, 1-4 yrs, 5-14 yrs, 15-49 yrs, 50-59 yrs, 60-69 yrs, 70-79 yrs, 80+ yrs) as feasible
- Deaths should not be reported solely from health facilities, but should include reports from site and religious leaders, community workers, women's groups and referral hospitals.

Sample Weekly EWARN Reporting Form*

* This form to be used in the acute phase of the emergency when the risk of epidemic-prone diseases is high.

Date: from Monday: To Sunday:

Town/Village/Settlement/Camp:

Province: District: Sub district:

Site name: Inpatient Outpatient Health centre Mobile Clinic

Supporting agency (IES): Reporting officer and contact number:

Total population: Total under 5 years population:

A. Weekly aggregate data

New cases of:	Morbidity		Mortality		Total
	<5 years	5 years <	<5 years	5 years <	
Total admissions					
Total deaths					
Acute respiratory infection					
Acute watery diarrhoea					
Acute bloody diarrhoea					
Malaria-suspected/confirmed					
Measles					
Meningitis-suspected					
Acute haemorrhagic fever syndrome					
Acute jaundice syndrome					
Acute Flaccid Paralysis (AFP)					
Tetanus					
Other fever >38.5°C					
Injuries/wounds					
Other					
Total					

- More than one diagnosis is possible; the most important should be recorded. Each case should be counted only once.
- Include only those cases that were seen (Or deaths that occurred) during the surveillance week.
- Write "0" (zero) if you had no case or death during the week for one of the syndrome listed in the form. Deaths should be reported only in the mortality section, NOT in the morbidity section.
- Case definitions for each condition under surveillance should be written on the back on this form.
- Cause of morbidity can be added or subtracted according to the epidemiology and risk assessment of disease.
- The purpose of EWARN surveillance is the early detection of epidemic-prone diseases.
- Data on condition such as malnutrition should be obtained through surveys (Prevalence) rather than surveillance (Incidence).

TECHNICAL NOTES

B. Outbreak alert

At any time **you suspect** any of the following diseases, please SMS or phone or email with maximum information on time, place and number of cases and deaths.

Cholera, shigellosis, measles, polio, typhoid, tetanus, hepatitis A or E, dengue, meningitis, diphtheria, pertussis, haemorrhagic fever (**This list of diseases will vary depending on the disease epidemiology of the country**)

Sample Routine Morbidity Surveillance Reporting Form*

* Morbidity surveillance can be expanded from EWARN after the acute phase to include other diseases and monitoring of other indicators as appropriate

Site

Date from Monday:..... To Sunday:

Total population at beginning of this week/month:

Births this week/month: Deaths this week/month:

Arrivals this week/month (If applicable):..... Departures this week/month:

Total population at the end of week/month:..... Total under 5 years population:

Morbidity	Under years <new case			5 years and over <new <total repeat cases			new cases	Total
	Male	Female	Total	Male	Female	Total		
Diagnosis*								
Acute respiratory infection**								
Acute watery diarrhoea								
Acute bloody diarrhoea								
Malaria – suspected/confirmed								
Measles								
Meningitis – suspected								
Acute haemorrhagic fever syndrome								
Acute jaundice syndrome								
Acute Flaccid Paralysis (AFP)								
Tetanus								
Other fever >38.5°C								
AIDS – suspected***								
Eye diseases								
Malnutrition****								
Injuries – accidental								
Injuries – non-accidental								
Sexually transmitted infections								
Genital ulcer disease								
Male urethral disease								
Vaginal discharge								
Lower abdominal pain								
Skin disease								
Non-communicable disease (E.g.diabetes)								
Worms								
Others								
Unknown								
Total								

- * More than one diagnosis is possible; Causes of morbidity can be added or subtracted according to context and epidemiological pattern.
- ** Acute respiratory tract infections: in some countries, this category may be divided into upper and lower tract infections.
- *** HIV/AIDS prevalence is best assessed through surveys.
- **** Malnutrition prevalence is best assessed through rapid surveys (MUAC or W/H screening) as surveillance only reveals those who come to seek care
- # Ages can be further disaggregated as feasible.

OUTBREAK ALERT

At any time **you suspect** any of the following diseases, please SMS or phone or email with maximum information on time, place and number of cases and deaths.

Cholera, shigellosis, measles, polio, typhoid, tetanus, hepatitis A or E, dengue, meningitis, diphtheria, pertussis, haemorrhagic fever (This list of diseases will vary depending on the disease epidemiology of the country)

Visit to Health facility	Under 5 years			5 years and over			Total	
	Male	Female	Total	Male	Female	Total	Male	Female
Total visits								

Utilisation Rate: Number of visits per person per year to health facility = total number of visits in 1 week/total population x 52 weeks

– Age can be further disaggregated (0-11 mths, 1-4 yrs, 5-14 yrs, 15-49 yrs, 50-59 yrs, 60+yrs) as feasible.

Number of consultation per clinician: Number of total visits (New and repeat)/FTE clinician in health facility/number of days health facility function.

PART 3: TRAINER'S GUIDE

The trainer's guide is the third of four parts contained in this module. It is NOT a training course. This guide provides guidance on how to design a training course by giving tips and examples of tools that the trainer can use and adapt to meet training needs. The trainer's guide should only be used by experienced trainers to help develop a training course that meets the needs of a specific audience. The trainer's guide is linked to the technical information found in Part 2 of the module.

Module 8 describes how undernutrition and disease are closely linked and how emergencies can have a huge negative impact on the health of the affected population. This module can be used to provide a practical training for field workers who are involved in assessing health and nutrition needs during emergencies. It can also provide a short practical briefing for senior managers. Module 15 focuses on health interventions to prevent and treat undernutrition.

Navigating your way round these materials

The trainer's guide is divided into six sections.

1. **Tips for trainers** provide pointers on how to prepare for and organise a training course.
2. **Learning objectives** sets out examples of learning objectives for this module that can be adapted for a particular participant group.
3. **Testing knowledge** this section contains an example of a questionnaire that can be used to test participants' knowledge of health assessment either at the start or at the end of a training course and some **optional activities/exercises** that a trainer may conduct to get a picture of how much participant have gained from the session(s)
4. **Classroom exercises** provide examples of practical exercises that can be done in a classroom context by participants either individually or in groups.
5. **Case studies** contain examples of case studies (one from Africa and one from another continent) that can be used to get participants to think by using real-life scenarios.
6. **Field-based exercises** outline ideas for field visits that may be conducted during a longer training course.

CONTENTS

1. Tips for trainers

2. Learning objectives

3. Testing knowledge

Section 1

Exercise 1: What do you know about health assessments and the links with nutrition?

Handout 1a: Health assessments and the links with nutrition?: Questionnaire

Handout 1b: Health assessments and the links with nutrition?: Answers

Optional activities

4. Classroom exercises

Exercise 2: Group exercise on different objectives for assessments

Exercise 3: Group exercise on importance of good coordination in humanitarian assessment

Handout 3a: Coordination exercise

Handout 3b: Coordination exercise – trainer guidance

Exercise 4: Group exercise Calculating mortality rates

Handout 4a: Mortality rate exercise

Handout 4b: Mortality rate exercise: answers

Exercise 5: Planning a Rapid Assessment

Handout 5a: Planning a Rapid Assessment

Training guidance 5b: Planning a Rapid Assessment

Exercise 6: Consideration of Gender Based Violence (GBV) in Rapid Health Assessments within the context of nutrition

Handout 6a: GBV exercise

Handout 6b: GBV exercise – trainer guidance

Exercise 7: Consideration of HIV in Rapid Health Assessments within the context of nutrition

Handout 7a: HIV exercise

Handout 7b: HIV exercise – trainer guidance

5. Case studies

Exercise 8: Use of the conceptual framework for maternal and child undernutrition to identify health and nutrition issues that need to be assessed in a case study from Bangladesh health assessments

Handout 8a: Conceptual framework for maternal and child undernutrition

Handout 8b: Use of the conceptual framework to identify health and nutrition issues that need to be assessed in a case study from Bangladesh – exercise

Handout 8c: Conceptual framework/Bangladesh case study: Answers

Exercise 9: Planning and implementing a health and nutrition assessment during conflict

Handout 9a: Planning and implementing a health and nutrition assessment during conflict in Central African Republic 2007

6. Field-based exercises

Exercise 10: Conducting a health assessment using the initial rapid assessment tool

1. Tips for trainers

Step 1: Do the reading!

- Read Parts 1 and 2 of this module.
- Familiarise yourself with the technical terms from the glossary.
- Read through the following key document:
 - The Sphere Project. (2011). *Humanitarian Charter and Minimum Standards in Humanitarian Response*, Chapters 1,2 and 5, (The Core Standards; Minimum Standards in Water Supply, Sanitation and Hygiene Promotion; and Minimum Standards in Health Action)
 - United Nations Inter-agency Standing Committee (UN-IASC), Health, Nutrition and WASH Clusters. (2009). *Initial Rapid Assessment (IRA) Tool*. IASC.
 - Connolly, M. A. (ed) (2005). *Communicable disease control in emergencies A field manual*. Geneva: WHO.
 - The Johns Hopkins University & International Federation of Red Cross and Red Crescent Societies. (2008). *Public Health Guide for Emergencies*, 2nd edition. Baltimore: The Johns Hopkins University and IFRC.
 - Health Cluster Guide (2009) IASC Global Health Cluster
 - See part 4 for full list of reference materials for this module

Step 2: Know your audience!

- Find out about your participants in advance of the training:
 - How many participants will there be?
 - Do any of the participants already have experience of doing health assessments and where?
 - Could participants with health assessment experience be involved in the sessions by preparing a case study or contribute through describing their practical experience?
 - At the beginning of the training ensure that the participants have been introduced to each other, are aware of each other's background and current work situation.
 - At the beginning of the training ensure that participants express their personal expectations for the teaching period – it is useful to ask participants to take a few minutes to think about their expectations of the training workshop and to write down one key expectation on a post-it note. After a few minutes the Trainer should go around the room and ask participants to read out their expectation – then collect the post-its and put on a flip chart. The trainer can then group the expectations, which may then be referred back to through the course of the workshop and during evaluation to see if expectations have been fully or partially met.

Step 3: Design the training!

- Identify appropriate learning objectives. This will depend on your participants, their level of understanding and experience, and the aim of the training.
- Decide how long the training will be and what activities can be covered within the available time. In general the following guide can be used:
 - A **90-minute** classroom-based training can provide a basic overview of health assessments and their links with nutrition
 - A **half-day** classroom-based training can provide a more in-depth understanding and include some practical exercises.

- A **one-day** classroom-based training can provide a more in depth understanding of health assessments and their links with nutrition and include a number of practical exercises and a case study.
- A **three- to eight-day** training would include classroom sessions (Overview, practical exercise and case studies) plus field-based training where participants carry out an assessment
- Decide exactly which specific areas to cover based on the learning objectives that you have identified.
- Divide the training into manageable sections. One session should generally not last longer than an hour and sufficient time for discussion and feedback should be allocated within each session.
- Ensure the training is a good combination of activities, e.g., mix PowerPoint presentations in plenary with more active participation through classroom-based exercises; mix individual exercises with group work. An interactive approach will enhance learning; this requires experience and planning.

Step 4: Get prepared!

- Prepare PowerPoint presentations with notes (If they are going to be used) in advance and do a trial run. Time yourself! Recommended PowerPoint presentations can be prepared from Part 2 of this module.
- Prepare exercises and case studies. These can be based on the examples given in this trainer's guide but should be adapted to be suitable for the particular training context.
- Prepare model answers for all of the exercises that you will conduct during the training using the material from Part 2 of this Module
- Plan sessions that can benefit from an interactive approach.
- Prepare a 'kit' of materials for each participant. These should be given out at the start of the training and should include:
 - Timetable showing break times (Coffee and lunch) and individual sessions
 - Parts 1, 2 and 4 of this module
 - Pens and paper
 - Calculators (Or request that each participant brings a calculator with them)
- Prepare additional materials which should be given out during the training
 - Participant handouts – case studies, exercises etc
- Prepare required equipment and supplies for training
 - Flip chart board and paper
 - Marker pens

REMEMBER

People remember 20 per cent of what they are told, 40 per cent of what they are told and read, and 80 per cent of what they find out for themselves.

People learn differently. They learn from what they read, what they hear, what they see, what they discuss with others and what they explain to others. A good training is therefore one that offers a variety of learning methods which suit the variety of individuals in any group. Such variety will also help reinforce messages and ideas so that they are more likely to be learned.

2. Learning objectives

Below are examples of learning objectives for a session on health assessment and the link with nutrition. Trainers may wish to develop alternative learning objectives that are appropriate to their particular participant group. The number of learning objectives should be limited; up to five per day of training is appropriate. Each exercise should be related to at least one of the learning objectives.

Examples of learning objectives

At the end of the training, participants will:

- Understand the important links between health and nutrition.
- Understand the importance of joint or coordinated health and nutrition assessment
- Understand the importance of coordination in humanitarian assessment generally and key actions to enhance coordination
- Be aware of the different types of health assessments that are required during the various phases of an emergency and the links with nutrition
- Be able to plan and participate in a health assessment which includes nutrition.
- Know how to calculate mortality rates.

3. Testing knowledge

Section 1 contains one exercise which is an example of a questionnaire that can be used to test participants' knowledge of health assessments and their links with nutrition either at the start or at the end of a training session. The questionnaire may be adapted by the trainer to include questions relevant to the specific participant group.

Exercise 1: What do you know about health assessments and their links with nutrition?

What is the learning objective?

- To test participants' knowledge about health assessments and their links with nutrition

When should this exercise be done?

- *Either* at the start of a training session to establish knowledge level
- *Or* at the end of a training session to check how much participants' have learned

How long should the exercise take?

- 25 minutes

What materials are needed?

- **Handout 1a:** What do you know about health assessments and the links with nutrition?: Questionnaire
- **Handout 1b:** What do you know about health assessments and the links with nutrition?: Questionnaire answers

What does the trainer need to prepare?

- Familiarize yourself with the questionnaire questions and answers.
- Add your own questions and answers based on your knowledge of the participants and their knowledge base.

Instructions

Step 1: Give each participant a copy of Handout 1a.

Step 2: Give participants 20 minutes to complete the questionnaire working alone.

Step 3: Give each participant a copy of Handout 1b.

Step 4: Give participants five minutes to mark their own questionnaires and discuss the answers together; clarify the answers where necessary.

Handout 1a: What do you know about health assessments and the links with nutrition?: Questionnaire

Time for completion: 30 minutes

Answer all the questions

1. What are the links between health and nutrition – which of the following is correct? *Circle the correct answer*
 - a) Individuals who are undernourished are more at risk of disease.
 - b) Disease/infection can result in acute malnutrition
 - c) Measles and diarrhoeal diseases can lead to acute malnutrition
2. List three different types of health assessment that may be conducted during a humanitarian emergency
3. When doing a rapid assessment, it is important to assess the incidence rate of which of these diseases? *Circle the correct answer(s).*
 - a) Diarrhoea
 - b) Acute respiratory infections
 - c) Measles
 - d) Leprosy
 - e) Chickenpox
4. What does the sentence tell you: "We have an emergency, we have had 120 deaths"?
5. The crude mortality rate (CMR) in an emergency is usually expressed in terms of:
 - a) per 1,000/year
 - b) per 10,000/day
 - c) per 10,000/month
6. What benchmark mortality rate would indicate a significant public health emergency?
7. What types of health services should be assessed in an emergency. *Circle the correct answer(s).*
 - a) Rural clinics
 - b) Referral hospitals
 - c) Community services
 - d) Health promotion activities

8. Name at least five errors which commonly occur when health assessment are being conducted

9. What steps would you take to ensure that gender issues are appropriately addressed in a health assessment?

10. List three ways to obtain qualitative data for health assessment purposes.
11. List three sources of quantitative data for health assessment purposes.
12. A comprehensive Knowledge, Attitudes and Practices (KAP) survey should be conducted in the early stages of a humanitarian emergency
TRUE OR FALSE
13. a) What does EWARS stand for?
b) In a humanitarian emergency when should EWARS be established?
c) What is its purpose?

Handout 1b: What do you know about health assessments and the links with nutrition?: Questionnaire answers

1. **All of them.**
2. **Includes – Initial Rapid Assessments, In-depth Comprehensive Assessments, Specialised Surveys and Surveillance.**
3. **a), b), and c). Leprosy is not so important in emergency. Chickenpox does not have as high rates of morbidity and mortality as measles.**
4. **Not a lot. It is not expressed as a rate, over time and with a population denominator. It could be 120 deaths out of a population of 500,000 or a population of 500; it could be 120 deaths yesterday, or 120 deaths over the last month.**
5. **b) CMR per10,000/day**
6. **The crude mortality rate is double the norm; or if this data is not available – a crude mortality rate above 1/10,000/day is considered an emergency and a mortality rate in children <5 years of age above 2/10,000/day.**
7. **All of them. It is important to remember the community and promotion services as well as the curative services.**
8. **Common errors:**

Many of the challenges of assessment, particularly in relation to large scale quick onset emergencies, are linked to gaps in coordination:

- Duplication and gaps in assessment -too much data collected from the same people and places in easily accessible areas, whereas remote areas are not visited.
- Assessment data is not sufficiently shared and even when it is shared the lack of compatible methodologies and formats make the results difficult to compare and analyse
- The capacity to collate and analyse data and communicate the results is limited so the analysis is incomplete and arrives too late to be useful
- Potentially useful resources (baseline data etc) that were available prior to the disaster are insufficiently used
- Rapid multi sector assessments try to gather too much information about a variety of sectoral and cross cutting issues, causing delays in the data processing and analysis and in the dissemination of the results
- Disincentives to engage in coordinated assessment processes both because of demands on the time of busy staff and competition between agencies for funding - given the direct link between assessment information and fundraising
- Lack of clarity about who will do what, and where during assessment following a disaster event

Additional problems identified include

- The assessment team lacks the expertise needed.
- The estimated size of the target population – the critical denominator – is unreliable.
- The survey sample does not accurately represent the affected population.
- The assessment report does not consider the affected population's perceived needs.
- Causes of death are incorrectly attributed to the disaster even for slow-onset disasters, such as drought and famine.
- Assessment reports are not written up.

9. **Key steps to ensure gender issues are appropriately addressed in assessments include the following**

- Ensure assessment teams include female assessors and translators
- Collect and disaggregate data by sex and age and apply gender analysis
- Find out which groups are hard to reach (Physical and social access) and/or marginalised and the barriers preventing access
- Identify community response mechanisms to psychosocial problems and strengthen those that can support individuals
- Identify local practices and beliefs about caring for sick in community (Including home based care) and if these practices particularly burden women, girls, boys or men.
- Map location, capacity and functional status of health facilities and public health programmes, including sex specific essential services for women and men (E.g. reproductive health services for women and men)
- Identify existing trained health professionals in community (Keeping in mind they may not working due to family responsibility) and enable them to return to work, through provision of transport, security, child care, flexible work schedules as needed.
- Compile inventory of local groups and key stakeholders in health sector including gender theme groups (Traditional healers women's organisations) to find out what is being done where, by whom and for whom.
- Assess availability of medical drugs and equipment for the provision of basic health services for women and men.
- Ascertain the availability of standardised protocols, guidelines and manuals in line with current international guidance and find out if they include provision for equitable access for women, girls, boys and men to services and benefits. If not apply international standards
- Conduct qualitative assessments to determine perceptions about health services provided to the community and identify recommendations to address their concerns.
- Involve women, girls, boys and men, including those who belong to vulnerable groups, from the outset in health assessments and priority setting, programme design, interventions and evaluations.
- With the community, analyse the impact of the crisis on women, girls, boys and men, to identify physical and mental health needs and ensure equal access to health services
- Provide child care support to enable women and men – especially those from single parent headed households to participate in meetings.

10. Qualitative data may be obtained from Key Informant Interviews, Focus Group Discussions, Observation (Health facility visits, transect walks through area)

11. Quantitative data may be obtained from records held by local authorities, camp managers, community leaders, and from health facility records.

12. **FALSE** A comprehensive KAP survey should NOT be conducted in the early stages of a humanitarian emergency – However it will be important to get a general picture of community KAP impacting the health status of the population and in relation to specific population groups in the early phase of a humanitarian emergency. This information may be obtained during an initial assessment through observation, Key Informant Interview (KII) and Focus Group Discussion (FGD) with mothers, carers, community representatives and health care workers

Depending on the concerns identified during the Initial Assessment about community KAP and infant morbidity trends; more in depth assessment of KAP may be required – to obtain more detailed information on common KAP and identified problems, to refine programme planning and to obtain baseline data against which changes in KAP may be measured.

Comprehensive in depth assessment of community KAP may be carried out, using a variety of qualitative and quantitative methods/tools. The selection and mix of quantitative and qualitative methodologies to be used is dependent on the objective of the study.

13. a) Early Warning and Response System

b) Should be rapidly established in a humanitarian crisis

c) To rapidly detect selected epidemic-prone conditions and implement immediate outbreak control measures

Section 2 outlines a series of optional exercises which a trainer may use to get an understanding of what participants have taken in from the session(s) during the course of training.

Questions on cards

At the end of a group session distribute index cards to each group. Inform participants that they will have five minutes to create two or three short questions with answers (May be multiple choice questions) related to the content covered during the session. Inform participants that their peers will have an opportunity to answer the questions they have developed in a later session. Instruct group to write each question on the front of an index card, and to write the answer on the back of the same card.

Alternatively cards can be distributed to individual participants asking them to create one or two questions (With answers) as above and that these will be used later in the workshop, when peers will have an opportunity to answer some of the questions.

The Trainer can read the cards and get some understanding of what participants have taken in from a session. Then at a later stage in the day/workshop the Trainer can ask some of the questions to the participants. Where index cards were completed by groups the Trainer should go group by group asking questions in the form of a quiz, or where index cards were completed by individuals the Trainer may ask participants a selection of questions in a plenary session.

Sharing key learning points

At the end of a session the Trainer may instruct participants to turn to their neighbour and share one (or two) new key piece(s) of information that they have learned from the session that has been conducted.

At the beginning of the next session the Trainer may invite participants to share the one or two pieces of information discussed with their neighbour at the end of the last session.

Participant feedback at end of day/workshop

The trainer may ask each participant to feedback on one or two key points of interest/learning from the day.

Participant review of day/workshop

The Facilitator may ask one or a group of participants to give a brief overview/review of the sessions covered during a training day/workshop, outlining the various sessions and (Some of the) key issues from each session.

Where a workshop lasts for a more than one day a review should be conducted each day. The Trainer may find it useful to start each day with a participant review of the previous day's sessions and key learning.

The Trainer may request one or more participants to do this at the end of the first day, so giving the participants an opportunity to prepare for this review. Alternatively the Trainer may ask one or more participants to do this shortly before the first session of day two starts (Selecting one or more of the participants who have arrived early).

Participant application of learning after completion of training workshop

At the end of the training ask participants to take a few minutes to consider what they will do within their organisation as a result of attending the workshop. Where an organisation has more than one representative the various individuals should briefly discuss this and give a joint organisational answer. **Ask** each organisation to feedback with two or three actions they will take within their organisation having attended the workshop.

4. Classroom exercises

This section provides examples of practical exercises that can be carried out in a classroom by participants, either individually or in groups. Practical exercises are useful between plenary sessions, as they provide an opportunity for participants to engage actively in the session. The choice of exercise will depend upon the learning objectives and the time available. Trainers should adapt the exercises presented in this section to make them appropriate to the particular participant group.

Exercise 2: Group exercise on objectives for assessments

What is the learning objective of this exercise?

- To be aware of the different objectives for health assessments in emergencies

When should this exercise be done?

- Near the beginning of a training day, as an energetic group exercise

How long should the exercise take?

- 30 minutes

What materials are needed?

- Paper, Flip chart and marker pen.

What does the trainer need to prepare?

- Familiarise yourself with the objectives for assessments as found in Part 2, and develop model answer from the materials in part2 (see introduction and core areas of health information needs).

Instructions

Step 1: Divide participants into groups of maximum five people.

Step 2: Ask groups to spend 10 minutes brainstorming on the possible objectives of a health assessment in an emergency and then to record possible objectives for a health assessment on a piece of paper

Step 3: In plenary, go round the groups in turn asking for one objective and get a participant to record the objective on a flip chart – continue until groups have feedback all possible objectives for a health assessment

Step 4: Conclude the session by summarising the feedback and explaining that the different type of assessments will be required at different phases of an emergency and it is important for assessors to be clear on what information they need and for what purpose at various stages in an emergency.

Exercise 3: Group exercise on importance of good coordination in humanitarian assessment and humanitarian response**What is the learning objective?**

- To understand the importance of coordination of humanitarian assessments
- To understand how best to enhance coordination when planning and conducting a health assessment in a humanitarian emergency
- To know the key stakeholders health assessors need to coordinate with when planning a health assessment in a humanitarian emergency

When should this exercise be done?

- May be conducted as part of a half day, one day or longer training course/workshop

How long should the exercise take?

- 50 to 60 minutes

What materials are needed?

- **Handout 3a:** Importance of good coordination in humanitarian assessment and humanitarian response.
- **Handout 3b:** Importance of good coordination of humanitarian assessments – Background and Task
- Flip chart paper and marker pens

What does the trainer need to prepare?

- A model answer is not provided. The trainer must work through the key points for this question using the materials in part 2 and develop model answers or key points for each of the questions. See trainer guide 3b.

Instructions

Step 1: Distribute the handout to each participant and divide participants into groups of maximum five people.

Step 2: Allow participants 20 minutes to work in groups to discuss the three questions and record answers for reporting back.

Step 3: Allow up to 20 minutes for reporting from all groups

Step 4: Use remaining time to facilitate discussion on feedback – ensuring that all relevant key points have been raised/discussed.

Handout 3a: Importance of good coordination in humanitarian assessment and humanitarian response.

Many of the challenges of humanitarian assessment and response are linked to poor coordination.

Q1 Why is coordination important when planning and conducting a health assessment in a humanitarian emergency situation?

Q2 As a Health Programme Manager of an international agency what steps can you take to ensure your agency is coordinating appropriately with other humanitarian actors while planning and conducting a health assessment?

Q3 As a Health Programme Manager of an international agency who are the key stakeholder that you should be coordinating with to plan and conduct a health assessment?

Discuss the three questions above and outline main points on flip chart for feedback and discussion.

Handout 3b: Importance of good coordination in humanitarian assessment and humanitarian response – trainer guidance

Many of the challenges of humanitarian assessment and response are linked to poor coordination.

Use the materials in part 2 to develop model answers or key points for each of the questions.

Refer to:

- a) General principles and guidance on assessment in humanitarian crises (all sectors) provides guidance notes some of which relate to coordination.
- b) Types of and approaches to coordinated assessments.
- c) Introduction to health assessments; see health cluster coordinating mechanisms
- d) Guidance on conducting an Initial Rapid Assessment (IRA) also makes reference to coordination in planning, implementation of assessment and also after completion of an assessment.

Q1 Why is coordination important when planning and conducting a health assessment in a humanitarian emergency situation?

Key points would include:

To avoid gaps and overlaps (In assessment) and maximise usefulness of assessment results

To ensure use of compatible methodologies and formats so that results are comparable

Q2 As a Health Programme Manager of an international agency what steps can you take to ensure your agency is coordinating appropriately with other humanitarian actors while planning and conducting a health assessment?

Key points would include:

- Attend relevant cluster/emergency coordination meetings
- Engage with assigned Global Health Cluster (GHC) lead
- Inform GHC lead of intention/interest to conduct assessment
- Ensure agreement from GHC on geographical area of responsibility for your agency
- If possible participate in joint multi-agency assessments using agreed methodology
- If not possible to participate in joint assessment, ensure that your single agency assessment is coordinated with other stakeholders, i.e. pre-assessment joint planning, use agreed format/methodology, two-way sharing of information pre- and post-assessment.

Q3 As a Health Programme Manager of an international agency who are the key stakeholders that you should be coordinating with to plan and conduct a health assessment?

Key stakeholders would include:

At planning level – GHC lead agency and other GHC partners

At operational/assessment area – Local authorities, Ministry of Health (MOH) representatives at administrative level, other NGOs and operational agencies involved in supporting health and other development activities, community leaders.

Exercise 4: Calculating mortality rates**What is the learning objective?**

- To know how to calculate mortality rates

When should this exercise be done?

- After an explanation on mortality rates

How long should the exercise take?

- 30 minutes

What materials are needed?

- A calculator for each participant
- **Handout 4a:** Mortality rate exercise
- **Handout 4b:** Mortality rate exercise: Answers

What does the trainer need to prepare?

- Familiarize yourself with the exercise and the results and the different types of mortality rates and their uses, as found in Part 2 of this module.

Instructions

Step 1: Give each participant a copy of Handout 4a

Step 2: Give participants 15 minutes, or as long as it takes to calculate the mortality rates.

Step 3: Go through the exercise in plenary, with a participant volunteering to demonstrate the calculation to the remainder of the group and discuss to ensure everyone is clear.

Handout 4a: Mortality rate exercise

Adapted from Sphere health and nutrition training modules, 2004

Task

Use the following data to calculate the under-five and crude mortality rate.

It is estimated that 20 per cent of the population are less than five years of age.

1. What is the crude mortality rate?
2. What is the under-five mortality rate?
3. Is this an emergency?

Deaths reported over five-day period from a population of 22,200

NAME	AGE	SEX	CAUSE OF DEATH
John Smith	4 months	M	Cough
Mohammed Ahmed	65	M	Fever, chills, headache
Marion Jones	3	F	Diarrhoea
Maryama Abdi	22	F	In childbirth
Joshua	30	M	?
Tadessa	3	M	Diarrhoea
Hassan Mohamed	2	M	Rash, fever, cough ? measles
James Jenkins	30	M	Truck accident
Mary Jenkins	5	M	Truck accident
Patricia Jenkins	2	F	Truck accident
Fatima Ismail	18 months	F	Malnourished
Doreen Duncan	18	F	Diarrhoea
Mary Jacobs	35	F	Diarrhoea
Theresa King	77	F	"very old"
Graham Williams	14	M	Fell from a mango tree!
Marie Mulholland	4	F	Measles
Ahmed Abdi	25	M	Malaria
Jack Smith	6	M	Respiratory diseases
Fred Harvest	7	M	Diarrhoea
Charles Sanderson	24	M	Stab wound
Jason O Reilly	15	M	Malaria
Ismail Mohamed	7	M	Measles
Susan Saunders	1 month	F	?
Mary Wise	6	F	Malaria
Gabrielle Gode	8	F	? meningitis
Steven Grey	4 months	M	Diarrhoea
Osman Abdi	6 months	M	Malnutrition
Hyacinth Blue	33	F	After childbirth
Jane Merlin	7	F	Malaria
Jean-Paul Marques	5	M	Respiratory infection
Elizabeth Edmund	6	F	Measles

Handout 4b: Mortality rate exercise: Answers

1. What is the crude mortality rate?

CMR
Total 31 deaths
 $CMR = 2.8/10,000/day$
31 deaths divided by 22,200 people x 10,000 divided by 5 days
= 2.8 deaths/10,000/day

2. What is the under-five mortality rate?

<5 mortality rate
deaths in children <5 years of age = 10 deaths
20% of the population are <5 years. In this example: 4,440 <5 years
<5MR = 4.5/10,000/day.

3. Is this an emergency?

Yes, as the CMR is $>1/10,000/day$ and the <5 years mortality rate is $>2/10,000/day$.

Exercise 5: Planning a Rapid Assessment**What is the learning objective of this exercise?**

- To be able to plan and participate in a joint health and nutrition assessment and/or
- To be able to plan and participate in a health assessment which appropriately incorporates nutrition issues.

When should this exercise be done?

- May be conducted as part of a half day, one day or longer training course/workshop

How long should the exercise take?

- 60 to 90 minutes

What materials are needed?

- **Handout 5a:** Planning a Rapid Assessment
- Flip chart paper and marker pens

What does the trainer need to prepare?

- A model answer is not provided. The trainer must work through the key points for this question using the materials in part 2 and develop model answers or key points for each of the questions See trainer guide 5b.

Instructions

Step 1: Distribute the handout to each participant and divide participants into group of maximum five people.

Step 2: Allow participants 15-20 minutes to work in groups to discuss the two questions and record answers for reporting back.

Step 3: Allow up to 40 minutes for reporting from all groups

Step 4: Use remaining time to facilitate discussion on feedback – ensuring that the key points have been raised/discussed.

Handout 5a: Planning a Rapid Assessment¹

In response to reports of increased fighting and further population displacement in Katakwi district, Teso region, Uganda; the Health Coordinator and Programme Manager of an international agency plan to carry out a **preliminary or initial rapid assessment** of the situation and need in the area.

Due to insecurity the assessment team will depart from the office (2 hours' drive from Katakwi) at 8am and leave Katakwi by 5pm latest.

Task

- 1) Please outline
 - a) Composition of the team,
 - b) Pre visit preparation required
 - c) Information that the team need to obtain during the assessment (Make a check list of questions/issues to investigate to guide the assessment).
 - d) Possible sources of information
 - e) Methodologies to be used in conducting the assessment and collecting the information,
 - f) Key informants, individuals/groups to engage with
- 2) Please also identify/discuss major issues that are likely to affect any possible intervention (Contextual and organisational).

¹ Adapted from Sphere training resources

Training guidance 5b: Planning a Rapid Assessment²

Use the materials in part 2 to develop model answers or key points for this exercise

Q1 Please outline:

- a) Composition of the team,
- b) Pre visit preparation required
- c) Information that the team need to obtain during the assessment (Make a check list of questions/issues to investigate to guide the assessment).
- d) Possible sources of information
- e) Methodologies to be used in conducting the assessment and collecting the information,
- f) Key informants, individuals/groups to engage with

Please refer to guidance and principles for conducting an initial rapid assessment for key points for the above question.

Q2 Please also identify/discuss major issues that are likely to affect any possible intervention (Contextual and organisational).

The key issues here would include

Staff security -to travel to and stay in the area.

Capacity of the organisation to support interventions (Availability of vehicles, communication equipment)

Logistics – risk of transport of supplies to and around the district.

² Adapted from Sphere training resources

Exercise 6: Consideration of Gender Based Violence (GBV) in Rapid Health Assessments within the context of nutrition**What are the learning objectives of this exercise?**

- To understand the implications of GBV on the nutritional status of infants and young children
- To understand how to incorporate exploration of GBV related issues in a rapid health assessment

When should this exercise be done?

- May be conducted as part of a half day, one day or longer training course/workshop and after participants have been introduced to the topic – suggest to do after exercise on IRA

How long should the exercise take?

- 50 to 60 minutes

What materials are needed?

- **Handout 6a:** Consideration of GBV in Rapid Health Assessments
- Flip chart paper and marker pens

What does the trainer need to prepare?

- Familiarise yourself with the points outlined in the trainers guidance 6b and part 2 of the training module.

Instructions

Step 1: Distribute the handout to each participant and divide participants into groups of maximum five people.

Step 2: Allow participants 15-20 minutes to work in groups to discuss the two questions and record answers for reporting back.

Step 3: Allow up 15-20 minutes for reporting from all groups

Step 4: Use remaining time to facilitate discussion on feedback, ensuring that the key points have been raised/discussed.

Alternatively this exercise could be conducted as a brainstorming exercise in a plenary session

Handout 6a: Consideration of GBV in Rapid Health Assessments

Q1 What are the implications of GBV on the nutritional status of infants and young children?

Q2 What are the issues that health assessors should consider in relation to GBV during a Rapid Health Assessment and how is this related to nutrition?

Discuss the two questions above and **outline main points** on flip chart for feedback and discussion –

Alternatively **brainstorm** the questions in a plenary session and record feedback on flip chart – ensuring that key issues are emphasised.

Handout 6b: Consideration of GBV in Rapid Health Assessments – trainer guidance

Q1 What are the implications of GBV on the nutritional status of infants and young children?

The physical consequences of GBV include unintended pregnancies, unsafe and complicated abortions, adverse pregnancy outcomes including miscarriage, low birth weight and foetal death, Sexually Transmitted Infections (STIs) including HIV and Urinary Tract Infections (UTIs).

These physical consequences will have a direct and negative impact on the general health status of a mother, which subsequently will impact the nutritional status of her infants, while low birth weight will directly impact health and nutritional development of the child.

The psychological consequences of GBV include anxiety disorders including post-traumatic stress disorder, depression, feelings of inferiority, inability to trust, fear, increased substance abuse, sleep disturbance, eating disorders, sexual dysfunction and suicide. A mother's ability to provide optimal nutrition and care for her children is likely to be affected if she is suffering from any of these psychological disorders.

Q2 What are the issues that health assessors should consider in relation to GBV during a Rapid Health Assessment and how is this related to nutrition?

Exploration about GBV-related issues should be conducted very sensitively and by appropriately skilled and experienced staff.

In the early stages of an emergency, health assessors should enquire about the number of reported cases of sexual violence. Assessors should also enquire about existing community support groups that would be able to be in a position to assist and support those who have been subjected to GBV.

Health and nutrition managers may be able to work with various groups providing support to women who have been subjected to GBV to link Infant and Young Child Feeding (IYCF) and other child care practices with various initiatives/services to support mothers who have been subjected to GBV.

Exercise 7: Consideration of HIV in Rapid Health Assessments within the context of nutrition**What are the learning objectives of this exercise?**

- To understand the health implications of HIV on the nutritional status of an emergency affected population
- To understand how to incorporate exploration of health related HIV issues in a rapid health assessment

When should this exercise be done?

- May be conducted as part of a half day, one day or longer training course/workshop and after participants have been introduced to the topic. Ideally this should be carried out after a session on rapid assessment.

How long should the exercise take?

- 50 to 60 minutes

What materials are needed?

- **Handout 7a:** Consideration of HIV in Rapid Health Assessments within the context of nutrition
- Flip chart paper and marker pens

What does the trainer need to prepare?

- Familiarise yourself with the points outlined in the trainers guidance 7b and part 2 of the training module

Instructions

Step 1: Distribute the handout to each participant and divide participants into groups of maximum five people.

Step 2: Allow participants 15-20 minutes to work in groups to discuss the two questions and record answers for reporting back.

Step 3: Allow up 15-20 minutes for reporting from all groups

Step 4: Use remaining time to facilitate discussion on feedback, ensuring that the key points have been raised/discussed.

Handout 7a: Consideration of HIV in Health Assessments within the context of nutrition

Q1 What are the health implications of HIV on the nutritional status of an emergency-affected population?

Q2 What are the issues that health assessors should consider in relation to health implications of HIV on nutritional status during a Health Assessment?

Discuss the two questions above and **outline main points** on flip chart for feedback and discussion.

Handout 7b: Consideration of HIV in Health Assessments within the context of nutrition – trainer guidance

Q1 What are the health implications of HIV on the nutritional status of an emergency-affected population?

Humanitarian crises, which are often linked to displacement, food insecurity and poverty, increase vulnerability to HIV.

The factors that determine HIV transmission during a humanitarian crisis are complex and depend on the context. Existing gender inequalities may be further exacerbated, making women and children disproportionately more vulnerable to HIV, e.g. sex work and sexual exploitation may increase as a consequence of loss of livelihood and lack of employment opportunities. Population displacement may lead to separation of family members and breakdown of community cohesion and of the social and sexual norms that regulate behaviour. Women and children may be used by armed groups and may be particularly vulnerable to HIV infection as a result of sexual violence and exploitation, while rape may be used as a weapon of war.

Humanitarian emergencies will also negatively affect the lives of people living with HIV:

- Pre-emergency HIV services may be disrupted during humanitarian crises – people may no longer have access to information about HIV prevention, to Voluntary Counselling and Testing (VCT), to condoms or to services for Prevention of Mother to Child Transmission (PMTCT).
- People living with HIV may suffer due to disruption of services for treatment of opportunistic infections and for Antiretroviral Therapy (ART).
- Their health is put at further risk as nutritional needs are not met and palliative and home based care may be disrupted.

The impact of an emergency on mothers and other carers living with HIV (as above) may impact their ability to provide optimal nutrition and care for the children in their care and subsequently affect the nutritional status of a child.

Q2 What are the issues that health assessors should consider in relation to the health implications of HIV on nutritional status during a Health Assessment?

In a humanitarian crisis HIV should be viewed as a priority cross-cutting issue and appropriately addressed in all aspects and stages of the response. The IASC HIV guidelines outline nine areas/sectors which should be actively engaged in HIV activity in a humanitarian crisis³:

- HIV awareness raising and community support,
- Health
- Protection
- Food security, nutrition and livelihood support
- Education
- Shelter
- Camp coordination and camp management
- Water, sanitation and hygiene
- HIV in the workplace

HIV- related issues should be integrated into initial rapid assessments in all sectors and initial priority emergency-specific HIV interventions prioritised.

From the HIV awareness raising and community support perspective, pre-crisis and existing prevention programmes and community support groups should be identified. These groups should be utilised for dissemination of appropriate messages and materials on prevention of HIV and GBV; availability of services for responding to GBV and provision of HIV treatment and care; and how to access ART.

After the initial assessment and establishment of initial responses the local HIV situation should be further assessed to enable development of an appropriate expanded prevention and awareness programme.

³ IASC guidelines for addressing HIV in Humanitarian settings 2010

From a health perspective, implementation of the Minimum Initial Service Package (MISP) for reproductive health in emergencies including reduction of HIV transmission, is a Sphere standard and is designed to be implemented without a needs assessment, since documented evidence already justifies its use.

The MISP, which includes reduction of HIV transmission as a component, outlines actions needed to respond to the priority life-saving reproductive health needs of a population (including people living with HIV) in the early phase of an emergency.

Continuation of ART for those already on treatment pre-crisis (including PMTCT) is included in MISP and should be considered a priority intervention and part of the minimum initial response to HIV even in the acute phase of an emergency.

In addition, the MISP includes prevention of excess neonatal and maternal morbidity and mortality, the prevention and clinical management of sexual violence, and coordination and planning activities as critical minimum actions.

After the initial response is established there is a need to re-establish core HIV-related services for the emergency affected population. An assessment of the needs of the emergency-affected population for HIV treatment, care and support services; and an assessment of the capacity of the existing health and social system to provide priority services should be conducted. Core HIV services should then be planned and implemented as soon as possible, taking into account the local context and priorities, the epidemiological profile of the population and the capacity of the sector/system to provide planned interventions/services.

5. Case studies

The following section provides two case studies with accompanying exercises to be conducted during training. Case studies are useful for getting participants to think through real-life scenarios. They also provide an opportunity for participants to work in a group and develop their analytical and decision-making skills. Trainers should develop their own case studies which are contextually appropriate to the particular participant group. Ideally, trainers should use scenarios they are familiar with.

Exercise 8: Use of the conceptual framework for maternal and child undernutrition to identify health and nutrition issues that need in to be assessed in a case study from Bangladesh

What is the learning objective?

- To familiarise participants with the Conceptual Framework for Maternal and Child undernutrition
- To increase participant understanding of the links between health and undernutrition

When should this exercise be done?

- After giving an overview of the Conceptual Framework and links between health and nutrition

How long should the exercise take?

- 30 to 45 minutes

What materials are needed?

- **Handout 8a:** Conceptual framework
- **Handout 8b:** Use of conceptual framework for health assessments, demonstrating the link with nutrition – Bangladesh case study
- **Handout 8c:** Use of the conceptual framework for health assessments, demonstrating the link with nutrition – Bangladesh case study: model answer

What does the trainer need to prepare?

- Put the headings of each term of the conceptual framework on pieces of card.

Instructions

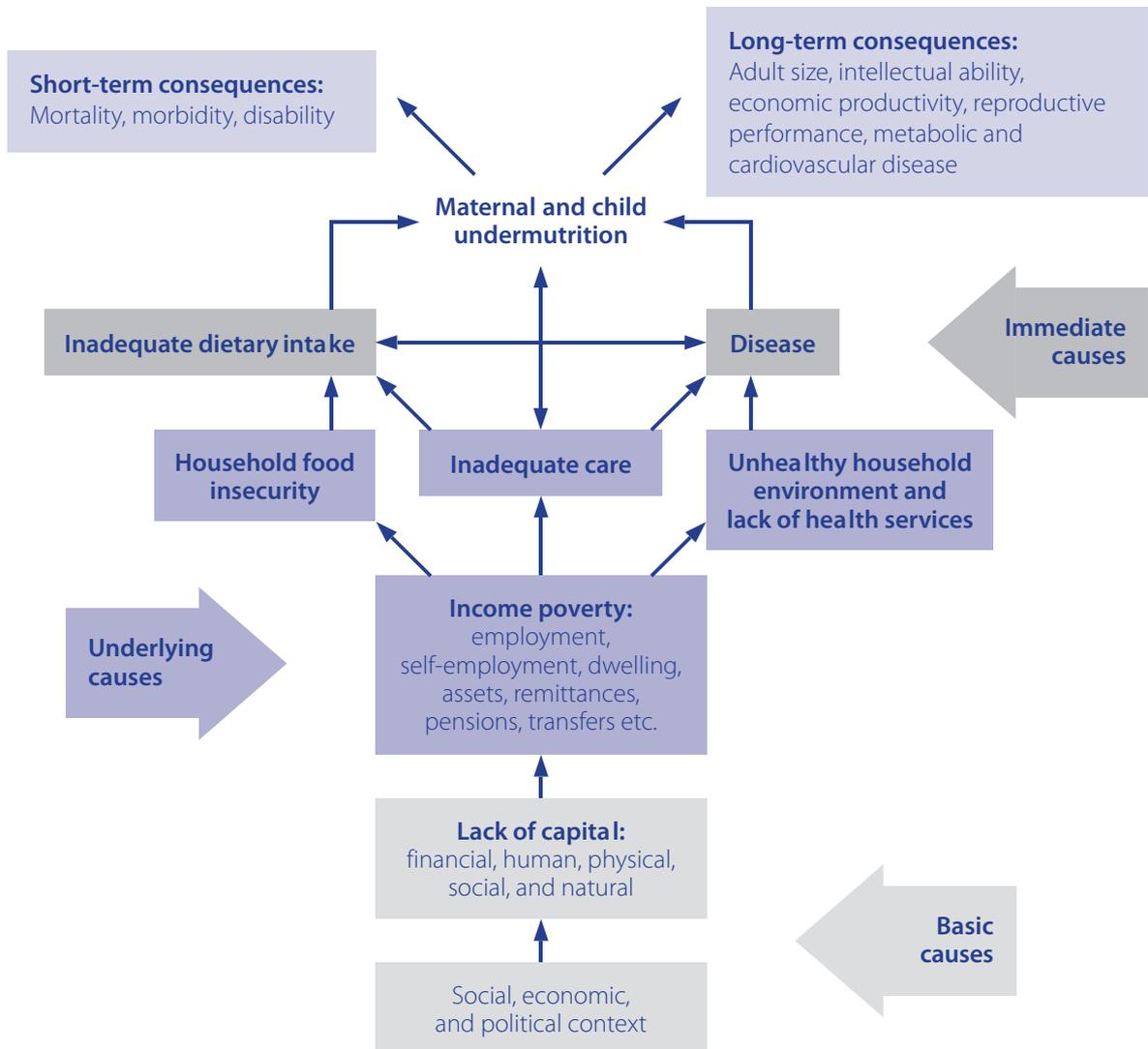
Step 1: Divide into groups of (Maximum) five people and (Depending on number of groups) assign one or two groups to each of the three underlying causes of undernutrition.

Step 2: Give each participant a copy of Handout 3a.

Step 3: Allow participants 10 minutes to read the case study and 10 minutes to discuss the key issues that need to be assessed under the specific heading they have been assigned

Step 4: Use remaining time for feedback and plenary discussion on the links between health and undernutrition.

Handout 8a: Conceptual Framework of the causes of maternal and child undernutrition and its short term consequences



Source: Lancet series on Maternal and Child Undernutrition 2008 – adapted from United Nations Children’s Fund, *Conceptual framework for analysing the causes of malnutrition*, UNICEF, New York, 1997

Handout 8b: Use of the conceptual framework to identify health and nutrition issues that need in to be assessed in a case study from Bangladesh

Case study Bangladesh: Cyclone Sidr, November 2007. Adapted from an assessment report following the cyclone Sidr in Bangladesh: www.who.int

Bangladesh is a very low-lying, densely populated country, frequently affected by cyclones and floods that annually cause the internal displacement of 1 million people. In 2007 the country had unusually high levels of rainfall.

Bangladesh is home to more than 2 per cent (140 million, 2005) of the world's population, 36 per cent of whom exist below the poverty line (2000) and 38 per cent of whom are less than 15 years old. Bangladesh also hosts approximately 400,000 refugees. Bangladesh is divided administratively into 6 divisions, 64 districts and 460 *upazilas*.

Cyclone Sidr developed over the Bay of Bengal and made landfall on 15 November 2007 in the coastal areas of Bangladesh with winds of up to 250 km/hr and associated tidal surges. Due to the complex of deltas on the coast, these tidal surges penetrated deeply and extensively inland, compounding the already existing problems from seasonal flooding. It was the worst cyclone to affect Bangladesh since 1991. Thirty districts, mainly in the southern part of the country, as well as offshore islands were affected by seasonal floods or cyclone or both.

On 26 November 2007, the Government of Bangladesh's official report indicated that more than 7 million people had been affected, of which 3,243 had died, 880 people were missing and 35,000 were injured. The figures were conservative as it was unknown how many were affected in remote areas. Disaster preparedness may have had an important mitigating effect as 3.2 million people were evacuated from the coastal areas.

The cyclone caused severe storm-damage to domestic dwellings (Greater than 1 million were partially or totally destroyed); roads, communication and other essential service infrastructure were also affected. Such damage hindered and complicated the assessment and response efforts. Access to the public health system which was already suboptimal was also affected and the capacity of the national surveillance system to detect and respond to epidemics further weakened.

WHO Bangladesh deployed field teams to Chittagong and Khulna Divisions to assist local health authorities and assess the situation. WHO also participated in the joint United Nations damage and needs assessments in the most affected areas. The Government of Bangladesh announced that relief priorities were to provide adequate food, safe drinking water and shelter to the affected people. Health issues were a major concern in districts affected by the cyclone.

The major health problems in Bangladesh, which could be exacerbated by the emergency related to infectious diseases. In addition in 2006, it was estimated that 13 per cent of children under five years of age were wasted and 48 per cent were underweight and around 20 per cent were vitamin A deficient. Major causes of mortality pre-emergency were from respiratory and diarrhoeal diseases.

Task – After reading the Bangladesh case study – use the conceptual framework to list and describe the issues that need to be assessed.

Handout 8c: Use of the conceptual framework for maternal and child undernutrition to identify health and nutrition issues that need in to be assessed in a case study from Bangladesh

Model answers:

Household food insecurity including:

- Access to adequate and safe food through the year
- Food production
- Food cost
- Livelihood strategies (Less manual labour, reduced terms of trade, weakened barter, asset depletion)
- Gifts /other sources

Inadequate care including:

- Maternal nutrition
- Maternal care (Workload gender imbalance etc)
- Infant and child feeding practices
- Child care practices / time available
- Health seeking behaviours
- Food preparation
- Intra-household food distribution
- Capacity to care for dependant individuals

Unhealthy household, environment and lack of health services including:

- Water quality and quantity
- Hygiene and sanitation
- Indoor pollution
- Access to and utilisation of health services (Due to a variety of reasons including damaged infrastructure – both buildings and roads – financial barriers, remote populations, weak quality of available services, low community engagement and awareness)
- Shelter

Exercise 9: Planning and implementing a health and nutrition assessment during conflict**What are the learning objectives?**

- To be able to plan and participate in a health assessment which includes nutrition in a conflict situation
- To know what information is required and methods to use to obtain the information

When should this exercise be done?

- As part of a longer in-depth training

How long should the exercise take?

- 60 to 90 minutes

What materials are needed?

- **Handout 9a:** Planning and implementing a health and nutrition assessment during conflict in Central African Republic 2007

What does the trainer need to prepare?

- Prepare a case study from a context familiar to the participants based on the template Handout 6a or prepare a similar study related to the country in which the training is being held. A model answer is not provided, so the trainer must work through some potential answers / key points for this exercise using the material from part 2 of the module. The trainer should review general principles and guidance on assessments in humanitarian crises, types and approaches to coordinated assessments and health assessments in emergencies sections, along with guidelines on conducting an IRA.

Instructions

Step 1: Distribute Handout 6a on the day before this activity, so that participants can read it through in advance. If this is not possible make sure you allocate 10 additional minutes for participants to read the case study, especially if English is not their first language.

Step 2: Divide the participants into groups of (Maximum) five people.

Step 3: Ask each group to complete the task in 30 minutes. This includes discussion of the issues and preparation of answers on flip chart

Step 4: Use remaining time for feedback from each group and plenary discussion. The trainer should then summarise the session and key points that have been highlighted by the participants and highlight any important issues/key points which have been omitted.

Handout 9a: Planning and implementing a health and nutrition assessment during conflict in Central African Republic 2007

Case study Central African Republic (CAR). This scenario has been extracted from an assessment report by Merlin in 2007.



Politics and conflict

Recent history in Central African Republic (CAR) has been characterized by coups, rebellions, mutinies and entrenched poverty. The country is landlocked, isolated and neglected. Surrounded by unstable neighbours, some of whom have backed local rebel groups, CAR is negatively affected by regional rivalries and conflicts, but lacks sufficient influence to alter this situation on its own. CAR does have significant mineral resources, but lacks the infrastructure and expertise to successfully exploit them without external investment.

The current President, Francois Bozize, came to power in a coup in March 2003. He was successful in legitimizing his rule through elections held in 2005. His consolidation of power followed a familiar course: senior army and government positions were filled by followers and patronage remains a key tool of control. Bozize faces several challenges to his government from a number of rebel groups operating in the northwest and northeast of the country.

Despite the low level of conflict and small forces involved, all armed factions appear to have had a significant impact on communities. Rebel groups have used the civilian population as shields and as a recruiting resource. Property has been looted and livelihoods disrupted. For its part the army has at times been brutal in its pacification of rebel areas. The general pattern has been that civilians have borne the brunt of the impact of conflict in terms of displacement and loss of property.

Current situation

There are an estimated 285,000 people that have been forced to flee their homes, 212,000 are now Internally Displaced Persons (IDPs) and 70,000 have left CAR. At least 100 villages have recently been burnt and there are reports of gender-based violence, with high numbers of rapes being reported. In conflict areas, both the army and rebels have preyed on the local population.

The underlying picture is one of significant chronic need. Successive years of under-funding, poor security and a lack of investment in infrastructure and training have reduced public services to a minimum. In many places services are non-existent. This situation has left the population highly vulnerable. The government and public services have no real capacity to deal with shock. The effects of a rebellion or a crop failure therefore probably have a rapid and disproportionately large impact on the population.

The health system has all but collapsed and requires long-term intervention to address the issue. Health staff has not been paid for some time, infrastructure is degraded and the population generally lacks the ability to pay the fees demanded by staff for services. Access to healthcare is a problem throughout CAR and, although the need is most immediate in conflict areas, many of the same problems persist elsewhere. It is reported that acute malnutrition exists, but at a low level and services are not available. Difficulties in the provision of clean water largely revolve around the maintenance of pumps and the provision of tools. As with the health system, access to education is minimal. Teachers have not been paid for some months.

There are still comparatively few agencies operating in CAR. A few agencies have started to provide Non-Food Items (NFI) to the IDPs. The Cluster system is in operation (WHO leads the health cluster) and it appears to function reasonably well – although it is not clear how many agencies are currently operating in health and nutrition in the area.

TASK

In your group, and once you have all had time to read through the case study, nominate a rapporteur to record the main points and a spokesperson to provide feedback to the wider group. Then answer the questions below.

You have been asked to be part of an NGO team to assess Central African Republic (CAR) with the view to starting a new health programme.

- 1. What type of assessment would you do and why?**
- 2. What information are you looking for during the assessment?**
- 3. Where would you get the information from and how?**
- 4. What might be the relationship between health and nutrition in this context and how does this affect your assessment?**
- 5. What are some of the challenges of doing an assessment in this context?**

6. Field based exercises

This section outlines ideas for exercises that can be carried out as part of a field visit. Field visits require a lot of preparation. An organization that is actively involved in programming has to be identified to 'host' the visit. This could be a government agency, an international NGO or a United Nations agency. The agency needs to identify an area that can be easily and safely visited by participants. Permission has to be sought from all the relevant authorities and the relevant communities and care taken not to disrupt or take time away from programme activities. Despite these caveats, field-based learning is probably the best way of providing information that will be remembered by participants.

Exercise 10: Conducting a health assessment using the initial rapid assessment (IRA) tool

The participants are tasked with conducting a field assessment.

The objective of the assessment is to provide a quick overview of how a population has been affected by a crisis, including who is likely to be at greatest risk of mortality and acute morbidity and why, and identify priorities for follow-up action.

What is the learning objective of the exercise?

- To be able to plan and participate in a health assessment which includes nutrition.

When should this exercise be done?

- As part of an in-depth course, after other exercises (such as case studies) have been completed.

How long should the exercise take?

- 2 days in total for participant briefing and preparation, site visit for assessment, analysis of findings and review of process.

What materials are needed?

- Calculators
- Initial rapid assessment tool for each participant, along with a few copies of the IRA aid memoire and guidelines. notebooks, clip boards
- Transport, fuel and food for the trip

What does the trainer need to prepare?

- Before starting, the trainer needs to have asked permission from the authorities at each of the sites chosen for the field study. It is essential that the trainer visits the field site in advance of the visit in order to set up focus groups and identify and get agreement with key informants, and identify potential problems
- Translators may be needed
- Transport and food will need to be arranged, and it is important to ensure there are no security concerns.

Exercise 10: Conducting a health assessment using the initial rapid assessment (IRA) tool (continued)**Steps to be taken day before travel to site**

- Give each participant a copy of the initial rapid assessment tool 2010 version (See www.humanitarianreform.org) in advance to read through.
- Brief the participants on the scenario and review the IRA – highlighting areas/issues that the assessment will need to focus on.
- Brief the team on how the assessment will be conducted.
- Divide participants into sub groups and allocate responsibility for various aspects of the assessment to the various groups by the trainer prior to travel to the site.
- The trainer should ensure that the participants understand the methods they should use to gather various types of information and the key stakeholders they need to engage with (For the various aspects of information gathering).
- **The trainer should support the groups to prepare for the visit and how they will undertake their respective task(s).**

Site visit

During the site visit the trainer should support and supervise the participants as they undertake their respective tasks.

Post-visit activity

Following the site visit the participants and trainer should meet to review findings from the visit

- Discuss and compare findings,
- Triangulate information from various sources, and
- Conduct analysis of cause and effect and interpretation of data
- Identify priorities for follow up actions (including immediate interventions and further assessment).

The process of conducting the review should also be reviewed and include:

- Challenges the participants faced in conducting the task and how these could be overcome in future assessments
- What the participants have learned from the exercise.

PART 4: TRAINING RESOURCE LIST

The training resource list is part four of four parts contained in this module. It provides a comprehensive list of reference material relevant to this module including guidelines, training courses and reference manuals. Part four provides background documents for trainers who are preparing training material.

What can you expect to find here?

1. An inventory of existing **guidelines and manuals** listed alphabetically by agency name with details about their availability
2. A list of known **training** courses listed alphabetically by agency name with details as available about:
 - Overall content
 - Intended use
 - Target audience
 - Length of time the course session has been designed for
3. Training materials that a trainer may use to organise health assessment training

Guidelines and technical papers

1. **Centers for Disease Control and Prevention (2007). *Reproductive Health Assessment Toolkit for Conflict-Affected Women Atlanta*: CDC.**
A toolkit which can be used to quantitatively assess reproductive health risks, services, and outcomes in conflict-affected women between 15 and 49 years of age. Survey data can be used to compare a population across points in time or to make comparisons across populations.
Availability: Printed in English and available electronically
Contact: www.reliefweb.int
2. **Inter-Agency Field Manual for Reproductive Health in Humanitarian Settings (2010)**
Developed by the inter-agency working group on Reproductive health issues in Humanitarian Settings and is an update of the Reproductive Health in Refugee settings Field Manual 1999.
Available in hard copy and electronically www.aiwg.net/resources and via www.onerresponse.info and/or www.humanitarianinfo.org
3. **Inter-Agency Standing Committee (2006). *Gender Handbook in Emergency Action New York, United Nations***
Availability: Hard copy and electronically via www.onerresponse.info and/or www.humanitarianinfo.org
4. **Inter-Agency Standing Committee Global Health Cluster (2009). *Health Cluster Guide***
Provides guidance for Health Cluster lead agency, coordinator and partners to work together during a humanitarian crisis to achieve the aim of reducing avoidable mortality, morbidity and disability and restore the delivery of equitable access to preventative and curative health care as quickly as possible.
Availability: Available in hard copy and CD-ROM from WHO Geneva and electronically at http://www.who.int/hac/global_health_cluster/en/ and via www.onerresponse.info and/or www.humanitarianinfo.org

TRAINING RESOURCE LIST

5. **Inter-agency Standing Committee (UN-IASC) (2009). *Health, Nutrition and WASH Clusters, Initial Rapid Assessment (IRA) 2009 version.***
A tool for conducting inter-cluster / agency rapid assessments, by WASH, health and nutrition clusters.
Availability: In English and French; Latest version 2009 includes Assessment form, Aid Memoire and Guidance notes, and software tool for inputting data 2009. Available on GHC website tools section, www.who.ghc, and via www.oneresponse.info and/or www.humanitarianinfo.org
6. **Inter-Agency Standing Committee (2010). *Guidelines for addressing HIV/AIDS in humanitarian settings, UN, New York.***
The guidelines outline background information on HIV in humanitarian crises and provide guidance on a) coordination, planning and resource mobilisation, b) responses to HIV for the nine key sectors including health and food security, nutrition and livelihood support; c) key monitoring and evaluation activities for the response to HIV in humanitarian settings.
Available in hard copy and CD Rom and electronically via link from www.oneresponse.info and/or www.humanitarianinfo.org
7. **Inter-Agency Standing Committee (2007). *Guidelines on Mental Health and Psychosocial Support in Emergency Settings, New York: United Nations.***
Availability: Hard copies, CD-ROM and electronically via www.oneresponse.info and/or www.humanitarianinfo.org
8. **International Federation of Red Cross and Red Crescent Societies (2008). *Guidelines for assessment in emergencies, Geneva: IFRC.***
This is a guide for generalists and members of the Red Cross Movement to advise on assessments. Chapters on concepts, planning an assessment, office-based tasks, fieldwork, analysis and reporting.
Availability: Printed version in English and available electronically
at <http://www.ifrc.org/Docs/pubs/disasters/resources/responding-disasters/guidelines-for-emergency-en.pdf>
9. **ISDR/UNHCR/WHO (2002). *Environmental health in emergencies and disasters: a practical guide, Geneva: IFRC.***
This practical guide covers the nature of emergencies and disasters, pre-disaster activities, response and recovery. Part II deals with various sectors and how they interact, including communicable diseases. Food safety and nutrition is covered in Chapter 9.
Availability: Printed version in English. Electronic version in English and Arabic available
at http://www.who.int/water_sanitation_health/hygiene/emergencies/emergencies2002/en/
10. **Johns Hopkins & the International Federation of Red Cross and Red Crescent Societies (2008). *Public Health Guide in Emergencies, 2nd ed. Geneva: IFRC.***
This is a guide for emergency public health. Of particular relevance are the chapters on disaster epidemiology with a section calculating mortality rates and rapid needs assessments; on health care systems in an emergency; and mental health.
Contact: <http://www.ifrc.org/what/health/relief/guide.asp>
11. **Médecins Sans Frontières (2006). *Rapid health assessment of refugee or displaced Populations Paris: MSF.***
Software: E-Pop (excel tool for rapid population estimates by area sampling in emergencies, Compunut (excel tool for calculation of food ration composition), Tool for prospective mortality and morbidity surveillance, Wincosas (Epicconcept, France, for data entry and analysis for vaccination coverage surveys) and EpiData v3.1 (data entry tool).
A manual describing the focus of a rapid health assessment, adequate methods for correctly carrying out rapid health assessments, with practical tools and support for analysis and interpretation of the results of a rapid health assessment. It is aimed at practitioners and includes 1) Framework of rapid health assessments: top priorities in emergencies, 2). The focus of rapid health assessments, 3) Presentation of methods, 4) Areas of assessment and indicators, 5) Practical tips for the implementation of a rapid health assessment availability: Printed version in English. Electronic version in English
Contact: www.refbooks.msf

12. **Oxfam/Emergency Capacity Building Project (2007). *Impact measurement and Accountability in Emergencies, the Good Enough Guide* Oxford: Oxfam.**

This guide is to assist with the basic elements of accountability and impact measurements. It is an output of the Emergency Capacity Building Project, which is inter-agency and has the aim of addressing the gaps in international emergency response. Of particular relevance are a couple of the tools e.g., Section 2, Profile the people affected by the emergency.

Availability: electronic version in English,
http://www.oxfam.org.uk/resources/downloads/good_enough_guide/good_enough_guide_book_en.pdf
13. **The Sphere Project (2011). *Humanitarian Charter and Minimum Standards in Humanitarian Response* Geneva: The Sphere Project.**

The new edition of the Sphere Handbook takes into account recent developments in humanitarian practice in water and sanitation, food, shelter and health, together with feedback from practitioners in the field, research institutes and cross-cutting experts in protection, gender, children, older people, disabled people, HIV/AIDS and the environment. It is the product of an extensive collaborative effort that reflects the collective will and shared experience of the humanitarian community, and its determination to improve on current knowledge in humanitarian assistance programmes.

Availability: Will be available in English, French, Spanish, Arabic in hard copy, CD ROM and electronically via www.sphereproject.org
14. **World Food Programme and Centers for Disease Control and Prevention (2005). *A Manual on Measuring and Interpreting Malnutrition and Mortality with a set of training materials* Rome: WFP.**

A manual and a set of training tools, including PowerPoint presentations, exercises and survey tools aimed at staff who collect and analyse nutrition and mortality data.

Availability: Electronic version of manual and training material
Contact: www.wfp.org
Available at: www.unscn.org/en/resource_portal
15. **World Health Organisation, Ed. Connolly, M.A. (2005). *Communicable disease control in emergencies: A field manual* Geneva; WHO.**

A manual, including the prevention, surveillance and outbreak control of communicable diseases. Of particular relevance: Chapter 1. Rapid Assessment, with sections on: objectives, composition of the team, methods of data collection, survey and sampling methods, data to be collected, analysis and presentation of results.

Availability: Printed version in English. Electronic version in English available at http://www.who.int/infectious-disease-news/IDdocs/whocds200527/ISBN_9241546166.pdf
Contact: www.who.int
16. **World Health Organisation, (2007). *Analysing disrupted health sectors, a modular manual* Geneva: WHO.**

A manual, linked to the training course (see below), with the aim of providing guidance to analysts of troubled health sectors. This includes countries on the verge of an economic, political and/or military catastrophe, protracted crises and situations of transition from disaster to recovery. The intended users are apprentice analysts, already with field experience, familiar with quantitative techniques, attempting to analyse a disrupted health sector.

Availability: Electronic version in English available at http://www.who.int/hac/techguidance/tools/disrupted_sectors/adhsm.pdf
17. **Darcy, J. and Hofmann C.A. (2003). *According to need? Needs assessment and decision-making in the humanitarian sector* HPG Report No.15. London**

Humanitarian Policy Group, Overseas Development Institute. A technical paper looking at the link between needs assessment and decision-making in the humanitarian sector. Of particular relevance is the executive summary which gives an overview on assessments and Chapter 3 on the practice of needs assessment, with sections on food security and nutrition (Section 3.3) and health-related assessments (Section 3.4)

Availability: Printed in English and electronically available at <http://www.odi.org.uk/resources/download/239.pdf>

Training courses

18. Centre for Research on the Epidemiology of Disasters: Assessing Public Health in Emergency Situations

Organised by: Centre for Research on the Epidemiology of Disasters (CRED) Belgium (course in English)

Timing: Two weeks.

This two-week intensive course is designed to familiarise professionals with the epidemiological techniques to determine the health impacts of disasters and conflicts. The course has practical application in the field and covers the different use of quantitative tools for the assessment of health needs in populations affected by catastrophic events.

An international faculty, comprised of reputable professors invited from various prestigious institutions, teach the course. The course introduces participants to the methods and tools of epidemiology in the context of humanitarian emergencies. Topics covered include malnutrition, infectious diseases, mortality, morbidity, mental health, reproductive health, and population displacement. The course takes place in Brussels, Belgium. Contact: <http://www.CRED.belgium>

19. International Rescue Committee: Public health in Complex emergencies

Organised by: International Rescue Committee in conjunction with several other institutions, and conducted jointly with these other institutions several times a year and in different places in the world

Timing: Two week residential course

Content: Broad introduction to public health in emergencies; focuses on critical public health issues faced by NGO/PVO personnel working in complex emergencies, aiming to enhance the capacity of humanitarian workers and their organisations to respond to the health needs of emergency affected populations. Participants will master the key competencies in the following sectors: Context of emergencies, epidemiology, communicable disease, environmental health, nutrition, reproductive health, weapon violence and trauma, protection and security, psychosocial issues, coordination.

Participants

- NGO/PVO staff who are or will in future be responsible for making decisions that affect the health of emergency-affected populations
- District Medical Officer (DMO) and other MOH staff working in areas affected by emergencies
- Staff from international and government organisations who are instrumental in planning services for emergency-affected populations.

<http://www.adpc.net> and <http://www.fhs.aub.edu.lb>

20. International Committee of the Red Cross, Health Emergencies in Large Populations (H.E.L.P.)

Organised by: ICRC in partnership with WHO, National Red Cross Societies and various academic institutions. In 2011 will be held in the US, Kenya, Benin, Switzerland, Japan, China, Mexico and South Africa.

Timing: Three weeks

Content: An intensive course in humanitarian assistance, public health principles and disaster epidemiology

Target audience: Humanitarian aid workers, physicians, nurses, public health practitioners

Contact help.gva@icrc.org or visit website: http://www.icrc.org/eng/resources/documents/misc/help_course.htm

21. Liverpool School of Tropical Medicine, UK.

Public health in humanitarian emergencies

Timing: A two week course held once a year in Liverpool, UK.

The aim of the course is to provide students with knowledge and critical understanding of common public health problems in humanitarian emergencies; to enable students to adopt an evidence-based and reasoned approach to the critical assessment and management of the problems and to develop and evaluate strategies for their prevention.

Target audience: Any person working in international development and humanitarianism would benefit from attending this course. Also people who work in the area of public health, health protection and disease control would benefit.

Contact: <http://www.lstm.liverpool.ac.uk/learning—teaching/lstm-courses/short-courses/hs900—public-health-in-humanitarian-emergencies>

22. **Liverpool School of Tropical Medicine, UK**

Complex Humanitarian Emergencies – Impact on Health and Well Being

Timing: A four week course held once a year in Liverpool, UK

The aim of the course is to provide students with a knowledge and critical understanding of current key themes and debates in the social sciences concerning humanitarian emergencies, including fragile and collapsed states and the politics of intervention, nation building efforts, the anthropology of conflict and complex emergencies, child soldiers and the challenge of reintegration into society, humanitarian assistance in the 21st century, vulnerability and livelihood.

Target audience: Any person wishing to or already working in international development and humanitarianism would benefit from attending this course.

Contact: <http://www.lstmliverpool.ac.uk/learning—teaching/lstm-courses/short-courses/hs807—complex-humanitarian-emergencies>

23. **Liverpool School of Tropical Medicine, UK**

Management of Refugee and Displaced populations

Timing: A two week course held once a year in Liverpool, UK

The aim of the course is to provide students with the knowledge, skill and critical understanding needed to adopt an evidence-based and reasoned approach to the critical assessment and management of refugee and displaced populations across the spectrum from emergency relief to sustainable development.

Target audience: Any person working in international development and humanitarianism would benefit from attending this course.

Contact: <http://www.lstmliverpool.ac.uk/learning—teaching/lstm-courses/short-courses/hs941—management-of-refugee—displaced-populations>

24. **Merlin: Public Health in Crises and Transitional Contexts**

Organised by: Merlin, UK

Timing: Seven days, non-residential, various locations

Objective: To give participants an overview of public health in acute humanitarian crises and early recovery phases

Content: Includes principles of public health, needs assessment and programme delivery

Target audience: Public health and other professionals with interest in the humanitarian sector

Contact: www.merlin.org.uk

25. **RedR UK: Needs Assessment Workshop**

Organised by: RedR UK

Timing: Five days

Objective: To improve the effectiveness of personnel engaged in humanitarian relief by taking you through good practice in assessment procedure, including frameworks and principles of emergency assessments

Overall content: There are four main themes: organisation and management, data collection techniques, analytical frameworks, sector-specific issues

Target audience: Those with experience working in a relief context and who are likely to carry out needs assessments in their work

Contact: http://www.redr.org.uk/en/What_We_Do/training/Course_Calendar.cfm

26. **WHO: Analysing Disrupted Health Systems in Countries in Crisis**

Organised by: WHO in collaboration with IRC and Merlin

Timing: 12 days, residential

Objective: To expand and strengthen the capacity of health professionals in analysing the health systems of countries in crisis, developing adequate response and recovery sector strategies, planning and implementing effective interventions

Overall content: Centred on the analysis of health systems of countries affected by, or recovering from protracted crises, for improving response strategies and plans

Target audience: Health professionals of countries in crisis: WHO staff, health personnel working in government institutions, NGOs, United Nations agencies and other organisations of the health and nutrition clusters.

Contact: http://www.who.int/hac/techguidance/training/analysing_health_systems/en/index.html

TRAINING RESOURCE LIST

27. **WHO Public Health Pre-Deployment (PHPD)**

Organised by: WHO Health Cluster, Health Action in Crises (HAC), Departments of Emergency Preparedness and Capacity Building (EPC) and WHO Mediterranean Centre for Health Risk Reduction (WMC).

Timing: It is a two-week residential course delivered by a pool of experienced humanitarian and public health experts from WHO and academic and technical institutions as well as non-governmental organisations to ensure effective readiness of the Member States, and to enable them to respond effectively to emergencies and crises.

Course aims: To prepare public health and other professionals, who are specific subject experts or those experienced in emergency settings, to work effectively and safely in emergency and crisis situations. These professionals are expected to effectively and efficiently work with national emergency health teams and also with the health cluster and other clusters at country level. Eventually, the course prepares professionals and humanitarian aid workers to respond better to emergencies.

Contact: <http://www.who.int/hac/techguidance/training/predeployment/phpd/en/index.html>

Training materials on health assessment in emergencies

28. **IFRC. Disaster Emergency Needs Assessment: a training module**

One of eight modules in a Disaster Preparedness Training Manual. Material developed by Interworks for the International Federation of Red Cross and Red Crescent Societies and may be used for individual study or by agencies conducting training courses.

Timing: Varied

Overall content: This module introduces basic concepts and approaches related to disaster situations and emergency needs assessments and presents post-disaster assistance needs typically associated with various types of natural hazards.

Target audience: Generalists, planners and professionals with disaster preparedness and/or emergency response responsibilities in the Federation and in the National Societies, as well as NGOs, government emergency commissions, local disaster committees and civil defence training units interested in disaster preparedness and preparedness planning. Visit www.ifrc.org/publicat/index

29. **The Sphere Project (2011). Humanitarian Charter and Minimum Standards in Humanitarian Response.**

Geneva: The Sphere Project.

The new edition of the Sphere Handbook takes into account recent developments in humanitarian practice in water and sanitation, food, shelter and health, together with feedback from practitioners in the field, research institutes and cross-cutting experts in protection, gender, children, older people, disabled people, HIV/AIDS and the environment. It is the product of an extensive collaborative effort that reflects the collective will and shared experience of the humanitarian community, and its determination to improve on current knowledge in humanitarian assistance programmes. Of particular relevance:

Chapter 1: The Core Standards; Food security and Nutrition Assessment in Chapter 3: Minimum Standards in Food Security and Nutrition

Availability: Printed version and pdf downloadable from website in English, French, Spanish and Arabic.

Contact and available at: www.sphereproject.org

30. **UNHCR Health Information System Reference manual**

The manual forms the core reference document for a five-day "Training of Trainers" workshop. This is the prelude to country-level training for implementing partner staff, followed by camp-based deployment of the Health Information System (HIS). The modules are designed to be reproduced and used independently of the manual, in field trainings and exercise work for frontline health staff.

Part One: Introduction

Part One presents an overview of the HIS. It describes the purpose of data collection, the process of selecting standards and indicators, and the importance of standardised health information. It also introduces the concept of the data cycle; the key partners involved; and explains the frequency of reporting at each level of health management.

Part Two: Technical Sections

Part Two introduces the technical sections in the HIS. The HIS contains 10 technical modules, which correspond to the primary healthcare model upon which services are planned, organised and delivered (See list below).

The modules identify the sources required for data collection; define who is responsible for the data; and provide guidance on the “what, how and when” of collecting and reporting health information. Each has been designed as a reproducible, field-based guide that can be used independently of the manual to train staff at the camp level.

Module 1: Population

Module 2: Mortality

Module 3: Morbidity

Module 4: IPD and Referral

Module 5: Laboratory

Module 6: Disease Control

Module 7: Expanded Programme of Immunization (EPI)

Module 8: Nutrition

Module 9: Reproductive Health

Module 10: HIV/AIDS

Part Three: Data Management and Support

Part Three contains core topics related to data management and data validation; internal auditing and quality control; and database management. It also describes how new toolkits will be updated and replaced in the field.

Module 1: Using the Excel Sheet

Module 2: Using the Database

Available to download via http://www.who.int/hac/global_health_cluster/guide/tools/en/index.html and/or CD-Rom can be ordered via the link.

Useful websites

1. www.humanitarianreform.org for information on all the clusters, including meeting reports, training courses and resource materials
2. www.oneresponse.info for information on all the clusters, including meeting reports, training courses, and resource materials
3. www.reliefweb.int for information on emergencies and training resources
4. www.smartindicators.org for information on Standardized Monitoring and Assessment of Relief and Transitions (SMART) initiative: for a description of rationale for and objective of SMART, the software, protocols and case studies; and for related training materials.
5. www.who.int for general information on health,
6. www.who.int/hac for information on Humanitarian Action in Crisis Situations
7. www.who.int/hac/global_health_cluster/en/ for information on health cluster aims, objectives, policies, activities, reports on training courses and meetings, information on upcoming trainings and resource materials
8. <http://helid.desastres.net/> provides a resource of over 650 texts relating to health in disasters, in English, Spanish, French, and some documents in Russian. It is inter-agency and contains documents not only from WHO, but also UNHCR, UNICEF, the Red Cross movement, NGOs and other institutions.
9. www.sphereproject.org to download Sphere handbook and Sphere training materials and information on Sphere training and TOT courses
10. www.enonline.net/ife for a wide range of information on IYCF in emergencies

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