
2.

Injury Prevention¹

Introduction

Recent trends in violent deaths caused by injury, whether accidental or intentional, confirm they now rank high—fifth to third place—in general mortality, and they are a prime cause of years of lost life. Moreover, 10-12% of the global burden of disease is due to injury and violence. Health services are not always prepared and equipped for treatment and prevention, particularly in the case of mass casualty situations and management of health aspects of violence. In addition, family or collective violence, apart from its health aspects, is also a factor of social disruption, which in turn impacts on health. A global strategy has been proposed in WHO's Ninth General Programme of Work (1996-2001) to reduce mortality from unsafe and violent situations by 15% by the year 2001.

Achievements in 1994

SAFECOM demonstration project. Under the coordination of the Department of Social Medicine, Karolinska Institute, Stockholm, Sweden (WHO Collaborating Centre on Community Safety), countries in four regions have adhered to the criteria set to participate in demonstration projects on community safety promotion. Review and assessment of the network was made on the occasion of the WHO-sponsored Third International Conference on Safe Communities (Harstaad, Norway, June 1994), as part of the continuous monitoring and updating of methodologies for risk assessment and programme planning, training and research (*see Box 5*). The Fourth International Conference recently was held in Fort McMurray, Canada, in June 1995. Based on current experience accumulated through the network, and with the technical input of collaborating centres on injury, WHO is now preparing global guidelines for injury control and safety

promotion, including the issue of violence which will be presented at the above-mentioned conference.

Injury surveillance. Policy formulation and assessment in the field of safety remains hampered by weakness or lack of political willingness to set operational surveillance of injury, particularly regarding consecutive morbidity and disability. WHO has set up a special standing working group with a secretariat in the Consumer Safety Institute in Amsterdam (WHO Collaborating Centre for Home and Leisure Accident Prevention), which has made a critical review of existing surveillance systems. The group is now preparing a specific injury classification annexed to the *WHO International Classification of Diseases*. It follows recommendations of a joint WHO/National Centre of Health Statistics international collaborating effort on injury statistics meeting (Bethesda, May 1994). Close coordination is secured with the Division of Epidemiological Surveillance and Health Situation and Trend Assessment (HST) headquarters.

The WHO Initiative for Neurotrauma Prevention and Management, which was launched on the occasion of the WHO Scientific Workshop on Neurotrauma Prevention and Management (Brussels, Belgium, 1993), gave rise during 1994 to four major outcomes: (i) production of a WHO/Centres for Disease Control and Prevention (CDC) protocol for epidemiological assessment of traumatic brain injury, which was reviewed on the occasion of a WHO co-sponsored meeting on neurotrauma organized by the Commonwealth Association for Mental Handicap and Developmental Disabilities (Bangalore, India, 13-16 November 1994), and will be tested first in India and the Caribbean through a multi-centre study; (ii) expansion of the WHO Safety Helmet Initiative, under the leadership of the Emory University School of Public Health, Centre for Injury Control, and production of training and research material; (iii) launching of a WHO Initiative on Spinal Cord Injury Prevention, on the occasion of a joint WHO/International Medical Society of Paraplegia Symposium on Prevention of Spi-

¹ The name of EHA's Injury Prevention (IPR) unit changed in 1995 to Safety, Promotion and Injury Control (SPI).

Box 5. Safe communities

Safe Community

- A cross-sectorial group responsible for accident prevention.
- Involvement of the local community network.
- A program covering all ages, environments and situations.
- Special attention to high risk groups and environments.
- Documentation of the frequency and causes of accidents.
- A planned program running over a long period of time.
- Utilize appropriate indicators to evaluate processes and the effects of change.
- Analyse the community organisation and possibilities for participation in the program.
- Involve the health care organisation both in the registration of injuries and the accident prevention programme.
- Involve all levels of the community in solving the accident problem.
- Spread experiences both nationally and internationally.
- Be prepared to contribute to a strong network of "Safe Communities".



Harstad is the first Safe Community in Norway. In addition we have about ten communities with accident prevention programs similar to the "Safe Community"-idea.

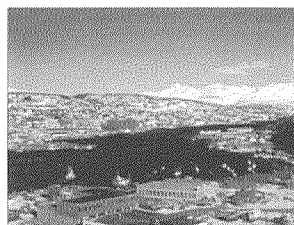
HARSTAD

From
registration
to results

TARGET GROUPS:
Children, youth,
adults and elderly.

ARENAS:
Home, traffic,
recreation, work-
places, schools
and preschools.

CHARACTERISTIC:
The injury registration
program was started in
1985. Harstad has an
intersectorial acting com-
mittee and all levels in the
community organisation
are involved. The



program focus on both
physical changes in the
environment and creating
motivation for accident
prevention.

Harstad is the first Safe
Community in Norway.



Photo: Arvid H. Sørensen



Norwegian Board of Health

nal Cord Injuries (Kobe, Japan, 1994); (iv) preparation of the First World Congress on Brain Injury, which took place in Copenhagen in May 1995, organized jointly with the International Brain Injury Association, when a Global Strategy for Traumatic Brain Injury Prevention and Rehabilitation was endorsed.

Simple guides on burn prevention and management, originated during the WHO co-sponsored First World Conference on Accident and Injury Prevention (Stockholm, 1989), have been produced by WHO and the International Society for Burn Injuries and presented to the ISBI Congress in Paris in June 1994. They have been provided to all regional offices, and further steps concern support to establishment of burn surveillance in countries.

Safety for the Elderly. The Centre of Geriatric Medicine in Toulouse, France (WHO Collaborating Centre for Promotion of Safety for the Elderly), is coordinating a project in this area, which focuses on epidemiology and prevention of falls, as well as environmental issues as they relate to mobility and housing of elderly in an urban environment. Cooperation is being initiated with Spain and Canada (Quebec), and the United States. A WHO protocol on fall prevention is being tested through a multi-centre project in France and in the United States.

Training. Two training courses are being held yearly, one in New Delhi on "Injury control" (WHO Collaborating Centre for Biomedical Engineering, Indian Institute of Technology, New Delhi, India), and the other a travelling seminar on "Community safety programme planning" (WHO Collaborating Centre on Community Safety, Karolinska Institute, Stockholm, Sweden), which in 1994 was held in Norway.

Programme trends

The year 1994 was a transient year for the programme, not only due to a new emphasis on violence or intentional injuries, but also because of an evolving trend to safety promotion, calling for more integrated work with other technical programmes. This new trend is reflected in WHO's Ninth General Programme of Work, which specifically refers to safety promotion and violence prevention for the first time. In addition, the move of the programme to the Division of Emergency and Humanitarian Action provides more opportunities for programme development in the area of safety, while at the same time reappraising the scope of the programme and its modus operandi, which is reflected in WHO's new strategy for emergency and humanitarian action (see Annex 1).

Violence and health. Following World Health Day 1993, which was dedicated to injury and violence, WHO initiated several steps to better define its role and prepare grounds for programmatic development in this area. First, PAHO/WHO passed a resolution on violence and health in October 1993, which was approved by the 37th Meeting of the Directing Council and gave rise to a Regional Plan of Action, which was presented to the PAHO Inter-American Conference on Society, Violence and Health (Washington, D.C., USA, 16-17 November 1994). A declaration was adopted and was submitted for endorsement to a conference of Heads of State of the Region for the Americas.

At WHO headquarters, an inter-programme group was set up, with the secretariat ensured by EHA/IPR which has undertaken an analysis of current WHO headquarters activities related to violence in view of preparing proposals for further coordinated programme development and possibly reporting to a future Executive Board session. It will precede the establishment of a WHO Task Force on Violence and Health, which has been included in the next budget biennium 1996-1997, which will monitor the development of activities in this area through a headquarters partnership programme. Finally, two WHO Collaborating Centres on Violence and Health were designated in Colombia (Universidad del Valle, Cali) and in South Africa (Health Psychology Unit, University of South Africa). The annual IPR WHO collaborating centre meeting (Paris, 27-28 October 1994) also gave special emphasis to the subject of violence within the scope of technical cooperation with WHO, and a special report is under preparation for the next meeting due to take place in October 1995. Four main areas for WHO potential involvement have been sug-

gested: (i) advocacy and health as an instrument for peace and violence mitigation; (ii) development of a public health conceptual basis for violence epidemiology analysis and health contribution to control; (iii) epidemiology and management of delayed effects of mental and physical injuries stemming from collective violence; and (iv) research development and inclusion in a future Advisory Committee on Health Research working agenda.

A joint FHE/IPR² research project is being carried out to collect data on child abuse, on the basis of a *WHO protocol for the study of interpersonal physical abuse of children*.³ WHO is also contributing to the United Nations study on "Impact of armed conflict on children".

Safety promotion and injury control. The concept of safety and crisis management is today approached in a very desegregated way, which has a bearing on ways of its management through, in many instances, uncoordinated sectoral interventions. The health impact of injury, whether intentional or accidental, is now such that it has called for control policies which WHO is supporting in its Member States. The main role of WHO for the future will be to promote the inclusion of safety on health policy agendas and in intersectoral and sectoral development policies, particularly through health impact assessment of injuries and violence and definition of the most appropriate contribution of the health sector to safety promotion, including violence prevention.

Safety promotion goes much beyond injury control, and must be seen as contributing to health in securing basic needs of the population in terms of social stability, protection against environmental hazards, and in respect of physical and mental integrity of individuals. It is therefore a basic component of public and health promotion policies. Such a scope calls for a reappraisal on the role of the health sector and subsequently of WHO itself.

This issue has been thoroughly reviewed on the occasion of a joint WHO/*Comité Français d'Education pour la Santé* (CFES) meeting (Paris, France, 26 October 1994), in which a representative from the Ministry of Québec participated. It was decided to set up a "think tank" of experts, including WHO collaborating centres, to undertake a global analysis of this issue and to prepare action-oriented proposals to be submitted to a tripartite committee WHO/CFES/Ministry of Health, in Paris in October 1995. The proposals, when finalized, following

² Division of Family Health/Division of Emergency and Humanitarian Action (Injury Prevention).

³ WHO/FHE/CHD/94.1

a broad consultation in the main sectors concerned with safety, apart from the health sector, should be issued as a technical WHO document, and would be the basis for further WHO programme development in this field. The objective is also to promote and support the develop-

ment of programmes in French-speaking countries and to set up a network identifying experts and institutions.

(For a list of WHO collaborating centres for injury prevention, see Annex 11.)

3.

Emergency Preparedness and Planning⁴

Support to national programmes

Bangladesh. Bangladesh is a country much prone to disasters because of its geographical position and its high population density. The population is about 110 million with a high growth rate of 2.2%, literacy levels are low, poverty is endemic and infrastructure is poorly developed. Repeated damage from storms and floods has significantly and severely hindered the development process in Bangladesh, despite a generous response from donors to fund development programmes over the years.

The incidence of diseases associated with poverty is high in Bangladesh. After the cyclone in 1991, loss of life, loss of income, family disruption, displacement, crowding, inadequate sanitation and lack of safe water, further exacerbated these problems.

In an effort to address some of these problems, it has been agreed, in principle, with the Ministry of Health and Family Welfare of Bangladesh to assist the country to establish a national centre for emergency preparedness and response. This agreement was reached in October 1994, when the Director EHA visited Bangladesh at the invitation of the Minister of Health. Planning is now going ahead and the Director EHA will return in early 1995, once the nature and function of the centre has been agreed upon by both parties to formally launch the project.

The project, while being developed specifically for the health sector, will complement ongoing initiatives in other sectors, at national level to improve the level of emergency preparedness and emergency management in the country, thus reducing the impact of disasters on the population.

Hedip

Background. The Health and Development for Displaced Populations programme (Hedip) was initiated in 1991 as a WHO contribution to the process of developing an

“organic” United Nations strategy for humanitarian assistance in situations where armed conflict provoked mass population displacement. The programme was promoted and managed by the Emergency Preparedness and Planning (EPP) unit of WHO/EHA and financially supported by the Italian Government.⁵ In addition, technical collaboration in the design and implementation of Hedip was provided by the WHO Collaborating Centre for Emergency Preparedness and Management in Rome, Italy.

Objectives. The main objective of Hedip was to contribute to development of national and international strategies in health and social sectors in order to address the growing problem of reintegration and reconciliation of displaced populations into the community.

It also wanted to research possible solutions to some of the major constraints facing international assistance programmes by: facilitating effective local coordination and intersectoral actions; bridging the gap between relief assistance and long-term sustainable development; providing assistance to benefit the entire community rather than a specific group of beneficiaries; and utilizing humanitarian action in the health and health-related sectors to facilitate the process of reconciliation at community level.

Methodology. Hedip was designed as an “action research study”. This implied a learning-by-doing approach. An important aspect of Hedip was that it was “qualitative” in orientation. Although this aspect was fundamental to its strategy, it proved extremely difficult to quantify its results. Another aspect was that it was policy-oriented. Results were documented and studied with the aim of identifying other aspects, which could be usefully applied in other contexts and which could become the basis for general policy development.

⁴ The name of EHA's Emergency Preparedness and Planning (EPP) unit changed in 1995 to Emergency Preparedness (EPR).

⁵ The Hedip programme ceased as of 5 April 1995.

Local strategies. Three key strategies that the Hedip programme applied and attempted to develop in each project area were: decentralization, participation and inter-institutional collaboration.

Hedip was implemented in selected countries through a number of "specific interventions" at local level. These were carried out in Mozambique (Milange district, Zambezia province), Sri Lanka (Colombo municipality), and Croatia (Split municipality). The plan was to work in a well-defined geographical area, small enough to permit community participation and large enough to implement agreed-upon activities to promote integrated area development.

Hedip activities in 1994. Two further issues of Hedip's newsletter — *Hedip Forum* — were published, one which focused on the relationship between emergencies and sustainable development, and the other, prepared as a WHO contribution to the World Summit on Social Development, focused on health and social development.

In 1993-1994 Hedip activities at country level (Croatia, Mozambique and Sri Lanka) included the following:

- **Croatia.** Hedip continued to provide support in the planning of an integrated municipal programme for youth, including a youth information centre. This included training activities for teachers in health and social problems affecting youth. Hedip supported job training activities both for residents of Split and for displaced persons living in the municipality. Support to job placement through market research was also supported with collaboration from the Labour Commission.

Hedip carried out numerous cultural and recreational activities with various population groups living in the municipality through support to local youth nongovernmental organizations who were active in solidarity action.

An important contribution was offered by the municipality of Modena, Italy, which allowed Hedip to organize a number of exchanges between the local Hedip committee in Split and a local committee in Modena. Through a continuous joint planning process, the committees agreed upon a plan of action, which was realized thanks to technical and financial support from Modena. The two committees formally instituted a nongovernmental organization called "MOST" to guarantee the sustainability of their efforts, even after the termination of the pilot project experience.

- **Mozambique.** At district level, the project supported the development of the district health plan. A number of health posts were reopened and upgraded and were

staffed by nurses or community health staff. Regular monthly meetings with district health personnel for planning and assessing activities were held. Clinical and organizational aspects were also included. Health services, including vaccinations and out-patient care, were extended to areas where there had previously been none. Hedip also provided technical support to the district health director in coordinating the activities of international organizations involved in the health sector.

Apart from the health sector, the project also worked with the local committee to identify other non-health problems in the district. Collaboration with UNDP and UNICEF regarding problems of rural development and education was established. These activities, however, were not implemented because the future of Hedip then had yet to be decided.

The project also helped to promote local processes of reconciliation. A representative of *Resistencia Nacional Mozambicana* (RENAMO) and of the district government, as well as other representatives were members of the local planning committee. Health services, such as vaccination campaigns, were extended into Renamo-controlled areas and were carried out jointly by district health staff and Renamo volunteers. These latter also benefited from joint training activities that fostered an atmosphere of trust and collaboration. Strategic decisions, such as the placement of health centres, were made with the criteria of equity of access for all groups residing in the district.

- **Sri Lanka.** Hedip supported the joint inter-institutional planning process, which expanded to include other international and nongovernmental organizations. Hedip supported community development activities in the shanty towns of Colombo municipality and initiated activities of training primary health workers to sensitize them to psycho-social problems in their communities.

In Colombo, emphasis was placed on primary health care activities and on community action for environmental sanitation, including the construction of latrines for families, implemented in collaboration with Italian Cooperation. In collaboration with the University of Colombo, Hedip supported the training of primary health workers in basic techniques for mental health and appropriate referral systems, as well as educational and literacy activities from day-care to adult literacy and vocational training. These and regularly organized recreational activities were held at the community centre, which was rehabilitated with support from Italian Cooperation.

An important need that emerged through the Hedip process was that of poor, illiterate families unable to get

access to schools or social services because they did not possess the necessary legal documents. Through local nongovernmental organizations and public officials, a regular service was created to assist families in procuring these documents.

Hedip evaluation. During 1994, a local social researcher worked in each Hedip project area in the countries listed above to document social processes related to the programme's activities. Also, a joint decision was made in 1994 by the donor (Italian Government) and the Director EHA to carry out a detailed evaluation of the Hedip programme, with a view to documenting "lessons learned". For this purpose, the EPP unit requested the collaboration of the United Nations Research Institute for Social Development (UNRISD).

The first evaluation mission carried out by UNRISD took place in Mozambique from 23 January 1995 to 2 February 1995, and missions to Sri Lanka and Croatia were completed by the end of February 1995.

The final evaluation review meeting on Hedip was held at headquarters on 5 April 1995, where and when it was officially decided to end the programme; a final Hedip evaluation report was subsequently produced.

Support to emergency relief operations

Immediately following a natural disaster, the international community frequently donates large amounts of medical and relief supplies. Only a small proportion of these donations are actually a response to a specific request from the country concerned. The bulk of the items delivered are of questionable value in meeting immediate humanitarian needs and in appropriateness for the type and scale of the event.

Such donations generate complex logistical problems for the country affected by a disaster, as well as considerable cost in storage, transport and distribution, and disposal of inappropriate, unsafe and unnecessary items. As a result, delays in the distribution of what is really needed are compounded.

WHO has recognized this problem and proposes to address it at several levels. In times of crisis, national authorities should be able to tell the international community, quickly and accurately, which basic relief items are appropriate and needed for the particular problem at hand, and in what quantity. This means countries and their organizations having predetermined standardized lists of acceptable items for relief purposes. These lists can be made available to donors and relief agencies in advance, as well as used as the basis for forming emer-

gency stockpiles and buffer stocks. To complement these lists and stocks, management tools are needed for the rapid assessment of quantities needed and to determine the most efficient means of distribution.

Three programmes are being developed to meet this need: (i) WHO is participating in an interagency process to standardize all relief items and is the lead agency for the health sector; (ii) the WHO Regional Office for the Americas (AMRO) has developed supply management software called SUMA, which will be expanded for global use; and (iii) protocols for the standardized rapid assessment of health needs in emergencies are being finalized for publication.

Standardization of relief items

General relief items. A number of United Nations and nongovernmental organizations are participating in a process led by the Interagency Procurement Services Office (IAPSO), a United Nations agency based in Copenhagen which is mandated to procure equipment and services for the United Nations system. The agency is standardizing the specifications of items commonly procured by the United Nations system. As an extension of this process, they have initiated a large interagency consultation process to standardize relief items needed during the first 72 hours after an emergency.

All participating agencies have agreed to conform to the standards that will be finally determined by this consultation process. Once the process is complete, IAPSO will be responsible for maintaining an interagency dialogue and for keeping lists of items up to date.

The overall aim is to identify the most essential and commonly used relief items and then to produce standardized specifications for them. This will improve compatibility between the relief activities of major agencies and also reduce costs, as appropriate items will be purchased in greater bulk. A second objective is to identify suppliers and manufacturers whose material matches the agreed specifications.

In 1994, discussions were held on food items, shelter materials, communications equipment, and transport. WHO participated actively in these meetings and, represented by the EHA Division and the Division of Operational Support in Environmental Health (EOS), hosted the sessions on water and sanitation equipment.

An additional benefit of this process will be to identify items for inclusion in emergency stockpiling, and to establish regional databases so that variations in regional and national standards can be accommodated. Regional

manufacturers and suppliers can be identified. Procurement through regional suppliers will not only reduce purchase and transportation costs, but will also reduce delivery time.

Health sector relief items. The most complex part of the standardization process is that related to the health sector. One of the most well-known items used in relief situations is the *New Emergency Health Kit*, which was developed by WHO in partnership with other agencies. The kit has been widely used for the last five years and has been much appreciated.

However, many relief agencies have since developed different kits. This has been as a result of the kind of emergencies that have occurred over the past several years. The New Emergency Health Kit was designed for warm climate developing countries. However, the international community has been operating under a broad range of climatic conditions and levels of development. There appears to be a need to standardize other kits.

WHO has begun this process and will include the results in the IAPSO project. A working group of six key agencies has been formed to manage the process and a WHO consultant has been hired to work with them. It is expected to take at least one year to complete the task. Consultations will be made with all leading agencies in health sector response, as well as WHO technical divisions and regional offices.

It is hoped that the output will be a list of recommended relief items for the health sector, with their technical specifications, from which agencies can then use to construct their kits as and when necessary. WHO recognizes that the agreement of such lists will be only the first step. It is hoped that a permanent interagency technical working group will be established, to review the lists on a regular and formal basis, and to ensure that the ongoing experience of relief agencies in the field is reflected in international guidelines and manuals.

SUMA. The WHO Regional Office for the Americas (AMRO) has collaborated with the Red Cross Society of Colombia to develop a software program for tracking supplies used during emergencies known as SUMA (Medical Supply Management in the Aftermath of Disasters in Latin America and the Caribbean). Work began in 1991 and it has now been extensively and successfully field tested in the Region for the Americas. It has been agreed with AMRO to develop this work on a global basis and to make the software generally available.

The aim of the software is to support national authorities in supply management, to be used at the port of entry (SUMA terminal software) and at the site where the

emergency is being managed (SUMA central software). In making the program more useful at a global level, two consultants have been employed by EPP, one of whom is the original developer of the software, to go to Bangladesh for two months to adapt the program to local conditions and needs and to train a group of Bangladeshis in its use. This was completed in December 1994 and will be evaluated in mid-1995, on conclusion of the cyclone season.

At the same time, the WHO Regional Office for Europe tested the program with an Italian nongovernmental organization partner in Bosnia and Herzegovina. A workshop will be held in 1995 to discuss the experiences and recommendations of the various experts who have worked with the program and a plan of action will be drawn up to prepare the software for wider dissemination. (*For more information on SUMA, see Chapter 1, "Region of the Americas".*)

Rapid assessment protocols. An additional requirement in emergency management is for standardized approaches to the assessment of needs in the health sector. In 1991, WHO worked with three WHO collaborating centres in emergencies — the Centre for Research on the Epidemiology of Disasters (CRED), Brussels, Belgium; Centres for Disease Control (CDC), Atlanta, Georgia, USA; and the National Public Health Institute, Department of Environmental Hygiene and Toxicology (FINNPREP), Kuopio, Finland — to prepare such guidelines for making rapid health assessments. The drafts have been used in emergency situations and the experiences of those who used them have been collated. The WHO collaborating centre, CDC, is finalizing the drafts for publication, which WHO expects to publish in 1995.

Modules include: (i) introduction to rapid health assessment; and guidelines for (ii) epidemics; (iii) outbreaks of meningitis; (iv) outbreaks of viral haemorrhagic fever; (v) outbreaks of acute diarrhoeal disease; (vi) sudden impact natural disasters; (vii) sudden population displacements; (viii) famines; and (ix) chemical accidents. (A new module on assessing the health needs in complex emergencies is being developed and will be included in the final publication).

IDNDR

WHO participated in the World Conference on Natural Disaster Reduction (Yokohama, Japan, 23-27 May 1994). The conference served as the mid-term review of the International Decade for Natural Disaster Reduction (IDNDR), an international campaign to reduce the im-

pact of natural disasters. The meeting provided an opportunity to address the prevention and preparedness aspects of emergency management in a major international forum.

For WHO, the conference provided the opportunity to present its views to national delegates and international policy-makers. In an era of donor fatigue and media saturation due to the rise in complex emergency situations, WHO has maintained that responsible emergency management strategies cannot be based on emergency relief alone. The conference was compatible with WHO's position on emergency management: it addressed issues of both development and humanitarian action, and took a multi-disciplinary approach, touching upon environment, population, social development and other issues. This differed from most international forums dealing with emergency management, which usually focus on one specific aspect only (e.g., nutrition or human rights) and often are relief-oriented, which reflects the dominant approach to emergency management today.

For these reasons, WHO devoted considerable resources to the organization of the conference. The EPP unit at headquarters organized one of the conference's "main committee" sessions on the subject of "How the public sector, private sector and voluntary organizations can work together", and published a document on the proceedings of the session.

The WHO Regional Office for the Americas (AMRO/PED) organized two of the conference's "main committee" sessions on regional reports (on the Americas and on Africa), and produced a publication highlighting the state of emergency preparedness in Latin America. In addition, it organized an exhibit, as did WHO/HQ, and participated in poster sessions of the conference.

WHO's Pan-African Centre for Emergency Preparedness and Response, in Addis Ababa, Ethiopia (now known as the WHO Pan-African Training Centre), provided technical, logistical and staff support to conduct research and organize meetings that led to the adoption of a "Common African Position on Emergency Management" at the Organization for African Unity (OAU) meeting of environmental ministers in the months preceding the conference.

Leading up to the conference, WHO conducted a one-year series of advocacy and promotional mailings to WHO programmes, regional offices, WHO representatives, collaborating centres and nongovernmental organizations dealing with health emergency management. These mailings contained advocacy briefs produced by EPP, such as "Disaster management: an opportunity for

change?", conference announcements, and reports on conference developments of interest to the health sector.

WHO is following up the Yokohama conference by endeavouring to implement the Yokohama Strategy and Plan of Action in the health sector. Here, WHO headquarters and its regional offices must continue to play a major role in advocacy, networking and institutionalization of emergency preparedness within development programmes. In the health sector, as in many others, there is still too little public information, proper training curricula, workable preparedness plans, standardized supplies and documented case studies on the cost-effectiveness of health sector emergency preparedness, post-disaster epidemiological research, etc. The network of health professionals with an interest in emergency management needs to be documented, as it is broad and cuts across several disciplines. An exchange of information needs to be facilitated among the vast number of health professionals with relevant expertise, if the health sector expects to be an efficient partner at national and international level in emergency situations.

Publications

Community emergency preparedness manual. The main focus of the work of WHO is in communities, and the main objective of that work is the delivery of primary health care as a key component of a national programme of sustainable development. Many publications have been produced by WHO over the years to address many aspects of the community and its needs in health care. One gap that has yet to be filled concerns the needs of the community in the area of emergency preparedness. This gap is now being addressed. WHO, acting as lead agency for a group that includes the International Federation of Red Cross and Red Crescent Societies (IFRC) and the International Civil Defense Organization (ICDO), is preparing a joint publication, entitled the "Community Emergency Preparedness Manual". This manual aims to give community-level health-care managers and their partners guidance on how to involve the community and its resources in emergency management. Each of the partners in this exercise is producing modules that will appear in the final publication, which will include subject areas such as planning for emergencies, first aid, search and rescue, epidemiology, triage, care of the injured, as well as general aspects of emergency preparedness as part of development planning. Arrangements are being made to finalize the drafts and to publish the manual in early 1996.

Management of nutritional emergencies in large populations. This draft manual, which will be a joint publication of WHO, IFRC and UNHCR, continued to undergo revision in 1994. The issue of minimum calorie requirements in nutritional emergencies has engendered considerable debate among relevant United Nations and nongovernmental organizations. Publication of the manual has been delayed due to this issue. However, these organizations have agreed to adopt new figures, by adjusting the minimum calorie requirement figure on a country by country basis. Work should be completed by early 1995.

Environmental health in emergencies. Another draft manual, also a joint publication of WHO, UNHCR and IFRC, is being finalized. The text has been prepared by the Editor (Dr B. Wisner), with support from the steering committee of representatives from the agencies concerned. The text departs from past publications on the subject because it addresses issues such as the emergency management cycle and its relevance to professionals dealing with environmental health issues, vulnerability reduction, preparedness planning, training, in addition to technical issues related to water and sanitation mea-

sures to be taken in times of disaster. The steering committee is reviewing and revising the final draft, and is expected to complete its work by June 1995.

(For more information on emergency-related publications and documents, see Chapter 5, "Pan African Centre for Emergency Preparedness and Response" and Annex 10 "Selected Bibliography".)

Training activities

In 1994, preparations for a one-month "International Diploma Course in Emergency Preparedness and Crisis Management" were completed. The course is aimed at national emergency preparedness managers and technicians and was designed jointly by WHO, ICDO, selected universities and WHO collaborating centres. The pilot session of the course will take place from 5-30 June 1995.

(For training activities in Africa, see Chapter 5, "Pan-African Centre for Emergency Preparedness and Response".)

4.

Emergency Information System

In response to World Health Assembly resolution WHA46.6 (1993), which states that WHO must strengthen its "capacity for early warning of disasters in general, and disease epidemics in particular, complementing the early warning mechanisms put in place by the United Nations system", EHA is planning to develop in cooperation with the concerned divisions and units an emergency information system with an epidemiological early warning component to help in dealing with the increasing worldwide need for WHO humanitarian assistance.

Considerable information sources already exist at international, headquarters, regional and country levels which can be utilized in support of a WHO early warning system. Basically, the information needed for EHA to perform these tasks relates to: (a) natural and man-made disasters and (b) actual and possible disease outbreaks.

While WHO does not have, at present, a specific "humanitarian assistance" information system or database, it does operate a number of *specific health-related information systems and databases*, such as the: (1) Global Health Situation and Projections Estimates; (2) WHO Registration of Infectious Diseases; (3) Malaria Information; (4) EPI Information System; (5) AIDS Reporting; (6) Health-for-All Indicators; (7) Food and Nutrition Indicators.

In addition, a project proposal was finalized by WHO/EHA in 1994 to develop an Epidemiological Early Warning System (EEWS). However, realization of this project will be subject to donor secondment (CDC) and funding.

The potential of linking the already existing and operating systems mentioned above with other agencies is very good, especially those that are already connected to Internet (i.e., numbers 2, 3, 4, 5 above).

WHO is also connected to *the World Wide Web (WWW) Server and the Gopher Server*, the purpose of which is to provide public information on the global health situation. Information available on WHO WWW and Gopher includes the following subject areas:

(1) Diarrhoeal and Acute Respiratory Diseases; (2) Communicable Diseases; (3) Essential Drugs; (4) Food and Nutrition; (5) Global Programme on AIDS; (6) Vaccines; (7) Library and Health Literature Services; (8) Human Resources for Health; (9) Human Reproduction; (10) WHOSIS (WHO Statistical Information System); (11) Office of Information; (12) Noncommunicable Diseases; (13) Chemical Safety; (14) Environmental Health; (15) Health Economics; (16) Tropical Diseases; (17) Technical Terminology; and (18) Tuberculosis.

In addition, WHO has been following closely the Consultations on Early Warning of New Flows of Refugees and Displaced Persons, chaired by DHA. DHA is in the process of developing its own Humanitarian Early Warning System (HEWS). The consultations are an inter-agency mechanism convened to help promote actions which could alleviate the possible causes of flight and to help ensure that adequate and timely relief assistance is provided if a new flow occurs. HEWS, which compiles and assesses information from a variety of sources, including from DHA's humanitarian partners within the United Nations system, feeds into this mechanism as a key information source and a provider of early warning assessments. In this context, WHO/EHA is currently developing a set of "health indicators" for use in HEWS. These assessments, combined with the submissions of other participating agencies and offices, become the basis for discussion at the Administrative Committee on Coordination (ACC) consultations. One of the outcomes of the Consultations on Early Warning of New Flows of Refugees and Displaced Persons has been the production of an *Indicative summary of international early warning, alert and related information systems, projects and programmes*, listing early warning systems of various agencies according to major topic area.

WHO has also been collaborating closely with DHA, whose responsibility it is to develop the "ReliefNet" proposal initially set up by U.S. nongovernmental organizations.

Examples of good cooperation on information flows and information systems include the UNHCR and FAO. Both agencies regularly supply member agencies of the Consultations on Early Warning with country and regional information related to their (UNHCR and FAO) specific mandates. (UNHCR has offered any interested Member agency of the Consultations on Early Warning

direct access to their recently developed country information database on population displacement, which is now on Internet (as of December 1994). Also, FAO regularly distributes to member agencies of the Consultation on Early Warning its monthly report of Global Information and Early Warning Service (GIEWS), related to country/regional food and agriculture situation.