Draft Manual for Evacuation
Camp Management

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1. Background

Setting up emergency shelter and or evacuation camp is not encouraged during times of emergencies and disasters. (Natural Disasters, Protecting the Public Health PAHO, Scientific Publication Series 575, 2000) This is because, it often results in overcrowding, inadequate food supply, poor access to safe and adequate water and generally deteriorating environmental sanitation. All of these expose the displaced population to communicable diseases, and the vulnerable groups, i.e. the children and the elderly, to serious malnutrition. However, there are situations when the setting up of evacuation camp is unavoidable, such as for the displaced communities found within the 8-kilometer danger zone of active volcanoes like Mt. Mayon, and during massive flooding with landslides as what was experienced in Quezon Province.

2. Objectives

This field manual intends to:

A. Serve as a quick reference for local government /camp managers, when setting up temporary shelters or evacuation camps during times of emergencies/disasters.
B. Help in doing rapid assessment in the evacuation camps.
C. Aid in the monitoring of operations in the evacuation camps.
D. Help prepare a formal documentation of the activities in the camp.

3. Establishing the Evacuation Camp

Evacuation centers (EC) are governed by the type of emergency involved. Short duration EC are usually set up during typhoons and flooding. The longer ones are often established when permanent damage to houses, etc occurs, such as in earthquakes, flashfloods, tsunami, volcanic eruptions (as what was experienced during the Mt. Pinatubo eruption) and in cases of armed conflict. In such long duration EC, the most common outcome is the permanent resettlement of the displaced community.

There are several considerations which one should keep in mind when planning for an evacuation camp. And these are as follows:

- Safety of the place/building. Be sure that it is not threatened by the same hazard that brought about the emergency.
• Arrangement for site selection.
  o If a building is to be used as an EC, be sure it is suitable for the purpose. A movie house is definitely not a good choice. In the Philippines the most common buildings used are: schools, churches, gyms.
  o If a makeshift shelter is to be set up, site selection will include,
    ▪ Accessibility (to major transportation and communication)
    ▪ Topography and drainage (if proper drainage or sewerage system is not in place, ground must be above flood level and preferably in slightly sloping terrain to allow easy drainage of waste water),
    ▪ Proximity to water source
    ▪ Free of environmental hazards (i.e. malaria, filaria, schistosoma etc.)
    ▪ Layout of the makeshift houses (should allow for spaces in between houses, access road and spaces for children to play.)

• In both types of temporary shelter the following should be in place:
  o Appropriate shelter, taking into consideration socio-cultural differences among the evacuees
  o Toilet facilities/latrines with provision for person with disabilities
  o Handwashing facilities (individuals should be taught/informed to bring their own soap and water)
  o Areas for bathing, washing clothes and cooking
  o Area for food storage
  o Solid Waste disposal system
  o Space for the evacuation personnel to set up an office

Aside from the above features, the following conditions should be found in the evacuation camp:

• Organizational structure among those who will manage the camp
• Social organization among the evacuees
• Provision of basic services (e.g. health services)
• Provision for privacy and recreational activities
• Promotion of self-reliance and employment opportunities
3.1 Selection of site:

A. Schools/other buildings as EC

The following are pointers /considerations in the selection of school/building:

- Must be accessible to major transportation
- The schools must have grounds/space, which is big enough for temporary tents which can be used by the evacuees during the day when classes are being conducted in the classrooms.
- The site must not be prone to flooding
- For the water supply and latrine requirement see section on environmental health
- Must have space for community kitchen
- Must have space for small children to play without disturbing the on-going classes.

B. For makeshift camps:

The following are pointers /considerations in the selection of site for the makeshift camp:

- Must be accessible: easy access to roads, supplies of food, shelter materials, cooking fuel and communication
- Adequate vegetation for shade; soil condition may permit future cultivation
- Presence of electricity
- With source of water
- Good drainage (avoid marshy ground; should be above flood level)
- Secured, less possibility of conflict/hostilities with the non-affected population in the vicinity
- No environmental health hazards, i.e. extremes in temperature, strong winds, exposure to habitat of vectors of diseases (ex. Malaria, schistosoma and filaria)

3.2 Organizational structure in the camp (includes the evacuees):

The health personnel (i.e. the MHO, PHO) is not expected to be the camp manager. But since most of the problems that may arise from the EC are health related it is encourage that the MHO or the HEMS coordinator will be involved in the pre-disaster/emergency planning for temporary shelters. The “camp chief” also referred to as camp manager, is anyone designated by the local executive (example: MHO, HEMS coordinator, public health nurse, other employee). It is however recommended that the appointee must have an experience in disaster preparedness and management. Such background will help
ensure a smooth management of the EC. In the Philippines, since the schools are commonly used as the evacuation centers, the principal is automatically designated as the “Camp Chief”. This is primarily because, he/she is the one knowledgeable in the ins and outs of the school building/premises. Furthermore, since classes are not suspended even when the schools are utilized as EC, the principal must still have control over the school facilities. Below is the proposed organizational structure in the, and the corresponding responsibilities of each person involved.

Organizational structure in the evacuation center
In schools

Organizational structure in the Makeshift EC
A. CAMP CHIEF:

In school, the principal is automatically designated as the “camp chief” (CC). In the event that the principal is not available, the “Head Teacher” may assume the position. In the case of makeshift shelters as evacuation camps or building other than schools, the “Camp chief” can be anyone designated by the local executive, and can be chosen from the following positions: MHO, Department of Health Representative (DOHRep), Health Emergency Management Staff (HEMS) coordinator in the municipality, or anyone who has enough experience in camp management. Duties and responsibilities of the CC:

- Overall leader in the camp, through whom all activities in the EC should be coordinated.
- Official spokesperson in the EC
- Attends meeting with LGU, Provincial and Regional Units, etc.

B. Social Worker:

This is a representative from the local Social Welfare and Development office. It is best to have 2 representatives from the local DSWD to the EC, who will go on alternate 24-hour duty. The social worker (SW) will be responsible for:

- Relief distribution
- Management of donations directly given to the EC.
- Inventory of relief goods
- Prepares list of needed materials, goods, food for the EC

The social worker is also designated as the alternate source of information (spokesperson) when the CC is not available. This is because, among the rest of the individuals in the EC, the social worker is the second most knowledgeable person in the various camp activities.

C. Barangay Nutrition Scholars:

Since the Nutritionist-dietitian is handling programs in the Philippine Plan of Action for Nutrition, and may not be able to handle additional work in the various EC, the LGU can engage the help of its “Nutrition scholars” who will be under the direct supervision of the LGU’s Nutritionist Diateticians (N-D). The nutrition scholar:

- Monitors the type of food given to the vulnerable groups, particularly the children in the EC
- Assists in the feeding program in the EC
- Monitors the status of the vulnerable groups (i.e. malnourish, etc)
• Conducts baseline and succeeding nutritional assessment
• Regularly meets with the LGU's Nutritionist-Dietitian for updating and feedbacking

D. Barangay Health Workers (BHWs):

Two BHWs, one from each host barangay (HB) and barangay of origin (OB), should be assigned on a 24-hour basis. Depending on the number of BHWs, they can go on duty every two days. Duties and Responsibilities of BHWs are as follows:

• Monitor daily consultations
• Make referrals to the MHO
• Supervise DOTS of registered patients
• Monitor non-communicable cases, i.e. CVD, diabetes
• Coordinate with barangay nutrition scholars regarding malnutrition in the EC
• Conduct IEC campaign in the EC
• Assist in psychosocial activities in the EC

E. Sanitary Inspector (SI):

The sanitary inspector is directly supervised by the LGU's sanitary engineer. The SI should:

• Monitor the status of the latrines, water supply and environmental and proper waste management
• Monitor water safety
• Recommend when fogging is needed
• Coordinate with local organization among the evacuees for the general cleanliness in the EC.

F. Security personnel/Police:

The security, peace and order in the EC should be maintained day and night, and this responsibility is given to the police and barangay tanod from the HB and OB. The team is composed of one police and 2 barangay tanod who will be on an 8-hour duty per day. They should be under the supervision of the barangay chairperson of the HB.

G. Volunteers:

During emergencies/disasters there usually are two types of volunteers, i.e. those among the affected individuals ("insiders"), and the other from the non-affected communities ("outsiders"). Those from the latter, may come for one time only, while some may be helping in the
camp from the start to decampment. The ratio of the non-evacuee volunteers to the bulk of work/people to be attended should be determined by the camp chief using the following criteria:

- Bulk of work to be done example repacking of goods
- Number of evacuees to be attended to, for example during relief distribution. A ratio of about 1:50 evacuees may be manageable.
- Space in the administration area where goods are being repacked, etc.
- Availability of extra food

Volunteers are needed in the following activities:

- Repacking of goods
- Distribution of relief goods
- Teaching of livelihood programs
- Psychosocial activities
- IEC activities

Volunteers should not be engaged in the cleaning activities in the camp. This should be the responsibility of the evacuees. The number of volunteers should be proportional to the population in the EC. Food should be allocated to volunteers who are from the non-affected community and are coming not on a one time basis (i.e. regular volunteers (RV)).

H. School Teachers (as “Room Chief”)

Learning activities are continued even when the schools are used as EC. This holds true even for children evacuees. Since classes are held in two shifts, the teachers, from the HB and OB may be designated as “Room chiefs”, one in the morning and the other in the afternoon. This will help facilitate the smooth conduct of activities within the cluster of families housed in the classroom.

In the makeshift camps, the “room chief”, can be the “cluster chief “. The latter will be chosen by the evacuees from the families within their cluster.

I. Barangay Chairperson from the Host barangay:

The Barangay chairperson (BC) in the HB is the recognized political leader in the EC, but is not responsible for the day to day management of the EC. The BC is expected to:

- Maintain peace, order, and security in the EC
- Settle domestic problems that may arise
Since the BC is the political figure in the organizational structure, he/she should not be involved in the relief operations, to prevent any form of grand-standing, and or perception of favoritism.

K. Evacuees

Evacuees are grouped into clusters, using as basis their “clustering” in the community of origin. Familiarity with each other is a form of “psychosocial support” during times of emergencies. A leader is elected in the cluster. This should be a consensus among the evacuees and not dictated upon by anyone. Barangay leaders from the OB may not necessarily be voted to be leaders. Duties and responsibilities of the evacuees:

- Cleanliness in the EC.
- Help maintain peace and order in the camp
- Leaders of clusters must see to it that all are given relief goods during distribution
- Liaison for complaints, etc. to the “Room chiefs / Cluster chief”
- Form “internal volunteers” when needed.

4. CAMP SERVICES

4.1 Environmental Health

A. Shelter

- EC in schools and other buildings

The WHO standard is about 3.5 square meters absolute minimum floor space/person. This would be about 20 persons per regular classroom in the Philippines. However, this standard is often difficult to achieve. A higher number of about 50 may be feasible if only females, children and the elderly will be housed in the classroom. The males evacuees, 15 and above, except those who are very old and sick, can sleep in tents outside the classroom particularly during the dry season. It is also important to provide for special rooms for married couples for their private moments.

- Makeshift camps:

The evacuees should be given the responsibility to make their own shelter using local materials, such as wood, bamboo, nipa etc. These materials are ideal during the dry season, but may not be so when the nature of the emergency is typhoon or
flooding. Shelter should be constructed to withstand strong winds and unexpected typhoons (e.g. by having bigger and stronger posts/column, tying/joining construction materials firmly).

A site plan must be available for the makeshift camp. As much as possible, one unit per family is encouraged. If this is not feasible, sharing with relatives can be done, with at least 2 families per unit. It is best to cluster relatives or neighbors from the original barangay together into “small communities” within the camp. This will facilitate the accomplishments of some tasks, such as maintenance of cleanliness of the latrines, etc., as well as disease surveillance. Also, these “small communities” must be laid out around common facilities such as latrines and water source. It is best to arrange them in rows separated by roads.

Below are additional considerations in preparing for the layout of the camp:
- Provide areas for the camp administrators
- Space for food storage
- Warehouse facilities
- Section for food/relief distribution
- Recreational area/feeding area/area for health education activities
- Community kitchen for feeding programs
- Clinic
- Expansion of the EC should be in the periphery and not in the spaces in between shelters or access roads.

B. Water Supply

The WHO standard is 1 water point per 200-250 persons. UNHCR recommends a minimum of 15 liters of clean water, per person, per day for domestic needs. Since the WHO standard is often difficult to achieve, a ratio of 1 faucet per 100 persons with a minimum discharge of 6 gallons per minute for drinking and domestic water use can be considered both for the schools and the makeshift evacuation camps. This ratio is acceptable when there are other ways to augment the supply as follows:
- Water rationing: water is given to families who store it in covered containers
- Water is made available through tanks with faucets
- Construction of deep well
- Bottled water
In an emergency or disaster situation, the first priority is to provide an adequate quantity of water and to protect water sources from contamination. However, safety of water especially those used for drinking and cooking is of equal importance. It is recommended to designate or organize separate sources (e.g. making signages for drinking/cooking only or not for drinking/cooking) for drinking/cooking from other purposes when supply of potable water is limited.

Water quality surveillance including water sampling and testing should be done regularly using standard portable kit for bacteriological testing. Likewise, bacteriologic and chemical examinations of water should be done in authorized water laboratory.

Water disinfection of drinking water should be done when sources are found positive of contamination. The most common method in emergencies is chlorination where calcium hypochlorite in granular form is recommended. The use of chlorine tablets on the other hand, is not considered as a method of water treatment for large population. However, it can be used in health or feeding centers when there is no other option. Water treated with chlorine must be tested for chlorine residual, generally it shall maintain free residual chlorine between 0.20-0.50 parts per million in water. This amount can still kill bacteria which can contaminate the water after chlorination. Higher amounts of residual chlorine cause strong odor and unpleasant taste which are often not acceptable to the user.

Boiling is another way of treating water, but may not be feasible especially if fuel in the EC is a problem.

Remember, provision of adequate safe water is a must in the evacuation center. The absence of it will surely increase the likelihood of spread of communicable diseases in the camp.

C. Excreta Disposal;

The ideal ratio is 1 latrine per 20 persons or at least 1 per family. This is seldom met specially when the whole barangay with a population of about 1000-4000 is evacuated into schools with 25-30 classrooms. Aside from the overcrowding it is expected that the toilet facilities in the school will not be enough, as well as those in the makeshift camp.
The problem of latrines may be augmented with the addition of portable toilets but it requires good planning, proper site selection, education among the target users, and consideration on proper disposal of collected wastes.

Since in most municipalities which are vulnerable to many natural hazards, the schools for evacuation have already been pre-identified, thus, construction of additional toilets can be done in the pre-disaster period. In the same manner, this can be done at the identified sites for the makeshift camps. **When construction of new latrines is not possible, portable toilets can be used only when daily de-sludging is assured, since failure to do so will result in the increase in flies, foul smell, and most importantly possible spread of communicable diseases.**

**Below are some considerations in building toilets in the makeshift camps:**

- In the makeshift camps, toilets should be located in areas accessible from any part of the camp.
- The toilets must also be well-lit in the evening.
- Handwashing facilities should be provided (individuals should be taught/informed to bring their own soap and water).
- Toilet papers must be available (in the case of portable toilet facilities).
- Provision for latrines for the elderly and handicapped.

**D. Waste disposal (liquid and solid)**

- **Waste water:**
  
  This comes from the following domestic activities i.e. washing of clothes, bathing, and food preparations. These activities (in both EC in schools and makeshift camps) should be done away from the water sources (i.e. faucet, deep well (jetmatic), open dug well) for two reasons:
  
  - it can contaminate the water sources
  - and create stagnant malodorous water in the area which could be the breeding place of mosquitoes.
  
  To prevent these, areas for washing, bathing, and washing of food and kitchen utensils should be provided. Peebles can be placed around these areas and proper drainage can also be constructed. Waste water can be put into good use. These waste water can be collected in drums (with cover) and can be **used for flushing toilets and watering of the**
plants or surroundings especially during the dry season. In this regard, pails or plastic containers must be provided in these areas

- **Solid waste**;

Solid waste is generated by all types of communities, big or small. If not controlled it can lead to several problems such as:

- Increase in rats and rodents
- Increase in insects: flies, cockroaches, ants, etc.

The best way to manage solid waste is by segregation, i.e. biodegradable (which can be made as compost), and non-biodegradable which can be recycled and reused. Waste minimization should be practiced where segregated recyclables materials could be a source of income among the evacuees.

Wastes should be properly contained and stored in appropriate containers or receptacles. Waste containers must have a minimum capacity of 50 liters (ideal is 100-liter capacity), and may be distributed in the EC at the ratio of about 1 container per 10 families. Locate the trash bins in the EC at least 15 meters away from the dwellings.

Some materials which can be used as waste containers are the following:

- **Black plastic bags** hanged in metal or wood frames with proper labels for biodegradable and non-biodegradable. If this is not practical for the community, sacks using other method of coding can be used.
- **Oil drums with capacity of 200 liters** could be cut in half. Be sure a cover is provided and holes are made at the bottom.

In a very big EC, on-site collection points, that is, wastes in the containers are collected daily should be established in strategic locations. Likewise, a central waste storage facility is recommended where wastes are collected for disposal off-site. Disposal of collected and transported wastes off-site should be disposed of in a DENR approved waste disposal sites (e.g. sanitary landfill).
Disposal for the biodegradable non-infectious can be through:

- Composting
- Safe burying at some designated area on site
- Regular collection by the LGU. A system of garbage collection must be arranged with the LGU. If possible daily collection should be done.

Disposal for the non-biodegradable non-infected:

- Segregation and sold to junk shops
- Collection by the LGU. It is recommended that collection of non-biodegradable is done in separate schedule from the biodegradable. This will promote some sense of discipline and responsibility among the evacuees.

“Remember that open burning of waste has to be avoided.”

D. Vermin control

Insects and rodents are the unavoidable pests in the EC. They spread diseases, spoil foods, and other materials, and can be the source of fear for some. They cannot be totally eliminated, but there are measures which can be instituted to minimize the increase in their population, and their effects on the lives of the displaced communities.

In the selection of sites the presence of some predisposing factors that could eventually lead to the vermin problems in the EC should be avoided. Some of these are as follows:

- Low lying areas and marshy grounds which can easily accumulate poorly-managed waste water. This can be future habitat of mosquitoes.
- Proximity to garbage dumping sites or areas with accumulation of uncollected garbage. These areas are the spawning grounds of rodents and flies.

The best control for vermin is prevention. However, the conditions in an evacuation camp are such that this problem is unavoidable. This is even underscored by the fact that most of the effective measures which can minimize the problem are behavioral in nature, an example is “on waste segregation.”
Some of the measures recommended to minimize/control vermin in the EC:

- Check the surroundings of the EC before its use. Initial measures to control vermin can be done, such as fogging for mosquitoes and other flying insects and setting up of traps for rodents.
- Promote waste segregation, and daily collection
- Provide enough trash bins for both biodegradable and non-biodegradable waste
- Eliminate breeding places of mosquitoes and rodents by:
  - Keeping the surroundings dry, free of stagnant water
  - Store left over food in clean and covered containers;
  - Dispose of waste food properly
  - Construct compost pits

The role of the evacuees in the control of vermin cannot be overemphasized. It is therefore, incumbent to the camp administrators to include in their “camp program” IEC campaign on this topic. Also, aside from knowing what to do, the evacuees must be organized, since these activities will only succeed through “community effort”.

4.2 Nutrition Management and Relief Distribution

A. Nutrition management

- Initial Food relief (General feeding Programme)

  The need of people in terms of food during disasters and emergency varies with the nature of the event. In situations when the capacity of the displaced community to provide for their subsistence is completely compromised, then they become totally dependent on external sources. In the same manner, when the course of the evacuation camp is projected to be long-term, large scale food distribution may lead to over dependency. Thus, when time allows, the camp administrator must provide for means of livelihood. This will be the start of recovery for the evacuees, and a restoration of their self-respect.
During the **early phase of the disaster**, when everything is in chaos, the **immediate goal** of the service providers is to attend to the basic needs of the victims which is **FOOD**. Remember that in the early phase, the objective is to **FEED** the victims and not to prevent nutritional deficiencies. Therefore, whatever food donations are from the government and other NGOs, must be appropriately distributed to the evacuees to initially relieve hunger. There is no need to calculate for the nutritive content of the food distributed, but the foods should be both **acceptable**, **palatable** and **should require minimal cooking or none at all**.

Remember, that what is needed at the initial phase is **SUFFICIENT ENERGY**. Thus, if the supply or choice of food is limited, **CEREAL** and cereal products alone will be enough to meet the basic nutritional requirement.

This, however, cannot be maintained for long. In reality, food management in the EC is a “day to day” business. Usually 2 days after the emergency, the initial shock of the event is over, and doing a **rapid assessment of food and nutrition situations** should be done. The objective of this is to get a rough estimate of the “likely bulk food” items needed. The assessment will take into consideration the following:

- Affected population
- Composition, i.e. no. of adults, children, other vulnerable groups.
- Availability of food, i.e. how its production and availability was affected by the emergency

**PAHO (Pan American Health Organization, Scientific Publication No. 575) recommends** that in calculating the composition of **DAILY RATIONS**, the following points should be considered:

- The ration should be kept as simple as possible
- To facilitate storage and distribution, nonperishable food commodities that are not BULKY should be chosen
- And, substitution of items within food groups should be
The food ration should consist of the three basic food groups, i.e. carbohydrate and fat-rich, protein-rich, and vitamin and mineral -rich. The staple item is preferably a cereal, the protein from salted or dried fried fish or meat, and fats as the source of concentrated energy.

An example of a food ration/day is as follows:
- Cereal (the staple food): 350-400 grams
- Proteins-rich food: e.g. beans 50 grams
- Energy-rich food, e.g. oil: 20-40 grams
- Sugar: 20 grams
- Salt: 5 grams
- Vegetables/fruit/condiments/spices: as available

Average ration: 1500 kcal for initial survival and over 2000 kcal for long term maintenance (Handbook for emergencies, UNHCR 1982)

Always remember, DIETS will be dependent on the availability of the commodity.

The general feeding programme is the provision of minimum nutrients needed to maintain a good nutritional status of the displaced community. As it progresses regular monitoring through the nutrition surveillance activities in the EC should be done and some of the points that must be considered are:
- The evacuees should be asked as to the quality and quantity of the rations. If there are complaints, the camp administrator should present possible solutions and do something to show that they are committed to resolve the complaints.
- Food bought from contracted suppliers must be regularly inspected.

Nutrition Surveillance:

When the life of the EC is projected to be long as in the case of volcanic eruptions, wherein the communities in the 8-kilometer danger zone are placed in evacuation centers for several weeks, monitoring of the nutritional status of the displaced community...
is a must. Since, the young children are the most sensitive to nutritional changes, the nutritional surveillance can be achieved with the regular anthropometric measurement of this group. It must also be remembered that acute exacerbation of chronic undernutrition will lead to serious malnutrition. In this regard it is best to get hold of the records of the nutritional profile of the children in the displaced population before the disaster/ emergency. In the event that this may not be available, the baseline status can be done as soon as the initial shock of the event is over.

In making the nutritional assessment, the weight-for-height provides the best indicator for acute changes in the nutritional status. However, if this is not possible, the middle upper arm circumference (MUAC) can be done. Children whose MUAC are ≤ 13.5 cm, weight for height ≥ 70% - 79% and are nor severely ill are referred to supplementary feeding. This method aside from being simple is easy to do and can indicate changes in the nutritional status of the displaced community.

What benefits do we get from the nutritional surveillance?

There are two advantages of a regular nutritional surveillance, these are:

1. It gives information as to the effectiveness of the general feeding program
2. It monitors the progress of the vulnerable groups,
   • i.e. if there is a need for selective feeding programmes
   • Or document the effectiveness of the current special feeding programmes

For the suggested form to be used in the surveillance refer to the Appendix E

In long-term displacement, two deficiencies among the population are very common, these are Vitamin A deficiency (especially among children) and iron-deficiency anemia. The latter is often caused by common parasitic diseases or insufficient intake of iron and folate. However, the distribution of multivitamin tablets to the displaced population in the camp is not recommended, since these tablets contain very insufficient amounts of the individual vitamins. The evacuees if possible, should be encouraged, to seek (on their own) for additional food which are good sources of vitamins and mineral. On the other hand, Vitamin A supplementation must be given to target women and children
(see Appendix F) who are malnourished, vulnerable and with eye manifestations. As for the iron and folate, daily supplementation is recommended.

- Supplementary feeding programmes

When do you start supplementary feeding (SF)? This is a common question in the EC. The decision to start supplementary feeding will depend on the results of the nutritional surveillance. The UNHCR recommends that when the prevalence of malnutrition among 0–5 year old children is over 20% (using weight for height as indicator), general supplementary feeding and/or therapeutic feeding programmes should be started as soon as possible. Likewise, SF is recommended when the percentage is from 10-20% but other factors such as the following are present:

- General ration is less than 2,000 kcal/person/day
- Severe public health hazards
- Presence of communicable diseases such as measles

The supplementary feeding is set up in the EC to correct malnutrition among the vulnerable ones, as well as prevent malnutrition in the identified high risk groups. Aside from the basic diet, food supplement will have to be given to the following: children under 5 years old, pregnant and lactating women, and the elderly. The extra meal should be consisted of high energy, high protein, low bulk meal. This is given once or twice daily depending on the nutritional need of the recipients. Also, breast feeding should not be stopped during emergency, and the camp administrators and health managers must not use the situation as an EXCUSE for flooding the EC with infant formula.

In extreme conditions, i.e. when malnutrition rate is 5-10% among the 0–5 year old group, some children may go into severe malnutrition (protein energy malnutrition (PEM) i.e. kwashiorkor and marasmus). As mentioned, the abnormal conditions in the EC may lead to acute malnutrition which then can exacerbate chronic underlying malnutrition. In such cases, “Targeted Supplementary Feeding programme (TSFP) or therapeutic feeding programme may have to be instituted. In TSFP, there is a need for a full time nutritionist to plan and supervised the feeding. The programme should be under the supervision of a medical doctor.
Targeted Supplementary Feeding Programme are for children and other special vulnerable groups. The following are the usual recipients of the TSFP:

- First Priority: Malnourished children 6 months to 3 – 5 years
- Second Priority: Malnourished individuals above 5 years
- Third Priority: Pregnant and lactating women
- Others: Individual, social, and medical cases

In TSFP the feeding consist of three-hourly intervals of high-energy liquid diet such as milk, soup, juice, ad nutritious drinks.

Regular periodic monitoring of the nutritional situation in the community / camp is necessary to evaluate the benefit of nutrition relief efforts as well as to serve as early warning system to determine impending deterioration in the nutrition situation. Thus, regular weighing of 0 – 5 year old children should be done; follow up of pregnant and lactating women; and monitoring of the activities of the camp with respect to health and nutrition. This can be done by the nutrition scholars and health workers through their surveillance activities. A system of recording must be in placed for easy follow-up. One method which can be used is the identification tags, such as bracelet or necklace.

REMEMBER: The success of feeding programs is also influenced by other Nutrition-related activities such as, measles immunization Vitamin A supplementation, correction of anemia, control of diarrheal diseases, and provision of adequate daily food ration.
B. Food and Relief Distribution:

• Food Storage:
  Food relief are often brought to the EC from the central office such as the Provincial, City, Municipal or National government, NGOs etc, already in the packed form, except perhaps for some items such as, raw food and cereals. These items are readily distributed and minimal time of storage may be needed before these are dispensed. Nonetheless, proper storage must be done, to minimize spoilage.

Points to consider in food storage:
- Designate a dry well-ventilated area in the EC for food storage which is also free from rodents and insects. Provide for control measures for rodents and vermins.
- Boxes / bags must not lie directly on floor. Use pallets, boards or heavy branches, or bricks underneath piles.
- Keep products at least 40 cm from the wall and do not stock them too high.
- Pile the bags / boxes two by two crosswise to permit ventilation. In this way, they are steadier and easier to count.
- Keep damaged boxes / bags away from the undamaged ones.
- Keep an updated stock card and conduct periodic inventory. The record should include date, origin/destination, amount received, amount distributed, and current balance.
- Observe “First In – First Out” or “First Expiry – First Out principle.
- For raw meat, etc, refrigeration system is needed.

Reserve a clean and dry place for the repacking of items such as rice, dried fish, and other raw food. For the raw meat, fish and poultry, refrigeration may have to be provided. In this activity, the help of volunteers will be needed. Just make sure that the number of volunteers will be proportional to the bulk of items to be repacked. Too many volunteers can also be a burden to the camp administrators.
• **Food Distribution**

To minimize problems related to food distribution in the EC, several factors must be considered, these are:

• Must have an accurate listing of the evacuees
• The distribution system must be followed (usually with the use of the ration card.)
• Distribution must be done by the service providers and not by persons perceived to be with political background (e.g. barangay chairperson).

In the EC, it is best to leave the distribution of relief food and goods to the representative of the social welfare department with the help of volunteers.

Food distribution must be on a regular basis and at a designated place in the EC. When dry food is distributed a weekly schedule is practical. With dry food, the family are given the responsibility of preparing the food for the family. In this regard, aside from a community kitchen, cooking utensils and other needed materials may have to be provided to the evacuees. This is usually the case, when the emergency/disaster resulted in the total loss of personal belongings.

During the early phase of the emergency (i.e. immediately after), COOKED food or ready-to-eat meals are distributed. Rationing of cooked food is difficult, because it needs a lot of preparation and equipment. Thus, as much as possible, cooked food distribution should not be carried out for a long time. As soon as fuel and kitchen utensils are made available, general rationing with dry food should be done. However for special feeding programs, cooked food is distributed. In this situation, the cooperation of the evacuees should be sought in the preparation of the food.

• **Allocation of food for the service providers**:

The service providers are part of the EC, and thus, must be looked after too. i.e. in their nutritional, medical and psychosocial needs. This is particularly so when the service providers are also victims. During the early phase of the emergency the **BP 5 Compact Food** (a good source of enough nutrients) can be ideally given to the service providers.
providers in the camp, since this will not entail any preparation. When the initial shock of the event has subsided, the service providers can be included in the food rationing which they can prepare amongst themselves in the EC.

4.3 Health Services:

A. Rapid health assessment and Disease Surveillance:

In the aftermath of natural disasters and with the setting up of evacuation centers, the risks for the spread of communicable diseases also increases. The reasons for this was enumerated in the PAHO , Scientific Publication No. 575.

Some of these factors are the following:

- Population density and displacement: overcrowding in the EC could lead to spread of airborne infections and the displacement introduces diseases to which the evacuees may be susceptible.
- Disruption in the water supply and sanitation services, which could lead to inadequate supply of clean water, improper waste disposal (human, solid and waste water), the most consequence of these is the spread of gastroenteritis and other food and water borne diseases.
- Public health programs are not working.

During the planning stage, the health administrator in the camp who is most probably the Municipal or City Health officer in the place should include in the preparation the following:

- Inventory of health personnel and volunteers.
- Listing of hospital, clinics for referral during times of emergency.
- Inventory of medicines and vaccines intended for emergency use.
- Case definitions to be used during emergency.
- Forms for health assessment which are easily accomplished.
- System for monitoring the health status in the EC.

In addition, since in the Philippines, the most common practice is to evacuate barangays and not individuals, the health officer must see to it that the health profiles of the communities, i.e.
barangays in his/her place are in order, and can will be available during emergency. These information, i.e. immunization coverage, no. of TB patients (in cases of long-term evacuation), etc., will serve as the basis for the planning of services and monitoring of disease patterns in the EC.

A mass screening for the presence of diseases may be done upon arrival at the EC i.e during registration. But as soon as things has settled preferably within the first week after the event, a rapid health assessment and surveillance should be conducted.

The initial assessment includes those on health and nutrition. The different factors which influence health and disease in the EC should also be determined, i.e. supply of clean safe water, shelter, latrines, environmental sanitation and food supply, etc.

In order to identify problems, existing or imminent ones, a surveillance system must be established hand-in-hand with the assessment activity. The continuous monitoring of the health status and disease patterns in the EC will help the health administrator make adjustments in the existing health and other services. For example, if there will be an increasing consultation for diarrhea, the state of water supply could be looked into. Such findings should be properly coordinated with the point person for environmental sanitation for immediate action.

REMEMBER: Information NOT communicated to the proper authorities has no value.

B. Control of Communicable Diseases in the evacuation camp

The health services in the EC must be in the context of primary health care. WHO summarizes it as follows:

“Primary health care is essential health care made accessible to everyone in the country, care given in a way acceptable to individuals, families, and the community, since it requires their full participation; health care provided at a cost the community and the country can afford ....”
Primary health care includes the following:

- Promotion of proper nutrition
- An adequate supply of safe water
- Basic sanitation
- Maternal and child care, including family planning
- Appropriate treatment for common diseases and injuries
- Immunization against major infectious diseases
- Prevention and control of locally endemic diseases
- Education about common health problems, and what can be done to prevent and control them.

“Primary health care emphasizes on the preventive aspect of the communicable disease over that of the curative care.”

From WHO

The deterioration of these factors, i.e. overcrowding, poor environmental sanitation, inadequate water supply, inadequate nutrition and break down in basic health services will lead in the increase of communicable disease. It follows then, that in order to control the spread of communicable diseases, these factors must be reversed to “positives”, and thus, lead to the decrease in the risk of spreading communicable diseases.

In long term evacuation centers, the health services eventually should include the regular services available to the people during normal conditions, such as the DOTS, CVD, maternal and child care, including immunization for other diseases.

Furthermore, the health services in the EC should include a good referral system to other agencies. There should not only be a listing of clinics and hospital which can accept referrals from the EC but, a MOA with these institutions.
Specific measures aimed to control communicable diseases in the EC:

- Provision of adequate, safe water
- Promotion of personal hygiene, example provision of soap for handwashing
- Proper disposal of excreta and garbage
- Rodent and insect control
- Immunization for young children against measles.

REMEMBER: That it is only measles which is given in the early phase of the EC even when resources are limited. All other immunizations are given later, i.e. when the facilities can allow it, or in the context of the expanded programme of immunization (EPI).

- Health education and the use of RISK COMMUNICATION

Health education plays a significant role in disease prevention and control, and this is underscored by the statement “Knowledge is power.” Primary health care involves the participation of the individual and the community, and this is possible if they understand health, and all the other health-related factors in them, and in the environment where they are. Given the proper knowledge, the community in the EC can help in disease surveillance, as well as promote the necessary changes to maintain health amongst them.

4.4 Psychosocial support

Health is not limited to the physical body. Mental health completes the picture of a “totally healthy individual.” In times of emergencies and disasters, the mind sometimes becomes more “diseased” than the body. Everyone who experienced the event are affected, in one way or another, physically, emotionally and mentally. There are those who may show overt signs such as hysteria, but there are also those who may suffer in silence. Children are among those who are affected most. It is in this regard, that psychosocial support is an important part of response in any emergency/disaster situation.

Formal psychosocial support sessions may not be possible during the first hour of the event. Particularly when the service providers
are victims themselves. In the same manner, in the EC, formal de-briefing /psychosocial support may start much later, depending on the availability of trained personnel to handle the sessions.

Psychosocial support in the EC, actually starts with the arrival and registration of evacuees in the center. The sympathetic “camp chief” and other members of the camp administration are the first to extend psychosocial support to them. Thus, it is a “Must that all persons who, by virtue of their positions, are to become CAMP CHIEFS, in the event of a disaster, should undergo training on disaster management with special emphasis on psychosocial support.” A “bully” for a camp chief, will send negative signals to the evacuees. He or she may become an additional trauma to the already traumatized evacuees.

People who are evacuated to the EC are often those who are also in the low income group. During disasters, they become totally dependent on others. It is in this regard, that they should be allowed to maintain their self-respect and dignity, and this is possible if those in the higher positions will show more of empathy and not pity, concern and not grand-standing.

The problem in the EC is the referral of evacuees who are vulnerable to psychosocial problems. Thus, in the rapid health assessment, the search for persons who are in need of psychosocial support should be done. Aside from this, the camp administrators should provide activities which are means of psychosocial support, such as: religious activities, livelihood, entertainment and recreation, and for the married couples, provision of areas for intimate relationship.

REMEMBER, psychosocial support is best obtained from the family, thus, even in abnormal conditions, families should be kept together

Once professional or trained psychosocial therapist are available, see to it that follow-up sessions are conducted as needed. A one-time session will not be helpful, but may even create unpleasant experience or memories for those who may be left “hanging in the air”. The identification of those who are “vulnerable” to psychosocial problems is a continuing process, and must be part of the surveillance system instituted in the EC.

In the EC, psychosocial support must also be extended to the service providers, who could be outsiders, i.e. not victims or “insiders” meaning they too were victims. In any case, these people may suffer from the “burn-out” syndrome, particularly when the life
span of the EC is extended. It is also necessary to provide them with a place for resting, and adequate nutrition during their tour of duty.

4.5 Communication and Transport

The importance of communication and transport in an emergency cannot be overemphasized. Today communication is a lot easier with the mobile phones. On the other hand too much dependence on it may also be disastrous. In cases of power failure, or loss of signal, mobile phones may be useless. Thus, it is best to have extra two-way radios as back-ups.

Transportation is vital in the EC. This will be needed not only for the transport of materials, etc, but also for patients who may have to be brought to the hospitals. It is recommended that there should be at least one vehicle on a stand-by basis in the EC, example a jeep or a tricycle for 24 hours.

4.6 Security

Security, peace and order must be maintained in the EC. Remember that trouble is directly proportional to the number of people gathered in one place by an abnormal event. This can be minimized in the EC if at the start, the displaced community is encouraged to organize. As mentioned, in the Philippines, barangays are evacuated as a whole. In the EC they are grouped in the same “cluster” they have in their barangays. This may be both advantageous and disadvantageous. It is an advantage, because people already know each other. On the other hand, knowing each other may be a disadvantage if someone in the group is a known “bully”. Thus, the camp chief must see to it that the leader of the group was chosen by the majority.

From the “organized” evacuees, the males can take turns in maintaining peace and order in the EC. This is done in collaboration with the police from the local government i.e. police should be assigned to the camp 24 hours a day. The presence of a police is a deterrent to some evacuees to do some misdeeds, like petty thefts.

REMEMBER: The evacuation camp is a community, and as one, cooperation among its members is vital for its survival.
5. References:


DSWD Administrative Order No. 171, Series of 2001 "Minimum Standard Rates of Assistance to Victims of Disasters, Distressed, and Displaced Individuals and Families in Crisis Situation"


6. APPENDICES

Appendix A1

Checklist in Determining the appropriateness of Buildings (Schools) as Evacuation centers

Profile:

1. Address: ____________________________________________________________

2. No. of Buildings: _______________________

3. No. of rooms available: _________________

4. No. of people can be accommodated: ________________

5. Accessible by: _______________________________________________________

For each item, encircle the appropriate answer.

Site:

- Prone to flooding: yes/no
- Dusty: yes/no
- Garden /yard: yes/no
- Type of soil:
  - Muddy: __________
  - Solid: _______
  - Sandy: ________

Suitability:

- Building Structure: sound/unsound
- Ventilation: adequate/inadequate
- Natural lighting: adequate/inadequate
- Artificial lighting: adequate/inadequate
- Source of water: adequate/inadequate
  - Level 1: _______
  - Level 2: _______
  - Level 3: _______
- Storage area: yes/no
- Area for administration: yes/no
- Area for temporary kitchen: yes/no
- Main power: yes/no
- Electrical system /wiring: sound/unsound
- Phone available: yes/no
Sanitation:
- Presence of drainage
- Adequate drainage
- Presence of sewer
- No. of Toilet: _________________
  - Water sealed
  - Septic tank needs pumping out
- Is there an area for portable toilets
- Provision for prefabricated showers/bathing area/laundry area
- Presence of vermin and vector
- Presence of trash bin
- Presence of area for composting

Fire Control:
- Fire extinguishers
- Fire exits
Appendix A 2

Checklist in Determining the appropriateness of Site for makeshift camp

Profile :
1. Address_____________________________________________
2. Land area : __________________________________________
3. Approximate no. of shelters that can be built ______________
4. Accessible by : ________________________________________

For each item, encircle the appropriate answer.

Site :
- Topography
  - Flat yes/no
  - Hilly yes/no
  - Sloping yes/no
    - Prone to flooding yes/no
    - Dusty yes/no
    - Windy yes/no
    - Space for gardening yes/no
- Type of soil
  - Muddy _____
  - Solid _____
  - Sandy ____
  - Clay ______
- Presence of environmental hazards : yes/no
  - Malaria ____
  - Schistosoma ____
  - Filaria : ______
  - Others : ______

Facilities
- Presence of electricity yes/no
- Source of water in the area
  - Level 1 ______
  - Level 2 ______
  - Level 3 ______
- Phone available yes/no
- Drainage and sewer yes/no
- Area for prefabricated/portable Toilets yes/no
- Provision for prefabricated Showers/bathing area /laundry area yes/no
- Presence of vermin and vector yes/no
Appendix B

Profile of Evacuation Center

Nature of the Emergency/Disaster:
______________________________________________

Place:
_______________________________________________________

Type of Evacuation Center:

☐ School

• No. of Rooms
:____________________

☐ makeshift

• No. of makeshift shelters
:___________

Date opened: ______________________

Date closed: ______________________

Place of origin of evacuees:
_______________________________________________

Total no. of Evacuees:
_______________________________________________

No. of families: _________________________________

No. of Males: _________________________________

No. of Females: _______________________________

No. of Children: ______________________________

No. of Elderly: _______________________________

No. of Pregnant: ______________________________

No. of PWD (person with disability) __________

Persons Managing the camp:

1. Camp Chief:

2. SWD representatives: A. ____________________________
     B ______________________________

3. BHWs: From Host Barangay:

__________________________________________________________________________________________
From Barangay of Origin:

4. Barangay chairpersons
   Host barangay: _____________________________________
   Barangay of origin __________________________________

5. MHO responsible : _________________________________
   Place of Health Unit : __________________________________

6. Nutritionist responsible :
   Barangay Nutrition Scholars: ______________________________

7. Sanitary Inspectors : ______________________________

8. Security personnel : ______________________________

9. Volunteers :

   ___________________________________
   ___________________________________
   ___________________________________
   ___________________________________
   ___________________________________
   ___________________________________
   ___________________________________
   ___________________________________

   ___________________________________
Appendix C

Checklist for environmental health/RAS survey

Evacuation Camp address : _______________________________________

Type : ______ School ______ other buildings _______ makeshift

Date opened : ____________________________________________

Date of RAS : __________________ RAS no. __________________

Done by : __________________________________________________

Designation: ________________________________________________

Contact no. ________________________________________________

Population :
  o No. of Evacuees : _________________________________
  o No. of Families : _________________________________
  o New arrivals : ______ Date of arrival : ________

SHELTER :
  • For schools/Buildings
    No. of rooms occupied : ___________________________
    No. of Families per room : ___________________________
    Remarks : _________________________________________

WATER SOURCE :
  o Level 1 : ______
  o Level 2: _______
  o Level 3 : _______
  o No. of faucets /water points: ______
    Rate of discharge: _______
  o No. Tanks for water : _______
    Capacity per tank : ______
  o Other source of water :
    ▪ Rationing : ______ Frequency : _____________
    ▪ Bottled water : ______

  o Water safety :
    ▪ Rapid Testing : ______ Method : _______
      ______th testing Date of test: _______
      Results : ___________________________________________
    ▪ Bacteriologic : ______
      ______th testing Date of test: _______
      Results : ___________________________________________

  ▪ Water treatment :

35
• Chlorine tablets: __________________
• Chlorine solution : _________________

  o Remarks : ____________________________
  ______________________________________
  ______________________________________

LATRINES:
• No of water sealed : __________________ 
• No. of pit/kybos : _____________________
• No of portable toilets : __________________
• Soap and water : ______________________
• Toilet papers ( for portable toilets) ______
• Remarks : __________________________________
              __________________________________
              __________________________________

SOLID WASTE DISPOSAL:
• Segregation practiced : ________________
• No of receptables available : _______ 
  Capacity : _______
• No. of dug pit : __________ Cover : Yes/ No
• Composting : _________________________
• Open burning : _______________________
• Collected : __________
  o Frequency : ________________________
• Collected by : _______________________
  Remarks: __________________________________
              __________________________________
              __________________________________

WASTE WATER DISPOSAL:
• Presence of drainage Yes/no
• Presence of sewer yes.no
• Other systems present :
  _______________________________________
  _______________________________________
  _______________________________________  

  • Remarks :
  _______________________________________  
  _______________________________________  

VERMIN and VECTOR
• Presence of accumulated water
  ( ground, receptacles ) yes/no
• Presence of uncollected garbage yes/no
• Presence of flies, ants, mosquitoes yes/no
Appendix D

Rapid assessment of the nutritional status of young children using the arm circumference method (from the Handbook for Emergencies, UNHCR, 1982)

Explanation of the Principle:

1. The arm circumference technique is suitable for a rapid assessment of the nutritional status of young children. It measures a part of the arm whose circumference does not normally change significantly between the ages of one and five, but which waste rapidly with malnutrition. The technique is not suitable for monitoring the progress of individual children.

2. If professional help is available it should of course be used but this assessment can be done by those with no previous nutritional experience provided the guidelines below are followed. The technique thus allows any UNHCR field officer to provide an objective assessment and hard facts rather than be limited to subjective reporting. This in turn allows a much more effective response.

Selection of the children

3. If the evacuee/refugee population is 10,000 or less a random sample of not less than 200 children aged between one and five years should be chosen. This can be done on a house to house basis (room to room) or by assembling all the children at one site and measuring, for example, every fifth child. If a “cluster” sample method is used (e.g. sampling in different sections of a large settlement/camp) not less than 30 children per cluster should be measured to allow a comparison between sections. Take care that the adults do not just produce sick children in the belief that the test is to be followed by medical attention; this will distort the result. A quick but crude way of ascertaining that children are approximately within the age range of one to five years is to check they have more than six teeth but are less than 115cm in height. For most people this would mean the children come up to about waist height.

4. The assessment must be put in context: information about where the children come from and when they arrived should be obtained and reported, as the condition of this particular group may not reflect that of the whole caseload.

The measurement
5. If custom-made measuring tapes are not available, take a thin strip of plastic of about 30cm in length and mark off clearly a zero point, then 12.0cm and 13.5cm.

6. Before measuring any child check for the presence of oedema (the swelling seen in Kwashiorkor) by pressing a finger against the front of the child's foot for about 3 seconds. If a dent (pitting) is seen the child has oedema and should not be measured but marked down as having oedema and being severely malnourished.

7. If there is no oedema, the circumference of the child's left upper arm should then be measured at the midway point. The tape should be wrapped closely (but not tightly) around the left arm midway between the elbow and the point of the shoulder. The arm should be hanging loosely.

**The results**

8. Classification of nutritional status can be made as seen on the attached form. The amount and degree of malnutrition can be calculated as percentages of the sample.
Appendix E

Nutritional Survey Report Form
Arm Circumference Method
(from the Handbook for Emergencies, UNHCR, 1982)

Evacuation/Makeshift Camp: ________________________________
Site/address: ___________________________________________
Date: ____________________________
Total of evacuees: ___________________
Total no. of children from whom random sample was taken ________
Method of Sampling: _______________________________________
Conducted by: ______________________ Contact no. ___________”}

<table>
<thead>
<tr>
<th>Satisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
</tr>
<tr>
<td>More than 13.5cm (approximately equivalent to over 80% weight-for-height)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Malnutrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>(B)</td>
</tr>
<tr>
<td>12.0-13.5cm (approximately equivalent to 70%-79% weight-for-height)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Severe Malnutrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>(C)</td>
</tr>
<tr>
<td>Less than 12cm (approximately equivalent to under 70% weight-for-height)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R</th>
<th>Satisfactory</th>
<th>Malnutrition</th>
<th>Severe Malnutrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td></td>
</tr>
<tr>
<td>More than 13.5cm</td>
<td>12.0-13.5cm</td>
<td>Less than 12cm</td>
<td></td>
</tr>
</tbody>
</table>

(oedema)

(Record numbers only. As this is for statistical purposes there is not need to keep any other details on those measured)

TOTAL SAMPLE: \[= A + B + C\]

% Malnutrition: \[= \frac{(B + C) \times 100}{A + B + C}\]

% Severe Malnutrition: \[= \frac{C \times 100}{A + B + C}\]

Of which % Kwashiorkor: \[= \frac{\text{Oedema} \times 100}{C}\]

Observations: ____________________________________________
## Vitamin A Supplementation

### I. Vitamin A Deficiency Prevention Schedule in Emergencies

**Oral Administration of VA Supplement**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants &lt; 6 months</td>
<td>50,000 IU once</td>
</tr>
<tr>
<td>Not breastfed</td>
<td></td>
</tr>
<tr>
<td>Infants 6 – 12 months</td>
<td>100,000 IU every 3 months</td>
</tr>
<tr>
<td>1 year and older and</td>
<td>200,000 IU every 3 months</td>
</tr>
<tr>
<td>adults except fertile women</td>
<td></td>
</tr>
<tr>
<td>Pregnant and other</td>
<td>No more than 10,000 IU per day</td>
</tr>
<tr>
<td>fertile women</td>
<td></td>
</tr>
<tr>
<td>Lactating Women</td>
<td>200,000 IU once during first month after delivery</td>
</tr>
</tbody>
</table>

### II. Vitamin A Deficiency Treatment Schedule

**For treatment of Xerophthalmia (signs)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately diagnosed</td>
<td>200,000 IU orally</td>
</tr>
<tr>
<td>Following Day</td>
<td>200,000 IU orally</td>
</tr>
<tr>
<td>4 weeks later</td>
<td>200,000 IU orally</td>
</tr>
<tr>
<td>Infants 6-12 months</td>
<td>100,000, 50,000 IU (&gt; 6 months)</td>
</tr>
</tbody>
</table>

**For high priority risk groups**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Children and adults with severe PEM</td>
<td>Full treatment schedule and continue in prevention programme</td>
</tr>
<tr>
<td>Children with measles</td>
<td>Continue prevention programme</td>
</tr>
<tr>
<td>Children with persistent diarrhea or other acute infection</td>
<td>200,000 IU Vitamin A orally once and continue in prevention programme</td>
</tr>
</tbody>
</table>
Appendix G

ANEMIA PREVENTION AND TREATMENT SCHEDULE

i. Infants and Children

3 mg of Elemental Iron per kg of body weight per day, taken orally, using a combined iron/folate liquid preparation or tablet. (Thus, for a 10 kg child, give 30 mg of elemental iron per day.) Indication: anemia; or low birth weight infants, from 2 months onwards. Treatment is given in courses of 2-3 weeks duration, 3-4 times per year.

ii. Pregnant Women

Elemental iron 60 mg (200 mg of dehydrated ferrous sulfate) and 250 mcg folate in a combined tablet 2-3 times daily until at least 4 weeks after anemia has disappeared. For prevention: 1-2 tablets daily throughout the second half of pregnancy.

iii. Other Adults and Adolescents

Mild anemia: give orally 60 mg of elemental iron (200 mg of dehydrated ferrous sulfate) and 250 mcg of folate daily until 4 weeks after anemia has disappeared.

Moderate to severe anemia: give 120 mg elemental iron and 500 mcg of folate per day (2 tablets of 200 mg ferrous sulfate + 250 mcg folate)

In general, it takes at least 2 weeks to correct even mild anemia, and one month longer for moderate or severe anemia. Supplements should be maintained for 1-3 months beyond the time when normal Hb level is attained, in order to build up iron stores. A positive response to treatment can be defined as a daily increase in Hb concentration of 0.1 g/dl from the fourth day onwards.
## Appendix H

### SAMPLE MENUS AND RECIPES TO MEET EXISTING CONDITIONS

1. **No fuel No water**

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Lunch</th>
<th>Supper</th>
<th>Snacks*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fortified Fruit Juice</td>
<td>Fortified Fruit Juice</td>
<td>Canned Veg. Sardines</td>
<td>Biscuits with Margarine</td>
</tr>
<tr>
<td>Enriched Bread</td>
<td>Vienna Sausage</td>
<td>Fortified Fruit Juice</td>
<td>Fortified Fruit Juice</td>
</tr>
<tr>
<td>Cheese Pimiento Spread</td>
<td>Pork &amp; Beans</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enriched Bread</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Snacks may be served as added nourishment; they provide additional calories

2. **Fuel Available, No water**

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Lunch</th>
<th>Supper</th>
<th>Snacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fortified Fruit Juice</td>
<td>Canned Vegetable</td>
<td>Canned Vegetable</td>
<td>Enriched Bread with Margarine</td>
</tr>
<tr>
<td>Meat Sandwich</td>
<td>Sautéed Corned Beef</td>
<td>Sautéed Mackerel with Butter</td>
<td>Fortified Fruit Juice</td>
</tr>
<tr>
<td></td>
<td>Enriched Bread</td>
<td>Fortified Fruit Juice</td>
<td>Fortified Fruit Juice</td>
</tr>
<tr>
<td></td>
<td>Fortified Fruit Juice</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. **Water Available, No fuel**

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Lunch</th>
<th>Supper</th>
<th>Snacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fortified Fruit Juice</td>
<td>Instant Soup</td>
<td>Vegetable Soup</td>
<td>Enriched Bread</td>
</tr>
<tr>
<td>Liver Spread Sandwich</td>
<td>Salmon Salad</td>
<td>Ready-to-eat Meat Dishes</td>
<td>Peanut</td>
</tr>
<tr>
<td></td>
<td>Candies</td>
<td>Bukayo</td>
<td>Butter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fortified</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fruit Juice</td>
</tr>
</tbody>
</table>

4. **Water and Fuel Available**

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Lunch</th>
<th>Supper</th>
<th>Snacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee/Tea/Milk Champorado</td>
<td>Misua Soup</td>
<td>Instant Soup</td>
<td>Enriched Bread</td>
</tr>
<tr>
<td>with Milk</td>
<td>Fried Fish</td>
<td>Egg Sarciado</td>
<td>Pudding</td>
</tr>
<tr>
<td>Toasted Dilis</td>
<td>KamoteTops</td>
<td>Adobong</td>
<td>Fortified</td>
</tr>
<tr>
<td></td>
<td>Salad</td>
<td>Kangkong</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rice</td>
<td>Rice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Banana</td>
<td>Candies</td>
<td></td>
</tr>
</tbody>
</table>

### Appendix I

### SAMPLE MENUS AND RECIPES TO MEET EXISTING CONDITIONS

1. **No fuel No water**

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Lunch</th>
<th>Supper</th>
<th>Snacks*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fortified Fruit Juice</td>
<td>Fortified Fruit Juice</td>
<td>Canned Veg. Sardines</td>
<td>Biscuits with Margarine</td>
</tr>
<tr>
<td>Enriched Bread</td>
<td>Vienna Sausage</td>
<td>Fortified Fruit Juice</td>
<td>Fortified Fruit Juice</td>
</tr>
<tr>
<td>Cheese Pimiento Spread</td>
<td>Pork &amp; Beans</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enriched Bread</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Snacks may be served as added nourishment; they provide additional calories

2. **Fuel Available, No water**

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Lunch</th>
<th>Supper</th>
<th>Snacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fortified Fruit Juice</td>
<td>Canned Vegetable</td>
<td>Canned Vegetable</td>
<td>Enriched Bread with Margarine</td>
</tr>
<tr>
<td>Meat Sandwich</td>
<td>Sautéed Corned Beef</td>
<td>Sautéed Mackerel with Butter</td>
<td>Fortified Fruit Juice</td>
</tr>
<tr>
<td></td>
<td>Enriched Bread</td>
<td>Fortified Fruit Juice</td>
<td>Fortified Fruit Juice</td>
</tr>
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<td></td>
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4. **Water and Fuel Available**

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<td></td>
</tr>
<tr>
<td></td>
<td>Banana</td>
<td>Candies</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix I

### Foods to be stockpiled for a family of six for an emergency

<table>
<thead>
<tr>
<th>Kind of food</th>
<th>1 Week</th>
<th>2 Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Milk: Evaporated or Powdered Whole Milk</td>
<td>16 – 14.4 oz can</td>
<td>32 – 14.5 oz. Can</td>
</tr>
<tr>
<td></td>
<td>4 – 1 lb. Can</td>
<td>1 – 5 lb. Can</td>
</tr>
<tr>
<td></td>
<td>3 – 1 lb. Can</td>
<td>6 – 8 oz. Can</td>
</tr>
<tr>
<td>2. Cereal: Rice</td>
<td>6 gantas</td>
<td>12 gantas</td>
</tr>
<tr>
<td>Bread</td>
<td>2 loaves</td>
<td>3 loaves</td>
</tr>
<tr>
<td>3. Fats and Vegetables</td>
<td>3 ½ cups</td>
<td>3 ½ kilos</td>
</tr>
<tr>
<td>4. Sugar</td>
<td>3 ½ kilos</td>
<td>7 kilos</td>
</tr>
<tr>
<td>5. Canned Meat, Fish, Cooked Dried Beans, Dried Meat and Fish</td>
<td>4 kilos</td>
<td>7 kilos</td>
</tr>
<tr>
<td>a. Sardines or Mackerel</td>
<td>3 – 8 oz. Can</td>
<td>6 – 8 oz. Can</td>
</tr>
<tr>
<td>d. Pusit (canned)</td>
<td>3 – 8 oz Can</td>
<td>6 – 8 oz. Can</td>
</tr>
<tr>
<td>e. Tinapa, tunsoy</td>
<td>4 – 8 oz Can</td>
<td>8 – 8 oz. Can</td>
</tr>
<tr>
<td>g. Beef Tapa</td>
<td>23 pcs.</td>
<td>46 pcs.</td>
</tr>
<tr>
<td></td>
<td>2 – 12 oz. Can</td>
<td>4 – 12 oz. Can</td>
</tr>
<tr>
<td></td>
<td>8 kilo</td>
<td>2/3 kilo</td>
</tr>
</tbody>
</table>
Appendix J

Health status/ Services
(Baseline/Initial Survey)

Date Accomplished: __________________
Evacuation Center: ____________________________________________
Type of Emergency/Disaster: ______________________________________
No. of Evacuees: ______________ Place of origin: ______________
  • No. of families: _______
  • No. of males: _______
  • No. of Females: ______
  • No. of children: ______
Accomplished by: ______________________
  Designation: ______________ Contact no. ____________

A. Health Personnel:
MHO in charge: _____________________________________________
Other Health personnel:
  • Other Physicians: _________________________________________
  • Nurses: _________________________________________________
  • Midwives: ______________________________________________
  • BHWs: _________________________________________________

Clinics/Hospitals for referral: _________________________________
  _________________________________________________________
  _________________________________________________________
  _________________________________________________________
Clinic days: ______________ Time: _________________________

B. Health Profile:
  • Immunization coverage:
    o Measles: _______________________________________________
    o DPT: _________________________________________________
    o Hepatitis B: ___________________________________________
    o BCG: _______________________________________________
  • No. of TB patients in DOTS program: ________________
    (Make available the list)
  • No. of individuals with CVD: ________________
    (Make available the list)
  • No. of individuals with diabetes: ________________
  • No. of pregnant: ______________________
  • No. of women breastfeeding: ______________________
  • No. of elderly: ______________________
  • No. of person with disability: ______________________
Suggested Form for Communicable Disease Surveillance Daily Report

Date: ________________
Prepared by: ____________________________
Designation: ____________________________
Office: _____________________________
Contact No. _________________________

Evacuation Camp: __________________________________________
Clinic site: ______________________________________________

<table>
<thead>
<tr>
<th>No. of New Cases with</th>
<th>Under 5 yrs</th>
<th>Over 5 yrs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fever (38°C)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Fever and Cough</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Diarrhea with blood</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Fever and diarrhea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Vomiting and/or diarrhea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Fever and rash</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Dog bite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Snake bite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Burns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Trauma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Jaundice and diarrhea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Deaths</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remarks: ______________________________________________________

Status of Evacuation today:
- No. of Evacuees: ____________________________
- No. of New arrivals: ______________________ Date: ____________
- No. of consults today: ____________________
- Significant changes in the water/sanitation/food supply: ____________________________

Adapted from the Post-Disaster Disease Surveillance Daily Report, page 45, Natural Disasters, PAHO, Scientific Publication Series No. 575, 2000
Appendix L

Report of Health Care Activities

Date prepared ________________ Period Covered:
Prepared by : _________________________________________
Designation _______________________________________
Office : ___________________________________________
Contact No. _______________________________________

Evacuation Center : ____________________________________
____________________________________

No. of Evacuees : ________________ No. of Families:________
No. of New Arrivals : ________________ Date of Arrival : _______

Immunization :
• Measles________________________________
• DPT __________________________________
• BCG:____________________________________
• Hepatitis B : ___________________________
• Tetanus toxoid : ______________________
• Others (specify)____________________________

Pre-Natal care : _________________________________________
No. of Deliveries:_____________________________________
No. of TB DOTS attended : ________________________________
No. of CVD consultations: _______________________________
No. of other bon-communicable consultations : _______________
No. of Psychosocial sessions conducted : ___________________
   Date: __________________________
   Conducted by : ___________________________________
   No. of Participants : Adults : _____ Male _____ Female
   Children : __________________

No. of REFERRALS : _________________________________
   Type of Cases : ________ No. ________________
   Place of referral _______________________________

Remarks: ___________________________________________
______________________________________________
### WHO Standards (Basic Needs)

(From the Pocket Emergency Tool, 2nd ed. HEMS-DOH, WHO)

<table>
<thead>
<tr>
<th>Average Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WATER</strong></td>
</tr>
<tr>
<td>Quality</td>
</tr>
<tr>
<td>Quantity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>SANITATION</strong></td>
</tr>
<tr>
<td>Latrine</td>
</tr>
<tr>
<td>Waste disposal</td>
</tr>
<tr>
<td>Soap</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>SHELTER</strong></td>
</tr>
<tr>
<td>Individual requirement</td>
</tr>
<tr>
<td>Collective requirement</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>HOUSEHOLD FUEL</strong></td>
</tr>
<tr>
<td>Weight of firewood</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>