

Emergency Health Contingency Plan

Ministry of Public Health

Lebanon

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I-GENERAL BACKGROUND:

The Ministry of Public Health (MOPH) Contingency Plan (CP) is a tool that describes the level of preparedness and the arrangements made in terms of Health Response in anticipation of a crisis to ensure appropriate health and humanitarian assistance and protection.

The overall objectives of the MOPH /CP include:

- Saving lives
- Maintaining health
- Preventing and containing epidemics

Box 1- general definitions

A health **Emergency** is defined as any sudden public health situation endangering the life or health of a significant number of people and demanding immediate action.

A health **Disaster or Catastrophe** is any actual threat to public safety and/or public health where the capacity of the emergency services to respond is overwhelmed or exceeded.

A health **Hazard** is defined as any potential threat to public safety and/or public health

A health **Risk** is defined as the probable consequences to public health and safety of a community being exposed to a hazard (i.e. death, injury, disease, disability, damage, destruction, displacement etc.).

Vulnerability is defined as any (endogenous) factor which increases risks arising from a specific hazard

The main **Cut Off indicators** for health emergencies defined by WHO are described below:

Table 1- emergency indicators

Status	Indicator	Cut off value
Health	Daily crude mortality rate	>1/10,000pop
	Daily under 5 mortality rate	>2/10,000 children under 5
Nutrition	Acute malnutrition in under 5	10% of under 5 years old
	Growth faltering rate in Under 5	30% of monitored children
	Low birth weight (<2.5 kg)	7% of live birth

Current country context

Lebanon is a small country of 10,452 sq km, with 217 km of coastal borders at the Mediterranean Sea. Lebanon has 170 square kilometers of water and 860 square kilometers of irrigated land. The country is experiencing growing Environmental concerns including mainly deforestation (man made and fire made), soil erosion and desertification and waste management. Lebanon has six provinces or Mohafazats: Beirut, Mount Lebanon, North, Bekaa, South and Nabatieh. The provinces are further divided into 25 districts or qadas in addition to Beirut.

Socio demographic context

The total estimated population for Lebanon is around 3,938 million. The population includes 27.2% less than 15 years of age, and 7.7% more than 65 years of age. Over 85% of the population lives in urban areas concentrated mainly in Beirut and Mount Lebanon. In addition to the

Lebanese citizen, more than 220,000 Palestinians are living in refugee camps. Other significant non Lebanese residents include: around 300,000 seasonal Syrian workers (mostly in construction and farming), some 100,000 workers (domestic and semi skilled mainly from Egypt and Africa and other countries in South Eastern Asia) and some 40,000 Iraqi refugees

Political context

The country is witnessing political instability reflected in major difficulties in forming the Cabinet of Ministers and an almost paralyzed Parliament as a result of severe polarization among the various factions. The State authority is challenged by the presence of heavily armed groups.. Lebanon hosts 15,000 UN peace keeping troops in the South, which presents also a special security challenge.

Internationally, Lebanon experiences a complicated situation with the continuous “state of war” with Israel. On the other hand, the repercussions of the crisis situation several countries of the Middle East are experiencing since the start of 2011 remains uncertain.

Planning assumptions

- Limited communication structures & infrastructure
- Maintained capacity of civil society
- Limited government preparedness
- Existing coping capacity of population
- Possible limited transport and other facilities
- Functioning market/private sector
- UN contingency plan activated
- Presence of UXOs affecting relief activities
- Necessary funds are allocated promptly by the Government

II- RISK SCENARIOS

Disasters will be grouped into two main categories:

- **natural disasters** which include: earthquakes, Tsunamis, floods, snow storms, fires, pandemics
- man- made disasters**, which include: internal conflict, external conflict, nuclear/chemical leaks

Accordingly the following scenarios are considered:

Scenario 1: Major Earthquakes/Tsunamis

The historical record of Lebanon and the area is rich in indications of past earthquakes recorded as early as AD 551 which was reported to be accompanied by a major sea-wave (**Tsunami**). The last severe and destructive earthquake in Lebanon happened in 1956.

Although the hazard of Tsunami is estimated low, the seismic hazard of Lebanon is particularly emphasized due to the following geological features:

-the active plate-boundary running for over ~1200km from Aaqaba in the south, to Antakia in Turkey in the north, and which creates in Lebanon the **Yammouneh Fault** that runs parallel to the Mt-Lebanon range along its eastern flank.

-the major active fault called the **Mt-Lebanon Thrust**, that runs in great part offshore the central Lebanon between Saida and Tripoli. It underlies all the western flank of Mt-Lebanon, below all the major cities of the country and its economical centers, and can thus be a great threat for all the coastal area; because it goes offshore this fault can also generate tsunamis.

-the **Serghaya Fault**, stretches along the Anti-Lebanon Range, threatening both the Lebanese Bekaa and Damascus-Nebek area in Syria.

Other numerous minor faults run generally West to East throughout the country but have a much lesser seismic potential than the main plate boundary.

The whole of Lebanon and its littoral must be considered as a high to highly-moderate risk area especially for the urban populations with the potential of events measuring up to 7.6 on the Richter scale.

Scenario 2- other natural disasters

Lebanon experiences yearly **snow storms**, but in view of the narrow dimensions of the country, quick access of rescue teams has been possible so far. Nevertheless, risks of avalanche as well as main roads closure remains, although not high.

Similarly, Lebanon experiences yearly episodes of heavy rainfall, resulting in **localized floods**, mainly in the Bekaa area, mostly due to poor urbanism, and chaotic constructions around river sides. More severe floods are possible if the weather becomes more affected by the global Climate change. However, and due to the narrow dimensions of the country, access of rescue teams is usually possible. Risk of isolation of communities and potential water borne outbreaks remains to be considered although likelihood is not high.

On the other hand, the risk of **main fires**, aggravated by the more frequent **heat waves** observed over the past decade, is an increasing potential, that may be exacerbated by the geographical nature of the country (high mountains and deep inaccessible valleys)

Scenario 3-outbreaks/epidemics/ pandemics

Outbreaks and epidemics, whether in the context of Crisis or sporadically occurring present a particular challenge to health of populations and to the health systems in general.

An Outbreak is defined as the occurrence of more cases of disease than expected in a given area among a specific group of people over a particular period of time and that has Public Health, Social, and Economical consequences

Transmission routes of Epidemics include:

- air (by breathing, sneezing or coughing),

- Fecal- oral (excreting/ ingesting)
- blood (contaminated surgical equipments, transfused blood products, insect/ animal bites...)

The main risk factors for outbreaks include:

- _ Overcrowding
- _ Inadequate shelter
- _ Insufficient nutrient intake
- _ Insufficient vaccination coverage
- _ Poor water, sanitation and hygiene conditions
- _ High exposure to and/or proliferation of disease vectors
- _ Lack of and/or delay in treatment

It is to note that Infectious Diseases do not exhibit unexpected properties in crises, but crises exacerbate existing or bring about new risk factors

To note also that epidemics and pandemics can by themselves create a state of Crisis, such as was the case with the recent novel a H1 N1 influenza pandemic.

Lebanon will be at risk, like any other country, in case of **Pandemics**, with probably increased speed of spread to the following factors:

- its geographical situation , as a cross-road and stop-over between the five continents
- its high touristic/travel activity
- its large diaspora frequently visiting the country
- its suboptimal Borders capacity for epidemic control

What epidemic disease to expect and when in emergencies

Main risk factor	Main epidemic disease of concern	Timing after onset of risk factor (window to act)
<ul style="list-style-type: none"> • Flooding • Intense rainy season • Temperature abnormalities 	<ul style="list-style-type: none"> • Malaria • Dengue fever • Rift valley fever 	<ul style="list-style-type: none"> • At least one month
<ul style="list-style-type: none"> • Movement of people from non endemic into disease-endemic region 	<ul style="list-style-type: none"> • Malaria 	<ul style="list-style-type: none"> • At least one month
<ul style="list-style-type: none"> • Dry season • 	<ul style="list-style-type: none"> • Meningitis 	<ul style="list-style-type: none"> • About two weeks
<ul style="list-style-type: none"> • Insufficient water • Contaminated water • Poor sanitation 	<ul style="list-style-type: none"> • Cholera • Shigella • Rotavirus 	<ul style="list-style-type: none"> • Around two weeks
<ul style="list-style-type: none"> • Overcrowding 	<ul style="list-style-type: none"> • Measles • Meningitis 	<ul style="list-style-type: none"> • Around two weeks
<ul style="list-style-type: none"> • Poor nutrient intake 	<ul style="list-style-type: none"> • Measles • Cholera • Shigella • Rotavirus 	<ul style="list-style-type: none"> • About one to two months
<ul style="list-style-type: none"> • Interruption of Routine vaccination 	<ul style="list-style-type: none"> • Measles 	<ul style="list-style-type: none"> • A few months

Scenario 4- internal conflict

Based on the country and regional political and security context, the following risks for **internal conflict** are considered:

- Civil strife between internal factions, different political parties and regions clashing.
- Political weakening/dysfunction/collapse of the Government structure due to increased internal tensions
- Attacks from terrorist movements
- Social unrest due to the deteriorating socio-economic situation
- Conflict within Palestinian Camps that may extend outside the camps to neighboring areas

Scenario 5-External conflict

Based on the country and regional political and security context, the following risks for **external conflict** are considered:

- A war between Israel and Lebanon
- Political and security developments in the East Mediterranean Region and their impact on Lebanon

Scenario 6- nuclear or chemical leak

Lebanon does not have main chemical industries nor nuclear plants. However, several neighboring countries (Israel, Iran, Syria) may experience chemical/ bacteriological or nuclear catastrophic leaks that could have repercussions on Lebanon. This would be dealt with as an International Event of Public Health Concern, in the context of International Health Regulations (IHR).

Lebanon does not have many chemical industries or nuclear plants. However, several neighboring countries (Israel, Iran, Syria) may experience chemical/ bacteriological or nuclear catastrophic leaks that could have repercussions on Lebanon. The potential of use of weapons of mass destruction should be considered as well. In all cases, possibility of air, water and soil contamination should be considered, as well as direct contamination and affection of people exposed.

In the advent of such a scenario, special health related repercussions should be considered.

-exposure to ionizing radiation

The immediate health consequences due to exposure to ionizing radiation depend on the dose of radiation, the duration of exposure and the volume of the exposed part of the body. The short term medical consequences range from skin reactions, to severe and fatal bleeding.

Lebanon has the required equipment needed to detect radiation (available at the Centre National de RecherchesScientifique). Isolation of exposed regions and persons may be required. Guidelines for medical care of patients exposed to radiation have been made available to health care workers through previous training.

-exposure to Chemical/ bacteriological hazards

Chemical hazards (nerve gases, herbicides...), and biological hazards(bacteria, fungi and viruses) could be one source of disastrous health consequences, either because they are directly inhaled, ingested or spread on skin, or indirectly through contaminated water or animal reservoirs.

Possible public health measures, depending on the type of chemical or biological hazard, may include: isolation of people in exposed areas, protection of health staff and care givers (vaccines, masks...), special measures for disposal of related waste, and even quarantine. Guidelines on case management of chemical/ biological hazards exposure has been made available to health care workers through previous training

Table 2 below summarizes the **likelihood of occurrence** of the above mentioned scenarios

Table 2- risks scenarios rating for Lebanon

Disaster category	Threat	Risk (scale 1 to 5 , 1 unlikely 5 very likely)
Natural disaster	Earthquake	
	Tsunami	
	Fire	
	Flood	
	Heat wave/snow storm	
Man made	Internal conflict	
	External conflict	
	Chemical/ Biological/Nuclear leak	

III- HEALTH IMPLICATIONS

In times of crisis, whether man made or nature made catastrophies, the health implications could be due to direct effects as well as indirect effects, and are almost the same in most scenarios.

Among the **direct effects**, the following should be considered:

- Impact on the population and individuals' health: death, injuries and trauma, infections and outbreaks, food, water and sanitation, stress and mental well-being

- Impact on the health system: access to primary and tertiary health facilities, availability of and access to medications, evacuation of casualties and related logistics

Among the **indirect effects** that may impact health of people and the health system, the following should be considered:

- disruption of road infrastructure affecting transport of :
 - casualties/sick people
 - goods: medical (medications, supplies and equipment) and non medical(food, fuel...)
 - human resources in health
- disruption of telecommunication affecting humanitarian and health coordination
- disruption of utilities reducing access to electricity, fuel, potable water, sanitation system etc....
- massive displacement resulting in overcrowding, poor shelter and sanitation conditions with subsequent increased risks of diseases

Table 3-what epidemic disease to expect and when in emergencies

Main risk factor	Main epidemic disease of concern	Timing after onset of risk factor (window to act)
Flooding Intense rainy season Temperature abnormalities	Malaria Dengue fever Rift valley fever	At least one month
Movement of people from non endemic into disease-endemic region	malaria	At least one month
Dry season	meningitis	About two weeks
Insufficient water Contaminated water Poor sanitation	Cholera Shigella Rotavirus	Around two weeks
Overcrowding	Measles Meningitis	Around two weeks
Poor nutrient intake	Measles Cholera Shigella Rotavirus	About one to two months
Interruption of Routine vaccination	Measles	A few months
pandemics	Influenza, SARS,etc...	Global**

** refer to Pandemics Contingency Plan drafted separately

IV- PREPAREDNESS IN HEALTH

The MOPH, with the support of the World Health Organization (WHO), has initiated since 2006 several preparedness interventions as part of the Recovery interventions. The advent of the Influenza Pandemic in 2009 accelerated the preparedness interventions, which was further leveraged by the preparations for the International Health Regulations (IHR). The main preparedness interventions are summarized below:

-Emergency Operations unit

An Emergency Operations Unit based at the Rafic Hariri Governmental Hospital (RHGH) coordinating closely with the High Relief Council (HRC), the Army and the Lebanese Red Cross (LRC) is established, and is equipped with advanced Information and Communication equipments allowing satellite connections in case of emergencies. A core team of RHGUH staff is trained on the IT component. A standard casualty reporting form is developed.

-data base on all PHC centers

All PHC centers (totaling 920 across the country) were assessed in terms of functionality and types of services provided in 2006-2007. The data base is available at the MOPH

-data base on Qda doctors

An updated list of qada doctors with their contact details is available at the MOPH and all PHC network centers and hospitals across the country. It is also displayed on the MOPH website

-data base on all private hospitals

All private hospitals operating in the country were surveyed in 2009, with information regarding physical premises, ownership, human resources, types of services/departments, medical equipments, and ISO qualifications. The data base is available at the MOPH as well as at the Syndicate of Private hospitals

- assessment of Public hospitals laboratories capacities

A baseline assessment of the capacity of public hospitals laboratories in diagnosing outbreaks and identifying health hazards was completed in 2010 based on the IHR recommendations. Accordingly, the Central Public Health Lab (CPHL) is currently being rebuilt and a plan to reinforce the public labs is developed. The BGUH laboratory is designated by WHO as reference lab for Measles monitoring and as national reference lab for Influenza monitoring

-management of medications and supplies:

-The central Drug warehouse was reinforced with the following:

- a Temperature Monitoring System at the Central Drug Warehouse-MoPH, to archive and monitor the temperature of the different locations. The system can be accessed from a local or a remote computer.

- a Logistics and Supply System is installed and staff trained to monitor distribution of medications and supplies. A new reporting system is developed for the Central Drug Warehouse-MoPH to monitor and validate the drugs distribution.

- five decentralized warehouses are established (one in each of the 5 Mohafaza), with medication and supplies stocks sufficient for 2 weeks, and are connected for monitoring to the Central warehouse

- the Essential Drug List has been updated in 2010 based on WHO recommendations
- Chronic medications stocks are available for 3 months

-training human resources

- 6 day intensive training on *Principles of Health Emergency Preparedness and Management*, based on WHO recommendations and support, was organized to a core group of 26 mid career level multidisciplinary experts from the MOPH, MOSA, MOI, Army, NGOs, Health professional Orders and Syndicates and academic institutions

- A set of training regarding *Reproductive Health (RH)* in emergency was organized across the country and reached around 1200 PHC and hospital health workers; the training was based on WHO and IASC recommendations and focused on:

- Recognizing RH emergencies and designing priority interventions,
- Case management of RH emergencies,
- Stock management of RH commodities,
- Communication skills,
- Counselling in RH.

- a set of training on *Mental Health* in emergencies was organized and reached around 200 general practitioners in private sector and some 800 PHC staff. The training focused on the IASC recommendation of Mental Health First Aid in emergencies. In parallel, a national mental health strategy is drafted in preparation for the establishment of a National Mental Health Program at the MOPH

- a set of training for public and private hospitals was organized in 2008-2009 on the principle of *Hospital Contingency planning*. The training focused on the practical aspects of developing the CP, and how to tailor it to the context of each hospital, and reached around 500 staff medical and administrators. Yearly follow up meetings are organized with the public hospitals accordingly.

- a set of training on principles of *Contingency planning at PHC* level was organized. Around 600 staff from various PHC centers have been trained

- one MOPH head of unit benefited from a three weeks *fellowship* in Japan on intensive training on Emergency planning and response supported by WHO

- a set of training on *Principles of Infection control* was completed in 2008-2009 targeting hospital staff and focused on the context of epidemics/outbreaks and pandemics and reached around 600 staff from private and public hospitals.

-A set of training on *Pandemic Influenza preparedness* and control at hospital setting was organized and reached around 600 hospital staff from private and public hospitals

- production of guidelines

-A Health Emergency Guidebook providing recommendations and guidance for health emergency preparedness and response was developed and disseminated to all PHC and hospital and concerned ministries and NGOs. The guidebook proposes unified definitions, experience

based approaches, and describes standards of preparedness and management of Health response in emergency situations.

- a Contingency and Preparedness and management plan is developed for *Avian Influenza* pandemic and for *A H1 N1 novel influenza* pandemic

- Surveillance of diseases

-An Early Warning Response and Alert System (EWARS) has been established at the MOPH, based on the principle of decentralization in order to provide regular data and alerts on outbreaks of major communicable diseases. To date, the MOPH has already achieved the following:

- the necessary guidelines and reporting forms and developed and disseminated
- the health workers at the level of Hospitals, PHC , army and Internal security forces have been trained on principles of EWARS
- the equipments and tools necessary for putting in place the mechanism of reporting at the level of PHC centres, army and selected private practitioners cabinets are available. The established EWARS was based on the principle of decentralization
- a rumor investigation system is established
- a school based surveillance system is established
- a detailed list of communicable diseases with potential outbreak has been updated including case definition and reporting recommendations

-the MOPH surveillance unit has been reinforced with additional staff both centrally and at Mohafaza level

-Four regional observatories were established in the following Mohafazat: Bekaa (Zahleh), North (Tripoli), South (Saida), and Nabatieh. The main objective is to have data collected on health (system and outbreaks) be analyzed and disseminated at the level of Mohafaza, to allow a better public health response.

-several ministerial decrees are issued regarding reporting infectious diseases, mandatory preparedness at hospital level etc..... ;these decrees are also available at the MOPH web site

- environmental health

- a set of training for the MOPH health inspectors on principles on water quality Monitoring has been completed. A total of 127 inspectors were trained

- a total of 6 portable water-testing laboratories, based on identified specification to be provided to the MoPH, the Water Authorities, the Ministry of Water and Energy and the RHGH. On the other hand, two water-testing laboratories were provided to the municipality of Beirut as well as the Ministry of Water and Energy. In addition 10 Citroen Berlingo vehicles were provided to the MoPH in order to ensure accessibility for water sampling and collection. The cars are available at the following areas: Nabatieh, Marjayoun, Saida, Tyre, Hermel, Zahleh, Shouf, Halba, Tripoli, and Kesserouan.

- the water quality specifications are revised with the assistance of LIBNOR.

- a training on Hospital waste management was organized for the private and public sector and the Army hospital. A checklist for Hospital waste management monitoring has been developed

- recommendations for insect and rodent control spraying campaigns in emergencies are available

V- HEALTH EMERGENCY RESPONSE PLAN

The health risks and the needs of the populations are similar in all humanitarian emergencies.

The need for food, water, shelter, health care, effective diagnostic and treatment usually increases in emergencies, irrespective of the type of emergency.

The emergency health response plan of the MOPH is based on the following guiding principles:

- saving lives
- ensuring prompt and quality health care
- providing pertinent curative and preventive care

Accordingly the MOPH will focus on

- assessment of health needs
- preventing , monitoring and controlling outbreaks
- maintaining health facilities operational capacity
- coordinating with main partners in health

1-assessment of health needs

The MOPH will conduct a rapid needs assessment based on the type of emergency, its intensity, its potential impact and its expected duration. The needs assessment should consider displacement of population, and their expected return, the infrastructure damage affecting proper functioning of the health facilities

2- preventing , monitoring and controlling outbreaks

The risk of infectious diseases, alone or in combination with malnutrition also increases in emergencies, especially for diarrhoeal diseases, acute respiratory infections (ARI) malaria where endemic, and measles. Risk of nosocomial infections also increases

Critical threats and risks that epidemics /pandemics (when epidemics become global and spread worldwide) hazard may pose were identified for each of the scenario models as well as what would be the risk mitigation activities of the MOPH. In terms of International Health Regulations, depending on the severity, type and pace of spread of an outbreak, key measures need to be taken at national and global level either to contain the outbreak or pandemic, or to mitigate the impact of the outbreak or pandemic

It is imperative to adjust the response to epidemic outbreaks based on initial hazard and risk analysis in order to minimize impact on the health and safety of the population, maintain and sustain operational capacity, and response actions in support of national efforts and around the possible scenarios .

The Response to epidemics and outbreaks includes:

- a- Epidemic investigation which requires:
 - a well trained public health team
 - adequate laboratory facilities

- adequate personal protective equipments and other logistics
- b- Control of the Source of Pathogen
 - Remove source of contamination (intoxication)
 - Remove persons from exposure (influenza and social distancing measures)
 - Inactivate / neutralize the pathogen (water treatment measures)
 - Isolate and/or treat infected persons (Ebola)
- c- Interrupt transmission
 - Interrupt environmental sources (safe water, sanitation, adequate shelter, standard infection control precautions in Health Care Facilities)
 - Control vector transmission (larvicide, environmental hygiene)
 - Improve personal hygiene (health education, soap)
 - Vaccination
- d- Modify host response
 - Immunisesusceptibles
 - Use prophylactic chemotherapy
 - Treatment of cases

Box 2- recommended vaccinations in case of Emergencies

- Vaccinate below 15 years old children in IDP shelters against measles regardless of their immunization status
- Vaccinate below 5 years old children in IDP shelters against polio regardless of their immunization status
- Vaccinate for measles and polio all children below 15 and 5 respectively if no proof of vaccination is available in the host community

3-maintaining health facilities operational capacity

The MOPH will ensure that medications and medical supplies will be made available in the central warehouse. The capacity of the warehouse can be expanded by renting additional space, depending on the context of the emergency. In case mobility is impeded, medications and supplies can be distributed to NGOs caring for the IDPs, based on the reports of the NGOs as well as the reported number of IDPs per shelter (information made available through the HRC daily reports). Distribution can also be done through UN convoys to the most affected areas .Priority in distribution should be given initially to the most affected areas, to the operational mobile clinics, PHC centres, and the public hospitals. With the slow picking up of the health system functions, public health facilities in the less-affected areas of the country can also be supplied with drugs, especially the regions that hosted large numbers of IDPs in shelters, to replenish the consumed medications and to ensure equity.

The MOPH will also allow advance payment at qada level to ensure provision of logistics and utilities to qada health units and public hospital as well as to private hospitals in the forefront of the emergency. The MOPH will also ensure that a roster of MOPH staff is available for quick deployment at the emergency sites

4- coordinating with main partners in health

The main partners in Health response in emergencies include:

- the concerned ministries (MOSA, MOEnv, MOD, MOI,MEHE, MOAg)
- the private sector
- the national NGO sector
- the academic institutions
- the UN agencies particularly the WHO, in addition to UNFPA, UNHCR, and UNICEF
- the International NGOs
- donor agencies and countries and

Once the Emergency is officially declared, the Health Cluster will be immediately activated, headed by the WHO and including all partners mentioned above. The Health Cluster will prepare the CAP and CERF in consultation with the MOPH, and activate its emergency response plan based on the UN CP.

It is important to ensure adequate coordination under the MOPH leadership in order to:

- avoid duplication of interventions
- mainstream resources
- prevent waste of efforts and time
- harmonize health emergency interventions with other health related interventions such as water and sanitation, environment, and protection

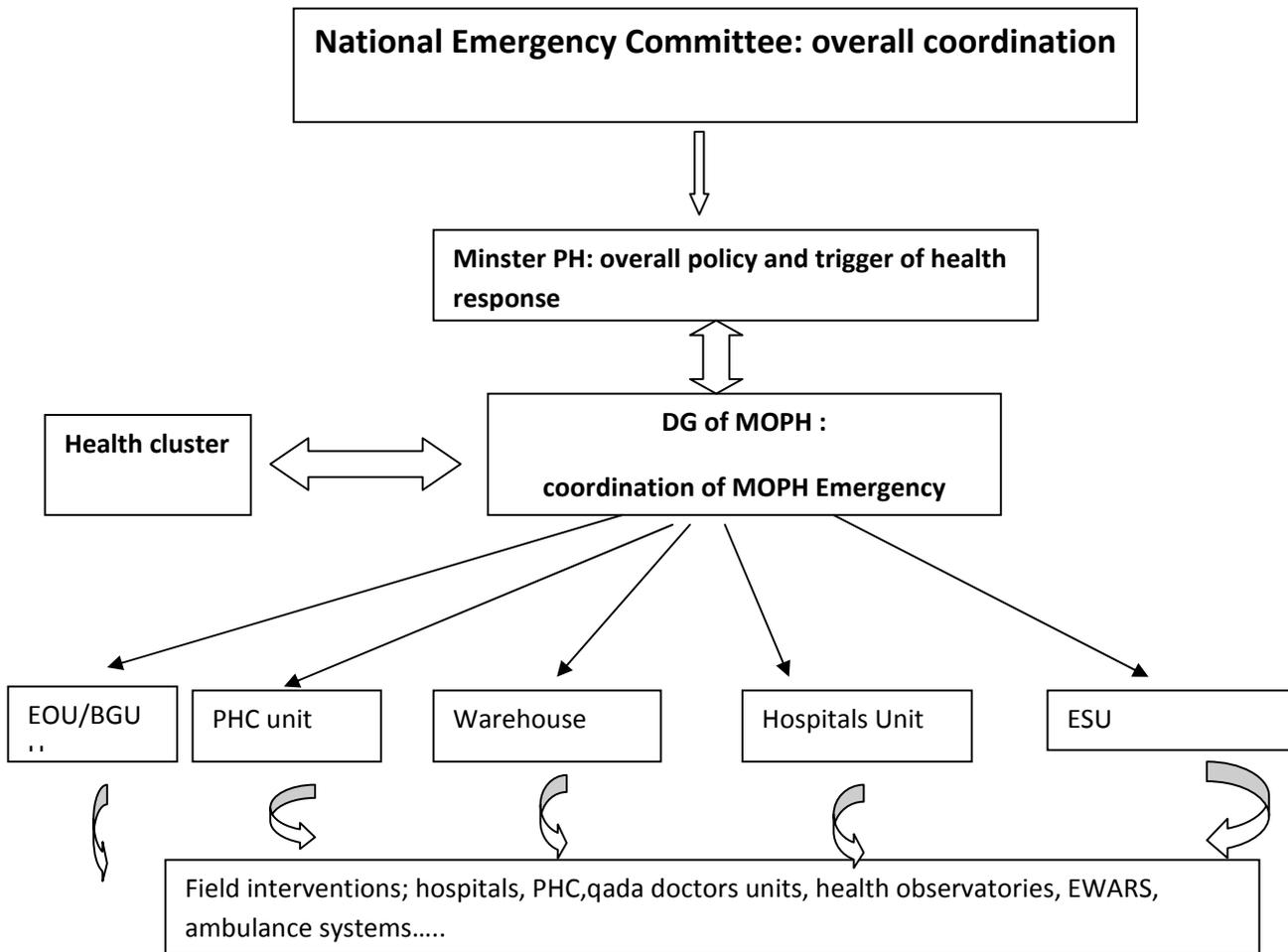
The respective roles of partners within the health cluster are summarized below.

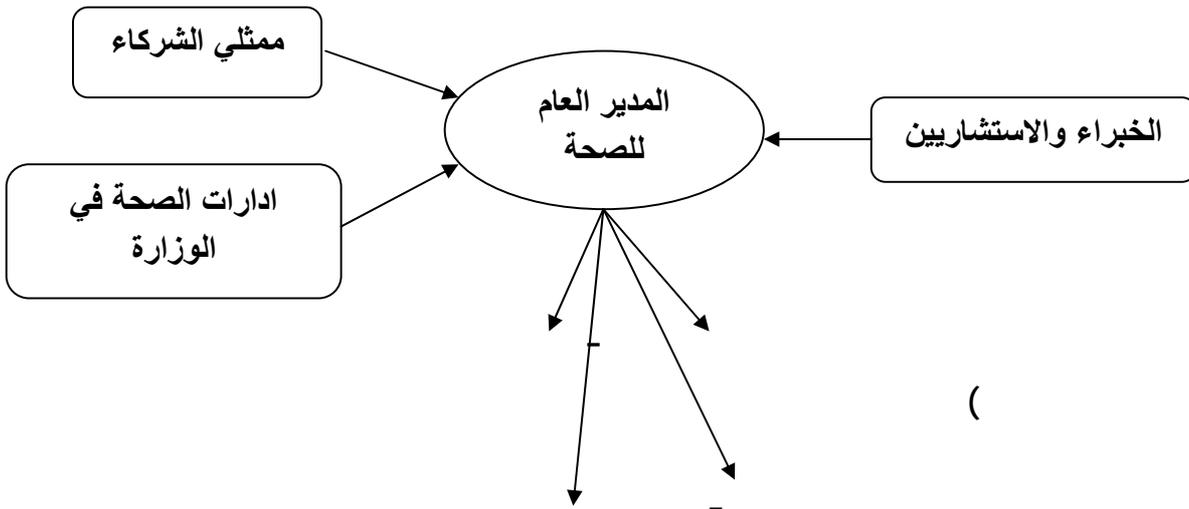
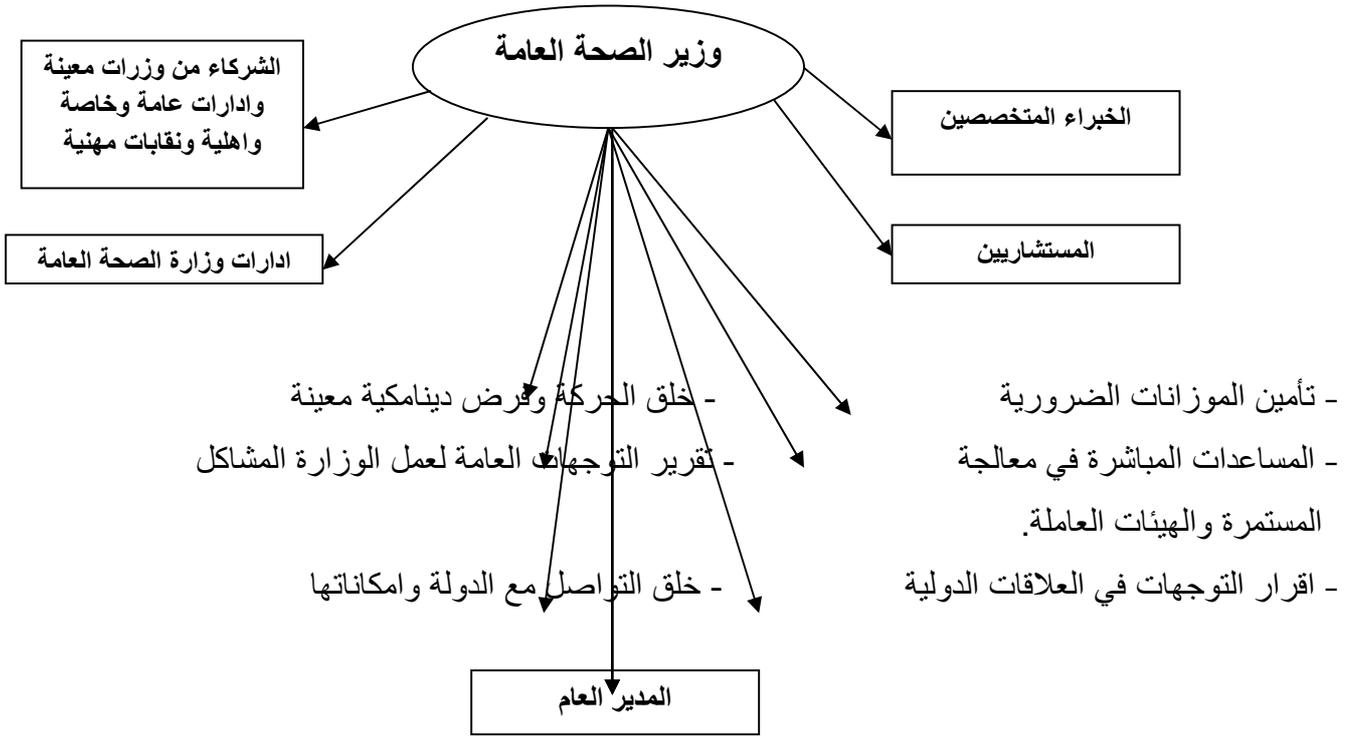
Table 4- roles of health partners in emergencies

Partner	Details	role
MOSA	225 centers across the country ;large network of NGOs; special programs (elderly, out of school children, disabled, violence against women and children, youth and SRH	-Provide PHC and protection -distribute food and non food supplies -support local NGOs
MEHE	-1,378 public schools -School based surveillance system	-transform schools into temporary shelters -coordinate with IOM IDPs needs
MOAg/MOEnv	Joint environment and zoonotic diseases task forces	-acute pollution control interventions -animal /zoonotic diseases control
MOI/MOD/LRC	-Medical team -Relief team -Ambulance system	-Evacuation of casualties -First aid at emergency site -Transport coordination with Emergency Operation room at MOPH /BGUH -transport medications and supplies

Private sector	<ul style="list-style-type: none"> -hospitals -polyclinics -laboratories -pharmacies -importers of medications and medical supplies 	<ul style="list-style-type: none"> -ensure operational capacity of their respective institutions -accommodate casualties -provide medications and supplies -ensure stocks of medications and supplies
NGOs	<ul style="list-style-type: none"> -local and international 	<ul style="list-style-type: none"> -work in coordination with the Health cluster - provide PHC services and IDP medical and non medical services
Academic institutions	<ul style="list-style-type: none"> -large number of well known institutions -experienced experts in emergency 	<ul style="list-style-type: none"> - provide technical support to interventions -support /implement outreach activities
UN agencies	<ul style="list-style-type: none"> Clusters (Health/nutrition, WESH, protection) 	<ul style="list-style-type: none"> -coordinate between various partners and stakeholders -prepare appeals and fund raising - deploy experts as needed - provide technical support - fill the gaps when needed -support monitoring the progress of emergency impact on health - channel donations(funds and in kind)
donors	<ul style="list-style-type: none"> Bilateral and other 	<ul style="list-style-type: none"> -coordinate donations within respective clusters

Chain of Command





Annex 1

Health Cluster response plan (WHO)¹:

- **Objectives to be achieved by cluster/sector**

The overall goal of the health cluster action is to contribute in reducing avoidable losses of life, suffering and burden of disease and disability of the population of Lebanon. This will be achieved ensuring a minimum, indispensable health information management system including rapid assessment, essential monitoring and surveillance of key diseases; coordinating the humanitarian health assistance; contributing in filling gaps in humanitarian health assistance particularly to vulnerable groups and; building on existing local capacities for emergency health response.

The Health Cluster response strategy and actions will take into consideration lessons learnt and after action review exercises after the last Israeli-Lebanese conflict. During that crisis, several problems were identified in the fields of health information management and coordination of medical surge teams particularly at the beginning of the humanitarian response. The strategic approach of the Health Cluster will put a special effort on addressing those problems.

Note is made that the emergency preparedness for natural disasters (namely earthquake) or epidemics (namely Pandemic Influenza), will be very similar to the preparedness for the internal threat scenario in terms of Human resources and logistics, with the difference that in case of epidemics such as Pandemic Influenza, pre-positioning of special medications (Oseltamivir) should be ensured

- **Action to be taken as an immediate response**

Health information management

- Establish a Strategic Health Operation Center within the premises of the WHO Office in Beirut pending the security situation
- Made immediately available to MoH, UN Agencies, national and international NGOs standard formats for rapid health assessments and perform joint, rapid health assessments accordingly
- Involve in the existing diseases early warning system the national and international surge medical teams
- Collect, analyse and disseminate available health data and produce a daily health situation report
- Map available health national resources
- Map international health surge response

¹ As indicated in the diagram “Proposed sector / cluster coordination set-up” , there will be a nutrition sub-cluster under the health cluster. The ToR of the nutrition sub-cluster are attached to this document.

Coordination

- Activate the health cluster
- Organize daily health cluster meetings in Beirut and in humanitarian hubs (where and if present)
- Work closely with UNICEF to activate the Nutrition sub-cluster led by UNICEF.
- Coordinate with UNFPA to activate the Reproductive Health sub-cluster catering particularly for pregnant and lactating women to ensure emergency obstetric care and support

Gap filling

- Provide medical supplies according to assessed needs. The recent Israeli-Lebanese conflict shows that central mechanisms for the procurement and storage of medicines and equipment are well developed in the country however; several gaps have been identified in the secondary distribution to the periphery mainly due to security restrictions. It is likely that in a new crisis situation those gaps will again be present. The supply actions should therefore be focused in ensuring the internal distribution to key health facilities rather than be limited to the shipment of kits to Beirut. In addition, local and regional procurement of, selected essential drugs covering specific assessed needs should be preferred against shipment of generic emergency kits. Stand by arrangements have to be established with local traders and distributors with a specific focus on paediatric formulations and chronic diseases drugs which are usually poorly or not present in generic emergency kits.
- Lebanon has a well developed network of hospitals and health centers therefore, the need for establishing field hospitals will be very minimal if not absent. However, since the majority of health institutions are run by the private sector, health workers may need to receive incentives for continuing to run essential services. The health cluster will establish homogeneous and commonly agreed criteria for this action.
- The quality of care, particularly the emergency surgical and trauma care is generally considered good. Therefore, the need for international medical teams will be minimal.
- **Building on existing capacities:**
 - Made available technical guidelines and fact sheets
 - Involve local institutions and partners in health information management and coordination as well as distribution of commodities including drugs, health kits, etc (i.e. Lebanese Red Cross and others)
 - Consult local communities and strengthen coping mechanisms with health promotion messages.
- **Resources required (staff and commodity needs)**
 - Deployment of emergency public health surge teams with focus on rapid assessment of health needs and coordination. On the other hand, the WHO has already established an Emergency Operations Room at the BGUH for the MOPH, 30 health professionals from various health related disciplines and health institutions and bodies are trained on Emergency preparedness and management. In addition, WHO has already trained more than 2,500 health workers and professionals on planning and Responding to emergencies in health with different scenarios. Rosters are available

- with the MOH and related professional syndicates and orders and national institutions.
- The internal threat planning scenario would assume movement restrictions and difficult accessibility to humanitarian needs due to security reasons. It is therefore likely that, to provide effective humanitarian action, the UN system will consider establishing humanitarian hubs in various geographical locations. Health Cluster structure will be present in all UN hubs.
 - WHO has already pre-positioned in Lebanon one Trauma Kits A and B, sufficient for 100 surgical interventions. Three additional trauma kits can be made available through the WHO regional office. UNICEF has already also pre-positioned essential drugs and some related health care supplies. Additional suppliers can be made available from the regional offices of UNICEF and UNFPA.
 - Ensure MOSS compliance of office premises and transportation means
 - UNICEF's preparedness plan is based on a twofold approach, which consists in securing immediate response to a potential affected population of 50,000 persons, while making contingency arrangements for up to 300,000 affected persons. UNICEF already had contingency stocks in Beirut, Saïda, Tyre, Tripoli ware houses, and will be available in Bekaa by end of May 2008.
 - Currently UNICEF is in possession of 2 NEH kits, 50 EDK covering medicines requirements for 50,000 persons for one month, 3 Em. Obs& surgical Kits, covering 300 deliveries, and 25 dressing kits (MSF) covering 1200 injured patients.
 - UNICEF within the first 72 hours, can provide contingency stocks of: ORS, new Emergency Health Kits, Midwifery Kits, Obstetric-Surgical Kits & dressing modules to partners and health facilities.
 - UNICEF had memorandum of understandings (MOUs) with national NGOs distributed geographically all over Lebanon to activate health and nutrition activities within 48 hours of emergency following UNICEF CCC's during emergencies.
 - Currently UNICEF has one International (P-4 level), one National Officer and one assistant in the field for health program. In the case of a major emergency, one additional national officer will be required.
- Based on its experience in rehabilitating primary health care centres in war-affected remote areas in the direct aftermath of July 2006 war, IOM can contribute as a partner in carrying out rapid needs assessments among primary health care centres in war-affected areas as well as amidst vulnerable populations (IDPs, refugees, children, women and elderly) in transitional shelters. Always in this respect, IOM can provide operational medical assistance (basic equipments and medicines for medical emergency response) and the evacuation of critical cases during emergency settings as well.
 - IOM has recently launched the Psychosocial Expert Team project. The Experts Team, attached to the MoSA, will be constituted of 6 professionals working in the field of psychosocial assistance. Its main tasks will be designing an action plan for psychological intervention in emergencies, train decentralized professionals and

institutions in the matter and create a national database for referral. In case of emergency, IOM can contribute as a partner by mobilizing the team and the supervising experts in order to ensure psychosocial intervention to war-affected populations in the transitional shelters and the regional centres of the MoSA as well. As for the Bekaa Valley, where psychosocial services are specifically rare, IOM can provide its expertise and the location for psychosocial assistance in DARI (the Recreation and Counseling Centre for Families) it established in Baalbeck in close cooperation with the Municipality of Baalbeck and the MoSA in the direct aftermath of July 2006 war.

- Relying on its experience in previous psychosocial assessments carried out in Lebanon and Jordan, IOM can provide as a partner, the design and implementation of RAP needs assessments, bearing in mind the facilities IOM has acquired in accessing collective temporary shelters during the last two years.

Types of needs assessments required

- Health assessment will be regularly conducted in a coordinated manner to evaluate the impact of the crisis on the health status of the affected population and on the performance of the health system
- The Global Health Cluster is developing guiding principles and tools for rapid health assessment (RHA). This would allow to have commonly agreed, standard tools for rapid health assessment. In the meantime, Health Cluster Leading Agency in Lebanon will reach consensus on the use of RHA methodology and tools to be used by health partners.
- A Disease Early Warning System (EWARS) for the early detection of communicable disease of public health concern is already implemented in Lebanon. WHO in collaboration with the MOH and the private health sector, is currently expanding this EWARS system to cover all Lebanon Health Cluster members and partners will be involved in that system.
- **Coordination arrangements for cluster/sector;**
 - Activate the health cluster (see Health Cluster Leading Agency ToRs) and sub-clusters
 - Organize daily health cluster meetings in Beirut and in humanitarian hubs (where and if present)

Annex 2

List of Critical staff at the MOPH 2012

جدول رؤساء مصالح الصحة في المحافظات

فاكس	هاتف خليوي	هاتف ثابت	الاسم	الصفة	المنطقة	رؤساء مصالح الصحة في
01/615 759	03/237 957	01/615 734-5	د. أسعد خوري	مدير الوقاية الصحية	محافظة بيروت	
05/920 211	03/620615	05/920 175	د. ميشال كفوري	رئيس مصلحة الصحة	محافظة جبل لبنان	
07/724 938	03/315 902	07/722 056	د. حسن علوية	رئيس مصلحة الصحة	محافظة الجنوب	
07/763 213	03/302 667	07/763 210	د. علي غندور	رئيس مصلحة الصحة	محافظة النبطية	
06/430068	03/646 433	06/433725	د. محمد غمراوي	رئيس مصلحة الصحة	محافظة الشمال	
08/822 225	03/806 380	08/801 512	د. أنطوان هرموش	رئيس مصلحة الصحة	محافظة البقاع	

Annex 3

List and contact details of Qada doctors

جدول أطباء الأفضية في وزارة الصحة العامة

						محافظة الشمال
06/690014	03/209340	06/690079-024	.			
06/461942	03/229152	06/461982	.			
06/423064	03/529892	06/435994	.			
06/953802	03/678901	06/950084	.			
06/667018	03/504304	06/660177	.			
06/671045	03/250732	06/671045	.			
06/740150	03/276978	06/740150	.			

						محافظة البقاع
	03/818062		.			
08/892316	03/892316	08/370255	.			
08/820601	03/806380	08/801512	.			
08/663201	03/287234	08/660012	.			
08/592451	03/341804	08/595026	.			

						محافظة الجنوب
07/739182,83	03/745940	07/720485	.			
07/349011	03/315902	07/740297	.			
07/780104	03/810191	07/780104	.			محافظة النبطية
07/760014	03/629772	07/760014	.			
07/550215	03/327630	07/550215	.			
07/830008	03/384600	07/830008	.			
07/450016	03/848312	07/450017	.			

						محافظة بيروت
01/615759	03/237957	01/615734-5	.			
01/611844	03/976032	01/611844-5	.			
01/690014	03/214520	01/614194/95	.			

						محافظة جبل لبنان
09/942905	03/717417	09/540218	.			
09/644496	03/278054	09/914923	.			
01/879014	03/422626	01/890916	.			
05/924113	03/811002	05/920860	.			
05/559740	03/220127	05/554614	.			
05/500013	03/117994	05/500013/48	.			

Annex 4

Map of hospitals with respect to Earthquakes potential

Annex 5

Roster of trained health professionals on emergency Health management and response

Annex 6

List of technical documents available at the MOPH web site

- Field guide for Health emergency preparedness and response
- List of communicable diseases and case definition in terms of IHR
- List and case definition of Zoonotic diseases
- Chemical hazards
- Nuclear hazards