MEDECINS SANS FRONTIERES

THE PRIORITIES

Check-Lists, Indicators, Standards

- SITUATION WITH DISPLACEMENT OF POPULATION -

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WARNING !

This is not a Guideline

Not even a Pocket Guide

This is a “Reminder”

That you should keep in your pocket !

It contains most of the small and big things that you always forget...
But no explanations or details

If you need more explanations, look in the pocket guides related to the subject
And if you want all the explanations and details, read the Guidelines

THE TEN TOP PRIORITIES

THE ADDITIONAL TOP PRIORITIES !

LITTLE TOOL KIT

RECOMMENDED READINGS

1. CHECKLIST FOR INITIAL ASSESSMENT

Background

Geo-political context

- Cause of displacement *(war, famine, natural disaster,...).*
- Duration of displacement and conditions under which it took place *(transport, access, security conditions, violent acts experienced, loss of assets,...).*
- Political situation and security conditions in the country of origin

Background health information *(in the place of origin)*

- Main health and nutritional problems, diseases with epidemic potential.
- Vaccination coverage rates.
- Health care infrastructure, staff available and use of traditional medicines.
- Important health beliefs and traditions.

Demographic Information

Description of the refugee/IDPs population

- Demography :
  - Estimate of total population *(refugees/IDPS and host population separately)* + Division by site
  - Distribution by age-group *(at least for the population < 5 and > 5 years)*
  - Sex ratio
  - Average household size
  - Number of arrivals and departures/week + Predicted number of future arrivals
- Vulnerable groups - importance, coping mechanisms and specific problems of these groups :
  - Pregnant and lactating women
  - Female headed-households
  - Unaccompanied minors
  - Disabled and wounded people
  - The elderly *(do they live alone or are they supported ?)*
  - Minority groups
- Ethnic composition, place of origin, clan membership,...
- Socio-cultural characteristics *(including type of leadership and community organization, religion, particular customs,...)*
- Main source of income in the country of origin *(farmers, breeders, merchants,...)*
- Source of income in the host country *(selling wood, working in the field for the local population,...) ?*

Health

Mortality / Morbidity

- Mortality rates (crude and under 5) *(before displacement, during displacement, since the arrival in the host country)*
- Causes of death
- Morbidity data on the most common diseases
- Presence of diseases with epidemic potential
- Psychological condition

Nutritional status

- Prevalence of global and severe acute malnutrition in children 6-59 months or 65-110 cm
- Obvious cases of malnutrition in other groups *(teenagers, adults,...).*

Health services and infrastructures

- Access
  - Access for the affected population to local, pre-existing health services
  - Ability of local health services to absorb the influx of people affected by the emergency
  - Do the people have to pay for the consultation and/or the drugs *(cost recovering system)* ?
- Facilities
  - Number and type of health facilities available
  - Level of support (MoH or NGO)
  - Level of operationally (how well/badly is it working ?)
  - Number of beds : total and occupied currently
  - Average number of patients seen/day : 6 months ago and current
  - Average number of deliveries/week :6 months ago and current
  - Availability of delivery room and operating theatre
  - Numbers, type, size and capacity of health facilities set up for the affected population, if separate
  - Adequacy of water supply, vaccine cold chain, generators or town electricity, excreta and waste disposal facilities, food for patients and/or malnourished.
- Health staff
  - Types and numbers of health staff/health facility and relevant skills and experience present in the hosting area
  - Health workers present among the affected population (refugees/IDPs) *(including traditional healers, traditional midwives and water and sanitation engineers)*
  - Availability of interpreters
- Drug and equipment
  - Availability of essential drugs and medical supplies
  - Availability of essential vaccines and vaccination equipment

Vital Needs

Food

- Quantity of individual rations : number of calories available/person/day
- Quality of individual rations *(nutrients and micronutrients [1])*
- Food distribution : who distributes what, how many times/month, when did the last distribution take place
- Access to food distribution : proportion of families receiving an adequate ration
- Habits of the population: staple food, type of meals, number/day, cultural taboos
- Food availability monitoring : individual stocks *(cattle, food,..)*, stocks on the site, on local market.
- Harvest : what do people cultivate in this area ? when did they harvest for the last time, when will next harvest take place ? when will the hunger gap take place ?

Water

- Sources of water *(river, well,...)*
- Is access to water for free ? *(In some places people have to pay to take water from a well for instance)*
- Quantity (litres/person/day) and quality
- Proportion of families having sufficient and adequate water transportation and storage means
- Number, type and location of water points

Hygiene and sanitation

- Current facilities for excreta disposal , type and number
- Anal cleansing methods in this population
- General hygiene on the site
- Availability and use of soap
- Presence of vector transmitting communicable diseases
- Adequacy of burial sites

[1] *The* micronutrients *are substances needed only in minuscule amounts but essential for proper growth and development; the consequences of their absence are severe. Ex. : Iodine, vitamin A and iron*

Shelter and Non-Food Items

- Types of shelter in use, proportion of household with protective shelter
- Shelter surface available per refugee + Number of people per shelter
- What material can one find locally to build shelters
- Proportion of households with cooking utensils, blanket, clothes,...
- What type and quantity of possessions have the refugees/IDPs brought with them ?
- What type of fuel is used to cook, is it available locally in sufficiency, is it affordable ?

Security

- Political situation and security conditions in the host country
- Whether and to what extent the refugees are accepted by the host authorities and the local population
- Security situation on the settlement site *(presence of soldiers/rebels, mines,...)*
- Any protection from the authority or international agency ?
- To what extent does the lack of security affects survival (access to food, water, firewood,...)
- Number of reports of violent events *(rape, beatings, robbery, gunshots,...)*
- Proportion of consultations due to violent events

Environment

- Environment in which the refugees have settled : physical characteristics of the site (topography, soil, vegetation,...) and surroundings (map of the site)
- Distance from the border, villages/cities, military camp,...(also to be drawn on the map)
- Accessibility to the site
- Information related to climate *(expected weather conditions over the whole year : rain, snow, high t°,...)*
- Information related to environmental health risks
- Total surface available per refugee + possibility for expansion

Coordination

- How are the refugees/IDPs organized ? Are there group or community leaders ? Are those leaders accepted/recognized by the community ? What is their role, are they really active ?
- What are the perceived needs by the population and leaders ?
- What is the existing local response capacity ?
- What is the presence and activities of local and international organizations ?
- Who is in charge of coordinating health, water and sanitation activities ?
- Who supplies which services in these sectors ?
- Who coordinates food delivery and its distribution to the affected population ?
- What have they achieved to date ?

Logistics

- Access : how *(by plane, by road,...),* time for access *(km, hours,...)*and condition of the roads *(state of the roads, accessibility during different seasons and for what type of vehicle, capacity of functioning airport, railroads, boats,...)*
- Transport : possibility to rent vehicles, to find fuel,...
- Communication : system available *(landline, mobile phone,...)* and authorization required
- Energy : what is the power system ; if generators needed : possibility to find fuel,...
- Cold chain : is there anything that can be used locally (EPI cold chain, fridges, ice on the market,...)?
- Housing : hotels, guesthouses for non-resident staff to stay, buildings to rent for office, housing,...
- Warehousing : availability, capacity, adequacy and security of warehouses to rent,...
- Supply : what can we buy on the local market *(construction material, fuel, food, stationery,...).*
- Finance : how can we secure the transfer of money ? is there any bank,... ?

2. MEASLES

Epidemic threshold in closed setting : 1 case

Strategy :

- Mass vaccination campaign
- Routine selective vaccination
- Screening and treatment of the cases

Mass vaccination campaign

Objective	- 100 % coverage - ≥ 95% coverage = acceptable - If % coverage < 95 % → catch-up campaign
Target population	- All children from 6 months till 12/15 years
Contra-indication	- Pregnancy
Vaccine and solvent	- Min. - 20° C Max. + 8° C - Dark storage (also at vaccination site) - Vaccine and solvent must be at the same t° during reconstitution

Routine selective vaccination

When	- As soon as the mass vaccination is over and whatever its results
Target population	- All children from 6 months till 12/15 years unable to prove previous vaccination - All children vaccinated before the age of 9 months to be re-vaccinated after the age of 9 months

Screening and treatment of the cases

Early case screening	- By health structure - By community health workers and/or home visitors
Therapeutic care	- Systematic isolation of measles cases - Systematic treatment of all cases - Specific treatment in case of complications

Do not forget the important correlation between measles and malnutrition

→ Children who have measles must receive a nutritional supplement during at least 4 weeks
→ Severely malnourished children are often children that had measles but didn't receive an adequate treatment

3. WATER – HYGIENE - SANITATION

Water Quality

No pathogens	Free residual chlorine content at discharge points : • 0.2 - 0.5mg/l (pH < 8) minimum 30 minutes contact time • 0.4 - 1.0mg/l (pH > 8) minimum 60 minutes contact time If chlorination really not possible : • Faecal coliforms < 10/100 ml at discharge points
Low Turbidity	< 5 NTU < 20 NTU is permissible in acute emergency
Low concentration of toxins	Context specific – if any doubt, contact HQ.
Acceptable to users	No colour, taste or odour, and not salty (< 2000 µS/cm [2])

Essential Water and Sanitation Requirements in Health Facilities

These are the minimum to respect, you are of course allowed to do more... not to do less !!!

Water

Health Structure	Litres/person/day
Mobile clinic : infrequent visits	2
Mobile clinics : frequent visits *(in fixed tents/existing buildings)*	5
OPD *(Out Patient Department)*	5
IPD *(In Patient Department)*	40 – 60 *
Surgery/Maternity	100 litres/intervention *(sterilisation not included)*
Blanket feeding	0.5 *(5 litres if long waiting time)*
Ambulatory SFC & TFC	5
ITFC *(In-patient Therapeutic Feeding Centre)*	30 – 50 *
CTC *(Cholera Treatment Centre)*	60
SARS isolation	100
Viral Haemorrhagic Fever (VHF) isolation	300 – 400 *
Kitchen	Included in above figures

Accessibility	For staff, patients and visitors
Minimum reserve in closable reservoir	2 days
Maximum distance to source	100 m **But don't forget that reliable water points should be available within the health structure, in each service !**
Maintenance water distribution points	At least once a week

** context dependent : e.g. climate, number of patients (for small number of patients, high quantity range)*

[2] *To be measured with the conductivimeter*

Bathing facilities

Health Structure	Quantity
IPD – TFC, etc	1 (bucket) shower/40 users * Calculation : (1+1 for staff) + ((N° of beds x 2)/40)
OPD	1 (bucket) shower for : - treatment against scabies, - victims of sexual violence,...

** Users = Staff (2 showers : 1 for male, 1 for female)) + patients + 1 accompanying caregiver/patient*

Appropriate for users	• Culturally and socially appropriate • Separate facilities for staff and patients • Separate facilities for male and female • Some showers with seats and handlebars for physically impaired persons
Safe location	• Located to avoid risk of sexual violence • Night lights provided, if feasible
Related facilities	• Water supply close by (max. 5 to 20 m) • Showers connected to wastewater facilities
Maintenance	• At least once a day

Excreta Disposal Facilities

Quantity	IPD, ITFC,...	1 latrine /20 users Calculation : (1+1 for staff) + ((N° of beds x 2)/20)
	OPD	• 1 for staff • 1 for male • 1 for female • 1 children's latrine
Technically appropriate	• Acute emergency → improved trench latrines/simple pit latrine	
Appropriate for users	• Culturally and socially appropriate • Separate facilities for staff and patients • Separate facilities for male and female • In-patient health structures : some latrines with seats and handlebars for physically impaired persons • Children's latrines *(or potties)* near paediatric wards, TFC,... • Bed pans/urine flasks for bedridden patients	
Easily accessible	• Distance of latrines : 5m < buildings < 30m	
Safe location	• Located to avoid risk of sexual violence • Night lights provided, if feasible	
Convenient hand washing facilities	• Soap, hand washing and waste water facilities at exit of latrines	
Prevent contamination of water sources	• > 30m from water sources	
Maintenance	• At least once a day	

Washing Areas

In in-patient health structures	
Separate washing area for :	• The structure's laundry (sheets, ...) • The patients' laundry (if required) • The dishes (if kitchen)
Appropriate for users	• Culturally and socially appropriate
Related facilities	• Water supply close by *(max. 5 to 20 m)* • Connected to wastewater facilities
Maintenance	• At least once a day

Waste Water Disposal

"Clean" waste water (no soap, oil, grease)	• Soak away pits • Infiltration trenches • Evapo-transpiration area *(arid-zones)*	Distance between disposal and water source : > 30m
	• Proper sealed sewer system, if present	
"Dirty" waste water	• Idem + Grease Trap	
Black water *(overflow of a septic tank)*	• Idem + Septic tank	
Rain & Runoff water	• Natural drainage	
Maintenance : at least once a week		

Medical Waste Disposal

General	• 1 set of medical containers/20 beds (sharp/soft/organic) • Containers at max. 5 to 20m walking distance • 3 containers of each type per location (rotation and spare)
Sharps	• Sharps containers *(modified drugs pot, single use or reusable sharps container, safety box in case of immunisation campaign)* • If lots of ampoules and vials → provide separate glass container • Regular collection and disposal of sharps waste • Sharps pit *(equipped with glass crusher if lots of glass generated)*
Soft waste	• Soft waste containers (20 - 60 litres plastic bucket with lid) • Daily collection of soft waste + cleansing and disinfections of emptied soft waste containers • Drum burner & residues pit
Organic waste	• Organic waste containers (plastic bucket with lid) - Maternity : 15 – 40 litres - Operating theatre : 20 – 60 litres • Immediate collection of organic waste + cleaning and disinfection of emptied organic waste containers • Organic waste pit *(latrine acceptable for placentas if very few deliveries)*
Patients/care-givers/visitors waste	• 1 Refuse bin (+/- 60 – 100 L) near (≥ 5m ≤ 10 m) each service (OPD,IPD....)
Waste zone	• Defined waste zone with all waste storage and disposal facilities • Fence around waste zone • Washing area with water point • Waste water evacuation facility via grease trap • Management by designated trained person • Maintenance immediately after use • Distance > 50m from water source

Hazardous waste (expired drugs, laboratory products...)	• Ensure hazardous waste is disposed of - Legally : in accordance with country legislation - Safely : in accordance with MSF HQ advice
Dead Bodies Management	• Safe storage of bodies prior to burial - Appropriated sized and located morgue for IPD - Separate morgue for isolation unit • All persons handling and preparing bodies - Wear gloves - Wash hands with soap • Epidemics (cholera, plague, Viral Haemorrhagic Fever,...) - All persons handling, preparing and burying bodies • wear appropriate protective equipment • wash themselves according appropriate rules (context specific) - Trained team carry out disinfection of bodies, structures and transport facilities - Trained team perform and/or supervise burial - All bodies are placed in body bags (+coffin for VHF) • Handling, preparation and burial of bodies has to be done in a culturally sensitive manner

N.B. Dead bodies related to war/famine/natural disasters DO NOT represent a major public health risk. Good management is needed however to avoid proximity to the dead (psychological effects), odours and scavengers/vectors. **Dead bodies related to epidemics DO represent a public health risk** and strict rules have to be followed in order to avoid spreading of the epidemic.

Staff

Responsibilities	To define very clearly : - Who in the team present in the field, is responsible for the watsan activities *(so, not theoretically but in the reality of your context !)* - Who is responsible for the training and supervision of the watsan staff
Cleaner Technician Water and sanitation manager	• Training + Job Description • Appropriate protective clothing • Appropriate tools
	• Vaccination against : Hepatitis B & Tetanus
	• Kit PEP for staff exposed to HIV/AIDS risks

Control of Vectors

Objective :

- Prevent transmission of vector borne diseases within health structures
  - Minimise survival chance of vectors in health structure
  - Reduce contact of vectors with infected patients
  - Reduce contact of patients, staff,... with potentially infected vectors
- Prevent infestation of vectors and nuisance pests in health structure
- Provide appropriate vector control facilities, equipment and services → see table next page

Extra measures during Outbreaks	No animals in health structure								X	X		
	Floor washing with O,2% chlorine solution								X			
	Laundry > 60° of incoming patients' clothing							X	X			
	1 x/week laundry > 60° of all linen and patients' clothing							X	X			
	Insecticidal dusting of corpses and clothes of the deceased							X	X			
	1 x/week insecticidal dusting – all mats and bed frames							X	X			
	1 x/week insecticidal dusting – all patients							X	X			
	Insecticidal dusting of incoming patients & spare clothes								X			
	Space spraying in between & around health structures		X	X	X				X			
	Larviciding **	X	X	X	X							
Measures for Endemic Zones and/or High Presence of the Vector	Prevent entry of rats to buildings							X		X	X	
	Insecticidal dusting of rat runs 1 x/week									X	X	
	Poison and/or trap and dispose of rats									X	X	
	Floor washing with 0,2% chlorine solution							X	X	X		
	Airing bedding in sun								X			
	Insecticidal dusting of incoming patients							X				
	2 x/day face & hand hygiene for all patients					X						
	General hygiene management (e.g. proper waste disposal)		X	X	X	X		X			X	
	General food hygiene				X					X		
	Fly traps and/or screens				X	X						
	Limit vector breeding sites in & around health structures	X	X	X	X	X						
	2 LLIN/prenatal consultation process *	X					X					
	1 LLIN/other people sleeping in health structure	X					X	X	X			
	Patient under LLIN whole day		X				X					
	1 LLIN/inpatient	X			X	X	X	X	X			
	2 x IRS of latrines/year			X	X	X						
	2 x IRS of health structure/year	X	X	X	X	X	X		X			
	Impregnated screens in doors and windows	X	X	X	X	X	X			X		
	Vegetation control around health structure		X		X	X					X	
	Proper site selection	X	X		X	X	X			X		
	Common Diseases	Malaria	Dengue, Yellow Fever	Filariasis, Encephalitis	Enteric Infection	Eye Infections	Leishmaniasis	Typhus, Relapsing Fever, Trench Fever	Plague, Typhus	Lassa Fever, Salmonellosis, Leptospirosis, Plaque, Hanta Fever	Scrub typhus, Scabies	
	Common Vectors	*Anopheles* Mosquitoes	*Aedes* Mosquitoes	*Culex* Mosquitoes	Flies	Flies	Sand flies	Lice	Fleas	Rodents	Mites	

IRS = Insecticidal Residual Spraying – LLIN = Long Lasting Insecticidal Net
*1 net for the woman & 1 net for the man. ** Only if skilled personnel is available*

Essential Water and Sanitation Requirements for Camps

Water

	L / person / day	Max. distance To water point	Min. storage & distribution
Acute emergency First days	3 - 5	No max. distance	Min. collective storage capacity : • 5 L/person *(so for 1000 pers.: bladder 5m³)* Min. household storage capacity : • 40 L Distribution : • 1 tap/200 – 250 persons • 1 hand pump/500 – 750 persons
Acute emergency As soon as possible	15 – 20	max 250 m	
Quality	Idem p. 9		

Bathing facilities

Quantity	• 1 (bucket) shower/40 users
Appropriate for users	• Culturally and socially appropriate (privacy, visibility, orientation) • Separate facilities for male and female
Safe location	• Located to avoid risk of sexual violence • Night lights provided, if feasible
Related facilities	• Water supply close by (max. 5 to 20 m) • Showers connected to wastewater facilities
Maintenance	• Regularly

Excreta Disposal Facilities

	Technically appropriate	Quantity
Acute emergency First days :	Defecation fields *(Improved)* Trench latrines	Defecation field : 0.5m²/user/day Trench latrines : 3.5m/100 users 1 *(improved trench)* latrine/100 users
Acute emergency Asap :	Improved trench latrines/pit latrines	1 latrine/50 users → 1 latrine/20 users
Appropriate for users	• Culturally and socially appropriate • Separate facilities for male and female • Some latrines with seats and handlebars for physically impaired persons • Some children's latrines (1/5 of the population < 5 years old)	
Easily accessible	Distance to trench latrines : Distance to pit latrines :	> 30 m and < 50 m of buildings > 5 m and < 50 m of buildings
Safe location	• Located to avoid risk of sexual violence • Night lights provided, if feasible • Guards at defecation fields and trench latrines *(also to explain correct use)*	
Convenient hand washing facilities	• Soap, hand washing and waste water facilities at exit of defecation facilities	
Prevent contamination of water sources	• > 30m from water sources • > 50m in case of defecation areas	
Maintenance	• At least once a day	

Washing Areas

Washing area for dishes	• 1/community = 80 persons *(see p. 25)*
Washing area for laundry	• 1/community
Related facilities	• Water supply at max. 5 to 20 m walking distance • Connected to wastewater facilities
Maintenance	• Regularly

Waste Water Disposal

Type of waste water	Grease Tap	Disposal	Distance between disposal & water source
"Clean" waste water (no soap, oil, grease)	NO	• Little vegetable garden • Animal drinking through • Soak away pits • Infiltration trenches	> 10 m
		• Properly sealed sewer system	
"Dirty" waste water	YES	• Soak away pits • Infiltration trenches • Evapo-transpiration area	> 30 m
		• Properly sealed sewer system	
Rain & Runoff water	NO	• Natural drainage	
Maintenance : at least once a week			

Domestic Waste Disposal

	Emergencies → Collective	Small clusters of population → Household
Temporary storage	• 100 litre drums with lid, handles and bottom perforation • 1 drum/10 families • Drum < 5 – 15 m from furthest dwelling	• 20 L / bucket with lid/household
Collection	• Teams of 2,5 persons/1000 inhabitants • Daily collection	• Household members
Transport	• Cart/Vehicle	• By hand
Treatment	• Not recommended	• Not recommended
Final disposal	• Fenced controlled tip with evacuation of run of water • > 1km from dwellings	• Fence cluster pit/household or several households

Dead bodies related to war/famine/natural disasters DO NOT represent a major public health risk. Good management is needed however to avoid proximity to the dead (psychological effects), odours and scavengers/vectors. **Dead bodies related to epidemics DO represent a public health risk and strict rules have to be followed in order to avoid spreading of the epidemic.**

	War/Famine/Natural Disaster	Epidemics
Body preparation and dressing	• No disinfection of body needed • Body dressing depending on local customs and/or availability *(coffin, shroud, blanket, sleeping mat, body bag)*	• Disinfection of the body AND • Sealed body bags *(+coffins)*
Burial/Cremation procedures by :	• Relatives • Aid-agencies potentially in case of mass burial	• Trained and protected personnel of the aid-agencies due to the very high contamination risk *(see p.12)*
Personal protection	• Hand washing with soap	According to the specific guidelines related to the diseases • Complete spraying of the staff with a chlorine solution • Complete protective gear for staff
Other help from aid agencies	Providing/involved in *(if needed)* : • Morgue in health structure • Selection of the burial/cremation site • Body dressing material • Potential transport of the bodies	Providing/involved in : • Morgue in the isolation centre • Selection of the burial site • Sealed body bags/impervious wrapping • Transport of the bodies

Burial	Cremation
Preferred option in all situations	Only when strictly demanded by population for religious/cultural reasons
Burial site : • > 50 m away from potable water resources • > 500 m away from habitable buildings • 1.500 m² / 10.000 population • Separate burial areas for different religions, if requested	Cremation site : • > 500 m away from habitable buildings • Downwind of habitable buildings
Grave : • Preferably individual grave • Mass grave if really necessary	
Burial depth : • > 1,5 m under surface • > 1,5 m above water table *(rainy season)*	Needs : • At least 300 kg of firewood/body • Experienced people for the cremation

Control of Vectors

	Common Vectors	Common Diseases								
		Malaria	Dengue , Yellow Fever	Enteric Infection	Eye Infections	Leishmaniasis	Typhus, Relapsing Fever, Trench Fever	Plague, Typhus	Lassa Fever, Salmonellosis, Leptospirosis, Plaque, Hanta Fever	Scabies
Measures for endemic zones and/or high presence of vector	*Anopheles* Mosquitoes	X	X	X	X	X	X	X	X	X
	Aedes Mosquitoes	X	X	X	X	X	X	X	X	
	Flies			X	X	X				
	Flies			X	X				X	
	Sand flies	X	X	X	X	X				
	Lice	X			X	X	X	X		X
	Fleas							X	X	
	Rodents							X	X	
	Mites									
Extra measures during Outbreaks	Promote absence of animals in dwellings		x					x		
	Insecticidal dusting of corpses and deceased clothes						x	X		
	1 x insecticidal dusting mats, bed frames, clothes in dwellings						X	X		
	Follow-up insecticidal dusting on request						X	X		
	Space spraying 300m around dwelling of confirmed case		X							
	Larviciding* and/or promote emptying stagnant water every week		X							
	Insecticidal dusting of incoming persons						X	X		
	Poison and/or trap and dispose of rats							X	X	
	Promote 2x/day face and hand hygiene for entire camp				X					
	Airing bedding in sun							X		
	General food hygiene			X					X	
	Fly traps and/or screens			X	X					
	Limit vector breeding sites in & around camp	X	X	X	X	X				
	1 LLIN/sleeping place	X			X	X	X	X		X
	2 x IRS of latrines/year			X	X					
	2 x IRS of dwellings/year	X	X	X	X	X	X	X		
	Proper site selection	X	X	X	X	X			X	

In case mosquitoes are zoophiles and if skilled personnel available

4. FOOD & NUTRITION

Minimum food energy requirement for a population totally dependent on food aid :

- **2.100 Kcal/person/day with**
  - **10 to 14% of energy from proteins**
  - **17 to 30% from fat**

Acute malnutrition

(in children from 6 months to 5 years or from 65 cm to 110 cm)

Acute Malnutrition	W/H in Z-Score	W/H as % of the Median*	Mid Upper Arm Circumference (MUAC)
Moderate acute malnutrition	≥ –3 to < -2	≥70% to <80%	≥115mm to <125mm
Severe acute malnutrition	< -3 or Oedema	< 70% or Oedema	<115mm or Oedema
Global acute malnutrition	< -2 or Oedema	<80% or oedema	< 125mm or Oedema

** W/H as % is not used anymore as admission criteria in MSF projects*

Decision tree for nutritional intervention

The decision tree described below may be used to assess the gravity of a situation but should not be followed to the letter.

Stage	Standard Indicators	Intervention
Famine	- Global acute malnutrition > 40 - 50% - CMR > 5 /10,000/day - Malnutrition among adults - Food availability and accessibility non-existent or severely reduced - Migration of distress	- General Food Distribution *(monitoring + lobbying)* - Targeted Food Distribution if necessary - TFP for children **and** adults - SFP or SeFD *(Selective Food Distribution)* for children and pregnant or lactating women
Serious food crisis	- Global acute malnutrition > 20% - Severe acute malnutrition > 5% - CMR > 2/10,000/day - General reduction on food availability and accessibility	
Food crisis	- Global acute malnutrition > 10-19 % - Severe acute malnutrition > 3 - 4% - CMR > 1/10,000/day - Food accessibility reduced for vulnerable households	- General Food Distribution (monitoring + lobbying) - Targeted Food Distribution if necessary - TFP for children **and** adults - SFP or SeFD for children and pregnant or lactating women
Food insecurity	- Severe acute malnutrition < 3 - 4% - CMR < 1/10,000/day - Food availability and accessibility slightly reduced	- Treatment of the malnourished children in the existing health structures *(paediatric wards,...)* - Nutrition support for hospitalized patients and specific diseases

Feeding programme strategy

Programme	Objective	Target population
General Food Distribution	- Cover the basic food needs of a population	- The whole population
Targeted Food Distribution	- Prevent deterioration of nutritional situation by providing a partial food ration when food accessibility/availability is insufficient or GFD is inadequate /inequitable.	- All families with children < 5 years - Other at-risk groups
SeFD Selective Food Distribution	- Increase food availability and prevent deterioration of nutritional status by covering specific nutritional and micronutrient needs, but only a part of the overall energy needs, of a vulnerable group of the population	- Groups with particular physiologic vulnerability : e.g. young children, pregnant and lactating women, people with chronic illness
Targeted Supplementary Feeding Programme	- Reduce morbidity among moderately malnourished patients - Prevent severe malnutrition	- Moderately malnourished children, pregnant and lactating women *(and other adults in some context)*
Therapeutic Feeding Programme	- Reduction of mortality and morbidity	- Severely malnourished patients - Moderately malnourished patients WITH medical complications

N.B. For more details on different strategies and how to choose them, see MSF Nutrition Guideline, chapter 3

Severe or moderate acute malnutrition WITH complications[3]

ITFC – In Patient Therapeutic Feeding Centre

Therapeutic Feeding Centre 24/24h
Can be an hospitalisation in paediatric ward, if few patients
In some rare cases the TFC hospitalisation will not open at night :

- *When there is a high number of patients and not enough staff*
- *When there are risks for the security of the patients, the care givers and/or the night staff*
- *But lower quality of care → organise a 24/24h TFC asap*

Severe acute malnutrition WITH NO complications[4]

ATFC - Ambulatory Therapeutic Feeding Centre

- Makes a decentralised programme possible
- Increases access and acceptability

} Better coverage

- Not for very sick children
- Medical treatment and proper follow-up of the patients more difficult
- Necessity to have a good referral system

- Check level of security *(risk of thefts of ration)*
- Check acceptance of the specialised food
- Check availability of food resources in the families

[3] *Anorexia (failing appetite test) or oedema ++/+++ or severe medical condition*
[4] *Pass appetite test, clinically well*

Moderate acute malnutrition WITH NO medical complications

Supplementary Feeding Centre

Since the introduction of the new WHO curves, we explore new strategies for the support of children suffering of moderate acute malnutrition. The main options are currently :

- Support for all children with MAM[5]
- Support for some of the children suffering of MAM *(children < 2 years, sick children without severe complications,...)*
- No support for children suffering from MAM
- Selective Food Distribution for all the children < 3 to 5 years *(+ possibly other at-risk groups)*

Several factors will influence the decision :

- The number of affected children
- The general nutritional situation
- The capabilities of the mission *(RH and food supply)*

In all cases the final decision will be made in consultation with the cell and the experts in nutrition.

Admission and Discharge Criteria

Therapeutic Feeding Centre

	Admission[6]	**Discharge**
Children *From 6 months to 10 years or from 65 to 130 cm.*	W/H < -3 Z score **or** Presence of bilateral oedema **or** MUAC < 115 mm *(only for children from 6 to 59 months or 65 to 110 cm)* **or** MAM with complications	W/H > -2 Z score *(on 2 consecutive measurements, 1 week apart)* **And** MUAC > 115mm **and** Absence of oedema for at least 1 week **and** Absence of acute medical problems **and** Good appetite and intake of food
Adolescents *From 10 to 18 years or > 130 cm*	W/H < 70% **or** Presence of bilateral oedema **or** MAM with complications	W/H > 85% *(on 2 consecutive measurements, 1 week apart)* **and** Absence of oedema for at least 1 week **and** Good clinical condition **and** Good appetite and intake of food

[5] *MAM = moderate acute malnutrition*
[6] *In some contexts, more and more rare, we still have to use the old curves (expressed as % of the median). In this case, refer to the table on page 18 for connections between % of the median and Z score.*

Adults	MUAC < 160 mm irrespective of clinical signs **or** Presence of bilateral oedema (Grade 3 or worse) **or** MUAC < 185 mm and poor clinical condition **or** MAM with complications	Weight gain *(on 2 consecutive measurements, 1 week apart)* **and** Total weight gain > 10 to 15% **and** Oedema less than grade 2 **and** Good clinical condition **and** Good appetite and intake of food
Pregnant and lactating women	MUAC < 170 mm **or** Presence of bilateral oedema (Grade 3 or worse) **or** MAM with complications	Weight gain *(on 2 measurements, 1 week apart)* **and** Oedema less than grade 2 **and** MUAC > 210mm **and** Good clinical condition **and** Good appetite and intake of food
Elderly *≥ 50-60 years*	MUAC < 160 mm and poor clinical condition **or** Presence of bilateral oedema (Grade 3 or worse) **or** MAM with complications	Weight gain *(on 2 consecutive measurements, 1 week apart)* **and** Oedema less than grade 3 **and** MUAC > 160mm **and** Good clinical condition **and** Good appetite and intake of food

Supplementary Feeding Centre

	Admission	**Discharge**
Children *< 5 years or 110 cm* *OR* *< 10 years or 130 cm.*	W/H between –3 Z and – 2 Z score without bilateral oedema	W/H > - 2 Z score *(for 2 consecutive measurements, 1 week apart)*
Adolescents *From 10 to 18 years* *or > 130 cm*	W/H between 70% and – 79.9% **and** Poor clinical condition **or** Discharged from a TFC	W/H > 85% *(for 2 consecutive weeks)* **and** good clinical condition
Adults	MUAC < 185 mm and can stand and walk **or** Presence of oedema (Grade 1and 2) **or** Discharged from a TFC	Weight gain for 2 consecutive weeks **and** absence of oedema **and** MUAC > 185mm **and** good clinical condition
Pregnant and lactating women	MUAC < 210 mm **or** Discharged from a TFC	Discharge 6 months after delivery

Elderly *≥ 50-60 years*	MUAC < 175 mm and can stand and walk **or** Presence of oedema (Grade 1and 2) **or** Discharged from a TFC	Increased weight **and** MUAC > 175mm **and** good clinical condition

Indicators in nutritional programmes

Main indicators	References values		Usual frequency	Main interpretations
	TFC	SFC		
Admissions and exits • Total number of patients registered • Admissions and exits • Re-admissions	< 5 %	< 5 %	d, w, m	• Evolution nutritional situation • Trend in food security • Workload and size of the programme
Outcome indicators [1] 1) Cured % 2) Defaulter % 3) Death % 4) Transfer %	> 80 % < 10 % < 5 %	> 75 % < 15 % < 2 %	Per month	• Quality • Accessibility, acceptability • Quality of care • Referral possibilities (quality of care)
Attendance rate	> 85 %	> 75 %	d, m	• Accessibility, acceptability
Average weight gain [2] • In-patient (ITFC) • Outpatient (ATFC)	10 to 20 g/Kg/day ≥ 5g/Kg/day	> 3g/Kg/day	Per month	• Quality of care (medical and nutritional)
Average length stay [2] • In-patient (ITFC) • Outpatient (A-TFC)	< 30 days < 45 days	< 60 days	Per month	• Quality of care (medical and nutritional)
Coverage • Camp setting • Urban area • Rural area (ITFC) • Rural area (A-TFC)	> 90 % > 70 % > 50 % > 70 %	> 90 % > 70 % > 70 %	Following a nutritional survey	• Accessibility and acceptability by the target population
Measles vaccination coverage [1]	100 %	100 %	Per month	• Quality

[1] Calculated on the total number of exits (cured, defaulter, death and transfer)
[2] Calculated on the cured exits (or a sample of 30 individual cards chosen randomly if large number of exits)

Food composition table

Nutritional value of common food aid commodities in emergencies

	Nutritional value/100 g		
	Energy (kcal)	**Protein** (g)	**Fat** (g)
Cereals			
Wheat	330	12.3	1.5
Rice	360	7.0	0.5
Sorghum/Millet	335	11.0	3.0
Maize	350	10.0	4.0
Maize meal	360	9.0	3.5
Wheat flour	350	11.5	1.5
Bulgur wheat	350	11.0	1.5
Blended foods			
Corn Soya blend (CSB)	380	18.0	6.0
Wheat Soya blend (WSB)	370	20.0	6.0
Soya-fortified bulgur wheat	350	17.0	1.5
Soya-fortified maize meal	390	13.0	1.5
Soya-fortified wheat flour	360	16.0	1.3
Dairy products			
Dried skim milk (DSM)	360	36.0	1.0
Dried whole milk (DWM)	500	25.0	27.0
Meat and fish			
Canned meat	220	21.0	15.0
Dried salted fish	270	47.0	7.5
Canned fish	305	22.0	24.0
Oil and fats			
Vegetable oil	885	-	100.0
Butter oil	860	-	98.0
Edible fat	900	-	100.0
Red palm oil	884	-	100.0
Margarine	735	-	82.0
Pulses			
Beans	335	20.0	1.2
Peas	335	22.0	1.4
Lentils	340	20.0	0.6
Dry groundnuts	580	27.0	45.0
Fresh groundnuts	330	15.0	25.0
Miscellaneous			
High Energy biscuits BP5®	458	14.7	17.0
Sugar	400	-	-
Pasta	365	12.5	1.2
Dates	245	2.0	0.5

Calculation of the nutritional value of a food ration [7]

1 gram protein = 4 kcal
1 gram of fat = 9 kcal

Example

Food item	Quantity in g/day	Kcal/day	Protein in g/day	Fat in g/day
Sorghum	350	1172	38	10
		= (350 x335 Kcal)/100	*= (350 x11 g)/100*	*= (350 x3 g)/100*
Oil	50	443	0	50
Peas	70	235	15	1
CSB	60	228	11	4
Total	–	2078 kcal	64	65
%	–	–	12 %	28 %
			64x4 = 256 Kcal *256/2078 = 12 %*	*65x9 = 585 Kcal* *585/2078 = 28 %*

Major nutrient deficiencies

Nutrient	Deficiency	Risk factors
Vitamin a	Xerophtalmia	Low vitamin A content of the general food ration, poor health and nutritional status, measles
Vitamin B1	Beriberi	Ration based on polished rice
Vitamin B2	Ariboflavinosis	Ration based on cereal flour unfortified with B2 (local cereal usually)
Vitamin PP or B3	Pellagra	Ration based on maize with limited amount of groundnuts, fish or meat
Vitamin C	Scurvy	Semi-desert area with limited provision of animal products (milk), fresh fruits and vegetables
Iron	Anaemia	Ration limited in meat content
Iodine	Goitre, cretinism	Population living in area with low iodine soil content and with no iodine salt fortification of food

[7] *If you are lucky enough, you have also in your luggage the pocket guide "Nutrition" with its technical sheets... in this case see technical sheet n° 8 : "Componut : Automatic worksheet of the nutritional value of a ration"*

5. SITE PLANNING

Site selection

Security and protection	• Reasonable distance from the border, any war zones, military camps, places where rebel troops withdraw,... • Safe area (free of mines,...)
Water	• Available on the site or close by
Space	• Large enough for the present number of emergency affected population • Provision for possible new influx • If possible, space for agricultural purposes and/or for livestock grazing
Accessibility	• Accessible for heavy vehicles during all seasons
Topography and drainage	• Gently sloping sites (between 2 and 5/6 %) in order to provide natural drainage • Avoid windy sites, as temporary shelters are usually fragile
Soil conditions	• Suitable for digging and water infiltration • Avoid rocky areas • Avoid areas with a high water table
Good vegetation cover	• To provide shade, • To prevent soil erosion • To reduce dust
Firewood	• Site well wooded with dead wood available
Environmental health risks	• Avoid areas in proximity of vector breeding sites transmitting killer diseases
Local population	• Respect of legal and traditional land rights • Respect the wishes of the local population • Avoid disturbance for the local population • If possible, involve refugees and local population in the site selection

Layout

- Principle guide → the cultural habit of the population concerned
- Involve refugees (men and women) in the planning of the site
- Plan by community unit : 8 to 16 shelters + communal space (latrines, showers,...)
- Avoid layouts in line and rows
- Do not separate families
- Ensure specific housing for group at risk (unaccompanied children, elderly,...)
- Ensure security of places used by women at night as well as the road towards them

Camp building blocks

1 family	= 4-6 people	
16 families	= 80 people	= 1 community
4 communities	= 320 people	= 1 village
4 villages	= 1.280 people	= 1 block
4 blocks	= 5.120 people	= 1 sector
4 sectors	= 20.480 people	= 1 camp

Site planning norms

Area per person for collective activities	• 30 m² to 45 m²
Shelter space per person	• 3.5 m² (4.5 – 5.5 m² in cold climates)
Distance between shelters	• 1.5 m minimum between guy-ropes of neighbouring tents on all sides
Distance between 2 rows of shelters	• 10 m
Distance between 2 villages *(= +/- 64 families)*	• 30 m minimum
Distance to water point	• 100 m to 500 maximum
Distance to trench latrine	• ≥ 30 m and ≤ 50 m
Distance to pit latrine	• ≥ 5 m and ≤ 50 m
Distance between water source and latrine	• > 30 m
Distance to garbage controlled tip (1/camp)	• > 1 km from dwellings
Distance to garbage drums (1/10 families)	• ≥ 5 m and ≤ 15 m
Firebreaks	• 30 to 75 m every 300 m of built-up area • or • min. 2 x height of building
Burial site	• 50 m away from water source • 500 m away from buildings • 1.500 m²/10.000 population
Cremation site	• 500 m away from buildings • Downwind of habitable buildings

Shelter

Enough space per person	• 3.5 m² (4.5 – 5.5 m² in cold climates)
Insulation	• against heat or cold
Protection from the elements in all seasons	• rain, wind, snow
Ventilation	• optimal circulation of the air – but no draught
Protection against the vectors	• Mosquitoes, tsetse flies, rodents,...
Psychological well-being	• security - privacy

Services and Infrastructures

Water and sanitation facilities *(See details p.14-15)*	Latrines - First days Latrines - Asap	1/50 to 1/100 1/20 people *(=+/- 4 families)* If possible, 1/family
	Water tap	1/ 200 to 250 people
	Hand pump	1/500 – 750 persons
	Block of showers *(men/women)*	1/ 40 people (=+/- *8 families))*
	Washing area for the dishes	1/ 100 people (= *1 community)*
	Washing area for the laundry	1/ 100 people (= *1 community)*
	Garbage controlled tip	1/ camp
	Garbage drums	1/10 families
Roads		20 – 25% of entire site
Distribution centre + Warehouse	Non Food Items	1/ camp
	Food	1/ camp 1m²/m³ food stocked = 2,5m³/ton

Shelters		1/ family
Administrative structures	Screening	1/ camp
	Registration	1/ camp
Medical structures	Hospital	Depending on the situation Total surface : 33,5 m²/bed Surface/patient : 6 m²
	Health centre	1/ camp – 10 - 30.000 people Total surface : 3.600 m² *(For 400 to 700 consultation/day)*
	Health post	1/ 3 – 5.000 people
	Nutrition structures (TFC, SFC,...) 24/24h : 150 children Day-care : 200 – 250 children	Depending on the situation 1 identified location/camp Total surface : 20 m²/bed Surface/child : 4 m²
	Nutrition structures (TFC, SFC,...) Ambulatory : 150 children/day	Depending on the situation 1 identified location/camp Total surface : 1.100 m²
	Cholera treatment centre	1 identified location/camp Total surface : 35 m²/bed Surface/patient : 6 m²
Staff accommodation	Room for staff	1/facility
Community facilities	Market	1/ 2 blocks
	Schools	1/ block
	Religious structures	Depending on the situation
	Recreation grounds	1/block
	Burial and/or cremation site	1/ camp

Non-Food Items

Shelter kit (plastic sheeting, rope,...) or tent, or specific "shelter kit" [8] (including carpenter kit (tools), iron sheets,...)	1/family
Water container	40 L/family
Soap	250 g/person/month
Blankets	Depending on the climate
Mosquito nets	Min. 2/family
Cooking sets	1/family
Bedding equipment	Depending on the context
Clothes	Depending on the context

[8] *Adapted to the context and made of local material*

6. HEALTH CARE

The four levels of health services

Level	Number of structures	Activities
Home visitors	1/500 – 1.000 persons	• Data collection : mortality, new born, newcomers, departures,... • Information, health education • Active case screening • Active research for defaulters (nutrition,...) • Referral to Health Post or Health Centre
Health Post and/or Mobil Clinic	1/3 – 5.000 persons	• OPD (first level) • Dressing and Oral Rehydration • On-going measles immunization • Referral to Health Centre • Data collection
Health Centre	1/10 – 30.000 persons	• Triage • OPD • IPD (observation) • Emergency service 24/24h • Minimum package of reproductive health • Minor surgery • Dressing, injections and Oral Rehydration • On-going measles immunization • Referral to hospital • Data collection and Health surveillance
Hospital	Depending on the situation	• Surgery and major obstetrical emergencies • Hospitalization • Referral laboratory and transfusions

Essential tools

- Diagnostic and Treatment protocols
- List of essential drugs for each level
- Medical stock
- Clear referral system for patients from one level to another
- Health surveillance system at each level *(mortality and morbidity data collection)*

- Weekly evaluation of the quantity and quality of services provided
- Adaptation of the resources to the changing needs *(increase the staff, implement new activities,...)*
- Ongoing training of the staff
- Ongoing awareness of the population of the services provided

7. CONTROL OF COMMUNICABLE DISEASES AND EPIDEMICS

Essential tools

Epidemic preparedness	• Information on potentially epidemic diseases that may occur in the refugee site or could be brought in by the refugee • Surveillance system to detect new epidemic diseases as soon as they appear (including the observation done by the home visitors) • Laboratory (local or abroad) identified for confirmation of cases • Sources of relevant vaccines in case a mass campaign is required • Possible treatment sites identified (cholera unit, isolation room) • Standard protocols for epidemic diseases (prevention – diagnosis - treatment) • Training of the staff • Emergency stock (minimum medical and logistic equipment to react directly and until more material can be delivered to the field)
Epidemic Investigation	• Confirmation of the existence of an epidemic (one case, unexpected increase of the number of cases or agreed threshold) • Confirmation of the diagnosis on a clinical basis or by laboratory tests • Standard case definition • Case registration • Sorting data by time (distribution of the cases over time) , place : (mapping of the cases) , person (distribution of cases by age, sex,...) • Identification of high risk groups (to target them better through preventive and curative measures) • Try to find out the source/cause of the epidemic
Outbreak control	To lower the number of cases → Control measures • Attack the source (clean water, clean food, vector control,...) • Protect susceptible groups (vaccination, better nutrition,...) • Interrupt transmission (isolation of cases, personal cleanliness,...and IEC – Information, Education, Communication of the general population) To reduce the mortality among cases • Early detection of cases, including contact tracing • Treatment

Main killers

	Major contributing factors	Preventive measures
Measles	• Overcrowding • Low vaccination coverage	• Minimum living space standards • Immunization of children
Diarrhoeal Diseases	• Overcrowding • Contamination of water and food • Lack of Hygiene	• Adequate living space • Safe water supply and sanitation • Sufficient quantity of water/person • Public health education • Good personal and food hygiene • Distribution of soap

Acute Respiratory Infections	• Poor housing • Lack of blankets and clothing	• Minimum living space and proper shelter • Distribution of clothes and sufficient blankets
Malaria	• New environment with a strain to which the refugees are not immune • Stagnant water which becomes a breeding area for mosquitoes	• Provision of mosquito nets • Destroying mosquito breeding places, larvae and adult mosquitoes by spraying
Malnutrition	• Reduced access or availability to food • Unsuitable food ration • Bad health condition • Availability and access to water	• Improve general food distribution : sufficient (2.100 Kcal), regular and balanced • Blanket feeding for vulnerable groups • Improve access to health - Early detection of the cases - Control the epidemics - Treat the diseases • Improve access to sufficient quantity of water of good quality

Communicable diseases of potential importance in emergency situations

Diseases	Epidemic thresholds → immediate investigation
Measles	1 case *(in closed setting)*
Cholera	1 case
Yellow fever	1 case
Viral haemorrhagic fevers	1 case
Plague	1 case
Typhus	1 case
Relapsing fever	1 case
Meningococcal Meningitis (A, C, W135)	< 30.000 inhabitants : - doubling of number of cases over a 3 week period or - 5 cases in one week > 30.000 inhabitants : - 15 cases/100.000 inhabitants/week and in high risk zone with no epidemic since 5 years - 10 cases/100.000 inhabitants/week
	Alert → immediate investigation
Whooping cough	1 case
Typhoid	1 case of intestinal perforation
Dysentery - Shigellosis type A (Sd1)	1 death
Visceral or cutaneous leishmaniasis	1 case
Trypanosomiasis	1 case
Schistosomiasis urinal	1 case
Malaria	Excessive number of cases in relation to prior experience according to place, time of year and population → comparison of the incidence of the disease with a previous incidence at a similar time of year and in the same population which is usually not possible in regard to refugee/displaced population. ↓ Doubling of number of cases over a 3 week period
Hepatitis A and E	
Tetanus neo-natal	
Tetanus in situation of natural catastrophe	
Conjunctivitis	
Scabies	

8. PUBLIC HEALTH SURVEILLANCE

EPIDEMIOLOGIC INDICATORS IN EMERGENCIES

Elements of an epidemiologic indicator

Time	**When**	• Specific moment, period • Year, month, week,... • Season
Place	**Where**	• State, district, city,... • Topography, climate, habitat,... • Environment (school, health centre, shantytown,...)
Person	**Who**	• Individuals, population, group at risk • Age, gender, ethnicity,... • Other socio-demographic or clinical characteristics

MORTALITY

The importance of measuring mortality

It defines :

- The magnitude of the disasters
- The causes of death → set the priorities for intervention
- The follow-up of the trends → adapt the intervention accordingly

It provides evidence for :

- Lobbying or testimony

Crude mortality rate cut-off values in an emergency situation

Phase	Crude mortality rate (deaths/10.000 pop/day)	U 5 [9] mortality rate (deaths/10.000/U 5/day)
Normal rate in developing country	0.3 – 0.5	0.6 – 1.0
Situation under control	< 1.0	< 2.0
Emergency warning	**> 1.0**	**> 2.0**
Situation out of control	> 2.0	> 4.0
Major catastrophe	> 5.0	>10.0

[9] *U 5 = Under five years old*

How to measure mortality rates

Prospective → *Compulsory : health surveillance system*	**Mortality surveillance system** • all the deaths occurring in the community have to be recorded • information obtained - from the community : cemeteries, leaders, CHW,... - from the health structures *(be careful for double counting : community + health structure)*
Retrospective → *if no previous data available*	**Mortality survey** : each head of household interviewed on : • how many persons live in the HH • how many died over recall period • causes of death

Indicators

	Community	Health Centre
Mortality	• Crude mortality rate • U5 mortality rate • Cause specific mortality rate	• Proportional mortality • Case-fatality rate

Crude mortality rate	$\frac{D}{N} \times \frac{10.000}{SP}$ *D = number of death during the study period* *N = total population + half of the total number of death* *SP = study period expressed in days*
U5 mortality rate	$\frac{D\ U5}{N\ U5} \times \frac{10.000}{SP}$
Cause specific mortality rate	Daily or weekly : $\frac{\text{number of deaths from a given cause}}{\text{10.000 people}}$
Proportional mortality	$\frac{\text{deaths due to a specific disease}}{\text{total deaths from all causes}}$
Case fatality rate	Crucial indicator of : • Disease virulence • Quality of clinical care • Access/prompt resource to treatment $\frac{\text{deaths due to a specific disease}}{\text{total cases of the disease}}$

MORBIDITY

Indicators

	Community	Health Centre
Morbidity	• Prevalence • Incidence rate • Attack rate	• Proportional morbidity

Prevalence	Proportion of persons in a population who have a particular disease : • at a specified point in time • over a specified period of time **number of patients with the disease / population at risk** ! Population at risk : who is at risk ? *(ex. prostate cancer)*
Incidence rate	New cases of a disease per unit of time • Measure the speed with which a disease occurs in a population during a given time period. • Key indicator to monitor an epidemic (daily, weekly incidence rate) **new cases / population at risk x unit / time period**
Attack rate	Cumulated incidence rate during an epidemic • Measures the proportion of the population affected by an epidemic up to the present time **new cases since start of epidemic / population at risk since start of epidemic**
Proportional morbidity	**consultations/admissions due to a specific disease / consultations/admission due to all causes**

DEMOGRAPHY

Standard age distribution in developing countries

These figures are indicative. They can be useful in the beginning of an emergency *(to calculate the needs according to the target population for a vaccination campaign for instance)* but **must be asap adapted to the reality of the context** you are working in. *(In situations of conflict, for instance, the men are under-represented as they are often the first victims...while in a famine, it is the children less than 5 years that will be the first victims,...).* Moreover, If there is a significant discrepancy between the figures you have collected in the field and this standard distribution, you should try to understand why *(ex. If few children less than 5 years...where are they ? dead, still in the village of origin,... ?)*

Children < 5		Useful data for vaccination campaigns	
0 to 11 month	3,74 %	0 to 6 months	1,90 %
12 to 23 month	3,57 %	6 to 8 months	0,93 %
24 to 35 month	3,40 %	9 to 59 months	14,17 %
36 to 47 month	3,23 %	5 to 12 years	22 %
48 to 59 month	3,06 %	6 months to 12 years	37,1 %
Total children < 5 years :17 %		6 months to 15 years	43, %
		6 months to 30 years	70,6 %

Total population	
< 5 year	17 %
5 to 14 years	28 %
15 to 44 years	42,9 %
≥ 45 years	12,1 %
Total population : 100 %	

Sex distribution	
Total women	50 %
Total men	50 %

Pregnancy	
Women of child-bearing age	47 %
Average fertility rate/woman	18 %
Total pregnant women = Total population x 0,50 x 0,47 x 0,18	

9. HUMAN RESOURCES

Determining human resource requirements

1. Make the list of the activities to be implemented (= top priorities)
2. Define the task to be performed for each activity and the target population for each activity
3. Identify the different categories of personnel required to execute these tasks

   ➔ The number of staff required may then be calculated based on the estimated workload, which depends on the target population and the time required to perform every task.

Management of the staff

Importance of :

- Good explanation of what is MSF (the charter), the objective in the country and the activities
- Job-descriptions for each category of staff (*standard job-description adapted to the context*)
- Organization chart for each facility (hospital, health centre,...).
- Staff policy (working hours, holidays, salary scale,...)
- Adequate working conditions guaranteed for all staff :
  - Avoid very heavy working hours (high risk that staff quickly become burned out in the emergency phase)
  - Impose a minimum rest of 1 day/week
  - Provide adequate living accommodation for staff non-resident in the area
  - Provide vaccination and prophylaxis
  - Provide appropriate protective clothing and appropriate tools
  - Under particularly stressful conditions, counselling and close support for staff may have to be provided
- On-the-spot training and close supervision
- Regular meetings (min. 1/week) to ensure a good information exchange and feed-back on activities to all staff
- Security : be aware that in some circumstances local staff may be exposed to a higher risk than expats.

Local staff recruitment

Local staff from the host population

Advantages :

- Reduce the risk of tension between the 2 populations as the presence of the refugees brings job-opportunities for the host population.
- Greater likelihood of finding qualified staff among the host population than among the refugees
- Resident staff will be less subject to pressure from the refugee community

Disadvantages :

- Drain of competent national staff from existing health services.

Local staff from the refugee community

Advantages :

- Familiar with the culture and language of their own community → to be preferred for community services : constructing and maintaining latrines, outreach workers for nutrition,...
- Opportunity for them to acquire new skills

☞ Some categories should only be filled by refugees : home-visitors, traditional birth attendants

Disadvantages :

Employing refugees as staff is not a simple process :

- The legal status of refugees should be checked as they are frequently denial access to legal employment by the host country
- Their qualification might not be recognized by the host country ; also certificates are frequently lost during displacement.
- The payment of refugee workers is subject to debate. UNHCR does not recommend payments for community services ; but experiences has shown that most refugees will not continue to work on a regular basis without some sort of incentive.

Gender balance

Maintain the ratio of 50% women in both the medical and non medical fields. In some areas this ratio will be higher : pre-natal consultations, nutritional centres, home visitors and community health workers.

Ethnic balance

Consider maintaining a balance between different ethnic groups among the staff (In some circumstances this may be particularly important).

10. COORDINATION

Without proper coordination, any relief programme will rapidly become disastrous !

Main objectives

Achieve the greatest possible impact on the situation. To reach this goal it is necessary to :

- Establish clear leadership
- Create a coordinating body
- Ensure that priorities and clear objectives are shared by all the actors at the different levels of the organization
- Ensure all needs are covered through a clear task distribution (prevent overlaps and gaps).
- Use common standards *(that can be better adapted to the situation after the emergency phase)*

With whom ?

- Host country authorities
- Refugee representatives
- UNHCR, and other UN agencies
- Other NGOs (national and international)
- Internally (within the organization)

When ?

From the very first minutes...until the end of the intervention, and this on a very regular basis.

How ?

By establishing good communication channels.

Even if informal contacts and cooperation exist, they are not sufficient for decision making and effective coordination → communication should be established and formalized, mainly by regular meetings and reports.

Common problem

There are frequently delays before someone takes the initiative and responsibility for coordination.

→ If the initiative has not been taken by UNHCR or the host government, relief organization must organize a coordination team and, if required, take on the leadership role themselves.

11. SECURITY

Security environment

➔ Influences access to food, water, firewood,... and therefore general health

➔ Gives indications on the need for specifically targeted interventions (mental health, care for victims of sexual violence, war surgery, protection, temoignage, ...)

Objectives

➔ Assess the exposure to risk factors that represent a threat to the safety and health of the affected population

➔ Implement targeted activities to alleviate the suffering

Indicators

Number of reports of violent events *(such as rape, beatings, robbery, violent attacks, gunshots,...)*	Report of the community, interview of key informants, focus groups,...
Proportion of consultations due to violent events	Register of the health facilities
% of deaths due to violence	Mortality survey and prospective surveillance

Time	When	• Before displacement, during displacement or since arrival • What time of the day,...
Place	Where	• At home or outside • If outside, where ?
Person	Who is affected	• Individual • Population group because of their ethnicity, gender, religion,...
	Who is the perpetrator	• Civilian or non civilian • Known or unknown,...
How	Type of violence	Medical • Type of injury • Cause of injury (rape, gunshot, mine,...)
		Legal • Violation of Human Rights (killings, rape, unlawful detention,...) • Violation of Humanitarian Law - that affect the civilian population (indiscriminate attacks on civilians,...) - that hinder the population's access to humanitarian assistance (blockades of convoys, attacks on hospitals,...).
Why		• Lack of protection by the authorities, UN agencies,... • Lack of security of the site : - Presence of mines or UXO in the surrounding - Presence of military camp in the surrounding, - Near the border where there are still conflict,... • No safe access to essential needs (water, firewood,...) • Domestic violence,...

12. MENTAL HEALTH

Do not forget

To be a displaced person or a refugee also means:

- to have fled in order to save their life,
- to have left or have lost: family, friends, neighbours, house…
- to have undergone or to have been witness of violence, injustice,...

If in the first phase of the emergency the actions will aim, above all, to meet the immediate needs essential to the survival of the population (medical care, water and food, shelter,.....)**, one should never neglect the stress, the moral sufferings, the psychological traumatisms** which addto the precariousness of the situation.

☞ **Mental health care should be always integrated into the medical consultations**

What you can do even if there is no psychologist

Do not underestimate the emotional intensity of the situation that the refugees are living in, under pretext that culturally, this population is accustomed to suffering, hunger, death…

Recruitment of the staff	- Have male and female staff for the consultation, as for some people it is not possible to tell their preoccupations and express their feelings to a person of the opposite sex
Training of the staff	- Inform the staff about the possible psychological and/or psychosomatic reactions after traumatic events. Don't forget to include the "home visitors" in the info-sessions as they are in the first line to listen to and/or feel the needs of the population
Care of the staff	- Don't forget that your staff, in all or partly, belong to the population : create a space for exchange in order to listen to and foreseen the emotional difficulties encountered during the work
During the consultations	- Importance of the quality of the reception and the attention given. All patients need to feel that they are being heard…to give them a few minutes more to talk make the difference. - Do not send back home people who come to consultation several times over a short period without apparent reason … the need to be heard is clear and can indicate that the suffering is at the emotional level rather than somatic → Explain the link between difficult life experience, stress, psychosocial suffering and somatic reactions. - Avoid prescribing anxiolytic and sleeping pills for acute stress reactions. Do so only if symptoms persist over time.
While analysing your data	- Check the proportion of consultations classified as "Others" in the medical register...a high percentage request that you check more in depth the nature of these consultations - Check if there is an overconsumption of analgesics, sleeping pills or gastric antacids

To some circumstances, however, the help of a psychologist could be necessary. Don't hesitate to :

- See if there are no other NGOs offering psycho-social care
- Ask the HQ to send a mental health officer to assess further the mental health situation and define strategies of action.

Possible reaction to a traumatic event

Immediate reactions *(Up to 72 hours)* **→ Acute phase**	**Post immediate reactions** *(Up to 3 months)* **→ Assimilation period**	**Chronic reactions** *(Over 3 months)*
Normal stress - Immediate reaction of alarm - Physiological, motor and cognitive symptoms: tachycardia, sweating, hyperactivity, feeling of distress, aggressiveness **Acute stress reactions** - Disorganized agitation, restlessness, panic flight - Emotional crisis - Incapacity to react, paralysis, sideration	**Acute Stress Disorder** - Re-experiencing the events : intrusive thoughts and images - Avoidance of stimuli associated with the trauma : thoughts, people, places, activities - Anxiety reactions - Symptoms of dissociation	**Post Traumatic Stress Disorder** - Constantly re-experiencing the events : intrusive thoughts and images - Persistent avoidance of stimuli associated with the trauma : thoughts, people, places, activities - Increased arousal : hyper vigilance, difficulty concentrating, irritability, difficulty falling asleep… **Associated disorders** - Anxiety and depression - Behavioural disorders - Somatic disorders - Functional complaints - Psychotic disorders

Psycho-social needs during the emergency phase *(displacement-resettlement)*

Basic needs	- Food, water, shelter, medical aid as well as protection and security
Information	- What happened, is it going to happen again, where are the relatives, friends, what happened to them, what actions of relief and aid are being taken, by who, where… - Access to information reduces unnecessary anxiety (and rumours) and distress by establishing a certain sense of mental control
Taking care of the dead	- Identification of bodies, proper burial, funeral ceremonies
Social contacts	- Reinforce social network for support, keep families together, facilitate access of isolated persons into activities, social network
Participation	- Involve beneficiaries in decision making concerning relief and care strategies, stimulate them to participate into the support activities undergone towards their community. This will help them to regain a sense of control over the situation.
Emotional support	- Psychological first aid: non intrusive pragmatic care focusing on listening without forcing to talk, assessing needs, ensuring that basic needs are met, encouraging company from significant others
Acknowledgment	- Recognize what they have been through, and their pain with respect and empathy

:

13. PROTECTION

What is protection ?

Protecting means recognizing that individuals have rights and that the authorities who exercise power over them have obligations. It means defending the legal existence of individuals, alongside their physical existence. It means attaching the juridical link of responsibility to the chain of assistance measures that guarantee the survival of individuals.

The notion of "protection" therefore reflects all the concrete measures that enable individuals at risk to enjoy the rights and assistance foreseen for them by international conventions.

In each case, relief actions are based on laws established for the benefit of protected persons. Relief organizations must both know and advocate these laws concretely. If these laws are not used, relief action risks weakening the framework of international legal protection set up for individuals in danger.
When providing relief in times of conflict, humanitarian organizations therefore must not separate the provisions of assistance from protection. These **organizations must respect the rights that are guaranteed for victims** and for relief organizations by humanitarian law **and must report any violations encountered** in the exercise of their work.

A refugee is :

Geneva Convention - 1951

Any person who is outside the country of his nationality and is unable or unwilling to avail himself of the protection of that country owning to :

→ Well founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion

'Organization of African Unity Convention - 1969 [10]

Every person who is compelled to leave his place of habitual residence in order to seek refuge in another place outside his country of origin or nationality owning to :

→ External aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of his country of origin or nationality

Whether a person is a refugee is not dependent on formal recognition, but on the fact of meeting the definition of refugee.

! MSF serves everyone according to the needs (not according to category) and has no interest, legal expertise nor mandate to be able to determine whether an individual qualifies as a refugee. In some instances, we may intervene, however, to make sure that people have a right to refugee status determination and thus protection.

Internally displaced persons are :

Persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence

As a result of or in order to avoid the effects of armed conflicts, situations of generalised violence, violations of human rights or natural or human-made disasters

And

Who have not crossed an internationally recognised State border.

[10] *Governing the specific aspects of refugee problems in Africa*

How are refugees different from IDPs ?

Virtually all refugees are IDPs before they become refugees, and there are many similarities in the situation of IDPs and refugees.

Similarities

- The root causes of displacement are similar
- Their national protection is ineffective or unavailable
- They need protection against life-threatening violence, abuse and danger
- They may need humanitarian assistance for survival and they will need assistance to return to their homes in safety and dignity, or to find another durable solution to their displacement.

Differences

- IDPs have not crossed an international border
- Refugee law protection standards do not extend to IDPs. The system on legal protection standards for IDPs is primarily based on international human rights and humanitarian law.
- In theory it is presumed that IDPs still avail themselves of the national protection provided by their government. Like all nationals, they are entitled to have their human rights respected and protected under national law. Practically speaking, state sovereignty and operational insecurity bar access to IDPs and render extension of international support for IDPs more difficult.
- IDPs do not have an international agency specifically mandated to provide international protection to them.

Who is mandated for what ?

STATES	Protection of both refugees and IDPs is primarily the responsibility of governments *N.B. Governments are responsible for upholding the human rights of all people within their territorial boundaries, including their nationals, but also refugees, IDPs and undocumented immigrants.*
UNHCR	UNHCR is mandated by the UN to provide international protection and assistance to refugees and to seek durable solutions to their problems. In certain ad hoc situations and upon several conditions UNHCR can be given a protection mandate for IDPs.
OCHA	OCHA is the UN body for coordination of humanitarian response to complex emergencies and disasters. It is also mandated (through its Emergency Relief Coordinator) to ensure that all humanitarian issues, including those which fall between gaps in existing mandates of agencies such as protection and assistance for internally displace persons, are addressed.
ICRC	ICRC provides protection and assistance to all victims of international and non-international armed conflict, both military and civilian, and therefore IDPs are a major target group for ICRC's humanitarian interventions.

How can MSF improve the protection of refugees/IDPs ?

1. Through our presence and operation

Be present in the camps and have direct contact with the refugees/IDPs :

- Merely the presence of international staff may help prevent abuses – more actively, through or direct and frequent contact with refugee/IDPs communities we are in a position to improve refugee/IDPs protection.

Take into account protection in our programmes. :

- In certain circumstances our activities can become a source of danger or threat for refugees/IDPs. Have the potential negative effects that assistance/humanitarian relief might have upon protection been considered ?
- Does MSF value the physical security of beneficiaries as much as the need of food, shelter and medical care ?
- Are we aware of the situation in our absence (at night,...) ?
- Do we really know what is going on in the refugee/IDPs camps ?
- Are the people responsible for protection within the camp not taking advantage of their position to perpetrate certain violations ?
- Have we taken into account the specific needs of the different vulnerable groups ?

2. By addressing the actors responsible for the fate of the refugees

Collect and analyse information about abuses.

Address protection problems with the actors responsible for protection (States, UN Agencies,...).

Urge them to take up their responsibilities.

3. Through awareness raising

Raising awareness around forgotten refugee crisis can sometimes be a tool for protection

Main questions to ask yourself when you are working in a refugee crisis

- Are the borders open for the refugees ?
- Are people being protected from refoulement [11] and expulsion [12]?
- Are people being treated in accordance with the minimum humanitarian standards ?
- Are we paying enough attention to vulnerable groups ?
- Are refugees being registered and are they receiving documentation ?
- Do people get access to the process of determining refugee status ?
- Are the camps safe ?
- Is UNHCR present in the field
- What durable solutions are being foreseen ?
    - If repatriation, is it truly voluntary repatriation?
    - Is humanitarian aid used as push or pull factor to influence the return of refugees ?

[11] ***Refoulement*** *: when a state adopt measures, at its border, that prohibit and actively prevent a foreign person who is not already a legal resident of its territory from entering its national territory.*

[12] ***Expulsion*** *: a measure by which the authorities of a state forbid an individual present on its territory to continue his or her stay there and proceed to escort the individual back to the border, or send him or her back to the state of origin.*

14. TEMOIGNAGE

10 Points on ethical and safe info gathering in the field to avoid inflicting further harm to patients and beneficiaries.

Confidentiality of medical data

The confidentiality of medical information is a core principle in medical ethics

- MSF medical personnel must not accept requests – not even from within MSF - to share medical information or point out patients.
- Medical personnel can provide statistics, trends, or general information on humanitarian consequences of a particular context ; or their personal account of facts.

Identity of beneficiaries

The identity of the person whom we gather info from should always be protected.

- When conducting interviews one should refrain from gathering information that may lead to the identification of the persons interviewed.
- The use of fake names or initials is a good solution. Other info that may lead to the identification of the victim *(ex. name of the village of origin)* may be described in more general terms *(ex. a village in the North).*

Informed consent

The interviewer has to explain the person interviewed about :

- Who he is; why MSF wants to do the interview; what we plan to do with the information; the person's right to terminate the interview at any time, not to answer certain questions or not to have certain info disclosed publicly.
- That the medical care is not conditional to the interview

Security

The persons who have the most to tell are often precisely those who need the most protection...

In search for info all possible measures must be taken in order to avoid bringing additional risk to the person, his family and community:

- Assessing as much as possible the risk of interviewing people in a given community, the choice of translator, place of interview and if and how we use the information collected
- Even if a person agrees to share his experiences, an interview should not take place or be halted if the interviewer foresees possible dangerous outcomes due to the interview itself or the nature of the info being shared

Vulnerability

"Asking a person to talk about experiences that were frightening, humiliating and painful can cause or increase anxiety. Not only can it create distress during an interview, but it may also have repercussions"

- Extensive interviewing with victims of violence should be carried out only in very exceptional circumstances, and by trained fact-finding investigators with a clear-cut research methodology.

Overuse of interviewing

Gathering info should be part of a strategy, be it for operations, communications or lobbying. Furthermore, the means and methodology must not be disproportionate to the use we wish or are able to give to the information.

- Only very exceptional circumstances justify systematic fact-finding interviews with patients and beneficiaries.

Victims of sexual violence

- Sexual violence should only be tackled with women of a given community if we are able to provide medical care ourselves or if there is a safe referral possible.
- When no medical programme is in place, in order to have a better understanding of sexual violence in a given context we can speak to individuals such national staff, women groups, teachers,...

Aftercare of victims and witnesses

Offering assistance in the wrong way or the wrong time can backfire and do more harm than good.

- For the sake of confidentiality and consent, individual cases should not be taken to national authorities or intergovernmental organizations such as ICRC and UNHCR without the consent of the person concerned
- You can inform a beneficiary of his possibilities and rights. But before doing so it is important to be sure that you are correctly informed yourself.

Mental health

Mental health files are as confidential as any other within medical practice.

Breach of confidentiality is un-ethical and can undermine the trust relationship which is fundamental in counselling.

Temoignage and international justice

In certain cases publications of victim's and witness' statements can lead to a situation where people are obliged to witness in court.

- In order to avoid people being obliged to testify in court against their will MSF decided, as a general policy, only to hand over to international courts written or other recorded accounts of victims with all names and other identifying information removed.
- In addition, MSF will never send lists of names of possible witnesses to the court, nor the names of victims, expatriate or national staff

N.B. If you want to interview people because you think it is necessary (for operations, communications or lobbying) but you are not sure about the way to do it, don't hesitate to contact the "Analysis & Advocacy Unit" in Brussels. They will be more than happy to help you.

PROXIMITY

OR

THE ART OF DRINKING A CUP OF TEA

How many times do you drink a cup of tea[13]/ month with the refugees/displaced persons, with the local population, the local authorities,....

Never	You may have done a good assessment, collecting a lot of data, indicators,... You still don't know anything about the context, and mainly the population you are working with. They also don't know much about you.... By the way you should know that to refuse hospitality can be considered as an offence !
1 time	Great, you did it ! I hope you enjoyed this moment...and discovered that the people were much more talkative once you had accepted their hospitality. No wonder ; by doing so you promoted them to the status of "subject" *(people that can give and receive)* instead of "object of care" *(people totally dependent of your help)* ! By the way you should know that in many countries *(mainly with Muslim culture),* you have to drink, at least, 3 cup of tea : - The first one is as hard as life - The second one, sweet as love - The third one, bitter as death !
≥ 2 ≤ 10	Excellent : you have accepted hospitality, creating a link with the people you are working with and discovering their real living conditions... but you can also keep the distance to have a more "scientific" view of the situation, collecting data and indicators...and taking time to analyse all of this !
> 10	You have definitely mastered the art of drinking a cup of tea... But... It is not a reason to forget to collect data and indicators...they are also essential to understand and analyse the situation !

You think this is a joke ? Not at all...

More and more we have the tendency to be glued to our computer making nice reports...with graphs or brilliant power point presentations... while the real life is outside. And when we go out of our well protected compound, its to jump in our Toyota, make a tour at the health centre or hospital and come back to the comfortable safety of our compound with the data we collected.

If it's important, and even essential, to collect data, calculate indicators and analyse the situation according to these scientific elements, it's also of great importance to use the most subjective tools you always have with you : your eyes and ears.

Don't hesitate to go and walk around, visit the market and the places where the people are living, listen to the people, explain who you are and why you are there, ...and drink a cup of tea ! You will collect a lot of useful information and discover the reality hidden behind the figures but you will also create a link with the population that will not perceive you anymore as an alien from outer space. Now, if they need help, they will come to you,.. and the day you need help, they will also come to you... just because they know you.

[13] ***Depending of your context, it can be a cup of coffee, yak buttermilk, a glass of vodka,...***

RADIO COMMUNICATION – PHONETIC ALPHABET

A	**Alpha**
B	**Bravo**
C	**Charlie**
D	**Delta**
E	**Echo**
F	**Fox-trot**
G	**Golf**
H	**Hotel**
I	**India ***
J	**Juliet**
K	**Kilo**
L	**Lima**
M	**Mike**

N	**November**
O	**Oscar**
P	**Papa**
Q	**Quebec**
R	**Romeo**
S	**Sierra**
T	**Tango**
U	**Uniform**
V	**Victor**
W	**Whiskey**
X	**X-Ray**
Y	**Yankee**
Z	**Zulu**

*** in Pakistan "I" becomes "Italy"**

COLD CHAIN

Vaccines[14]	Stages of the cold chain	Maximum temperatures	Minimum temperatures
OPV / BCG / Measles Yellow fever	All	**+ 8°C**	**-20°C**
Hepatitis B / DTP	All	**+ 8°C**	**+ 2°C**
DT / TT	Transport	+40°C	**+ 2°C**
DT / TT	Storage	**+ 8°C**	**+ 2°C**
Solvent	Transport	Ambient	**0°C**
Solvent	Storage	Ambient	**0°C**
Solvent	Point of use	Must be at the same t° as the vaccine	

[14] *OPV = Oral Poliomyelitis vaccine, BCG = Tuberculosis vaccine, DTP = Diphtheria, Tetanus, Pertusis, DT = Diphtheria, Tetanus, TT = Tetanus*

CONVERSION FACTORS

To convert from	*To*	*Multiply by*

Length		
Yards (1 = 3 ft = 36 inches)	Metres	0,91
Metres (1 = 100 cm)	Yards	1,09
Miles (1 = 1.760 yds)	Kilometres	1,61
Kilometres	Miles	0,62

Area		
Yards² (1 = 9 ft²)	Metres²	0,83
Metres² (1 = 10.000 cm²)	Yards²	1,19
Acres (1 = 4.840 yds²)	Hectares	0,41
Hectares (1 = 10.000 m²)	Acres	2,47
Miles² (1 = 640 acres)	Kilometres²	2,59
Kilometres² (1 = 100 ha)	Miles²	0,38

Capacity		
Pints	Litres	0,56
Litres	Pints	1,76
Gallons (1 = 8 pints)	Litres	4,54
Litres	Gallons	0,22
Metres³	Yards³	1,30
Yards³ (1 = 27 ft³)	Metres³	0,76
USA Dry Measure Equivalents		
1 pint	= 0,96 UK pt	= 0,55 litres
USA Liquid Measure Equivalents		
1 pint	= 0,83 UK pt	= 0,47 litres
1 gallon	= 0,83 UK gal	= 3,78 litres

Weight		
Ounces (oz)	Grams	28,35
Grams	Ounces	0,035
Pounds (lb, 1 = 16 oz)	Kilos	0,45
Kilos (kg, 1 = 1.000 g)	Pounds	2,20
1 ton (CWT = 2.240 lb)	Metric tons	1,01
Metric tons (MT, 1 = 1.000 kg)	tons	0,98

Temperature		
Centigrade	Fahrenheit	0° C = 32° F For other t° : multiply by 1,8 and add 32
Fahrenheit	Centigrade	Substract 32 and multiply by 0,56

CHECK-LIST AIRPORTS AND RUNWAYS

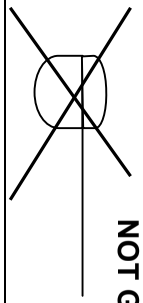
Or

All what you must know before a plane can land on the field

Location co-ordinates	• Latitude and longitude + reference points close to the runway and visible from the air (lake, bridge,...)
Length and Width of runway	• To be measured in meters or feet
Orientation of the runway	• Ex. East/West
Height of the runway from the sea level	• To be measured with an altimeter
Space for manoeuvres of landing and parking	• Can the aircraft turn 180° ? Can the aircraft be parked and leave the runway free for another one ?
Windsock	• If not already present, must be installed.
Type and thickness of tarmac	• Ground, gravel, concrete,...?
Condition of the runway	• Visual inspection in order to find cracks, mud, stone, holes, potholes, deep puddles,... • Good to drive the runway by car or by truck to check if there are some areas where the aircraft could get stuck • Evaluate the possibility of correcting defaults
Percentage of inclination of the runway, drainage and absorption of water	• What will be the condition of the runway after heavy rains ?
Static obstacles	• Type and position of trees, electric lines, water towers,...especially at the head of the runway and at the sides
Moving obstacles	• People, animals,... take the necessary measures to avoid any potentially dangerous situation
Services available	• Control tower – working hours • Weather station • Night lighting • Airport staff - working hours • International Landing System (for instrument flight) • Fuels and supplying system – quantity, price/L • Fire-fighters and medical aid service • Ground Power Unit (Jet Starter) • Loading and unloading services, type, number and weight capacity (High loader, Forklift,...) • Radio frequency HF/VHF • Customs/immigration • Warehouse – type, capacity and condition
Airport authorities	• Contacts + official title
Aviation limitations	• Procedure of landing permit • Duties to be paid (royalties, parking cost,...)
Relevant contact	• Other operators using the airport
Access to the airport	• Transport limitations (Off Road vehicles needed ?,...) • Security of the roads (robbers, mines, front lines,...) • Distance from the airport to the final destination

Level soup spoon

GOOD



NOT GOOD

Solution	Preparation	Use
2 %	**2 scoop or soup spoon / 1 litre** new solution to be prepared **every week**	**Cholera** ➔ stools, vomit ➔ corpses
1 %	**1 scoop or soup spoon / 1 litre** new solution to be prepared **every week**	**Mother solution to be diluted** ➔ drinking water *(dilution according result of the modified Horrock test = jar test)* ➔ cleaning and disinfection of : · well · flexible reservoir
0.5 %	**5 scoop or soup spoon / 10 litres** new solution to be prepared **every 2 days**	**Viral Haemorrhagic Fevers & Sars** ➔ gloved hands ➔ stools, vomit, urine, body fluid spills ➔ corpses
0.2 %	**2 scoop or soup spoon / 10 litres** new solution to be prepared **every day**	**Cholera** ➔ floors, walls, surfaces, beds, objects, latrines **Rodents & lice associated diseases** ➔ floors
0.1 %	**1 scoop or soup spoon / 10 litres** new solution to be prepared **every day**	**Disinfection and cleaning of** ➔ showers, washing facilities ➔ reusable sharps containers, soft and organic waste bins ➔ collective dustbins and drainage holes ➔ tankers, pipes, pumps, drop pipe, slab and surroundings of sharps pit
0.05 %	**1 scoop or soup spoon / 20 litres** new solution to be prepared **every day**	**Cholera** ➔ hands, skin ➔ clothing, bedding, washing up **Disinfection and cleaning of** ➔ recipients of ceramic candle filters, open tanks, lorries/carts for waste ➔ household gloves, aprons, goggles, clothing, bedding **Scrubbing the walls of a well**

Recommended Readings

N.B. Most of these books and documents are on the DVD "Pocket Guides Emergency"

General

Refugee Health – An Approach to Emergency Situations
MSF – 1997

Field Library Catalogue
MSF - 2011

Initial Assessment

Manual for the Assessment of Health and Humanitarian Emergencies
MSF/OCA - 2002

Rapid Health Assessment of Refugee or Displaced Population
Epicentre-MSF 2006

Rapid Population Estimation in Emergency
MSF – 2007

Guidelines for Assessment in Emergencies
ICRC - 2008

Measles Vaccination

Guideline Measles Epidemics
MSF – 2005

Pocket Guide Measles Vaccination – Situation with Displacement of Population
MSF/OCB – 2006

Water, Hygiene and Sanitation

Public Health Engineering in Precarious Situation
MSF Draft 2010

Essential Water & Sanitation Requirements for Health Structures
MSF/OCB – 2010

Essential Water & Sanitation Requirements for Camps
MSF/OCB – Draft 2010

Health Care Waste Management
CD – Version 1.0 – April 2006

Food and Nutrition

Nutrition Guidelines
MSF - draft July 2007

Nutritional and Medical Protocol for Treatment of Severe Malnutrition - Inpatient Children from 6 to 59 months
MSF/OCB - January 2011

Ambulatory Feeding Protocol & Practical Guide
MSF/OCB – V.2. – June 2010

Nutrition – Situation with Displacement of Population
Pocket Guide MSF/OCB – 2011

Nutritional and Medical Protocol – New-borns & Infants
Pocket Guide MSF/OCB – 2008

Shelter, Site Planning and Non-Food Items

Transitional Settlement – Displaced Population
T. Cornelis – A. Vitale - University of Cambridge – Shelter Project – 2005

Shade Nets
Shelter Centre – MSF - 2006

Plastic Sheeting
Oxfam – 2007

Shelter – Situation with Displacement of Population
Pocket Guide MSF/OCB - 2006

Health Care

Clinical Guidelines – Diagnosis and Treatment Manual
MSF - 2010

Control of Communicable Diseases and Epidemics

Control of Communicable Diseases Manual
David L. Heyman - 2004

Communicable Disease Control in Emergencies – A Field Manual
WHO 2005

Human Resources

CD RH KIT
MSF/OCB – 2007

Security

Care for Victims of Sexual Violence – Situation with Displacement of Population
Pocket Guide MSF/OCB - 2011

Mental Health

Emergency Mental Health Library
CD MH International Working Group – MSF 2008

Trauma – Guidelines for Psychosocial Care
MSF/OCB – 2004 *(in the CD Emergency Mental Health Library)*

Mental Health Guidelines
A Handbook for implementing Mental Health Programmes in Area of Mass Violence
MSF/OCA – 2006 *(in the CD Emergency Mental Health Library)*

Protection - Temoignage

The Practical Guide to Humanitarian Law
Françoise Boucher-Saulnier
MSF – 2006

The 4 Geneva Conventions and the 3 Additional Protocols
ICRC

International Humanitarian Law : Answers to your questions
ICRC

The Basics Collection

1. Protection des Droits Humains : Le Rôle de MSF – MSF/OCB - 2000
2. Bearing Witness : Strategies and Risks – MSF/OCB - 2001
3. Protection of Refugees – MSF/OCB - 2004
4. MSF and Protection : A Practical Guide – MSF/OCB - 2006

Tool Kit

CD Log
MSF/OCB - 2010