Coping with Disaster
WHO's Role in Global Emergencies
Nothing is sacred when earthquakes strike; the ruins of a church in Peru.

Cover: A vivid mural from Latin America captures the horror of epidemic cholera.

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A world of calamities

There has probably never been a single day in human history without some community, somewhere in the world, either suffering a natural or man-made calamity or picking up the pieces after such a disaster. But only in recent decades have those calamities been so vividly transmitted into the homes of millions of television viewers. That same medium encourages the viewers to judge the speed and effectiveness with which local and international services respond to disasters.

The very fact that millions of viewers, and readers of the press, are critically aware of disasters virtually as they happen, and of the response to them, has given emergency-related activities a much greater political dimension than they ever had in the past.

In just one decade, between 1978 and 1988, disasters affected more than 420 million people and killed well over one million. An estimated 40 million people even now are refugees or displaced persons driven from their homes as a consequence of disasters. The World Health Organization (WHO) has a clear mandate to do everything in its power to mitigate the health consequences of emergencies, wherever they occur. Its concern is Health for All, whatever the age, gender or status of the victims.

More vulnerable

Today, on the brink of the 21st century, a vast range of demographic, ecological and technological conditions are making many communities more vulnerable than ever before to the impact of natural and man-made disasters. Scientific advances have certainly helped to ease the impact of some emergencies. Meteorological satellites give advance warning of oncoming cyclones, city buildings can now be constructed to withstand almost every scale of earthquake, and new vaccines help to control the spread of disease in the aftermath of catastrophes.

Nevertheless, the size, number and complexity of major emergencies still continue to grow, and many of them have their roots in political, economic and social situations. So today, over and above such natural calamities as the earthquakes, cyclones, floods and volcanic eruptions that have plagued mankind throughout history, must now be added the ill-effects of the misuse of science and technology.

Pollution may take many forms, such as the 1984 Bhopal disaster in India where a leak of poisonous gas killed more than 2,800 local residents, or the 1986 fire at the Chernobyl nuclear power station in the USSR which released a radioactive cloud across large areas of Europe. But
man-made calamities also include desertification resulting from massive destruction of the habitat close to the cities, gas explosions and fires caused by faulty pipelines, the bursting of ill-built dams, and the sorry toll of death and injuries in modern warfare – that most preventable of disasters.

Economic hardship makes it difficult to prepare for disasters or deal with their aftermath. Countries with staggering debt burdens or war-torn economies are unable to strengthen their health services, to stock sufficient medicines, to build laboratories or to train personnel.

As the post-Cold War international order takes shape, the world has become more vulnerable to man-made disasters than ever before. Political turbulence triggers emergencies with large numbers of war victims and displaced persons, ruined farmland and industries, and health and social services disrupted almost beyond any hope of repair.

Deforestation, major oil spills and depletion of the ozone layer are not only disasters in themselves but render areas less able to cope with natural disasters that may follow.

Developing countries are especially vulnerable. They bear most of the burden of providing shelter, food and health services at such times – a burden which strains their own limited resources. Almost invariably they lack the training, awareness, planning or minimal investment required to mitigate the effects of disasters.

The practical measures that countries can take to prepare themselves against disasters include assessing the natural and man-made hazards to which they are vulnerable, listing their existing medical and health resources, drawing up contingency plans, vaccinating vulnerable groups (e.g., against yellow fever or measles), training health personnel, and keeping the public informed and aware.
2. Humanitarian assistance

In the setting outlined above, humanitarian assistance – which includes emergency prevention, preparedness and response – has moved to the top of the international community agenda. As the lead United Nations agency for health issues, the World Health Organization (WHO) has accepted the responsibility for shaping, coordinating and putting into operation health-related emergency assistance programmes at the global level. WHO becomes involved in humanitarian assistance when a country requests it, or when the United Nations as a whole is required to take action.

The UN itself has restructured its humanitarian assistance in recent years, and WHO has not been slow to develop new strategies and tools to deal with the health aspects of humanitarian assistance in emergencies, working in partnership with the international community. Moreover WHO can draw upon the technical skills of its personnel at headquarters, in the six regional offices and in country representatives’ offices, as well as tapping the skilled resources of its collaborating centres all over the world.

WHO’s operational goals in this field are:

- to alleviate the health consequences of emergencies, and
- when they occur, to strengthen the capacity of countries to manage major emergencies on their own.

There is a longer-term goal too. WHO seeks to create emergency assistance programmes that will serve as a springboard for the long-term development of the health sector. A country whose health services are permanently on the alert to avert disasters, or to move into action in response to emergencies when they do arise, is a country well-prepared to face every eventuality that may impinge on its people’s health.

Impact on health systems

Disasters of all kinds tend to disrupt national health systems. Scarce money and manpower that had been earmarked for essential and timeless health needs are “temporarily diverted” to satisfy basic needs for food, water, sanitation and medicines, to prevent deaths from injuries and to guard against epidemics. But many disasters turn into chronic emergency situations that may last for years, thus hindering the regular provision of health services.

Disasters have an even more serious impact in the developing world because they subvert the development process. They wipe out any gains made in the health infrastructure (improvement of hospitals, laboratory networks, clinics and so forth), and in the general infrastructure that is needed to ensure a healthy population (jobs, roads, water and sanitation). The public health consequences of disasters may include large numbers of injured in need of rehabilitation, the spread of communicable diseases, psychological disorders and malnutrition, disruption of water and sanitation services, and the cessation of routine curative and preventive health activities.

All these are good reasons why WHO is active in emergency preparedness and not just
Badly burnt by a molotov cocktail, a boy is treated without benefit of anaesthetics in war-torn Bosnia.

emergency response. WHO treats emergency issues within the framework of long-term national development, rather than through a case-by-case response to disasters as they arise.

**New UN approach**

In the newly-evolving international climate, and sensing the increasing public awareness of and interest in emergencies occurring everywhere in the world, the UN restructured its approach to humanitarian assistance, creating a new Department of Humanitarian Affairs (DHA) to coordinate UN action in this domain.

As the leading UN health agency, WHO in turn coordinates its work in emergency management with the general activities of the DHA. It particularly supports the UN’s strong emphasis on linking humanitarian assistance with development. WHO sees this approach as being entirely harmonious with its own insistence on primary health care as the means of attaining the goal of “Health for all” and on the long-term development of national health systems and expertise.

In Afghanistan, 14 years of war resulted in one million deaths, two million injured or disabled and over five million refugees and displaced persons; the health infrastructure was badly weakened. Since 1989, WHO’s Division of Emergency Relief Operations has been involved in carrying out health care programmes in rural Afghanistan, in collaboration with other UN agencies. WHO’s approach focused on the rehabilitation and reconstruction of health care facilities and development of human resources – always with the primary health care approach in mind.

A Master Plan for the Health Sector was drawn up and agreed to by representatives of both warring sides in the country. This made WHO responsible for providing assistance to disabled Afghans, reconstructing health facilities, training medical staff and other health workers, undertaking immunization programmes, maternal and child health care, environmental health, and control of specific diseases (including malaria, tuberculosis, acute respiratory infections and diarrhoeal diseases), and setting up a health information system.
WHO team in action

The decade of the 1990s has already seen outbreaks of civil strife in such countries as Liberia, Somalia, and former Yugoslavia. The casualties are numbered in their thousands. Just one example among many of WHO's activities in times of war was the work of a small but dedicated team under a WHO consultant surgeon based at the Bozidarevicva Hospital in Zagreb to help casualties seriously injured during the fighting in Bosnia. The multi-disciplinary team undertook everything from major surgery, including amputations, to the fitting of prostheses and the subsequent rehabilitation process. Many patients had undergone crude surgery under battlefield conditions and required a second operation.
3.
The role of WHO in Emergency Management

WHO operates at the request of its Member States and in partnership with the international community, including other UN bodies, donor agencies, NGOs and governments, to prepare for and respond to disasters whenever and wherever they occur. Besides coordinating the international community’s efforts to assist national health services before, during and after emergencies, so as to alleviate the impact of disasters on health, WHO seeks to encourage self-reliance and national development in Member States by increasing their capacity to manage emergencies of all kinds.

Humanitarian assistance has to be tailored to each country’s particular needs in the short and long term. More and more, the international community is recognizing that disaster relief goes beyond a brief, intensive influx of food, medicine and technical assistance. Relief must be integrated into long-term plans for health and social development. This was underlined by the UN General Assembly’s Resolution 46/182 in 1991, which stated that “there is a clear link between emergency, rehabilitation and development ... Humanitarian assistance should be accompanied by a renewal of commitment to economic growth and sustainable development of developing countries.”

This is why WHO encourages countries to include disaster prevention, mitigation and preparedness measures in their mid-term and long-term development plans, rather than assuming that emergency aid will be “parachuted in” as short-term relief. Every dollar intended for relief is allocated with development in mind.

WHO has decades of experience in working with national health authorities to develop preparedness measures that reduce the impact of disasters on health and health services. Its many technical programmes – such as communicable diseases, immunization, water and sanitation, mental health and essential drugs – have incorporated emergency preparedness elements in their activities in member countries.

Expansion and restructuration

WHO formally established an emergency unit in 1974 to coordinate the technical work of other programmes for preparedness activities at country level. In the 1980s, when natural catastrophes,
technological disasters and political conflicts increased in numbers and scale, the member countries called on WHO to tackle disaster relief as well. Consequently, an expanded Division of Emergency Relief Operations (ERO) was formed in 1989.

Originally focused on the relief and rehabilitation issues facing Afghanistan, Namibia and the Arab Occupied Territories in the Middle East, this new relief arm quickly expanded its emergency relief operations to such troubled areas as Angola, Cambodia, the Gulf region, the Horn of Africa, Lebanon, Liberia, Malawi, Mozambique, former Yugoslavia, some of the former Soviet republics and elsewhere.

In order to better meet the challenges of humanitarian assistance in the 1990s and beyond, WHO recently took stock of its performance in emergencies and restructured the operations of the Emergency Relief Operations Division (ERO). The Division was divided into three major areas in January 1992 to meet new international developments in humanitarian assistance. These areas are:

- **Emergency Preparedness and Planning**, a global programme with the task of strengthening the preparedness and mitigation capacities of emergency-vulnerable countries;

- **Emergency Response**, which divides its activities into three geographic zones – Africa and the Middle East, Europe and the Americas, and Asia and the Pacific – to ensure more efficient management of emergency relief;

- **Emergency Information System** – another global programme, charged with creating a new information network for rapid, efficient communication of information in emergencies.

Specifically, WHO's emergency management programmes coordinate health policies and infrastructure development so as to address a whole
ERO can draw upon the vast scientific and technical resources of WHO’s 25 divisions and nearly 100 technical programmes (at Headquarters, in Regions and in country offices), as well as over 1,100 scientific and technical institutions linked to WHO as collaborating centres.

At the regional level, WHO has six regional offices with focal points for emergency issues. These are in Alexandria, Brazzaville, Copenhagen, Manila, New Delhi and Washington D.C. The Pan-African Centre for Emergency Preparedness and Response, in Addis Ababa, is dedicated entirely to servicing disaster-vulnerable areas in that continent, and a feasibility study is under way for a similar Asia-Pacific Centre.

At the national level, the offices of WHO country representatives (WRs) are the focal points for undertaking emergency activities. They provide government ministries (usually, but not always, the Ministry of Health) with technical advice, emergency funds, supplies and training. As well as national development plans and capabilities, they take into account the in-country expertise of academic institutes, NGOs and private firms.

At the global level, ERO coordinates policy planning within WHO emergency health activities. It does so with the support of other WHO programmes, and in collaboration with other UN agencies and related organizations. Ten collaborating centres, specialized in emergency management, provide technical expertise, training and research for WHO emergency management programmes.

Let us now look in more details at those three areas of action.

Relief workers waste precious time in sorting inappropriate or inadequately labelled drugs following an emergency in Latin America.
WHO Emergency Preparedness and Planning

The general public tends to perceive emergency management in terms of the delivery of relief supplies and medical care. Such notions are reinforced by widespread media coverage of airlifts of essential drugs and convoys of food that are certainly vital to the success of relief operations. Gradually, however, people are learning that disaster management incorporates a whole cycle of activities that precede and follow crisis situations.

In fact, an essential part of that management takes place long before disasters actually occur. At a fraction of the cost of expensive relief operations, disaster-vulnerable countries can do a great deal to safeguard their health infrastructure and to minimize the death and destruction that stem from disasters. As the leading UN agency for health issues, WHO puts strong emphasis on emergency preparedness activities for the health sector.

Such activities save lives and money and are more cost-effective to operate than response programmes aimed at picking up the pieces after the event. Moreover, they encourage national self-reliance in handling emergencies by making communities more effective in responding to disasters the moment they occur, better able to deploy locally available resources and more competent to manage international relief assistance.

Counter-disaster planning

As part of emergency preparedness planning, WHO helps countries to undertake vulnerability analysis and mapping – that is, to
information is relayed through national coordinating committees responsible for rapidly mobilizing people and resources in an emergency and for managing post-disaster assistance.

Counter-disaster planning is a continuing process to be carried out at all levels and within all sectors. Specific plans need be developed to deal with specific disasters, and the plans ought to be reviewed and updated after each actual disaster or simulation exercise. Hospitals and clinics will make their own plans, including mobilizing medical stocks and frequently running exercises to test efficiency. Public information is important; communities that are well-informed about hazards are better equipped to cope with emergencies when they occur.

WHO develops and publishes emergency preparedness standards and guidelines, and also arranges training workshops and seminars in health emergency mitigation, preparedness and response, as well as national workshops in disaster-prone countries. Training courses are often conducted in tandem with other UN agencies or such bodies as the International Federation of Red Cross and Red Crescent Societies or the UN Department for Humanitarian Affairs (DHA).

“Health and Development for Displaced Populations” is an example of a strategic programme testing new approaches to fulfilling the health needs of displaced groups and the communities that host them. Known as HEDIP, this WHO-sponsored programme targets all vulnerable groups sharing risks due to massive population displacement, including refugees, returnees, displaced and host populations. In particular, it emphasizes the need for community-based solutions and the strengthening of local capabilities and infrastructure.

The WHO/AMRO Supply Management Programme (SUMA) is developing software and training so that member countries can efficiently sort supplies in emergencies, through such measures as monitoring the quantity and quality of health supplies, improving distribution and introducing proper labelling.
5. WHO Emergency Response

When disaster does strike, WHO becomes fully operational, responding at the request of the country concerned or of the United Nations. It assists emergency-stricken areas in carrying out the following tasks:

- rapid assessment
- coordination of relief activities
- disease control
- epidemiological surveillance
- management of mass casualties
- environmental health management
- food and nutrition
- management of health relief supplies
- temporary settlements
- communications and transport
- management of international assistance
- re-establishment of normal health services.

WHO mobilizes resources for relief, recovery and rehabilitation through four distinct processes:

1. The Emergency Response Fund. WHO allocates a relatively modest sum to provide funds for operations necessary in the early days following a disaster, before international assistance arrives. The money is used to procure WHO emergency health kits, to cover local expenditures, and to send in health needs assessment experts. A rapid needs assessment ensures quick donor reaction.

2. Crisis Management and Emergency Assessment Missions. WHO technical advisors help the national health authorities to manage the health consequences of major emergencies, often working with a “health crisis management group.” WHO technical assistance serves as a tool for the UN and donors to minimize – through “lessons learned” – the duplication, gaps and inefficiencies that have all too often been a feature of disaster relief efforts.

3. Emergency Drugs and Supplies. The rapid shipment of emergency drugs in the event of a disaster is vital. WHO’s Emergency Health Kits ensure that the drugs and materials sent are appropriate, timely and properly labelled. A regional network of emergency drug stockpiles, with centres in Amsterdam (Netherlands), Copenhagen (Denmark) and Pisa (Italy), ensures rapid distribution of these kits.

4. UN Consolidated Appeals and other UN Emergency Response Coordination. The fourth process for mobilizing resources involves integrating appeals for the health component of disaster response into a single consolidated appeal for each major emergency. During complex disasters, WHO’s strategy is to provide donors with clear, accurate, unified and regularly updated reports on overall emergency conditions and needs. When a disaster’s primary impact is on the health sector – as in the case of epidemics – WHO may take the lead role in coordinating international assistance to the stricken area.

An example of the practical value of these funds appears in the UN Revised Consolidated Inter-Agency Appeal for former Yugoslavia (April-December 1993), which reported that between September 1992 and March 1993 the interna-
tional community had provided essential humanitarian assistance to 2,700,000 people in the former Yugoslav republics. “It is clear that these efforts have saved an untold number of lives and averted a major disaster,” commented the report, which also underlined the “massive” requirements of those regions for rehabilitation of war victims.

Often repeated contributions in cash or kind have been received from Australia, Canada, Denmark, the European Community Humanitarian Office, Germany, India, Italy, Netherlands, Norway, Sweden, the United Kingdom and the USA. The report added that, while the contributions were generous, still more donations would be needed for health operations in all [former Yugoslav] republics in the future.

WHO is also appealing for emergency aid for Somalia, where funds are needed to reduce mortality from communicable diseases and to ensure access to public health services for all Somalis.
International response to the Armenian earthquake of December 1988 was overwhelming – literally – and proved a point that emergency “specialists” had long tried to make: international aid needs to be tailor-made to the region and country concerned. International voluntary aid came spontaneously from 70 countries.

Unfortunately, the “relief supplies” included huge quantities of unsolicited medical drugs, often inappropriate for the situation and labelled with foreign brand names which were unintelligible to local relief workers. Identifying them wasted much valuable time. Typically, less than 30% of drugs donated by the international community proved to be suitable for emergency use.

To counter this kind of waste and inefficiency, WHO developed Emergency Health Kits whose contents vary according to the needs of different situations anywhere in the world. The kits provide the clearly-labelled generic drugs and medical supplies that are most needed during disasters, together with a concise explanatory booklet. Each kit provides supplies for 10,000 people for approximately three months, and consists of ten basic units, each containing drugs, renewable supplies and basic equipment, packed in a single carton weighing about 860 kilograms.

One variant on the contents, for instance, is the kit prepared for treating pneumonia among children in hospital, and designed for a hospital paediatric unit of 30 beds. Variants of the standard kit, designed expressly for use in Bosnia, included – besides desperately needed drugs and surgical supplies – such special supplies as anaesthetic kits, transfusion kits, mental health kits and vitamin kits. It was as a result of WHO’s technical advice that the bread available to the beleaguered inhabitants of Sarajevo was enriched with vitamins.
Child victim of malnutrition in a drought-stricken area of Africa.
6.
Emergency Information System

WHO's Division of Emergency Relief Operations (ERO) is developing an Emergency Information System as a tool for rapid, efficient coordination in declared emergencies. Its key elements will include:

- consolidated information on WHO relief operations for long-term emergencies
- an emergency health database to catalogue global and national statistics, training materials, technological hazards and so forth
- the status of emergency response funds
- a list of focal points for humanitarian assistance among multilateral and bilateral donor agencies, disaster-vulnerable countries, UN agencies and NGOs
- situation reports, progress reports and final reports on the health-related components of emergencies
- well-monitored global stockpiles of drug and medical supplies
- a roster of available health experts for emergencies.

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<th>Type of Emergencies, WHO response, 1992 to March 1993</th>
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<tbody>
<tr>
<td>Epidemics*</td>
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<tr>
<td>Drought****</td>
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<tr>
<td>Natural disasters**</td>
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<td>Conflicts***</td>
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Total number of WHO responses: 40

* Special efforts against epidemics such as an appeal for cholera control in Zimbabwe.
** Sudden natural disasters like floods in Yemen, etc.
*** Including responses under Peace Agreements.
**** Control of epidemics is included in many responses.
7. Investing in the future

For the future, WHO aims to use its emergency programmes as a springboard for long-term development of the health sector. Its strategy will include:

- reinforcing existing national health resources, rather than duplicating them as so often happens;
- training health personnel in disaster-vulnerable countries, so as to build up their technical expertise;
- providing appropriate technical assistance, drugs and supplies in emergencies, in order to counter the waste and inefficiency that results from uncoordinated and inappropriate assistance from the international community;
- coordinating WHO emergency management activities with all partners, again to avoid waste and inefficiency;
- reconstructing the health infrastructure based on strong disaster mitigation legislation at the national level;
- using post-disaster assistance as an opportunity to underline the “lessons learned” and to sensitize national and local health authorities to the value of emergency preparedness;
- initiating community-level preparedness programmes, based on the primary health care approach, to work towards WHO’s declared goal of Health for All by the Year 2000.

Photo: Red Cross

Cyclone shelter in Bangladesh gives local communities year-round protection.

Photo: Red Cross
Back cover: An uncertain future faces this child, victim of chronic famine in the Sahel.

Photo: UN/WHO/I.J. Isaac

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The dreadful beauty of a Caribbean hurricane seen from space. At ground level, people are suffering.