Health Action in Crises
The number of people affected by disasters continued to rise in 2005. The year began with the response to the South East Asia tsunami and finished with the response to the South Asia earthquake. Each year, one in five WHO Member States experiences a crisis that endangers the health of its people. Estimates indicate that more than 150 million people were directly affected by natural disasters.

Moreover, for each major emergency that is reported by the media and recorded in international databases, there are dozens of smaller-sized emergencies that strike local communities, affecting the development and the health of their populations with little or no external assistance to help in relief and recovery operations.

Investing in community capacity-building for emergency preparedness and response is the only sustainable answer to this situation.

Similarly, several complex emergencies fall quickly into the category of “forgotten crises” as soon as the media spotlight fades away. This translates into shortages of humanitarian funds to sustain vital relief and recovery operations.

Systems at local level that normally provide people with accessible food, water, shelter and sanitation, ensure personal security and protection from harm, and deliver health care, do not function, and national systems are unable to compensate.

Recovering from the disastrous effects of major and complex emergencies and crises takes much longer than perceived by the international community. Their impact on health services and on the health status of populations persists for years. A considerable proportion of countries affected by crises or in transition, lag far behind in attaining the Millennium Development Goals. In 16 of them, under-five mortality is reported to have increased in the past 10 years.

The year 2005 also witnessed important developments in expanding the work of WHO in emergencies and crises. These developments include the resolution passed by the 58th World Health Assembly (WHA), the implementation of the UN humanitarian reform, and the review of the experience and lessons learned in recent crises. In line with these developments and in order to address the growing challenges in this area of work, Health Action in Crises was reorganized in November 2005 around its three main pillars of work: emergency preparedness, emergency response and operations, and transition/recovery programmes.

WHO’s emergency work will focus during the coming years on the following:

- Providing technical assistance for the development of comprehensive, multi-sectoral emergency preparedness and response programmes.
- Developing and updating norms and standards in various technical areas including health emergency planning, legislation, risk mitigation and management approaches, human resource development, and partnership building.
- Strengthening coordination and synergy with other UN agencies and programmes as well as other international humanitarian actors.
- Building on the expertise available in other WHO technical programmes in order to address the needs of communities and populations affected by crises. In other words, WHO will build on its strengths and comparative advantages and make them available to its Member States and other international health partners.

Important achievements were made by WHO in improving its performance in this area of work in 2005. More work is needed.

The challenges facing us in addressing our priorities are huge. They cannot be met without effective collaboration with other stakeholders. Expanding joint work and partnerships is a key objective for 2006.

Dr Ala Alwan
Representative of the Director-General for Health Action in Crises
2005: a catalogue of challenges

January

2005 began with the response to a crisis of unprecedented proportions. The South East Asia earthquake and tsunami, which struck at the end of December 2004, affected nine countries, killing more than 180 000 and displacing an estimated 1.2 million. The crisis required governments, civil society, humanitarian actors (including nongovernmental organizations and donors) and the UN to respond on a scale that has never been seen before. WHO was able to respond to this disaster thanks to an extraordinary effort at all levels of the Organization, with regional and headquarters staff joining colleagues in WHO’s South East Asia Region to plan and implement WHO’s response. Over 200 staff were deployed to the affected countries in the weeks following the disaster. More than 50 departments were involved in providing expertise and technical backup to the field operations, confirming, once again, that effective disaster management needs strong coordination and a multisectoral approach.

WHO’s first concern was to support national health authorities in their efforts to protect the health of survivors, particularly the most vulnerable – the very young and old, pregnant and lactating women, those with chronic diseases and those unable to reach medical help easily. The Organization’s technical expertise was called on to develop early warning systems and response plans for disease threats and assist the recovery and rehabilitation of the affected countries’ health systems.

One year on, the health systems of the countries affected by the tsunami have recuperated, with the assistance of donors and development agencies. They are also much better prepared to face similar challenges in the future. In Sri Lanka, the rehabilitation of close to 100 health clinics and hospitals is progressing and includes plans to upgrade another 100 undamaged health centres. In Indonesia, of the 122 hospitals and health centres damaged or destroyed, 38 have been fully restored and 51 are under construction. In the Maldives, recovery focused on replacing lost equipment and building capacity for reproductive and mental health and emergency preparedness. In India and Thailand, assistance was provided for disease surveillance and reconstruction of health facilities.
February

The humanitarian crisis in eastern Democratic Republic of the Congo reached an unprecedented intensity. A demobilization, disarmament and reintegration process in the District of Ituri, in the north eastern and Orientale Province, was launched in September 2004. However, fewer than half the estimated 15 000 militiamen had completed the process when it ended. Some 88 000 or so people were displaced by the conflict in Ituri alone. In South Kivu, violence against the population generated significant new migrations. In Katanga, in the south east, some 52 000 people were driven away from their homes. Women living within the conflict zones continue to be at risk of sexual violence. Even beyond these three conflict areas, an estimated 30 000 people died each month for lack of health care.

Despite interruptions, aid to the affected population was maintained in 2005. WHO provided technical support and supplies in response to outbreaks of cholera, measles, plague and typhoid fever. WHO also provided psychosocial support to victims of sexual violence. Some progress was visible in 2005: through forced disarmament, several zones have become accessible to humanitarian organizations. The continued assistance of the international community in all areas has helped provide minimal health services to the most vulnerable. However, access remains limited because of poor security, logistics and infrastructure, lack of medicine and poorly trained health workers.

The demobilization of ex-combatants in Burundi was more successful. At the beginning of February, almost 5000 of them were demobilized, bringing the number of returnees to more than 100 000 since January 2004. However, dramatic public health problems persisted. A cholera outbreak that broke out in January was brought completely under control only in mid-February, through the combined management of WHO, UNICEF, the Italian nongovernmental organization Gruppo di Volontariato Civile, Médecins sans frontières and the Burundi Ministry of Health. In addition, WHO supported the health component of the response plan for a food shortage in the North.

The 22 February earthquake which struck the southern town of Zarand in the Islamic Republic of Iran killed more than 640 people, injured 1500 and left tens of thousands homeless. The Iranian Government did not appeal for international assistance but asked for voluntary contributions from international organizations. WHO made a comprehensive assessment of earthquake-inflicted health sector damage and specific health sector needs in the Zarand area.
March

In South Sudan, thousands of displaced Sudanese returned to their home after the signature of a comprehensive peace agreement between the Government and the Sudan People’s Liberation Movement/Army on 9 January. However, the region had insufficient basic infrastructure – roads, schools, clinics and buildings – for the local civil authorities to allow the returnees to go back to a normal life.

In Darfur, in the West of Sudan, the humanitarian, security and political crisis worsened. There were many severe human rights violations, and people were dying in large numbers from malnutrition and disease. Despite these difficult conditions, the early warning and response system for early detection and response to outbreaks, in collaboration with medical nongovernmental organizations, doubled its coverage to close to 1.4 million displaced people (or about three-quarters of the total displaced population) and 55% of the total population affected by the conflict. Thanks to that system set up by WHO and the Ministry of Health, suspected cases of meningitis were detected in all three Darfur regions. Biological samples were collected and sent for laboratory confirmation. A system of daily reporting of suspected cases was established in collaboration with the federal Ministry of Health. The meningitis outbreak was rapidly contained. In the following months, the same system allowed the early detection and control of outbreaks of measles, hepatitis E and diarrhoeal diseases.

Two months of rain, snowfall and floods caused widespread damage to the infrastructure in Baluchistan, North-West Frontier Province and northern areas of Pakistan. Water supplies, sanitation systems, electricity, communications and road links were seriously affected, and food supply shortages were reported in remote areas. An estimated 150,000 people were affected in Baluchistan alone. The Government of Pakistan did not request international assistance but welcomed help from bilateral and multilateral partners. WHO provided emergency medical supplies for the affected areas, including six New Emergency Health Kits. Each kit can cover the medical needs of 10,000 people for three months.

An 8.7 magnitude earthquake struck just off the coast of northern Sumatra in Indonesia and triggered tsunami alerts around the Indian Ocean just before midnight on 28 March. Over 1300 persons were killed and injured in Nias, 100 in Simeulue and 200 to 300 in Banyak, three islands close to the epicentre. Over 250,000 people were displaced in these three islands and on the west coast of Sumatra. Buildings and bridges were destroyed, and the electricity and telecommunications networks disrupted. WHO immediately began working with a UN team to assess damage, sending staff to help with emergency activities and planning. The initial focus was on local emergency treatment and evacuation of more severe cases. WHO worked with the Ministry of Health to assess the damage to health care services, develop an emergency strategic planning and provide immediate essential needs (such as mobile medical services for injuries and trauma care, shelter, water, food, clothes, blankets and sanitary measures), funding for staff mobilization, transport and communication. WHO strengthened its office in Medan, in northern Sumatra, in order to support emergency relief services and monitor the situation. Six staff members were posted in Nias: two medical officers, one logistician, one water sanitation expert, one immunization officer and one surveillance officer.
April

In Iraq, in partnership with the Ministry of Health and other health stakeholders, WHO concentrated on five main areas: access to quality health services; prevention and control of disease; mother, child and reproductive health; environmental health; and development of human resources for health. In April, 25 food control laboratory technicians from the ministries of health and agriculture completed a two-week food safety training course on microbiological, chemical and instrumentation food testing methods. A total of 94 people received training on food safety through four courses organized by the Ministry of Health, in partnership with WHO and the Jordan Food and Drug Administration. In addition, seven shipments of diagnostics and international reference standards were delivered to the National Centre for Drug Control and Research. Five further shipments of diagnostics were provided. In April, WHO also provided 300 motorcycles and 2500 emergency hygiene kits to the Ministry of Health to support primary health care outreach activities in rural and remote areas.

In Côte d’Ivoire, the peace, disarmament and reunification process, which began in early 2003, resumed in April 2005 after months of interruption. However, life remained hard for the 16.4 million Ivorians, including 500,000 internally displaced persons, and an estimated 70,000 refugees living in the country. WHO opened an emergency sub-office in Bouake to better assess health needs, address gaps and improve the coordination of humanitarian assistance. New Emergency Health Kits and surgical kits were prepositioned in Abidjan. However, persistent insecurity seriously hampered the implementation of humanitarian assistance programmes. Security deteriorated further with clashes in the West, forcing 20,000 people, mostly women and children to flee their homes.

May/June

In Darfur, a crude mortality survey commissioned by the UN Humanitarian Coordinator was finalized in June. It was jointly conducted by WHO, the federal Ministry of Health and the three Darfur States ministries of health, in partnership with other UN agencies and nongovernmental organizations. The main objective of the survey was to estimate mortality between November 2004 and May 2005 in the three states among: internally displaced persons living in accessible camps, internally displaced persons living outside camps and affected communities in accessible areas. Three separate surveys were conducted in each state, each targeting one of the defined study populations. All surveys were completed in North Darfur and West Darfur, while only 75% were completed in South Darfur due to the deteriorating security situation and access difficulties. Preliminary results showed the crude mortality rate to be 0.8 deaths per 10,000 people per day, a significant improvement compared with the 1.5 (North Darfur) and 2.9 (West Darfur) per 10,000 people per day mortality rates registered in the 2004 mortality survey.

On 14 May, over 500 people crossed from Uzbekistan into Kyrgyzstan after popular protests for the release of 23 people on trial for extremism in the city Andizhan, ended up in clashes between protesters and the army. WHO delivered emergency medical supplies to the Andizhan regional hospital and led the health component of an interagency crisis team.

On 16 June, severe storms, including hailstorms, led to heavy flooding in parts of north-eastern and eastern Afghanistan. A destructive flood occurred in the city of Faizabad, affecting at least 4000 families, causing the death of an estimated 50 people and destroying 2000 houses. Between 9 and 28 June,
6,000 cases of acute watery diarrhoea, including 777 hospitalizations, were reported in the affected areas. Laboratory testing confirmed cholera. WHO delivered ten New Emergency Health Kits and provided technical support for cholera control.

As of 30 June, more than 30,000 internally displaced persons from Chechnya were registered for assistance in Ingushetia. The health system in the North Caucasus was unable to satisfy the demands of the 1.5 million people affected by the ongoing humanitarian crisis. WHO worked closely with UNICEF and Russian health authorities to expand the Integrated Management of Childhood Illnesses and Mother Empowerment programmes. In addition, WHO worked to build capacity in obstetric and neonatal care through the Promoting Effective Perinatal Care programme. Other activities included coordinating and supporting mental health and psychosocial programmes, including psychosocial support to traumatized children and victims of mine incidents. In addition, WHO promoted partnerships that resulted in strengthened policies and systems for emergency preparedness, mitigation and response within the health sector.

July/August

The dramatic deterioration of a chronic food shortage in Niger led to an acute humanitarian crisis. An estimated 800,000 children under five were suffering from hunger, of whom at least 160,000 were moderately malnourished and 32,000 severely malnourished. At the same time, a cholera outbreak with a very high case fatality rate (9.8%) was detected in the southern Bouza district, and the peak malaria season was approaching. WHO set up an emergency task force in Niamey and established an emergency sub-office in Maradi, in the South of the country. WHO supplied eight cholera kits (each cholera kit is designed to cover the medical needs of 100 severe cases); 48 trainers were given instruction on the clinical management of severe malnutrition; the national protocol for the treatment of severe malnutrition was revised; 100,000 doses of artesunate-amodiaquine and 20,000 rapid malaria tests were delivered; 40 trainers were given instruction on the use of artesunate combination therapy; an emergency system for the early detection and control of outbreaks including nutritional data was set up; and various health information material produced. The emergency programme in Niger was drastically reduced in December for lack of funds.
Heavy rainfall and hailstorms in May and June and again in July caused heavy flooding in many parts of Bulgaria, with rivers rising by 1.5 to 2.5 metres. Further rains at the beginning of August forced 10,000 people to evacuate their homes in the Sofia region. At least 20 people were killed. Residential and public buildings and infrastructure were damaged. A state of emergency was declared in a number of districts. WHO public health and environmental health experts provided technical assistance for needs assessment and coordination as well as emergency medical supplies.

Increasing tensions between refugees, the local population and the international community in eastern Chad resulted in some restriction of humanitarian activities. The WHO emergency sub-office in Abéché was involved in defining a health contingency plan for the area in case the situation worsened. Meanwhile, the early warning system set up by WHO and the Ministry of Health in collaboration with health nongovernmental organizations detected up to 400 cases of severe jaundice, including 41 deaths (10% fatality rate) in ten villages in Ouaddai, in eastern Chad, between 8 June and 27 July. An outbreak control committee was established in Abéché to respond to the jaundice outbreak. The subsequent improvement of water and sanitation conditions in camps and neighbouring villages and active health promotion activities conducted in the refugee settlements were instrumental in limiting the further spread of the disease.

In northern Uganda, nearly two decades of conflict have resulted in the internal displacement of up to two million people. In Gulu, Kitgum and Pader districts – those most affected by violence – nearly 90% of the population are living in camps in 2005. WHO has opened an emergency sub-office in Gulu district to better cope with the crisis.

In mid 2005, the Ugandan Ministry of Health and UNICEF requested assistance from WHO to assess the health status of internally displaced persons in the three districts. The study was led by the Ministry of Health and WHO in partnership with UNICEF, the UN World Food Programme, the UN Population Fund and the International Rescue Committee. The study’s objectives were primarily to estimate the crude and under-five mortality rates between January and July 2005 among populations living in camps in Gulu, Kitgum and Pader. Both mortality rates were found to be well above the emergency threshold of 1 death per 10,000 people per day. A total excess mortality of 25,694 (of which 10,054 were children under five) could be projected for the entire Acholi region between January and July 2005, indicating almost 1000 excess deaths per week. Malaria/fever and AIDS were the top reported causes of death. Among children under five, top causes were malaria/fever and two lango, a local name for a complicated candidiasis with chronic malnutrition and diarrhoea.

In late August, after Hurricane Katrina struck the United States of America, emergency response experts from the Pan American Health Organization and World Health Organization (PAHO/WHO) travelled to the affected areas to assist efforts to cope with the catastrophe. PAHO/WHO staff also formed part of a United Nations team. Nine health disaster experts were deployed from the Regional Office and headquarters to sites in Arkansas, Louisiana, Mississippi and Texas with the main task of strengthening the humanitarian relief coordination.

For further information on a broad spectrum of activities carried out by Pan American Health Organization’s Area on Emergency Preparedness and Disaster Relief in 2005, please visit: http://www.disaster-info.net/AnnualReport05/index.htm
The WHO humanitarian programme in Kosovo has consistently emphasized the importance of addressing the health situation of the internally displaced population residing in three temporary camps in North Mitrovica urgently. This serious public health emergency was due to the concomitant occurrence of an unprecedented heavy and prolonged exposure to lead, other heavy metals and chemicals. This, added to the extremely poor hygienic conditions of the camps, confirmed by the results of a soil and blood test survey conducted in the affected area and population, is now being addressed by the international community. In October 2005, WHO set up a task force of international experts to provide technical advice to mitigate potential long-term health consequences, affecting mostly children and pregnant women. This WHO task force supports the United Nations Mission in Kosovo to facilitate the urgent relocation of these populations to areas uncontaminated and meet the requirements and standards for hygiene and sanitation.

On 8 October, a powerful earthquake (7.6 on the Richter scale) struck in Pakistani Kashmir, near the border of India. The Pakistani Government reported over 73,000 dead, about 70,000 seriously injured and another 59,000 with minor injuries. Approximately 3 million people were left homeless and without health services, many of them living in inaccessible areas. The impact of the earthquake was catastrophic in terms of the number of casualties requiring trauma care and surgery, and the damage to the health care system, including the death of health personnel and destruction of health facilities, administrative buildings, equipment and vehicles. A joint Ministry of Health/WHO emergency health coordination centre was established in the Pakistani Institute of Medical Sciences in Islamabad within a week. WHO worked closely with national and local authorities to restore primary health care services, coordinate health action and set up in collaboration with other major health partners an early warning disease alert and response system in the affected areas. WHO provided large quantities of urgently needed medicines, equipment and other health supplies such as vehicles and communications equipment. Severe damage to the water and sanitation systems, lack of access to adequate shelter and food posed serious health risks. However, several weeks after the event, the early warning system showed that mortality rates had been kept below the humanitarian emergency threshold, thus confirming that the joint measures had been effective.

Achievements can be summarized as follows: rapid deployment of staff within a strategic framework based on needs and priorities; quick set-up of basic operational structures and field presence; rapid mobilization of medical kits and other relief supplies; and timely production of situation reports to provide a situational overview.
Communicable Disease Control in Humanitarian Emergencies

Humanitarian emergencies, caused by conflict or natural disasters, are frequently characterized by the displacement of large numbers of people. Those affected may often be resettled in temporary locations with high population densities, inadequate food and shelter, unsafe water and poor sanitation. These conditions have enabled communicable diseases, either alone or in combination with malnutrition, to emerge as major killers.

Death rates of up to ten times those of the local population have been recorded among refugee and displaced populations, and more than three-quarters of these deaths may be caused by communicable diseases alone. Various risk factors interact to produce a higher incidence of diarrhoeal diseases, acute respiratory infections, vaccine-preventable diseases such as measles, and vector-borne diseases such as malaria. Tuberculosis and HIV/AIDS are also major health concerns in these situations.

The common goal is to reduce the excess morbidity and mortality caused by communicable diseases in humanitarian emergencies by providing technical and operational support to field operations.

In WHO, a working group on communicable diseases in emergencies includes experts on diarrhoeal diseases, malaria, acute respiratory infections, tuberculosis, HIV, immunization, water and sanitation, child health, surveillance/early warning and outbreak response. This working group sets the technical standards for communicable disease control and provides rapid technical and operational support in acute emergencies, with ongoing assistance as the situation evolves. The group liaises with WHO country and regional offices, national authorities, other UN agencies, nongovernmental and international organizations and donor agencies.

For example, in response to the South East Asia earthquake and tsunami disaster in December 2004, WHO teams were deployed to Sri Lanka and Indonesia, assisted by GOARN (Global Outbreak Alert and Response Network) partners. These teams were involved in implementing a disease surveillance/early warning and response system in Aceh including software and mapping application, delivery of laboratory services, contingency planning for epidemic response, guidelines on case management, training as well as providing initial support to endemic disease prevention and control. In Aceh, Indonesia, where the greatest devastation occurred, co-coordinating the work of over 100 health agencies in the field, with poor logistics, destroyed infrastructure and ongoing insecurity was a major challenge for WHO.

In the first 3 months following the tsunami, over 65 outbreak alerts were investigated and appropriate interventions rapidly implemented for clusters of cases of tetanus, dengue and dengue haemorrhagic fever, bloody diarrhoea, typhoid, scrub typhus, hepatitis A and E, and measles. In addition to tsunami-specific communicable disease guidelines, epidemic kits for the rapid investigation of outbreak alerts were distributed to WHO sub-offices as well as to partner agencies in Aceh Province.
Tracking health performance and humanitarian outcomes

The number of survivors after a crisis and their health are two yardsticks used to judge its severity and the effectiveness of responses to it. Hence, accurate and timely mortality, health and nutrition data are extremely important. They can prompt questions about why things are deteriorating, provide insights into the nature of risks people face and provide the basis for an effective response to the crisis.

The workshop concluded that a common humanitarian tracking service would be useful for the systematic measurement of selected indicators in crises. The service would draw on the best elements of current initiatives as validated through impartial expert scrutiny. It would provide impartial and timely analysis of the health, mortality and nutrition status of populations of humanitarian concern and assess the quality and coverage of response. A tracking service would permit the severity and status of a crisis to be objectively judged and would guide effective humanitarian action, including the allocation of resources and the targeting of interventions.

Technical quality, impartiality and objectivity in relation to data collection, analysis and publication are vital if stakeholders are to trust the service. Thus the need for a governance structure for the service that isapolitical and independent from institutional interests. The workshop concluded that the tracking service should be organized as a network of collaborating institutions around the world selected on the basis of an objective appraisal of their comparative advantage, track record and capacity to deliver agreed components of the service.
The Humanitarian Health Cluster

The UN Emergency Relief Coordinator commissioned a humanitarian response review in 2005. The review concluded that international humanitarian action needed major improvements with respect to capacity, predictability, effectiveness, and accountability. Shortcomings needed to be filled, and systems established to assess needs, performance and impact. Human survival and health are, self-evidently, the focus of the humanitarian enterprise. Partnerships among UN agencies, Member States, the Red Cross and Red Crescent Movement (ICRC), the International Organization for Migration (IOM) and nongovernmental organizations (NGOs) are crucial to improve the survival and health of communities affected by crises. The effectiveness of the health component of crisis response is indicative of the adequacy of the overall humanitarian action. Hence the creation of the Humanitarian Health Cluster Working Group by the Inter-Agency Standing Committee, the primary mechanism for interagency coordination of humanitarian assistance. The Health Cluster is led by WHO and consists of entities in the UN system, the ICRC, the IOM and NGOs networks.

The Health Cluster has established a joint initiative to improve humanitarian health outcomes consisting of a prioritized action package of interrelated measures. These are intended to strengthen early warning systems, preparedness, capacity-building, assessments and strategies, country-based management, review, reporting and lesson-learning, and advocacy and resource mobilization.

The Health Emergency Action Response Network (HEAR-NET) an action programme of this joint initiative, was started by WHO in 2005. Recognizing that human resources shortages are an urgent and serious constraint to the achievement of better humanitarian health outcomes, this initiative seeks to provide an interagency pool of qualified, experienced and well-prepared international health personnel for working in crises and disasters including short-term acute emergency needs, short periods, and longer-term period in prolonged crisis and post-crisis recovery situations.

This training for humanitarian health personnel is intended to complement the UN Disaster Assessment and Coordination training conducted by the UN Office for the Coordination of Humanitarian Affairs for general humanitarian professionals. Health personnel are prepared through suitable training, familiarized with standardized operating procedures and backed-up in the field by dedicated operational support platforms. They are expected to deliver better humanitarian health results assessed according to agreed benchmarks and standards.

A pilot induction course was organized by WHO in November 2005. The course was organized around four segments: essential public health aspects of humanitarian action; core operational skills for humanitarian health workers; personal effectiveness in humanitarian health teams; and a simulation field exercise to practice skills and knowledge in an integrated manner.

Thirty-two public health and related professionals from a range of agencies completed the course, with about two-thirds of them becoming eligible to join the deployment roster. Overall course feedback was very positive, with a number of substantive recommendations for improvement which will be implemented in the next course.
Cost recovery in complex emergencies

Cost recovery is a system for mobilizing resources that requires users to refund all or part of the cost of delivering a service. The presence of cost recovery mechanisms as part of health care programmes in countries affected by crises has become a source of increasing concern to many humanitarian relief agencies.

Although the information available on cost recovery in emergency settings is extremely limited, there are arguments and evidence that justify that concern.1 For poor people, the most vulnerable group and the one first hit by a crisis, fees represent an obstacle to using health services. Consequently, they tend to wait until they are very sick, when they are forced to seek more expensive care in hospitals. Use rates indicate that, in already disrupted and inequitable health care environments, user fees compound inequities in access to treatment and contribute to the destitution of the most vulnerable. This is referred to as household catastrophic health expenditure. Cost recovery mechanisms have frequently led to decreased use of health services, untreated morbidity and irrational use of drugs sold by unqualified people. Weak administrative capacity at the peripheral level, so common in countries in crisis, results in poor financial management mechanisms for accounting for the additional revenue and for its fair reallocation. Further, user fees in most countries represent an extremely low source of additional income. When transaction/administrative costs are deducted, user fees often represent no more than 3%-5% of the real cost incurred by the system. Last but not least, the moral imperative of impartiality of humanitarian assistance (that is, assistance should be provided only on the basis of need) is a powerful argument against any economic discrimination in access to healthcare.

The pressing need for quality secondary health care became clear immediately after the beginning of the Darfur crisis in Sudan in early 2004. The hospitals in Darfur were desperately unprepared for the large influx of people requiring emergency care. In response to those pressing needs and to the limited access to secondary care due to the persistence of a cost recovery system, WHO Sudan initiated, together with other partners, a hospital programme aimed at withdrawing the cost recovery system for internally displaced persons and conflict-affected populations and to improve the quality of secondary care available in the area.

This hospital programme was based on providing economic incentives for the staff, covering running costs and providing medicines and medical supplies to the ten most important hospitals in Darfur. In addition, main hospital departments were rehabilitated and various training activities conducted.

Ratios of 1 nurse per 20 beds per 8 hours and 1 doctor per 50 consultations in outpatient departments are used as the basis on which to calculate incentives together with hospital statistical data. Incentives based on salary rates received from the Ministry of Health and the current incentives scale for health workers in each state. Each professional has a job description agreed with the hospital. Incentives are paid only if an adequate standard of performance is achieved. There is a joint monitoring performance mechanism.

Running costs are identified by studying the budget of each hospital and the expenditures over a minimum period of six months per hospital.

The financial data are matched with the hospital statistics and the workload, taking into consideration the changing refugee population.

Requests for funding for certain activities need to be approved by WHO. The money is transferred directly to the hospital bank account against a documented receipt and a report from the focal point.

The upper limit of medicines and medical supplies to be received by the hospital is calculated on the basis of the workload caused by the refugees, the amount of emergency cases and the morbidity and mortality data on a basis.

Through the WHO initiative on rational use of drugs, the Sudan National List of Essential Drugs was distributed to all hospitals in Darfur, while a central medical supplier was nominated and an active quality control system was put in place. WHO organized three successful seminars, in close collaboration with the federal and state ministries of health, on the revised List.

An effective and efficient pharmaceutical inventory management tool was set up at El Geneina Hospital and El Fasher Teaching Hospital.

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Malnutrition and emergencies: a risky equation

Hunger and malnutrition are rampant among refugees and displaced populations. Many of them suffer from one or more of the multiple forms of malnutrition. In an acute emergency, ensuring adequate food supplies is essential. The risk of malnutrition depends on factors such as the degree of civil security, food availability and accessibility, access to health services and the adequacy of relief efforts.

Deficiencies of iodine, vitamin A and iron are common in emergency-affected populations. In addition, scurvy (vitamin C deficiency), pellagra (niacin deficiency) and beriberi (vitamin B1 deficiency) frequently occur in populations entirely dependent on food aid.

The combination of malnutrition and communicable diseases is the most prevalent public health problem in emergencies; together they are responsible for millions of preventable deaths worldwide each year. Malnutrition compromises the body’s immune system and so increases the number of deaths from measles, diarrhoea and other infectious diseases. In particular, malnutrition makes people more susceptible to infection with HIV, and those living with HIV/AIDS are more vulnerable, as the body does not have sufficient resources to fight the opportunistic infections associated with the disease. HIV/AIDS is known as “slim” in some parts of the world.

Because malnutrition contributes greatly to overall morbidity and mortality, the management of malnutrition and the maintenance of adequate nutritional levels are among the most effective ways of decreasing the burden of disease, especially among vulnerable groups such as infants and young children, pregnant and lactating women, and the elderly. Nutrition surveillance systems are also needed to adequately monitor the nutritional status of people affected by complex humanitarian emergencies.

During the food crisis in Niger, WHO improved the capacity of the national health system by providing training for staff and ensuring the availability of therapeutic food and the necessary equipment for the management of severe malnutrition. In addition, WHO worked with the Ministry of Health to set up appropriate systems to monitor nutrition activities.

WHO also strengthened the surveillance system, incorporating nutritional data into the weekly epidemiological bulletin produced by WHO and the Ministry of Health. WHO reviewed the National Protocol for the clinical management of severe malnutrition in children and made technical papers and guidelines widely available.
Women's health in crisis

Women and girls often bear the brunt of conflicts today. It is estimated that at least two-thirds of the millions displaced by conflict worldwide are women and girls. These women and girls face daily deprivation and insecurity. Many face the threat of violence when they engage in basic daily survival tasks such as fetching water or gathering firewood. They often lack access to health services that address the physical and mental consequences of conflict and displacement and have a higher risk of dying in childbirth because basic reproductive health services are not available. Cultural restrictions may also affect women's access to care when female clinicians are not available or when male family members refuse to allow women to seek care or are not available to accompany women to clinics. In too many settings today, the devastation of the health care system due to years of conflict or neglect means that even those services that are available are woefully inadequate and do not always address the specific health needs of women.

In normal circumstances, during pregnancy and childbirth, it is estimated that about 15% of women and 10% of their newborn babies are at risk of life-threatening complications which require immediate and appropriate care. However, relief efforts often focus primarily on treatment of injuries and control of communicable diseases. Maternal and neonatal health are often not considered an immediate priority. In the earthquake affected areas in Pakistan, for instance, about 13,000 women were estimated to have given birth every month. Of these about 2000 would have required emergency obstetric care for complications. However, in the first month after the disaster, only 200 women were reported to have given birth in health facilities in the affected areas. Even if the majority of women living in the area was accustomed to delivering at home and some women left the affected areas, there is little information on the fate of the remaining women or their newborns. The situation was further complicated by damaged health facilities and the lack of locally available trained personnel (since many of them had also been affected by the disaster).

During the response to the earthquake in Pakistan, WHO emphasized the importance of women's health care, coordinating this sector with local health authorities and partners, strengthening health information and training local professionals. Mechanisms for collecting and monitoring data on women's health were established, including specific needs assessments. WHO helped local health authorities to revitalize the health services, including primary health care and the referral system, in order to ensure health care for mothers and their children. However, this experience highlighted deficiencies in key technical aspects of providing women and children with health care in emergencies. Some of the major constraints encountered were lack of human and financial resources and lack of coordination between partners for a funding mechanism to assist and manage a proposed women's health plan. To address these gaps, WHO and UNFPA are collaborating with other partners in reviewing the current guidelines and strengthening mechanisms for joint work in future emergencies.
Responding to sexual and gender-based violence

While rape and other forms of sexual and gender-based violence (SGBV) take place in all societies at all times, conflicts often increase the incidence of those events, even though they are usually underreported. Many women, girls and even men are subjected to rape, including gang rape, sexual slavery and other forms of violence (such as being forced to witness others being raped or mutilated).

SGBV may have severe physical, psychological and social consequences. Physical consequences of sexual violence include injuries, fistulas and sexually transmitted diseases such as HIV/AIDS. There is also a higher risk of unsafe abortions because of unwanted pregnancy. Psychological consequences include nervousness, sleep disturbances, phobia, substance abuse, depression, social withdrawal, sexual dysfunction, post-traumatic stress disorder and suicide. Women and men who have been raped also suffer from social exclusion. Some women are rejected by or prevented from returning to their families, often finding themselves with no support and few means of subsistence. Children and partners of rape victims are stigmatized too.

The war in the Democratic Republic of the Congo has led to increased sexual violence, especially in the East. Sexual violence continues to be used as a tactic of warfare by most of the armed parties involved in the conflict. SGBV remains one of the greatest threats to women’s health in the country.

In April 2005, a WHO assessment reported on the burden faced by the healthcare system of treating large numbers of SGBV related cases of fistula, the Joint Initiative on the Fight against Sexual Violence towards Women and Children documented 41,225 cases in the provinces of South Kivu and Maniema, and the cities of Goma and Kaleme since 1998. The estimated number of unknown cases is assumed to be several times higher than the official figures, due to the fact that women hesitate to report their cases fearing social stigma and the culture of impunity. Additionally, SGBV victims use several reporting paths other than the police, such as traditional leaders, health facilities and other sources of aid. This results in missed information and under reporting as data is not systematically collected and harmonized.

WHO started to address the problem of SGBV in the areas around the towns of Kindu and Kaleme in the East of the country. Nearly 300 health care professionals have been trained in the field in clinical management of SGBV cases. Health personnel have been sensitized to recognize its direct and indirect consequences and to identify key signs and symptoms. WHO also has provided equipment and essential medical supplies to upgrade the capabilities of 11 health centres and nine drop-in centres. In addition, the Organization has contributed to infrastructure rehabilitation and supported social mobilization activities, not only for journalists and civil servants but also for adolescents. WHO maintains small-scale income-generation projects to support rehabilitation and integration of SGBV survivors and to reduce their economic hardship. At country level, WHO’s work includes the building of partnership networks with multiple stakeholders including civil society institutions.
Reaching consensus on mental health in emergencies

The impact of disasters on the mental health and psychosocial well-being of individuals and communities can have a public health dimension that needs multisectoral response. Mental health and psychosocial support programmes during and after acute emergencies are increasingly recognized as necessary and many approaches and concepts have been proposed for their implementation in the field. However, the suitability of some of these concepts is controversial. There is no agreement, for instance, on the public health value of the post-traumatic stress disorder concept and no agreement as to whether vertical, separate trauma-focused services are appropriate. On the other hand, there is agreement that exposure to extreme stressors can cause social and mental health problems and that emergencies can severely disrupt social structures and the care of persons with pre-existing mental disorders.

Emergency strategies and especially transition strategies need to complement ongoing mental health system development priorities, especially the development of national plans for the organization of mental health services. Such plans involve downsizing existing custodial mental hospitals, making mental health care available in general health care settings, and strengthening community and family care of persons with severe, chronic mental disorders.

During 2005, WHO has initiated and co-chaired the work of the Inter-Agency Standing Committee Task Force on Mental Health and Psychosocial Support in Emergency Sittings. The Task Force is developing guidelines on minimal interventions in disaster response. These guidelines are expected to be finalized during 2006.

Among various field programmes implemented in 2005, WHO’s mental health activities in South Asia started a long time before the tsunami and will continue for years to come. Not long before the tsunami, WHO developed a mental health plan for conflict-affected north east Sri Lanka, in close collaboration with experts from that region. An adapted version of this plan was used by the Sri Lanka Government, by the WHO Country Office and by various international non-governmental organizations with expertise in psychiatry as the framework for developing long-term post-tsunami community mental health services in Sri Lanka.

Basic WHO documents on mental health in emergencies were made available in the field within a few days of the disaster. Senior WHO staff and consultants were on site within two weeks and continued to stay for many months. WHO provided support to the Sri Lanka Ministry of Health in estimating the mental health needs and preparing strategies/action plans to respond to these. It also provided assistance in the form of documents, training and manuals.

Across all countries hit by the tsunami almost all areas affected had poor mental health services before the disaster. WHO worked with the Ministries of Health, local institutions and professionals and with international agencies in order to strengthen services for responding to the pre-existing as well as newly emerging needs. These services are based on the community mental health model and are designed for the long term. The result thus far includes a new, comprehensive national mental health policy, which is currently being implemented.
Emergency and essential surgical care

Appropriate medical and surgical treatment of injuries in emergencies is vital for improving survival, minimizing future functional impairment and disability, and ensuring as full a return as possible to community life. Of course, injuries have a particular public health relevance during natural disasters such as tsunami, floods or earthquakes, where they can be the major cause of death and disability. Armed conflicts cause similar problems: referral of cases to appropriate health facilities often becomes difficult; and untreated or inadequately treated war injuries, fractures and infected wounds contribute to high mortality rates or may lead to severe, long-lasting disabilities. There are other risks for relief workers and affected populations in the aftermath of natural disasters. Buildings may have become structurally unsound, and falling debris or falls on to debris may cause serious injury. Buried anti-personnel landmines in some places are an additional long-term risk for humanitarian workers and the people they serve.

WHO has developed a comprehensive e-learning toolkit called Integrated Management for Emergency and Essential Surgical Care (IMEESC). The kit includes Best Practice Guidelines on Emergency Surgical Care in Disaster Situations and Best Practice Protocols for Clinical Procedures Safety as well as information on the management of trauma, pregnancy-related complications, anaesthesia, prevention of HIV transmission and other infections, emergency equipment, sterilization of equipment, waste disposal and transportation of the critically ill.

The toolkit was developed after the South East Asia tsunami and may be found at: http://www.who.int/surgery/imeesc/en/index.html

The WHO IMEESC tool was adapted to local needs in Pakistan and incorporated into the Essential Surgical Skills and Emergency Maternal Child Health (ESSEMCH) training programme organized by WHO, Child Advocacy International and the Pakistan Ministry of Health. It has also been included in the SICOT Education Centre for Telemedicine at King Edward Medical University in Lahore, Pakistan (SICOT is the French acronym of the International Society of Orthopaedic Surgery and Traumatology, which is a WHO partner).

Immediately after the dramatic earthquake in Pakistani Kashmir in October 2005, doctors, nurses and paramedics who had already received the ESSEMCH training and ambulance drivers from the Pakistan Institute of Medical Sciences (Islamabad), Railway Hospital (Rawalpindi), Federal Government Services Hospital (Islamabad), District Headquarters Hospital (Nowshera) and King Edward Medical University (Lahore) provided emergency surgery and obstetric care in camps for the internally displaced.

A team comprising a WHO expert advisory panel and staff from the Sindh Institute for Urology and Transplantation set up three emergency dialysis centres in three different cities on the day after the tragedy, airlifting 12 dialysis machines and 6 tonnes of equipment and medicine.
Strengthening WHO’s ability to improve Health Action in Crises

The year 2005 coincided with the first of a three year programme (TYP) aimed at improving WHO’s institutional capacity for health action in crises. The TYP, which was developed as a global programme by Headquarters together with the six WHO Regional offices, aimed at the following results at the end of three years (2007):

- Crisis-competence within WHO to respond well and quickly
- WHO working more closely with other UN agencies and key partners
- WHO administrative procedures upgraded for operational effectiveness
- Sufficient resources (people, equipment, funds) available for immediate and effective response
- Concrete and predictable support to countries for preparedness, response and recovery

The TYP was instrumental in developing WHO’s current strategy for health action in crises as well as elaborating four key functions in emergency preparedness, response and recovery. The programme led to a much stronger field capacity with around 40 full-time staff funded for WHO’s crises work throughout the world, with a focus on the African region, by the end of 2005. This group has been supported, briefed and trained in key areas and is starting to contribute to improved health action in crises. During the year, WHO opened up 15 new sub-offices (mostly consisting of TYP funded staff) and set up systems, mechanisms and procedures as part of the TYP. This helped WHO to respond more efficiently to the South East Asia tsunami, Hurricane Katrina in the USA, and to the crisis in Niger and in Pakistan. The TYP also ensured that contingency funding was available to pre-fund emergency operations. The period also witnessed a large number of support missions from Headquarters and regional offices to the field. Joint reviews were conducted by donors and WHO in Sudan, Sri Lanka, Indonesia and Chad during the year. Through the TYP, key trainings were developed and over 250 staff and partners trained in various field locations throughout the world.

The TYP has also contributed to more coherent action by WHO by promoting global joint planning, dialogue and experience exchange between regions as well as joint monitoring and responsibility for the TYP. Many of the regions are integrating emergency work into their day-to-day health action and donors continue to demonstrate confidence. By the last quarter of 2005, Canada had joined the group of TYP donors and the funds raised for year two of the TYP went up to USD 12 million.

At the same time, a great deal remains to be done for strengthening WHO’s ability to help health stakeholders in crises. At the end of one year, some changes are visible but need continuous effort and resources to make a lasting impact. One year has contributed towards performance improvement and credibility but obviously cannot perfect performance, only start a process towards it.
Seeking predictable funding

Voluntary funds available for WHO's Health Action in Crises work have more than doubled in the past three years, from around USD 61.5 million in 2003 to almost USD 134 million in 2005. The donor base has also widened considerably. While in 2003 Health Action in Crises received contributions from 17 donors, in 2005 we could count on the financial support of more than 30 governments and organizations and a significant number of private contributors. This increase in voluntary funds reflects a growing interest in WHO's evolving role in emergencies.

Most of the resources have been to support specific emergencies. However, extra-budgetary funds mainly through the three year programme to Enhance WHO's Performance in Crises have been used for capacity building activities and to expand and reinforce WHO's presence in countries in crisis. Allocations from the Organization's regular budget have seen an increase of 8.4% in the 2005-06 biennium compared with the previous one: an increment that, in a general environment of shrinking resources, shows a commitment towards WHO's work in the area of emergency preparedness and response.

WHO's Eastern Mediterranean and South East Asia Regions received 82% of the funds available in 2005 reflecting the need to support large-scale emergencies such as the South Asia earthquake, the South Asia tsunami and the ongoing conflict in Sudan and Iraq. In 2005, the African Region received only 8% of the funds despite being the region with the highest number of countries facing crises.

Despite this general increase of resources, the allocation by crisis continues to be uneven. Sudden emergencies and natural disasters get more public attention than protracted long-term crises. The WHO components of the flash appeals for funding launched in 2005 immediately after sudden emergencies achieved a funding rate of 83% of what was required. By contrast, ongoing appeals received only 44%, confirming the great contrast between high-profile emergencies in countries such as Sudan, Iraq or Uganda and the so-called "forgotten emergencies" in countries such as Eritrea, Central African Republic, Democratic Republic of the Congo and Guinea (see table on next page).

Ensuring predictable funding and equitable distribution to countries and areas of intervention is one of the main challenges that agencies involved in responding to humanitarian emergencies are facing today. Donors have also acknowledged the importance of a prompt and needs-based allocation of resources. In 2005, more country teams have used pool funding mechanisms aimed at allocating funds and responding to crises in a more coordinated and effective way.

In 2006, the adoption of the new Central Emergency Response Fund and the cluster approach, and the expansion of the pool funding mechanism will determine whether we are able to achieve the goal of timely, flexible and needs-based funding for emergency and humanitarian action.
WHO would like to thank all the donors who contributed to the Health Action in Crises work in 2005, including:

- the Arab Gulf Programme for United Nations Development Organizations, Australia, Belgium, Canada, China, the Czech Republic, Denmark, the European Commission, Exactmobile, Finland, France, Germany, Greece, Iceland, Ireland, the Islamic Development Bank, Italy, Japan, Kuwait, Luxembourg, Monaco, the Netherlands, Norway, the Pan American Health and Education Foundation, Poland, Portugal, private donors, the Republic of Korea, Romania, the Russian Federation, Saudi Arabia, Slovakia, Sweden, Switzerland, Turkey, the United Kingdom of Great Britain and Northern Ireland, the United Nations Development Programme, the United Nations High Commissioner for Refugees, the United Nations for the Coordination of Humanitarian Affairs, the United Nations Trust Fund for Human Security, the United Nations Trust Fund for International Partnerships, the United States of America, the City of Venice and the World Allergy Organization.

### 2005 UN Consolidated Appeals: WHO Requirements and Funding Status
(Funds received from 1 January to 31 December 2005)

<table>
<thead>
<tr>
<th>Country/region</th>
<th>WHO requirements</th>
<th>Cash contributions received in 2005</th>
<th>Average funding per emergency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>4,122,589</td>
<td>2,464,075</td>
<td>59.8</td>
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<td>Central African Republic</td>
<td>2,440,394</td>
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<td>Chad</td>
<td>5,512,265</td>
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<td>Chechnya (Russian Federation)</td>
<td>3,060,750</td>
<td>1,041,915</td>
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<td>Côte d’Ivoire</td>
<td>471,064</td>
<td>26,452</td>
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<td>DR Congo</td>
<td>16,796,866</td>
<td>1,151,723</td>
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<td>Eritrea</td>
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<tr>
<td>Guinea</td>
<td>1,305,042</td>
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<td>Great Lakes</td>
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<tr>
<td>Iraq</td>
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<td>Republic of Congo</td>
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<td>Somalia</td>
<td>3,701,455</td>
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<td>Sudan</td>
<td>21,348,604</td>
<td>17,528,176</td>
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<td>Uganda</td>
<td>1,574,100</td>
<td>1,090,936</td>
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<td>West Africa</td>
<td>8,822,640</td>
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<tr>
<td>West Bank and Gaza Strip</td>
<td>4,732,500</td>
<td>646,457</td>
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<td><strong>Total Country/Region Appeals 2005</strong></td>
<td><strong>91,967,445</strong></td>
<td><strong>40,952,893</strong></td>
<td><strong>44.53</strong></td>
</tr>
</tbody>
</table>

### 2005 Flash Appeals: WHO Requirements and Funding Status
(31 December 2005)

<table>
<thead>
<tr>
<th>Country/region</th>
<th>WHO requirements</th>
<th>Cash contributions received in 2005</th>
<th>Average funding per emergency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola Marburg VHF</td>
<td>2,370,000</td>
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<td>South Asia Earthquake</td>
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<td>Niger</td>
<td>1,266,000</td>
<td>613,028</td>
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<tr>
<td>Benin</td>
<td>250,000</td>
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<tr>
<td>South East Asia Tsunami</td>
<td>70,010,220</td>
<td>64,865,716</td>
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<tr>
<td>Djibouti Drought</td>
<td>160,000</td>
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<td>0.0</td>
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<td>Guatemala Floods*</td>
<td>1,770,000</td>
<td>3,216,239</td>
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<tr>
<td>Guyana Floods*</td>
<td>690,000</td>
<td>281,438</td>
<td>40.8</td>
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<tr>
<td><strong>Total Country/Region Appeals 2005</strong></td>
<td><strong>104,266,220</strong></td>
<td><strong>86,328,986</strong></td>
<td><strong>82.80</strong></td>
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</tbody>
</table>

*Appeal launched by the Pan American Health Organization (PAHO)*
The way ahead

Crises and disasters – whether natural or man-made – have a devastating effect on health systems and infrastructures.

Health conditions that are normally easily treated become aggravated or even life-threatening because of the breakdown in health systems. Disabled and elderly people, and patients with chronic illness, are at greatest risk. Children and women, especially when impoverished, are also vulnerable.

WHO faces two main challenges in 2006-2007. The first will be to increase the provision of support to Member States in their efforts to prepare for emergencies.

This will be done through the strengthening of WHO’s key functions in a crisis: (a) conducting needs assessments and analyses; (b) identifying critical gaps and ensuring they are filled; (c) supporting Member States in coordinating action for health and building local capacity; and (d) revitalizing public health functions and building the capacity of health systems for preparedness and response. In addition, WHO will make a critical contribution to the repair, recovery and strengthening of local health systems, linking them with support from outside, reducing vulnerability and promoting equity.

WHO’s second main challenge will be improving its ability to respond promptly and efficiently to major crises. In 2006-2007 WHO will concentrate on building rapid response teams, improving logistics services, stocks and equipment, and developing standard operating procedures to enable rapid response. It will also strengthen its presence in countries in order to assist Member States to prepare for and respond to the health aspects of crises.

To respond to these challenges, WHO will improve partnerships with sister UN agencies and other international partners and nongovernmental organizations to ensure that health is a high priority on the global agenda and that appropriate resources are provided for health action to prepare for and respond to crises.
WHO's work for health action in crises is a result of a collaborative effort involving various technical departments at Headquarters, Regional and Country Offices. In particular this report was made possible thanks to the contributors of the following WHO departments: Department of Gender, Women and Health; Department of Injuries and Violence Prevention; Department of Mental Health and Substance Abuse; Department of Nutrition for Health and Development; Department of Making Pregnancy Safer; Disease Control in Humanitarian Emergencies Programme, Communicable Disease Cluster.