

Risk reduction and emergency preparedness

**WHO six-year strategy for the health sector
and community capacity development**



**World Health
Organization**

Health Action **in** Crises

Risk Reduction and Emergency Preparedness

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2007



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FOREWORD

Major emergencies, disasters and other crises are no respecters of national borders and never occur at convenient times. The magnitude of human suffering caused by these events is huge, and many aspects of people's lives are affected – health, security, housing, access to food, water and other life commodities, to name just a few. That is why it is vital to have emergency plans in place, so that the effects of disasters on people and their assets can be mitigated, and a coordinated response may be launched as effectively and efficiently as possible when disasters or other crises strike. The aim is to save lives and reduce suffering.

Although many emergencies are often unpredictable, much can be done to prevent and mitigate their effects as well as to strengthen the response capacity of communities at risk. The World Health Organization is the lead agency for addressing the health aspects of emergency preparedness and response. In 2005, its World Health Assembly (WHA) passed a resolution calling on the Organization to provide technical guidance and support to countries building their emergency response capacities, stressing a multisectoral and comprehensive approach. The following year, another resolution called on Member States to further strengthen and integrate their response programmes, especially at the community level, and emphasized interagency cooperation at the international level. WHO Regional Committees have also passed resolutions in support of emergency preparedness.

In 2005, the Humanitarian Response Review, commissioned by the Emergency Relief Coordinator, concluded that major improvements were needed in humanitarian response. The Inter-Agency Standing Committee (IASC), the United Nations Economic and Social Council and the UN General Assembly therefore recommended the implementation of a set of four humanitarian reforms in order to improve the capacity, predictability, timeliness, effectiveness and accountability of international humanitarian action including: the strengthening of the Humanitarian Coordinators System, the establishment of a Central Emergency Response Fund and other financial reforms, enhanced partnership between UN and non-UN humanitarian agencies, and the cluster approach. WHO is the designated lead of the health cluster, the role of which is to build global capacity for humanitarian health action by developing global guidance, standards, tools and resources to inform, enhance and facilitate the implementation of the Cluster Approach at the country level as well as to improve surge capacity, access to trained technical expertise and material stockpiles to improve response operations. A key to achieving the desired impact of these reforms, and specifically of the cluster approach, is the strengthening of the preparedness capacity of countries and communities particularly at risk before emergency strikes.

The World Conference on Disaster Reduction, held in January 2005 in Kobe, Japan, adopted the Framework for Action 2005–2015: Building Resilience of Nations and Communities to Disasters and provided and promoted a strategic and systematic approach to reducing vulnerabilities and risks to hazards. WHO will partner the United Nations International Strategy for Disaster Reduction (ISDR) and other UN and non-UN agencies in the 2008–2009 Safe Hospitals Initiative, which aims at building the resilience of hospitals and other health facilities to disasters, both structural and functional, so that they would still be functional under emergency situations.

Under the aegis of international policies, including WHA resolutions, and as part of its mandate as the international health lead agency and the IASC global health cluster leader, WHO intensified its work during 2006 in the field of emergency preparedness and response. Beginning with the definition of its global strategy and moving gradually into the implementation of the main directions highlighted in the strategy.

This strategy is based on the recommendations of a global consultation held by WHO in February 2006 that brought together experts in emergency preparedness and response from around the world. The consultation was followed by several important activities to discuss the various components of the strategy and to reach consensus on the objectives and key strategic directions.

With the finalization of the strategy, work to bring it into practice had already been started by WHO and its partners. Indeed several new initiatives took place in 2006 while the Strategy was under finalization. The main ones were the development and the implementation of a global survey on country emergency preparedness, a global consultation on mass casualty management in emergency settings, a consultation on the role of nursing and midwifery in emergencies, and another on non-communicable disease management in emergencies. Other initiatives are planned for 2007.

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Definitions for reference*

Crisis

- Is an event or series of events representing a critical threat to the health, safety, security or wellbeing of a community, usually over a wide area. Armed conflicts, epidemics, famine, natural disasters, environmental emergencies and other major harmful events may involve or lead to a humanitarian crisis.

Disaster

- A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses that exceed the ability of the affected community or society to cope using its own resources. A disaster is a function of the risk process. It results from the combination of hazards, conditions of vulnerability and insufficient capacity or measures to reduce the potential negative consequences of risk (1).
- Any occurrence that causes damage, ecological disruption, loss of human life or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area (2).

Emergency

- A sudden occurrence demanding immediate action that may be due to epidemics, to natural, to technological catastrophes, to strife or to other man-made causes (1).

Hazard

- Any phenomenon that has the potential to cause disruption or damage to people and their environment (1).

Risk

- The probability of harmful consequences, or expected losses (deaths, injuries, property, livelihood, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerabilities (1).

Vulnerability

- The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards (1).
- The degree to which a population or an individual is unable to anticipate, cope with, resist and recover from the impact of a disaster.

* There are other definitions published in several key manuals. Countries and communities may adopt definitions that suit their preparedness and response contexts and that meet a consensus at the largest scale possible.

Risk is a function of the hazards to which a community is exposed and the vulnerabilities of that community. However, that risk is modified by the level of the local preparedness of the community at risk. It is expressed by the following notation (1):

Risk is proportional to **Hazard x Vulnerability / Level of Preparedness**

Emergency Preparedness (2):

For programmatic purposes, WHO designates by “Emergency Preparedness and Risk Reduction” those activities that aim at preventing, mitigating and preparing for emergencies, disasters and other crises.

For the purpose of this document, the following definitions should apply:

- **Risk Reduction** involves measures designed either to prevent hazards from creating risks or to lessen the distribution, intensity or severity of hazards. These measures include flood mitigation works and appropriate land-use planning. They also include vulnerability reduction measures such as awareness raising, improving community health security, and relocation or protection of vulnerable populations or structures.
- **Emergency preparedness** is a programme of long-term activities whose goals are to strengthen the overall capacity and capability of a country or a community to manage efficiently all types of emergencies and bring about an orderly transition from relief through recovery, and back to sustained development. It requires that emergency plans be developed, personnel at all levels and in all sectors be trained, and communities at risk be educated, and that these measures be monitored and evaluated regularly.

1. BACKGROUND

1.1 Introduction

Over the past 30 years, there has been a major shift in how emergencies and crises are managed. More emphasis used to be placed on humanitarian response and relief activities – national or international – with little attention given to strategies and actions in place prior to disasters that can mitigate the effects of these events on communities and preserve lives and assets. It is becoming increasingly clear that while humanitarian efforts remain important and need continued attention, community-based risk reduction and emergency preparedness programmes are critical for reducing the effects of emergencies, disasters and other crises, and thus essential for the attainment and protection of sustainable development.

Emergency preparedness has traditionally focused on stockpiling relief goods and providing urgent services to meet the public's basic needs. In most countries political commitment and financial and human resources are concentrated overwhelmingly on these short-term emergency contingencies. While building up capacities for humanitarian response continues to be a priority for all countries, it is now widely believed (perhaps influenced by the severity and frequency of disasters and conflicts in the past decade) that more should be done to reduce the social, economic and human consequences of these emergencies. This translates into a need for placing much greater attention on the implementation of proactive strategies and a call for a more comprehensive approach to building national capacities in emergency preparedness and response as well as in risk reduction, focusing on those communities most at risk.

Preparedness is essential in securing the right to life with dignity. States bear the primary responsibility for protecting their populations and ensuring a dignified life but the modern approach to preparedness extends well beyond those traditionally involved in relief efforts, such as civil protection forces, emergency offices and humanitarian organizations. Communities need to work closely with local authorities, public organizations and the relevant section of the private sector, in order to strengthen their own capacities to prepare for and manage the consequences of various risks.

The health impact of emergencies and crises can be substantially reduced if both national and local authorities and communities in high-risk areas are well prepared and are able to reduce the level of their vulnerabilities and the health implications of their risks. International initiatives by the humanitarian community are geared increasingly towards supporting this objective. The challenge is to put in place systematic capacities such as legislation, plans, coordination mechanisms and procedures, institutional capacities and budgets, skilled personnel, information, and public awareness and participation that can measurably reduce future risks and losses.

In addressing these challenges, the World Health Organization (WHO) bases its strategic advocacy on experience from past crises. The response to the floods in Mozambique in 2000 – the worst for over a century – was a great success. Media headlines celebrated the helicopter rescue of a mother who gave birth while sheltering in a tree. Less reported were the 45 000 lives saved, mostly by local rather than international rescuers. A year later, more floods hit Mozambique. Local teams rescued over 7000 survivors. As a result of the good experience of managing the floods in 2000, those occurring in 2001 had a negligible effect in terms of loss of lives (3). Mozambique well exceeded expectations in preparedness for a low-income country. Another well documented case is the 1997 cyclone that hit the Cox's Bazaar region of southeast Bangladesh, leaving 1 500 000 people homeless. The cyclone killed only 127 people (4),

although it was stronger than one in 1991 that killed 138 000 (5). The low death toll was partly because the cyclone struck during the day and at low tide. However, an effective community-based early-warning and evacuation system and cyclone shelters for evacuation were crucial factors in saving so many lives.

This six-year strategy is a demonstration of WHO's confidence and commitment that country and community-based emergency preparedness and risk reduction are feasible, and that investing in them pays.

1.2 Vulnerability to emergencies and crises

Major emergencies, disasters and other crises are social, economic and political events. In the past decade the total number of catastrophic events has almost doubled, showing a trend line from approximately 450 to 800 major emergencies per year (6). The increase is most marked in middle and low income countries, where emergency preparedness is often insufficient. Because of improved preparedness in many countries, fewer people are dying from catastrophic events, but the number of people affected by them is still increasing, with important long-term implications. An estimated 157 000 000 people were directly affected by natural disasters alone in 2005. In addition, politically driven complex emergencies and crises are long-lasting and cause a great number of premature deaths and immense suffering. The number of refugees and internally displaced persons assisted by the United Nations High Commission for Refugees (UNHCR) increased from 17 100 000 at the beginning of 2004 to 20 800 000 by the beginning of 2006 (7). Many more people, internally displaced because of natural disasters, are not included in this UNHCR figure.

Major emergencies and crises primarily often affect the health of the affected population well beyond the immediate risk of disease, death and injuries during the emergency stage. Health is defined by the WHO as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (8). The long-term psychological consequences of conflicts are well known and are increasingly recognized after major technological and natural emergencies. Furthermore, the potential impact of climate change on food security and its interaction with HIV/AIDS and other communicable diseases, the protracted nature of many ongoing conflicts, and the consequences of environmental catastrophes are likely to bring about new health challenges. The international community now considers mortality and morbidity rates as key indicators of the severity of conditions requiring humanitarian intervention as well as the yardstick for measuring its impact.

In many developing countries health facilities and the education and training of health professionals constitute a major capital investment. From epidemics to conflicts, natural disasters to technological emergencies, this human and physical infrastructure is the most fundamental for the survival of the population. Yet health systems are also among the most vulnerable to major events. After the 2004 Indian Ocean tsunami, in Sri Lanka alone the health physical infrastructure losses included at least 92 partially or fully damaged health institutions. These included hospitals, drug stores, cold rooms, preventive health care offices, health staff accommodation facilities and district health offices. In addition, a large number of vehicles (ambulances, lorries, vans, motorbikes) and most of the medical equipment and office equipment in the affected areas were totally destroyed. The loss of health personnel included medical officers, nurses, midwives and support staff. Furthermore, a large number of health staff were injured, traumatized or displaced by the event, hence unable to assist the affected (9).

Assessments conducted a few weeks following the Pakistan earthquake of October 2005, which affected millions of people, showed that up to half of the health facilities in the affected

areas were non-functional and that large numbers of staff and their families were killed, injured or displaced because of damage to their houses.

According to a survey conducted by the Lebanese Ministry of Public Health and WHO, the conflict during the summer of 2006 resulted in the total destruction or damage in southern Lebanon of a considerable proportion of health facilities.

These and many other examples show that emergencies and crises not only lead to prolonged suffering of the health of the population but also to substantial loss of overall health resources. Thus the vulnerability and protection of the physical infrastructure, the institutions and the personnel is one of the major challenges addressed by this strategy.

1.3 Emergencies and crises risk management

Along the widely technically accepted approach both at international and at country levels, the WHO strategy in risk reduction and emergency preparedness is based on an “**All-Hazard / Whole-Health**” concept:

- **All-Hazard** entails developing and implementing emergency management strategies for the full range of likely risks and emergencies (natural, biological, technological and societal). Different hazards and emergencies can cause similar problems in a community; and such measures as planning, early warning, intersectoral and intra-sectoral coordination, evacuation, health services and community recovery are usually implemented along the same model adopted by the community regardless of cause.
- A **Whole-Health** approach has to be adopted. Countries and communities at risk cannot afford to have parallel planning and coordination systems for each category of health risks. Technical leadership may vary but emergency planning processes, overall coordination procedures, surge and operational platforms should be unified under one emergency preparedness and response unit. Plans of the health sector can then be effectively coordinated with other sectors as well as with the designated national multisectoral emergency management agency.

In addition to death and injury, other considerations must be included in the health plan. It is recommended that emergency preparedness plans must include -in addition to the common coordination, information tools and support services- environmental health (including water, sanitation and hygiene); management of chronic diseases (including mental health); maternal, newborn and child health; communicable diseases control; nutrition; pharmaceuticals and biologicals and health care delivery services (including health infrastructure). Other specialized services may be included for preparedness and management of specific risks. Another key aspect of the Whole-Health approach concerns the necessity to include starting from the planning phase, health institutions and capabilities available with the private sector, military medical services, national Red Cross/Red Crescent societies and other NGOs.

Achievements in reducing the impact of emergencies, disasters and other crises on public health vary from country to country. Although some countries have shown strong commitment and consequently made significant progress towards this goal, others have not been able to mobilize the necessary political support or resources required long before an emergency strikes.

As stated by the World Health Assembly (WHA), in its resolution WHA58.1 adopted in 2005[§] “the effectiveness with which affected nations respond to sudden events of this scale *reflects their preparedness and readiness* for focused and concerted action. In 2006, WHA59.22^{**} requested Member States to “further strengthen national emergency mitigation, preparedness, response, and recovery programmes through, as appropriate, legislative, planning, technical, financial and logistical measures, with a special focus on building health systems and community resilience”. It also requested the Director-General to “take the necessary steps to provide technical guidance and support to Member States for building their health sector emergency preparedness and response programmes at national and local levels including a focus on strengthening community preparedness and resilience”.

1.4 WHO policy on emergency preparedness

The policy of WHO is determined by its governing bodies and, in particular, by the World Health Assembly. Prevention and mitigation of and preparedness for disasters are longstanding concerns of the governing bodies.

At global level, resolution WHA34.26 (1981) stressed that “despite the undoubted importance of relief in emergencies, preventive measures and preparedness are of fundamental importance”. Coinciding with the International Decade on Natural Disaster Reduction, resolutions WHA42.16 (1989) and WHA46.6 (1993) re-endorsed the concept of disaster reduction in the health sector. In 1995, WHA48.2 recognized that disaster reduction is an integral part of sustainable development and that each country bears the primary responsibility for strengthening its capacity. The resolution clearly differentiated WHO’s role in “emergency preparedness and disaster reduction” from that in “emergency response and humanitarian action”. As mentioned above, the importance given to preparedness by the Member States was reiterated as recently as in 2005. At its 58th session, the World Health Assembly (WHA) adopted resolution WHA58.1, clearly reiterating the necessary links or synergies between response and preparedness and recovery respectively and the need to “strengthen the ingenuity and resilience of communities, the capacities of local authorities, and the preparedness of health systems”. This resolution urged Member States, among other things:

- “to engage actively in the collective measures to establish global and regional preparedness plans that integrate risk-reduction planning into the health sector and build-up capacity to respond to health-related crises”
- “to formulate ... national emergency-preparedness plans that give due attention to public health, including health infrastructure...”.

A year later, the WHA discussed health action in crises again and passed another resolution (WHA59.22) which reiterates the importance of action needed to build national capacities in emergency preparedness.

Resolutions have been passed by every regional committee over the past 20 years to reinforce the mandate given to WHO at global level and to strengthen initiatives in the area of emergency preparedness and response in Member States.

[§] http://www.who.int/gb/ebwha/pdf_files/WHA58/WHA58_1-en.pdf

^{**} http://www.who.int/gb/ebwha/pdf_files/WHA59/A59_R22-en.pdf

In summary, Member States have made clear the distinction between the support required to build their national capacities and the strengthening of WHO's own capacity to respond to a crisis^{††}. Although both directions of work are essential and complementary, the present strategy addresses WHO's role in building the capacity of Member States in order to increase their resilience and coping capacity.

It is important to note that most resolutions address the issue of emergency preparedness from an all-hazard point of view, stressing the need for a comprehensive approach and strategy in WHO.

^{††} The latter option is addressed through the three-year programme for improving WHO's performance of health action in crises, launched in 2004.

2. WHO STRATEGY ON HEALTH SECTOR RISK REDUCTION AND EMERGENCY PREPAREDNESS

2.1 Guiding principles

Overriding principle: risk reduction and emergency preparedness are the responsibility of all sectors at all levels

- *Risk reduction and emergency preparedness are part of the development process.* Unlike the response to acute humanitarian crises, where the international humanitarian community may play a significant role, building the capacity of health sectors in order to reduce the risks from and respond to emergencies requires strong and long-term commitment and sound managerial and technical programmes from the Member States. The developmental nature of capacity-building highlights the critical role of WHO's support at the country, regional and global levels.
- *An all-hazard approach is essential.* As indicated before, planning processes and other tools necessary for emergency preparedness, mitigation and response are similar regardless of the nature of the hazard. Countries and especially communities at risk cannot afford to develop a separate system for each type of hazard they are vulnerable to. The capacity of the health sector must be enhanced to face all types of major risks, from epidemics to conflicts, natural disasters to technological accidents, well known risks to new or emerging threats such as an influenza pandemic or terrorism. This means that the WHO strategy should build on existing WHO expertise and capacity in all relevant departments and programmes as well as in different parts of the world.
- *Risk reduction and emergency preparedness are the responsibility of all national actors.* At the national level the ministry of health is the lead agency of the health sector, which includes among others the armed forces medical services, the International Red Cross and Red Crescent Societies, health-related nongovernmental organizations, private health facilities and professional associations.
- *Emergency preparedness requires a multisectoral approach.* At the national and local levels, reducing the public health impact of emergencies, disasters and other crises requires a multisectoral outlook. Proper land use management and design of housing or new health facilities may, for instance, contribute most to decreasing mortality and morbidity. The provision of public health services and medical care is utterly dependent on the preparedness of other sectors such as: law and order, transport and communications, lifeline services (water/electricity) and public works, search and rescue and fire services, social services and housing, and others.

At the international level, resolution WHA.58.1 “encourage[s] cooperation of WHO's field activities with those of other international organizations, with the support of donor agencies, so as to help governments of countries affected”. This approach is applicable to all types of emergencies and crises including those seemingly of a purely health nature such as major epidemics, food or water poisoning or chemical spills. WHO will therefore seek the collaboration of other international agencies, especially those with a specific mandate in managing the risks and promoting emergency preparedness at multisectoral level such as United Nations Development Programme (UNDP), the UN Office for the Coordination of Humanitarian Affairs (OCHA), the International Strategy for Disaster Reduction (ISDR), UNICEF, WFP, international and regional financial institutions,

donors, the International Red Cross and Red Crescent Movement and relevant nongovernmental organizations.

- *Priority on technical assistance.* WHO, a specialized international technical agency, is more focused on technical support than on funding or the donation of supplies. Such support includes the development of strategies, norms and standards, advocacy and awareness building, capacity building and transfer of knowledge and management skills as well as the provision of technical advice.

2.2 Goal

The goal of the WHO strategy is to support countries in building national capacity in risk reduction and emergency preparedness, and to assist the health sector in Member States in reducing the adverse public health consequences for communities in terms of mortality, morbidity, disability and damage to health care delivery services resulting from emergencies, disasters and other crises.

2.3 Objectives

The objectives of the WHO strategy are:

1. to advocate the need for capacity-building in risk reduction and emergency preparedness in the health sector
2. to support the capacity of the health sector in Member States and local communities to prepare for and respond promptly and efficiently to the health consequences of emergencies caused by natural, technological, environmental and societal hazards and epidemics.
3. to develop baseline data, norms, standards, training resources and information on health sector risk reduction and emergency preparedness.
4. to monitor progress in strengthening emergency preparedness programmes in Member States.

2.4 Targeting

All countries are exposed to one type or another of emergencies, disasters or other crises. Regardless of their level of development or geographical situation, they all can benefit from increased investment in health emergency preparedness and risk reduction programmes. However, the least developed countries (or, within the same countries, the less-resourced communities) are also often those most severely affected by emergencies and the least prepared to manage them.

WHO can provide a range of technical support to Member States. Some activities (for instance, to promote awareness or stimulate commitment) and services (such as publications and training material) will be directed to all interested Member States. Other activities or services involving extensive technical assistance will need to be more specifically and progressively targeted.

Priorities for WHO support will vary across regions and countries, according to the following principles:

- vulnerability to emergencies, disasters and other crises and the needs for strengthening emergency preparedness and response programmes
- a declared commitment of the ministry of health and other key institutions (the designated national emergency management agency, civil protection/defence, fire and rescue services, ministry of finance, military medical services, national Red Cross or Red Crescent and other relevant organizations) to institutionalize and strengthen the risk reduction and emergency preparedness programmes in the health sector
- the interest of donors or other actors in supporting WHO in this undertaking.

2.5 Priority areas

The following priority areas are based on the recommendations of the consultation of international experts held by WHO in February 2006:

- assessing and monitoring baseline information on the status of risk reduction and emergency preparedness in the health sector at regional and country levels
- institutionalizing risk reduction and emergency preparedness programmes in ministries of health and establishing an effective all-hazard/whole-health programme for this purpose
- encouraging and supporting community-based risk reduction and emergency preparedness programmes
- improving knowledge and skills in risk reduction and emergency preparedness and response in the health sector.

2.5.1 Assessing and monitoring baseline information on the status of risk reduction and emergency preparedness in the health sector at regional and country levels

WHO will continue supporting Member States in assessing the status of their national emergency preparedness and risk management in health sector. Such support was initiated in response to WHA resolutions 58.1 and 59.22 by a global assessment of national health sector emergency preparedness and response, which began in 2006 and is expected to be concluded in 2007. Criteria for such assessment were developed in agreement with WHO regional offices, and the survey data are intended to provide baseline information. Monitoring systems at regional and national levels will facilitate collection of information that can be compared with this baseline in order to assess progress.

2.5.2 Institutionalizing risk reduction and emergency preparedness programme in the ministries of health and establishing an effective all-hazard/whole-health programme for this purpose

WHO will actively promote the establishment or strengthening of a risk reduction and emergency preparedness unit in each ministry of health reporting directly to the highest relevant authority. This unit will be the focal point for the designated national emergency management

agency and for other sectors involved in emergency preparedness and response. It should work in integration with other relevant existing technical departments within the ministry of health.

WHO should prioritize the development of joint health sector emergency preparedness plans within the existing health sector coordination mechanism as well as health sector contingency planning, with regular updating of methodologies and planning for exercises and simulations.

WHO will also advocate that proper preparedness requires improvement and protection of the baseline capacities including health care facilities, services and skills^{††} (10).

2.5.3 Encouraging and supporting community-based all-hazard risk reduction and emergency preparedness programmes

WHO has a mandated role to strengthen community health, which extends to emergencies and crises. This role includes assisting ministries of health to integrate risk reduction and emergency preparedness into existing community structures. The strategy to support multi-risk (all-hazard) emergency preparedness for the communities will include joining forces with ISDR in the promotion of health resilience in the community as the main disaster reduction message in 2008-2009. Preparations for planning and implementing the WHO-ISDR partnership have already started.

WHO will support national and local governments, and work through partners to support community-based action. WHO' support will focus on building on existing networks and capacities.

2.5.4 Improving knowledge and skills in risk reduction and emergency preparedness and response in the health sector

To improve skills and knowledge, WHO will work with Member States and other partners:

1. to develop and update guidelines, standards and sound technical information, on emergency preparedness and response
2. to promote the development of sound and credible training and educational material and encourage the organization of courses, workshops, simulations, other mechanisms of transfer of knowledge, and platforms where health emergency managers can share experience and material at local, national, regional and international levels.

Training should focus on awareness-raising, advocacy and sensitization on risk reduction and emergency preparedness health issues, planning processes, needs assessment in emergencies, inter-sectoral emergency management and standardizing and building technical skills within all health disciplines involved in emergency preparedness and response.

^{††} ISDR has selected "safe hospitals" as an objective to be reached by 2015 "...by ensuring that all new hospitals are built with a level of resilience that strengthens their capacity to remain functional in disasters and implement mitigation measures to reinforce existing health facilities".

3. IMPLEMENTATION, MONITORING AND RESOURCES

3.1 Implementation

At national and global levels, all large crises – whether they are technological, environmental or natural disasters, conflicts, epidemics or famines – involve mostly the same partners, pose the same managerial and political challenges and ultimately require the same overall coordination approach and response mechanism. Risk reduction and emergency preparedness measures should therefore be also coordinated within the organization. Capacity-building and technical guidance for specific hazards such as disease outbreaks, chemical or radiological accidents and terrorist acts will continue to be strengthened under the responsibility of the specialized departments. The relevant technical and operational parts of the Organization at WHO headquarters and the regional offices will continue their collaboration in complementary and mutually reinforcing ways in support of the implementation of this strategy.

Resolution WHA58.1 stressed the importance of “clear synergies between preparedness and response”. Within WHO, this synergy will be ensured by the active participation of emergency preparedness and capacity-building experts in the real time or after-action evaluations of WHO humanitarian response and the identification of lessons learned.

The strategy foresees:

- *At country level:* The analysis of risks and capacities and the inclusion of emergency preparedness in a country’s regular programmes.
- *At regional level:* Assisting in the development of national strategies and programmes in target countries; the provision of technical assistance and the development of human resources; facilitating intercountry partnerships and exchange of experience.
- *At global level:* Policy setting, promoting advocacy at international and interagency levels, developing norms and standards, assessing and monitoring the global level of preparedness in coordination with Regional Offices, facilitating interregional partnerships, and fund-raising for country-based capacity-building in the field of emergency preparedness and response; establishing interagency and international partnerships in this area.

3.2 Monitoring

Monitoring vulnerability and risk trends increases understanding of what could happen in the future and is essential for successful preparedness and risk management policies and action. Recognition and analysis of the changing nature of multiple threats and vulnerabilities are starting points for alerting the authorities and the public and raising awareness of the consequences of pending risks. WHO has considerable technical and methodological experience on vulnerability assessment, which can easily inform the assessment of trends in emergencies, disasters and other crises.

Institutional learning is an important aspect of monitoring progress as an organization analyses its own objectives and capacities for achieving them. The process should also result in

an increased commitment by the ministry of health and other national stakeholders for preparedness and risk management.

This monitoring of progress can help:

- follow all aspects of the implementation of the strategy and to report on progress made and problems encountered to WHO governing bodies
- foster and support, at national level, the periodic evaluation of the national implementation of the strategy with the aim of strengthening the managerial process for national health development
- systematically collect, analyse and share experience at regional and global levels.

The global survey on the status of emergency preparedness is a useful tool, along with the new vulnerability assessment and mapping (VAM) project, for monitoring of progress and trends in targeted countries.

3.3 Mobilization of resources

There is a misconception that WHO's work in emergency preparedness and response is an additional responsibility on top of the regular normative and developmental work of the Organization, and that this work is mainly funded through ad hoc extrabudgetary resources. This may be appropriate for response to specific and unpredictable crises but not to the fulfilment of WHO's core function to strengthen the capacity of Member States in emergency preparedness and risk reduction.

Being a technical development area, WHO key activities to support risk reduction and emergency preparedness activities should be primarily funded through the WHO country regular budget. However, additional funding could be obtained from:

- Earmarking a proportion of extrabudgetary overseas development assistance and/or relief and recovery funds for capacity-building for emergency preparedness in the affected and neighbouring countries.
- Fund-raising for specific projects that are not funded by the above sources and aiming at country capacity-building in the field of emergency preparedness and response.

4. REFERENCES

1. Living With Risk: A Global Review of Disaster Reduction Initiatives, 2004 version, Inter-Agency Secretariat of the International Strategy for Disaster Reduction.
2. Community Emergency Preparedness: A Manual for Managers and Policy-Makers, WHO Geneva, 1999. ISBN 92 4 154519 4.
3. Mozambique National Report of Disaster Reduction, Kobe 2005.
<http://www.unisdr.org/eng/mdgs-drr/national-reports/Mozambique-report.pdf>
4. Disaster Management and Cyclone Warning System in Bangladesh. <http://www.gfz-potsdam.de/ewc98/abstract/akhand.html>
5. 1991 Bangladesh Cyclone- Wikipedia.
http://en.wikipedia.org/wiki/1991_Bangladesh_cyclone
6. The ODFA/CRED International Disaster Database EMDAT.; www.em-dat.net. Accessed 24 December 2006.
7. Refugees By Number: UNHCR, 2006.
<http://www.unhcr.org/basics/BASICS/3b028097c.html>
8. The constitution of WHO. http://whqlibdoc.who.int/hist/official_records/constitution.pdf
9. Sri Lanka 2005 Post-tsunami Recovery Program Preliminary Damage and Needs Assessment, annex 5. Colombo, Sri Lanka, Asian Development Bank, Japan Bank for International Cooperation, World Bank, 2005. At <http://www.adb.org/Documents/Reports/Tsunami/sri-lanka-tsunami-assessment.pdf>. Accessed 24 December 2006.
10. Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters (HFA). At <http://www.unisdr.org/eng/hfa/hfa.htm>. Accessed 24 December 2006.