Chapter 1
Leading and responding


The origins of WHO

Public health beyond national borders was considered in 1851 at an international sanitary conference held in Paris. Five of the 12 participating countries signed an international sanitary convention to which was annexed the text of international sanitary regulations. After a succession of international sanitary conferences, 12 States signed the Rome Agreement in 1907, which provided for the setting up in Paris of an international office of public hygiene (Office international d’hygiène publique – OIHP). Its function was to provide general information to participating countries on public health, especially infectious diseases, while retaining a diplomatic orientation (as illustrated by the majority decision against restricting its directorship to a physician). Progress was made on control of the main infectious diseases, including yellow fever, cholera, malaria and tuberculosis. Activities also covered food safety, hospital building and administration, school health, industrial hygiene, and from 1909, biological standardization. Landmarks in international health are given in Box 1.

When the League of Nations was formed, there was a proposal to transform the OIHP into the health organ of the League, but this never happened. The Health Organization of the League of Nations thus existed independently in Geneva. The OIHP’s publications included a weekly epidemiological bulletin which was eventually incorporated in the Weekly epidemiological record of the League of Nations (now published by WHO). It was not until after the Second World War that the functions of both bodies were combined to form a new organization able to deal with large epidemics through a coordinated international effort. Meanwhile several regional sanitary bodies were set up, including a sanitary council in Egypt, and an international sanitary office in the Americas, which became the Pan American Sanitary Bureau in 1923 (concerned mainly with combating yellow fever).

In 1945, a United Nations conference was held in San Francisco to consider the possibility of setting up an international health organization. The health of all peoples was considered to be fundamental to the attainment of peace and security in the world. In 1946, a preparatory technical commission was instituted, comprising not representatives of States but experts selected on the basis of their technical competence. This commission proposed the name “World Health Organization” and suggested that the organization should be run by three bodies: a World Health Assembly, an Executive Board and a Secretariat (Box 2).

The International Health Conference, the first international conference to be held under the aegis of the United Nations, took place in 1946 in New York. The 51 Member States of the United Nations were represented, as well as 13 non-members and various specialized agencies and
nongovernmental organizations. Within four and a half weeks, the conference drafted the Constitution, as well as a protocol that brought the Rome Agreement to an end and transferred OIHP’s duties and responsibilities to the new organization. The Constitution expressed clearly the principles that were to govern the new organization and went a long way towards fulfilling the wishes of those who favoured the creation of a single body for world health matters.

One recurrent theme in all international discussions, that of non-intervention in internal affairs of States, played an important part at the conference. WHO was requested to act as the directing and coordinating authority on international health work, but its assistance to governments was to be subject to those governments’ request or acceptance. The World Health Assembly was given authority to adopt regulations concerning certain technical matters. This was tantamount to investing it with legislative powers, a measure allowing governments to accept international sanitary arrangements simultaneously and with minimum delay.

It was agreed that the organization should be open to all States without exception. No provision was made for expelling a Member State, only to suspend the voting rights of those who fail to meet their financial obligations.

**WHO’s first 30 years**

On 7 April 1948, the Constitution was accepted by the required number of Member States of the United Nations (26). There were 48 Members by the opening of the First World Health Assembly and 55 when it closed a month later. Many more Members subsequently joined the Organization, bringing the total to 191 as of 1 January 1998 (Table 1 and Annex 1).
The First World Health Assembly was held in Geneva, at the Palais des Nations, on 24 June 1948. One of its tasks was to elect the first Director-General, Dr Brock Chisholm, who remained in office until 1953. Current health problems were divided into six groups according to priority: malaria, maternal and child health, tuberculosis, venereal diseases, nutrition and sanitation; public health administration; parasitic diseases; viral diseases; mental health; and various other activities. It soon appeared that this classification did not correspond to the extreme diversity of national health needs. It was therefore replaced later by a more flexible method, better suited to the real needs of Member States and to their requests for assistance, which allowed the stage of development and the problems of each country to be taken into account.

The decentralization of activities was one of the most tricky problems facing the First World Health Assembly, which had to decide how many regions should be created, which countries they should include, how soon the regional organizations should be instituted, and what financial arrangements should be made. The Assembly suggested that the following factors should be taken into account.
account: the health level of the countries to be included; the possible existence in those countries of a permanent epidemic focus; the extent to which those countries had managed to overcome the health consequences of war; the efficiency of their health administration; and their capacity to resolve their problems.

Finally the six WHO regions (Africa, the Americas, Eastern Mediterranean, Europe, South-East Asia, Western Pacific) were established. The Assembly’s decision concerning Europe was limited to the setting-up of a temporary office to deal with the health rehabilitation of war-devastated countries. In the Eastern Mediterranean area, it was decided to integrate with WHO the existing Maritime and Quarantine Sanitary Council of Egypt located in Alexandria. An agreement was concluded with the Pan American Sanitary Organization: the Pan American Sanitary Bureau in Washington, DC, was to assume, in addition to its former functions, the new role of WHO Regional Office for the Americas. For further details, see Chapter 6.

Between 1949 and 1952, a certain number of transfers took place between the regions. In 1953, the World Health Assembly reaffirmed the principles that had prompted regionalization, found that they had been justified in practice, requested the Executive Board periodically to review and report on regionalization, and requested the Director-General to provide the regional offices with guidance and assistance, to ensure that they conformed with the principles and policies established by the governing bodies. The World Health Assembly recommended the interchange of staff among regions and between headquarters and regions. The Executive Board felt that there should be no rigid allocation of functions between the central and regional offices, and it was also opposed to the decentralization of certain functions which in its opinion could only be efficiently discharged centrally. In 1953, the Executive Board carried out a full-scale organizational study of the regional structure. Its report gave a complete functional description for a composite or model regional office. One of the main purposes of regional offices was to provide effective contact between WHO and national governments. To meet their many requests for advice, regional advisers were attached to regional offices.

The working methods of WHO which were established in the early years are generally still in use today. To meet a request from a country, the regional director would consult with the national authorities to determine the form of international assistance to be supplied. On the basis of the requests received, the regional programme was planned, examining the various projects with regard to their conformity with policy guidelines and their suitability for inclusion in a coordinated plan of development for the region and country in question. For specific projects, the Organization would recruit and brief a suitable expert or team. The regional office ensured liaison and cooperation with the national counterparts and local services. International staff were assigned to assist the government, not to control the project, the course of which was determined by the local needs, environment and epidemiological conditions. Once the international staff were withdrawn, the local services applied, extended and continued the work, which became an integral part of the national health services.

Technical and scientific meetings were used to give authoritative technical direction to the policies and programmes of WHO, to pool and exchange information, to suggest
Table 1. Members and Associate Members of WHO

<table>
<thead>
<tr>
<th>Year</th>
<th>Members and Associate Members</th>
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<tbody>
<tr>
<td>1946</td>
<td>Canada, China, Iran (Islamic Republic of), New Zealand, Syrian Arab Republic, United Kingdom of Great Britain and Northern Ireland</td>
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<tr>
<td>1947</td>
<td>Albania, Austria, Egypt, Ethiopia, Finland, Haiti, Iraq, Ireland, Italy, Jordan, Liberia, Netherlands, Norway, Saudi Arabia, South Africa, Sweden, Switzerland, Thailand, Yugoslavia</td>
</tr>
<tr>
<td>1948</td>
<td>Afghanistan, Argentina, Australia, Belarus, Belgium, Brazil, Bulgaria, Chile, Denmark, Dominican Republic, El Salvador, France, Greece, Hungary, Iceland, India, Mexico, Monaco, Myanmar, Pakistan, Philippines, Poland, Portugal, Romania, Russian Federation, Sri Lanka, Turkey, Ukraine, United States of America, Venezuela</td>
</tr>
<tr>
<td>1949</td>
<td>Bolivia, Costa Rica, Ecuador, Guatemala, Honduras, Israel, Lebanon, Luxembourg, Paraguay, Peru, Republic of Korea, Uruguay</td>
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<tr>
<td>1950</td>
<td>Cambodia, Cuba, Indonesia, Lao People’s Democratic Republic, Nicaragua, Viet Nam</td>
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<tr>
<td>1951</td>
<td>Germany, Japan, Panama, Spain</td>
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<tr>
<td>1952</td>
<td>Libyan Arab Jamahiriya</td>
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<tr>
<td>1953</td>
<td>Nepal, Yemen</td>
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<tr>
<td>1956</td>
<td>Morocco, Sudan, Tunisia</td>
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<tr>
<td>1957</td>
<td>Ghana</td>
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<tr>
<td>1958</td>
<td>Malaysia</td>
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<tr>
<td>1959</td>
<td>Colombia, Guinea</td>
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<tr>
<td>1960</td>
<td>Benin, Burkina Faso, Cameroon, Central African Republic, Congo, Côte d’Ivoire, Gabon, Kuwait, Mali, Niger, Nigeria, Senegal, Togo</td>
</tr>
<tr>
<td>1961</td>
<td>Chad, Cyprus, Democratic Republic of the Congo, Madagascar, Mauritania, Sierra Leone, Somalia</td>
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<tr>
<td>1962</td>
<td>Algeria, Burundi, Mongolia, Rwanda, Samoa, United Republic of Tanzania</td>
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<td>1963</td>
<td>Jamaica, Trinidad and Tobago, Uganda</td>
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<tr>
<td>1964</td>
<td>Kenya</td>
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<tr>
<td>1965</td>
<td>Malawi, Maldives, Malta, Zambia</td>
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<tr>
<td>1966</td>
<td>Guyana, Singapore</td>
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<tr>
<td>1967</td>
<td>Barbados, Lesotho</td>
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<td>1968</td>
<td>Mauritius</td>
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<tr>
<td>1971</td>
<td>Bahamas, Grenada, Guinea-Bissau</td>
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<tr>
<td>1972</td>
<td>Bangladesh, Fiji, Qatar, United Arab Emirates</td>
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<tr>
<td>1973</td>
<td>Democratic People’s Republic of Korea, Swaziland</td>
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<tr>
<td>1974</td>
<td>Angola, Cape Verde, Papua New Guinea, Sao Tome and Principe, Suriname</td>
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<td>1975</td>
<td>Djibouti</td>
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<tr>
<td>1979</td>
<td>Seychelles</td>
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<td>1980</td>
<td>Equatorial Guinea, Saint Lucia, San Marino, Zimbabwe</td>
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<td>1981</td>
<td>Dominica</td>
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<td>1982</td>
<td>Bhutan</td>
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<td>1983</td>
<td>Saint Vincent and the Grenadines, Solomon Islands, Vanuatu</td>
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<tr>
<td>1984</td>
<td>Antigua and Barbuda, Cook Islands, Kiribati, Saint Kitts and Nevis</td>
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<tr>
<td>1985</td>
<td>Brunei Darussalam</td>
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<tr>
<td>1990</td>
<td>Belize, Namibia</td>
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<tr>
<td>1991</td>
<td>Latvia, Lithuania, Marshall Islands, Micronesia (Federated States of), Tokelau</td>
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<tr>
<td>1992</td>
<td>Armenia, Azerbaijan, Bosnia and Herzegovina, Croatia, Georgia, Kazakhstan, Kyrgyzstan, Puerto Rico, Republic of Moldova, Slovenia, Tajikistan, Turkmenistan, Uzbekistan</td>
</tr>
<tr>
<td>1993</td>
<td>Czech Republic, Eritrea, Estonia, Slovakia, The Former Yugoslav Republic of Macedonia, Tuvalu</td>
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<tr>
<td>1994</td>
<td>Nauru, Niue</td>
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<tr>
<td>1995</td>
<td>Palau</td>
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<tr>
<td>1997</td>
<td>Andorra</td>
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* Listed according to the year on which they became a party to the Constitution or the year of admission to associate membership.

* Associate Member.
For many purposes, WHO has directly approached country medical services and individuals in every part of the world.sciences, and health administrators in fields of interest to WHO. Their views and recommendations, contained in the reports of expert committees or expressed by panel members individually, are used by the Executive Board and Secretariat in preparing WHO programmes.

For many purposes, WHO has directly approached country medical services and individuals in every part of the world. The Organization has set up formal laboratory networks for reference and exchange of information on various subjects, and for coordinated programmes of research. Those for influenza and poliovirus research and for biological standardization are among the best known. The system covers most fields of health and medicine. This association is often based on formal agreements between individual countries and WHO. WHO’s assistance also consists in facilitating an exchange of workers, or in providing essential technical supplies. The cooperation of nongovernmental organizations (NGOs), in addition to governmental ones, has been most valuable for obtaining information and ensuring the wide application of any necessary development or investigation. NGOs have supplied technical data, made known the objectives of the Organization, joined in various programmes and assisted in developing interest in international health work.

In order to increase knowledge, a direct or indirect objective in most WHO programmes, WHO has systematically used existing national centres and institutions whose services are made available by the responsible national authorities. Various types of activities are undertaken: general or special surveys of existing conditions; inquiries into a particular problem by a number of investigators in the laboratory, the hospital or the field; analyses of existing circumstances to guide further research; and coordination of such activities in an international health programme. A natural adjunct to providing general technical services for all countries and direct services to individual countries has been the use of international publications. From the outset, WHO found it necessary and desirable to continue and expand the international publications programme that it had taken over from its predecessors.

Whereas WHO’s first Director-General had overseen the establishment of the new Organization, Dr Marcolino Gomes Candau, who was elected in 1953 and served until 1973, made his mark in the application and extension of the principles enunciated in the Constitution to the real-life situations prevailing worldwide.

During the 1960s, cholera, plague and yellow fever persisted and remained potentially dangerous. In addition, new diseases or syndromes appeared (e.g. mosquito-borne haemorrhagic fever). Mass campaigns and the development of new methods limited the extent of malaria, yaws, poliomyelitis, yellow fever, tuberculosis and typhus. In the field of virus diseases, new vaccines – such as measles and freeze-dried smallpox vaccines – brought new hope for the future. There were considerable developments in chemotherapy and chemoprophylaxis.

The 1970s witnessed the beginning of a new awareness of the rights, status, and role of women which re-
sulted in greater independence for women and their increased participation in all aspects of economic, political and social life. However, there was still much to be done to achieve sex equality in most countries. The increasing involvement of women in economic life influenced, in turn, the family lifestyle. The demand for daycare services, preschool care and education facilities increased, and this period saw the emergence of a new type of family and new types of relationship between men and women and between parents and children.

Considerable emphasis was placed on the evaluation of developmental progress in general and social progress in particular, and there was a shift towards the measurement of social development and changes in well-being by non-monetary indicators and away from excessive reliance on such indicators as per capita gross national product. Ways of measuring the impact of health action on the improvement of health status were given increasing priority. Among health status indicators, life expectancy and infant mortality were often selected with other social indicators for the construction of composite indices of social progress. Long delays in data processing which affected the timeliness of information, and the lack of coordination between the health administration and other sectors, limited the usefulness of health-related socioeconomic statistics. There were often no national or international guidelines or standards on data collection procedures, classification schemes and coding rules, with the result that statistics were heterogeneous and incompatible, data on health expenditure being one example.

WHO’s third Director-General, Dr Halfdan Mahler, took over in 1973 at a time of profound changes in international political and economic relationships. His mandate (until 1988) encompassed the next significant phase for the Organization, typified by a new awareness of health as an essential part of human development.

In 1974, the Sixth Special Session of the United Nations General Assembly adopted the Declaration and the Programme of Action for the establishment of a new international economic order. In the same year, the UN General Assembly approved the Charter of Economic Rights and Duties of States, and 1974 was designated as World Population Year.

1975 was the International Women’s Year. Special international conferences relating to the environment included the Human Settlements Conference, held in 1976, the Water Conference and the Desertification Conference, both held in 1977.

The public and the mass media showed a growing interest in the organization of health-related matters, and at the international level, the debate took place not only in health organizations such as WHO, but also within groupings of countries representing all shades of social and economic development and political opinion (e.g. the OAU, groupings of Latin American countries, the CMEA countries, the European Economic Community, and the OECD). Health development was also given increasing emphasis in the policies of a number of organizations and programmes of the United Nations system, such as UNICEF, UNDP, the World Bank, UNFPA, UNEP, ILO and UNESCO.

The concept of health development, as distinct from the provision of medical care, was a product of recent policy thinking. Through WHO in particular, countries elaborated a number of fundamental principles for health development. The concept of health development, as distinct from the provision of medical care, was a product of recent policy thinking. Through WHO in particular, countries elaborated a number of fundamental principles for health development. One was that governments have responsibility for the health of their people, and at the
same time people should have the right as well as the duty, individually and collectively, to participate in the development of their own health. Governments and the health professions also have the duty of providing the public with the information and social framework that will enable them to assume greater responsibility for their own health. These principles led to the further principle of individual, community and national self-determination and self-reliance in health matters, self-reliance not being synonymous with self-sufficiency.

The distribution of resources affecting health came under close scrutiny. This led to the widespread acceptance of the need for a more equitable distribution of health resources within and among countries. Increasing emphasis was laid on preventive measures well integrated with curative, rehabilitative and environmental measures. Biomedical and health services research underwent critical analysis, and policies were aimed at orienting such research more closely to the solution of problems that are highly relevant to people’s priority needs (socially relevant research). Within WHO, two special programmes were set up in response to this trend: in 1972, the Special Programme of Research, Development and Research Training in Human Reproduction; and in 1975 the Special Programme for Research and Training in Tropical Diseases. Health technology underwent the same kind of critical analysis, and the concept of appropriate technology for health emerged. This was understood to mean a technology that is scientifically sound, adapted to local needs, acceptable to the community, maintained as far as possible by the people themselves in keeping with the principle of self-reliance, and capable of being applied with resources that the community and the country could afford. This technology had to be applied through well-defined programmes delivered through a countrywide system incorporating the above concepts and based on primary health care.

A landmark in the development of health policy was the International Conference on Primary Health Care which took place in 1978 in Alma-Ata, attended by delegations from 134 governments and by representatives of UN system organizations, other agencies and NGOs.

The Conference declared that the health status of hundreds of millions of people in the world was unacceptable and called for a new approach to health and health care to shrink the gap between the “haves” and “have-nots”, to achieve a more equitable distribution of health resources, and to attain a level of health for all the citizens of the world that would permit them to lead a socially and economically productive life. The Conference further affirmed that the primary health care approach was essential to an acceptable level of health throughout the world and acknowledged that this could be attained through a fuller and better use of the world’s resources.

Thus, in endorsing the report of the International Conference on Primary Health Care in 1979, the World Health Assembly and the United Nations General Assembly reaffirmed that health was a powerful lever for socioeconomic development and peace, and that the goal of health for all by the year 2000, which was essential for raising the quality of life, could be attained through the primary health care approach. In 1981, the World Health Assembly adopted the Global Strategy for Health for All by
Leading and responding

Box 3. The WHO Model List of essential drugs

In the 1970s, whereas the developed countries were faced with problems of overconsumption and misuse of drugs, in the developing countries essential drugs were not available in sufficient quantities, were too costly, and were sometimes of questionable quality.

There was a need to reorient WHO’s activities in this area so as to develop a global approach relating priorities in the matter of drugs to health priorities in general. All the parties concerned shared a common responsibility and should cooperate fairly, and all the partners must also abide by certain rules.

It was considered necessary that countries should formulate their own national drug policies, setting their own priorities as regards research, production, control and distribution of pharmaceuticals. It was clear that those policies would differ in different countries, depending on many factors. For countries that had difficulty in obtaining essential drugs it was also important that WHO should be able to give advice and information and assist with the training of personnel responsible for drug control.

Accordingly, the World Health Assembly requested WHO to advise Member States on the selection and procurement, at reasonable cost, of essential drugs of established quality corresponding to their national health needs. The first WHO Model List was published in 1977. This list contained 208 pharmaceutical products and received a mixed reception from both the pharmaceutical industry and the health professions.

The List has since been revised nine times. Its definition as a “common core” of essential drugs for basic needs, drugs which “satisfy the health care needs of the majority of the population and should therefore be available at all times in adequate amounts and in the appropriate dosage forms” remains as valid today as it was 20 years ago. Over the years a total of 166 new products have been added while 68 have been deleted, demonstrating the dynamic nature of the ongoing review which focuses both on changing global health needs and therapeutic options. As of 1997, there were 306 products on the List.

The success of the Model List lies in its effectiveness as a tool for drug supplies, for education and for highlighting lacunae in therapeutic needs, thereby speeding up availability of new drug treatments. It should always be considered in the context of national drug policies which address not only drug use, but also procurement and supply strategies, drug financing, drug donations and drug education for health professionals and consumers alike.

the Year 2000, inviting Member States to formulate, or strengthen and implement, their strategies for health for all accordingly and to monitor their progress and evaluate their effectiveness, using appropriate indicators to this end.

Since the foundation of the World Health Organization there has been an evolution of international health manpower policies, which has both reflected and heightened national health leaders’ awareness of key manpower issues. Political pressure, and societies’ demand for medical education, brought for some years an almost unrestricted expansion of training capacity; manpower production developed a momentum of its own, increasing demand and ignoring needs. Soon countries had too many health professionals who could only function within a relatively narrow range of skills and were unable, or unwilling, to practise the kind of health care that most people required or to go to the places where they were needed. In 1979, WHO recommended that governments take action to ensure the availability of adequate numbers of appropriate types of health personnel, recognizing that this would involve the reorientation of existing health workers, the development of new categories of workers in health and related sectors, and training of all manpower to serve the community. The potential role of traditional medical practitioners, birth attendants and voluntary health workers, was also evoked.

The Action Programme on Essential Drugs was established in 1981 to promote the development of national drug policies and essential drug lists. These two activities were given a strong boost by a major conference of experts in Nairobi on the rational use of drugs, a concept which placed essential drugs in the context of a comprehensive approach to the selec-

tion, procurement, prescription and use of the most essential drugs and gave impetus to the need for full professional involvement, quality control, reliable information and other elements of sound national drug policies (Box 3).
At the same time, the developing countries were experiencing an epidemiological transition, with rapid ageing of the population together with an increasing incidence of noncommunicable diseases linked to changes in lifestyle. The growing prevalence of cancer, cardiovascular disease, diabetes and other chronic conditions in addition to the long-standing problems of communicable diseases such as cholera, malaria and tuberculosis imposed a double burden on health care systems in these countries. There were also worrying trends in mortality from accidents and suicide in young adults, particularly in the developed countries. In addition, the pandemic of HIV infection and AIDS imposed a particularly heavy new burden on developing countries. All these realities had to be taken into account in implementing public health action geared to achieving the goal of health for all through primary health care.

The election of Dr Hiroshi Nakajima as Director-General of WHO in 1988 came at a time of global political and economic upheaval unprecedented since the end of the Second World War. Local civil strife and armed conflict became more widespread, drawing WHO increasingly into participation in humanitarian emergency activities, and involvement in issues of human rights (Box 4). The end of the Cold War stimulated a major realignment of global political and economic relationships. In many countries, these global changes were accompanied by greater emphasis on market-based economies and democratic reforms which stressed individual rights and responsibilities for health, food, housing, education and political representation. At the same time, the decline in the pace of economic growth, the growing debt burden in many countries and economic structural adjust-
ment resulted in fewer resources for international development activities and for national funding for health and social sector programmes. Confronting these serious limitations, national authorities worldwide were increasingly preoccupied with health sector financing, particularly the sharply rising costs of medical care which threatened the sustainability of cost-effective primary health care interventions.

These dramatic global changes were accompanied by other transitions that significantly affected health status and disease patterns, such as growing environmental health problems resulting from natural resources degradation and pollution, and improper use and disposal of hazardous materials; significant demographic changes caused by rapid population growth in some countries, unplanned urbanization, and mass migration of refugees due to natural and man-made disasters; and greater expectations regarding the level and quality of health care created by expanding medical technology and health awareness. The spread of the AIDS pandemic and the resurgence of diseases such as tuberculosis and malaria not only threatened to jeopardize hard-won improvements in health status, particularly in terms of life expectancy and infant mortality, but also led to health deterioration in some countries, further inhibiting economic development.

In spite of financial constraints being a major obstacle to supporting Member States in implementing and sustaining their health services, WHO was able to adjust to 12 consecutive years of no real growth in the regular budget through the use of extrabudgetary resources, which increased from about one-fifth of the budget in 1970 to slightly more than half in 1990. Paradoxically these extrabudgetary programmes created a financial drain on regular budget programmes which subsidized the extrabudgetary administrative activities. Moreover, while these extrabudgetary resources usually supported important health interventions, competing policy and budgetary considerations often arose between decisions of the Executive Board, the World Health Assembly and regional committees, and those of the donor-dominated management structures of the extrabudgetary programmes.

Concerned with the need to respond to these profound changes, the

**Box 4. Health and human rights**

WHO’s Constitution states that “The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political, economic or social condition”. On two separate occasions, in 1970 and 1977, the World Health Assembly has proclaimed that “health is a human right”, and the same affirmation was made by the International Conference on Primary Health Care, held in 1978 in Alma-Ata under the joint auspices of WHO and UNICEF.

The 50th anniversary of the entry into force of WHO’s Constitution coincides with the 50th anniversary of the adoption of the Universal Declaration of Human Rights. The right to a standard of living adequate for health and well-being is enshrined in Article 25 of the Declaration. It is fitting that the two anniversaries will be commemorated in a combined, integrated manner in 1998 by WHO, and that “health as a human right” is one of the 10 themes to be emphasized during WHO’s 50th anniversary events.

The Task Force on Health in Development, established pursuant to a resolution adopted by the World Health Assembly in 1992, was mandated to recommend appropriate arrangements for the protection of basic health as a human right and, in consultation with all partners concerned, to initiate a process of education and consensus-building to ensure that health status is protected in the development process. WHO identifies human rights and the closely related domain of ethics as over-arching principles that should be taken into account in all relevant WHO programmes and activities.

Steps are now being taken to intensify WHO’s role in the human rights sector, in conjunction with its many governmental and nongovernmental partners. This newly invigorated approach by WHO to the field of human rights should enable the Organization to give clear recognition to an infrequently cited paragraph of the Preamble to the Constitution, which proclaims that “The health of all peoples is fundamental to the attainment of peace and security”.

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The years since 1992 have witnessed a deep commitment by the WHO Secretariat to undertake the profound institutional reforms required by Member States to ensure that the Organization is ready to assume its role at the dawn of the 21st century.

Executive Board decided in 1992 to undertake a review of the extent to which WHO could make a more effective contribution to global health work and in Member States. It found that, although health for all remained valid as a guiding principle, the Organization and Member States had not been able to finance and implement their programmes at a pace which would ensure the achievement of the targets. The Organization was at a pivotal decision point, and must either redouble its efforts and concentrate its resources on achieving health-for-all goals or revise those goals to achievable levels in the light of changing world conditions.

The association of health for all with the year 2000 had been a motivational concept for the past 15 years. However, it had come to be seen as limiting, sometimes misunderstood and proposing a time-frame which was not universally attainable. More realistic operational targets and indicators were needed to guide future international health work by WHO and Member States. Operational targets such as eradication of poliomyelitis or dracunculiasis, and extension of primary health care, should define minimum acceptable levels of health status or services, consonant with the principle of equity. Thus, the year 2000 could represent only the first milestone in the continuum towards health for all.

The years since 1992 have witnessed a deep commitment by the WHO Secretariat to undertake the profound institutional reforms required by Member States to ensure that the Organization is ready to assume its role at the dawn of the 21st century, and to respond more effectively and efficiently to changing needs in countries.

WHO must now take full advantage of the opportunities provided by the globalization of the economy, technological innovations and the information explosion, which through the impending knowledge revolution can enable individuals wherever they may be to achieve their health potential.

How WHO works and what it does

The international norms and standards developed by WHO have served public health by unifying diagnostic and therapeutic procedures, improving the compatibility of research data, containing the spread of disease, and ensuring the quality of food, drinking-water, and pharmaceutical products. At the same time, WHO also operates as a goal-oriented organization, working to achieve time-limited objectives decided upon by its governing bodies and advisory groups.

WHO sets the standards

Since 1948, the Organization has carried out a wide range of normative activities. Some were inherited from the international health bodies which preceded WHO (the International classification of diseases and the International health regulations). Some relate to WHO’s directing functions (e.g. the list of International Nonproprietary Names for pharmaceutical substances, the Guidelines for drinking-water quality, the Codex Alimentarius, the Code of Marketing of Breast-milk Substitutes). WHO’s coordinating functions can be illustrated by its historically significant work in the fields of biological standardization and vaccine research.

Classification is fundamental to the quantitative study of any phenomenon. It is recognized as the basis of all scientific generalization and is therefore an essential element in statistical methodology. Uniform defini-
tions and uniform systems of classification are prerequisites in the advancement of scientific knowledge. In the study of illness and death, therefore, a standard classification of disease and injury for statistical purposes is essential.

The **International statistical classification of diseases and related health problems** (ICD), with its associated rules and guidelines for information collection, coding and tabulation, is the standard international statistical tool for the study of causes of mortality and morbidity. The main purpose of the ICD is to permit the comparison of causes of mortality and morbidity between countries at the same point in time, and within and between countries over time, thus enabling the provision of comparable statistics for decision-making in disease prevention and the provision of care at different levels, and facilitating the obtaining of epidemiological data for research purposes.

The statistical study of disease began with the work of John Graunt on the London Bills of Mortality in the early 17th century. While over three centuries have contributed something to the scientific accuracy of disease classification, there are many who doubt the usefulness of attempts to compile statistics of disease, or even causes of death, because of the difficulties of classification. To these, one can quote Professor Major Greenwood: “The scientific purist, who will wait for medical statistics until they are nosologically exact, is no wiser than Horace’s rustic waiting for the river to flow away”.

The first attempt to classify diseases systematically was made in the 18th century, published under the title *Nosologia Methodica*. At the beginning of the 19th century, the classification of disease in most general use was the *Synopsis Nosologiae Methodicae* published in 1785. In 1839, the General Register Office of England and Wales, found in William Farr – its first medical statistician – a man who not only made the best possible use of the imperfect classifications of disease available at the time, but who laboured to secure better classifications and international uniformity in their use. The utility of such a classification of causes of death was recognized internationally in 1853. Numerous attempts were made thereafter to establish a universally acceptable classification but the general arrangement proposed by Farr, including the principle of classifying diseases by anatomical site, survived as the basis of the *International list of causes of death*.

The Health Organization of the League of Nations also took an active interest in vital statistics and appointed a commission of statistical experts to study the classification of diseases and causes of death, as well as other problems in the field of medical statistics. A monograph was prepared that listed the expansion in the rubrics of the 1920 *International list of causes of death* that would be required if the classification was to be used in the tabulation of statistics of morbidity. This study was published in 1928.

After WHO was created, it assumed responsibility for continuing the regular revisions of the *International list of diseases and causes of death*. After WHO was created, it assumed responsibility for continuing the regular revisions of the *International list of diseases and causes of death*, starting with the Sixth Revision in 1948. The classification was subsequently revised in 1955 and 1965. The Ninth Revision in 1975 saw the introduction of a system for the dual classification of diseases according to both their etiology and manifestations, as well as a classification of the morphology of tumours. It was during the currency of the Ninth Revision (1979-1992) that the use of the classification was extended from the...
The purpose of the IHR is to help prevent the international spread of diseases and, in the context of international trade, to do so with the minimum of inconvenience to the passenger.


traditional applications of statistics of underlying causes of mortality and the indexing of hospital medical records to include medical insurance schemes, the recording of adverse effects in drug monitoring as well as reasons for encounter in primary care and resource allocation in health care. This enormous growth in the use of the ICD was largely due to the availability of personal computers which enabled users to operate systems which had previously only been feasible on mainframe computers.

Fourteen years instead of the usual 10 were allowed for the preparation of the Tenth Revision of the ICD, in order to enable an in-depth review to be made of the structure and content of the classification in the light of both national and international public health requirements. The main innovation in the Tenth Revision, which came into effect on 1 January 1993, is the use of an alphanumeric coding scheme of one letter followed by three numbers at the four-character level. This had the effect of more than doubling the size of the coding frame in comparison with the Ninth Revision, the greatly increased clinical detail being contained in 12 420 rubrics compared with some 6700 in ICD-9.

WHO, through its network of 10 collaborating centres for the classification of diseases, each based on a particular language or geographical area, has now established a mechanism for the Tenth Revision which enables the classification to be updated periodically according to need.

In parallel with the development of the Tenth Revision of the ICD, a “family” of fully-compatible disease and health-related classifications has arisen to meet the needs of specialist groups for greater clinical detail than that provided by the four-character classification. Such specialty-based adaptations already exist for oncology, psychiatry, neurology, dentistry and stomatology, paediatrics and dermatology, while others are planned for rheumatology and orthopaedics, and external causes of injuries.

One of the first responsibilities of WHO was to unify the separate international sanitation treaties in a single code. WHO adopted the *International sanitary regulations* in 1951, which replaced the previous set of treaties among Member States. The *International sanitary regulations* were amended a number of times in the 1950s and 1960s, and renamed the *International health regulations* (IHR) in 1969. The IHR were amended in 1981 to remove smallpox from the list of diseases subject to the Regulations. Today, the IHR represent the only international health agreement on communicable diseases that is binding on Member States.

The purpose of the IHR is to help prevent the international spread of diseases and, in the context of international trade, to do so with the minimum of inconvenience to the passenger. This requires international collaboration in the detection and reduction or elimination of the sources from which infection spreads rather than attempts to prevent the introduction of diseases by legalistic barriers that over the years have proved to be ineffective. Ultimately, however, the risk of an infective agent becoming established in a country is determined by the quality of the national epidemiological services and, in particular, by the day-to-day national health and disease surveillance activities and the ability to implement prompt and effective control measures.

No regulations can be expected to foresee every disease eventuality and, in certain situations, diseases and conditions other than those covered by the IHR may be of concern to na-
tional health authorities and the travelling public. The IHR cannot refer specifically to diseases that were not known at the time the Regulations were last revised. This is the case with AIDS. Nevertheless, any requirements for an HIV antibody test certificate (“AIDS-free certificate”) is contrary to the Regulations, since Article 81 states that “no health document, other than those provided for in these Regulations, shall be required in international traffic”.

The success of WHO in globalizing disease control programmes might suggest that the defects of international law have not hobbled its effectiveness in improving health care worldwide. However, despite having the authority to do so, WHO has been reluctant to use international law, and its effectiveness has been questioned. A 1975 WHO publication stated that the IHR have not functioned satisfactorily at times of serious disease outbreaks. More recently, WHO’s efforts with the IHR have been called a failure, and noncompliance with these regulations has increased in connection with reporting disease outbreaks.

WHO’s reluctance to apply international law has been attributed to its organizational culture, which is dominated by scientists, doctors and medical experts. The global threat posed by these infections represents in many ways a test case for international public health law. The effectiveness of international law depends on the consent of States, which means that sovereignty and its exercise determine the fate of international legal rules. In adopting a legal strategy for its emerging infectious disease action plan, WHO has to convince its Member States to take certain actions in response to disease emergence.

*International Nonproprietary Names for pharmaceutical substances* (INNs) are also referred to as common or generic names. As a result of the rapid industrial expansion and development of a large number of synthetic drug substances which became available internationally, the World Health Assembly in 1950 recognized the need to develop one standard name worldwide to identify newly developed pharmaceutical substances. A single internationally recognized name for an active drug substance is vital for safe prescribing and dispensing, and for ease of communication among scientists and health professionals. In contrast to the tradenames, INNs are intended to be used as public property without constraint, i.e. nobody should own any proprietary rights, thus the inclusion of “nonproprietary” in the designation INN. WHO collaborates closely with national nomenclature commissions to select a single name with worldwide acceptability for each active substance that is to be marketed as a pharmaceutical. To date some 6900 names have been selected. The selection of an INN follows established rules so that the name itself communicates to medical and pharmaceutical health professionals the therapeutic or pharmacological group to which the active drug substance belongs. Newly selected INNs are published first as proposed and, provided no objection was raised within a permissible period of four months, again as a recommended INN in *WHO drug information*. The list gives the names in Latin, English, French and Spanish. The cumulative list which is published periodically includes in addition the Russian version and more detailed information, such as references to pharmacopoeial monographs and international and national names that are identical or different to INNs. A CD-ROM version is in preparation.

The International standards for drinking-water quality were first published by WHO in 1958 as an aid to
the improvement of water quality and treatment. The second edition appeared in 1963 and the third one in 1971. These publications were used as guidance by many countries in the formulation of national standards. Consequently their name was changed to WHO Guidelines for drinking-water quality with a first edition in 1984, and the second edition in 1993. The Guidelines now consist of three volumes, containing (i) recommendations; (ii) health criteria and other supporting information; and (iii) surveillance and control of community supplies.

The Joint FAO/WHO Codex Alimentarius Commission was established in 1962 to protect the health of the consumer and, at the same time, to ensure fair practices in food trade. Codex has been working since and has elaborated a number of food standards, guidelines and recommendations. However, while member governments of Codex have been asked to accept these standards, it has been left for governments to decide whether they should or should not implement them. It has established more than 200 food standards, over 40 codes of hygienic and technological practice and more than 3000 maximum residue limits for pesticides and veterinary drugs in foods, as well as maximum limits for over 700 food additives and contaminants, and has contributed to harmonizing food standards worldwide.

No matter where they live, consumers should enjoy adequate protection against the risks of foodborne diseases. This can be achieved, without restricting international trade, if all countries harmonize their regulations by using international standards as a basis for their sanitary measures. Codex is also in the process of elaborating general standards covering food additives, contaminants and toxins to provide a wider basis for protecting consumers’ health. Following the Uruguay Round of Multilateral Trade Negotiations in 1994, countries agreed to reduce tariff barriers for many agricultural commodities so as to encourage free trade. As a result, non-tariff barriers became a real concern because they could undermine the promotion of international trade if put into practice in an arbitrary or discriminatory way (Box 5).

When the World Health Assembly adopted the International Code of Marketing of Breast-milk Substitutes in 1981, it called on governments to translate it into legislation, regulations or other suitable measures, and to involve all concerned parties in its implementation. In pursuit of its aim to contribute to safe and adequate nutrition for infants, the International Code affirms that: governments are responsible for ensuring that objective and consistent information is provided on infant and young child feeding; there should be no advertising or other form of promotion to the general public of breast-milk substitutes or other products within the scope of the Code; and that health workers should encourage and protect breast-feeding. 158 Member States have since reported to WHO on a wide range of approaches they are using to give effect to the International Code, such as adopting new legislation and regulations or other suitable measures, and to involve all concerned parties in its implementation. In pursuit of its aim to contribute to safe and adequate nutrition for infants, the International Code affirms that: governments are responsible for ensuring that objective and consistent information is provided on infant and young child feeding; there should be no advertising or other form of promotion to the general public of breast-milk substitutes or other products within the scope of the Code; and that health workers should encourage and protect breast-feeding. 158 Member States have since reported to WHO on a wide range of approaches they are using to give effect to the International Code, such as adopting new legislation and regulations; reviewing and updating existing laws; preparing and updating guidelines (e.g. for health workers, manufacturers and distributors); negotiating and updating agreements with health workers and infant-food manufacturers; and establishing committees to monitor and evaluate the impact of national measures.

The significance of biological standardization for global health programmes was recognized in the early years of the 20th century by the League of Nations and its Commis-
Leading and responding

Box 5. Links between health and trade

Trade in services is a rapidly growing activity accounting for an increasing share of national product in both developing and industrialized countries. The World Trade Organization (WTO) has organized multilateral negotiations to liberalize trade in services, resulting in the General Agreement on Trade in Services (GATS).

“Services” are generally described as being distinct from physical commodities, being intangible, nontransferable economic goods. For trade purposes, GATS defines services in terms of the ways in which they can be supplied; e.g. across a border (in the health field, an example would be telemedicine), or through people who are service suppliers (such as health professionals working outside their home country).

Relatively few countries have made commitments in the health sector under GATS. Some 27% of WTO Members (half industrial and half developing countries) agreed to open up hospital services to foreign enterprises, and 35% (in similar proportions) did so for medical and dental services. Some 19% (mostly industrial countries) scheduled the services of health personnel other than physicians.

It is much too early to assess the impact of the Agreement on trade in health services. However, there is a growing awareness of its potential for both industrial and developing countries. In the general context of rising health care costs coupled with a growing trend to reduce public spending in the social sectors, the advantages of exporting health sector skills and technology, or of attracting higher-spending foreign customers to health facilities, are obvious.

But how can objectives of profitability and resource generation be reconciled with that of improving the population’s health status? WHO has identified three interim policy objectives to further that goal: equitable access to care (i.e. equal utilization of health services for the same need, with users contributing according to their economic capacity); quality of care (this refers to the standard of the health care system); and efficient use of resources (i.e. a given output is produced at minimum cost, or maximum output is produced at a given cost).

However, some health professionals tend to think of international trade as an area of little relevance for public health activity. Yet even as early as 1949 the World Health Assembly called the attention of the Director-General to the need for eliminating quarantine restrictions of doubtful medical value which interfere with international trade and travel. But not until 1995 did an international trade agreement come into force to respond to the concern that as other trade barriers came down, sanitary and phytosanitary measures might be used for protectionist purposes. It therefore encourages countries to apply harmonized measures based on international standards, guidelines and recommendations which, in turn, reinforces WHO’s norms. For example, the agreement stipulates that in the case of food safety the international references are those of the Codex Alimentarius Commission – which implements the Joint FAO/WHO Food Standards Programme.

Nor is WHO called upon solely for its norms. Its expertise is becoming increasingly valuable in a particularly sensitive area of trade relations, that of settling disputes. In a dispute between the European Union and the United States in 1997, WHO experts provided scientific evidence on risk assessment procedures used to determine potential risk to human health, a key element for the findings of WTO’s dispute settlement panel. As expanding trade raises the likelihood of litigation, WHO may well in the future be increasingly called upon to advise as the only international source of impartial scientific expertise in health matters.
The global investment in basic research, begun about 50 years ago, is now paying rich dividends in the availability of new vaccines.

Table 2. WHO’s general programmes of work

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are developed following extensive global consultation and serve as guidance for national health authorities. The rapid expansion of the biologicals field, together with the development of novel biotechnologies, not only in developed countries but also in a number of developing countries, raises new and specific challenges for product safety and efficacy. There is thus an increasing need for international standards for ensuring the quality of biological products and for developing a coordinated international approach to all aspects of regulation and standard setting in this area.

From the earliest days of WHO, formal laboratory networks were set up by the Organization for reference, exchange of information and coordination of research programmes, particularly in the area of vaccine research (e.g. for influenza and poliovirus). The global investment in basic research, begun about 50 years ago, is now paying rich dividends in the availability of new vaccines. The pace of innovation is expected to increase well into the next century and beyond.

WHO policy trends

General programmes of work and principles

Within the framework of WHO’s Constitution, general programmes of work lay down medium-term objectives for a specified period (4–6 years) (Table 2), while programme budgets set out immediate objectives for activities to be undertaken during a biennium (formerly one year).

In 1950, the First general programme of work stated five basic principles: all countries and territories should take part in the Organization’s work; assistance in the development of health services should be supplied only at the request of the government concerned; the services afforded should foster national and local self-reliance and initiative, and should be adapted to the environment; WHO should stimulate and coordinate current research; services should be available to all Member States.

Different emphasis was given at different times to WHO’s role and functions in response to the world health situation. Functions have traditionally been grouped into two categories: direction and coordination of international health work, and technical cooperation with countries.

The international directing and coordinating function started with the establishment of international norms and standards inherited from the preceding international organizations. The early work included drugs and biological substances for prophylactic or therapeutic use, the International statistical classification of diseases, injuries and causes of death and the International health regulations (see above).

Technical cooperation, on the other hand, was a new task assigned to WHO, which no preceding organizations had undertaken. In 1950, the First general programme of work stated that regional offices should be responsible for this activity, with headquarters providing technical guidance and coordination. The importance of fostering self-reliance of
the country was stressed from the outset, and repeated in every successive general programme of work. When WHO’s involvement is finished, the country should be able to continue on its own.

By 1960, the distinction between the two major functions had become artificial. By 1975, a study on the interrelationships between the central technical services of WHO and programmes of direct assistance to Member States led to the recognition that an integrated approach to the development of programmes was needed, all programme activities at all levels being mutually supportive and parts of a whole, with more responsibility being given to WHO’s country offices. This led to a significant evolution in the concept of WHO’s technical cooperation. Formerly, WHO activities in countries tended to be based on the traditional concept of technical aid or assistance, implying a donor-to-recipient relationship without mutual exchange. This was replaced by a new concept of technical cooperation characterized by equal partnership among the cooperating parties. Towards the end of the 1970s, there was a shift in the WHO regular budget towards technical cooperation: the proportion allocated increased from 51% in 1977 to 60% in 1980. In the 1970s and 1980s, WHO increasingly promoted technical cooperation among developing countries. In the 1990s the Organization made efforts to ensure that its regional and global levels acted in complete coordination.

**Criteria for activities and priorities**

Within this framework, WHO’s activities were aimed at yielding results that could be demonstrable to governments. The activities therefore followed a careful analysis with countries of their needs in support of their strategies. WHO introduced a planning process in the field of health during the late 1950s, based on modern science and technology. This was emphasized particularly in the Fifth general programme of work, which identified four principal programme objectives: the strengthening of health services; the development of health manpower; disease prevention and control; and the promotion of environmental health. The Sixth summarized the criteria for WHO’s involvement as: the problem has been clearly defined; the problem is of major public health and socioeconomic importance; the potential for the solution of the problem has been demonstrated; there is a strong rationale for WHO’s involvement; and WHO’s non-involvement would cause serious adverse health repercussions.

The programme also emphasized the need to have specified targets, and sometimes output indicators, for each programme objective and stipulated that the progress of the work towards those targets was to be assessed by the regional committees, the Executive Board and the World Health Assembly.

The Seventh and Eighth general programmes of work were somewhat more elaborate, indicating the main thrust of each programme. Following the Alma-Ata Conference and the subsequent launching of the global health-for-all strategy, the WHO Secretariat produced a “medium-term programme” for each programme in respect of the periods covered by the Sixth, Seventh and Eighth general programmes of work, so as to facilitate the preparation of the programme budgets to reflect directly the objectives and targets that were set. The annual programme and budget estimates became the biennial programme budget as from 1976-1977 to allow for flexibility in implementation. To eliminate certain weak-
general programmes of work emphasized protecting mother and child health, including family planning, and health of workers and elderly people. The Seventh stressed action against undernutrition and nutritional deficiencies, but also against nutritional excess and imbalance.

The Fifth noted that a dark side of industrialization and urbanization was the emergence of factors detrimental to health, e.g. pollution, road accidents and stressful city life, and that the previous concept of environmental sanitation had evolved into that of environmental health.

The Eighth general programme of work noted steady progress in the efforts to address environmental and social issues affecting health, and promoting and protecting the health of specific population groups such as the elderly. It also stressed that the scope of general health protection and promotion extends beyond prevention and control of diseases by medical technology; it is an evolving concept that encompasses fostering lifestyles and other social, economic, environmental and personal factors conducive to health.

The Ninth general programme of work envisages that WHO continues its support to the implementation of strategies agreed upon at the United Nations Conference on Environment and Development in 1992 to achieve ecologically-sustainable development and to prevent and control environmental health risks.

**Preventing and controlling specific health problems.** The diseases of great public health concern in the early days of WHO included those affecting maternal and child health, malnutrition, tuberculosis, malaria, venereal diseases, endemic treponematosis, smallpox, plague, cholera and yellow fever. The Organization has adapted itself continually to the changing world situation. Starting

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**Programme orientation and targets**

**Strengthening national health services.** The First general programme of work stressed the need to integrate specialized health service activities in a general health programme (or basic health services). The Fifth general programme of work emphasized the need for maximum coverage of health programmes, particularly of the potentially underprivileged, as was the need for programmes planned in advance, instead of assistance to single services of limited scope. This led to the adoption in 1975 of the new approach of primary health care for the promotion of national health services. To counter the perception that the development and strengthening of the health system infrastructure is a “tedious and bureaucratic job”, in comparison with specific activities which appear “more glamorous and more important” the Eighth general programme of work emphasized the strengthening of health infrastructure. Education and training of the various categories of health personnel was given high priority from the beginning, both from the quantitative and qualitative points of view, to cope with the changing needs of the community and with the evolving health technologies.

**Promoting and protecting health.** The Fifth, Sixth and Seventh
from international quarantine and epidemiological intelligence of communicable diseases, which WHO inherited from its predecessors, the scope of epidemiological surveillance has gradually been extended since the 1970s to cover environmental hazards, noncommunicable diseases and other existing and emerging health problems.

Two major policy decisions were taken in the 1950s, namely, on malaria eradication in 1955 and on smallpox eradication in 1958. The malaria eradication programme could not achieve its goal in spite of remarkable initial gains. Countries' failure in integrating the programme into the general health services, as well as the development of vector resistance to insecticide and parasite resistance to chemotherapy, are considered to be the main factors involved. The strategy was subsequently modified, with renewed emphasis on control programmes as and where needed. Some progress occurred in the 1970s and early 1980s, but the malaria situation has worsened since then.

The smallpox eradication programme, on the other hand, was the most brilliant success in WHO's work. After its initiation by the World Health Assembly in 1958, the programme was intensified in 1967, and coordinated efforts of an unprecedented nature began on a worldwide scale. Eradication was achieved in 1977, and the experience gained has been used for programmes of eradication, elimination or control of other communicable diseases.

Recognizing that substantial improvements have occurred in controlling many communicable diseases, due to a greater coverage by, and access to, affordable simple technology to cope with specific problems, such as by immunization programmes, the Ninth general programme of work envisages that poliomyelitis and dra-

Smallpox eradication was achieved in 1977, and the experience gained has been used for programmes of eradication, elimination or control of other communicable diseases.

Medical and health research.
The First general programme of work stated that WHO should not as a rule carry out direct medical or scientific research as such, but should endeavour to stimulate and coordinate work done in these fields. During the first 10 years of its existence, WHO conducted some research as an integral part of its programme activities, but there was no special effort to promote and coordinate medical research on a large scale. The need to promote research into determinants of health
WHO focused its attention on well-defined priority areas for health research, such as human reproduction and tropical diseases. – i.e. the interrelation of economic, social and health development – has also been recognized since the 1960s. Following a study in 1958 on WHO's role in research, an intensified medical research programme was started in 1960. The Advisory Committee on Medical Research was established in 1959 to provide the Director-General with the necessary scientific advice in relation to the research programme; in 1986 it was renamed the Advisory Committee on Health Research.

Important developments in the research programme included the establishment of the International Agency for Research on Cancer in 1965.

On the other hand, a major initiative for interdisciplinary research in epidemiology and communication sciences launched in 1965 was not successful. Subsequently, WHO focused its attention on well-defined priority areas for health research, such as human reproduction and tropical diseases.

WHO's role in research has since been to identify research priorities, strengthen national capabilities and promote international coordination and rapid transfer of information. Research on health systems based on primary health care has been given priority since the 1980s.

**Management of WHO's own work.** The Seventh general programme of work emphasized the application of a managerial process for WHO's programme development and the optimal use of WHO’s resources, to be supported by permanent monitoring and evaluation of programme implementation. The Ninth general programme of work stipulates WHO’s managerial requirements in a more rigorous manner than earlier general programmes of work.

### Gathering vital information

#### Statistical services

Activities in health statistics and epidemiological surveillance were inherited from WHO's precursors and reflected in the Constitution, which requires the Organization to establish and maintain such administrative and technical services as may be required, including epidemiological and statistical services. Related obligations of Member States are that each Member shall communicate promptly to the Organization important laws, regulations, official reports and statistics pertaining to health which have been published in the State concerned and that each Member shall provide statistical and epidemiological reports in a manner to be determined by the World Health Assembly.

WHO has traditionally issued several statistical publications on the basis of information provided by Member States. The League of Nations had already published an *Annual epidemiological report* from 1922 to 1938, and this was continued in the *Annual epidemiological and vital statistics* first published in 1951, covering the period 1939-1946. The second edition, covering the years 1947-1949, was considerably enlarged and developed so as to comply with the expressed wishes of national statistical and public health administrations. The *World health statistics annual*, first published in 1962, is the continuation of the series.

The *Epidemiological and vital statistics report*, a monthly supplement for the *Weekly epidemiological record*, was started in 1947. The purpose of this supplement was to provide teaching institutions, certain health administrations and statistical services with a homogeneous periodical freed from episodic data which were of comparatively little interest.

The need was very soon felt for technical assistance to strengthen national capacity in health statistics, since the countries giving satisfactory information, both on the occurrence of death and on its causes, were very few. Development of vital statistics and civil registration was given priority, and WHO proceeded to advise and assist Member States in improving their epidemiological and statistical data collection and reporting to WHO.

The 1960s saw the advent of computer technology in the health field. A computer was installed at WHO headquarters in 1966 and a considerable part of the statistical work was computerized during the 1970s. Statistical data processing was expedited and the computer made it practicable to store time series in an easily retrievable form, including the data received by WHO from Member States since 1950.

With the rapid development of automation in the industrialized countries, a new approach to health information was advocated, so as to develop comprehensive computer-based management information systems. Unsuccessful attempts were made to develop national health information systems. The main reasons for the failure were the overemphasis on computerization and a lack of clear recognition of the importance of the prerequisites to such computerization: of adequate quality of source data and ability to collect and prepare input to an automated system, and of capacity among health managers and decision-makers to utilize the output information to improve health care.

The movement towards national health information systems, however, was not entirely in vain. By the mid-1970s health planners and managers had begun to realize that the usual epidemiological and statistical reports they received did not suffice. Some information had to be obtained from other sectors concerning matters closely related to health (economic development, unemployment, educational status and literacy, food supply, etc.). All the relevant data had to be assembled from these various sources and then analysed and digested by the health decision-maker. Thus the managerial purpose of the generation of information was recognized more clearly, and this was reflected in the reorientation of WHO’s work in this area during the 1980s.

At the request of the Executive Board in 1994, WHO reoriented its reporting style in response to global change and to the expressed need for an annual report on the status of world health, which should at the same time be a report on WHO’s activities – The World Health Report. Its objective was to provide, through a self-contained, concise but comprehensive annual publication, a review of the global health situation and needs, and of problems faced by health systems, in order to recommend where priority should be given to international health action and to the Organization’s activities in that context. Its target readership was new to WHO: non-medical professionals such as policy-makers and planners for development, heads of donor agencies and other international funding institutions, policy-makers in health (e.g. ministers of health, social welfare, etc.), financial experts who decide on the allocation of funds, and the educated public as well as opinion-makers in the media and elsewhere.
Disease surveillance

Since its creation the Organization has given high priority to the timely dissemination of epidemiological information, e.g. on the occurrence of certain communicable diseases which are of international interest. Information received has been processed and feedback provided to all countries without delay through the Weekly epidemiological record (now available on Internet).

WHO is also using electronic links to monitor disease through a mechanism to investigate rumours of outbreaks. The information is made available on the Disease outbreak news web page. Information is shared through electronic communication links between WHO headquarters, regional offices, country representatives and other groups involved in disease surveillance.

Several agencies are cooperating in a project to link with collaborating centres, laboratories and other institutions electronically by means of local telephone services, radio-to-telephone or radio-to-satellite, in order to share restricted information on priority diseases almost immediately so that countries are better prepared for disease outbreaks and better able to respond to them effectively.

WHO has an influenza surveillance network of specialized laboratories which detect influenza viruses that could trigger a pandemic. FluNet is a prototype World Wide Web site for the electronic submission of influenza data from participating national laboratories. Only designated users can submit data, but the results – graphics, maps and tables of influenza activity on a global scale – are available to the general public. As new data arrive and are verified, the maps and tables are revised to give users an up-to-date overview of the influenza situation. FluNet has speeded up the sharing of information on influenza patterns and virus strains and is becoming an essential tool in preparedness for and prevention of influenza pandemics.

Health legislation

In 1948, the International digest of health legislation took over from the section Lois et règlements sanitaires of the Bulletin mensuel de l’Office international d’hygiène publique.

During WHO’s first 10 years, the comparative legislative surveys in the Digest bore witness to the enactment of legislation in the traditional areas of quarantine and epidemic information, nomenclature, international standardization, statistics, public health administration, mental health, and maternal and child health. The quarterly International digest of health legislation remains the cornerstone of the worldwide transfer of information on health and environmental legislation, and related ethical issues. In 1951, the World Health Assembly adopted the International sanitary regulations, revised in 1969 to become the International health regulations (see above).

In the 1970s, the scope of the issues addressed broadened considerably in view of technical and scientific advances and the need to protect the population against unsafe products and working and living conditions. From 1970 to 1980, the scope was further extended to address issues such as abortion, drug abuse, environmental protection, and legislative action to combat smoking.

1977 marked a decisive turning-point in WHO’s health legislation activities, which formerly were primarily centred on the transfer of information. The global health legislation programme was to ensure its full concordance with the goal of health for all and the primary health care ap-
approach, embodied in the 1978 Declaration of Alma-Ata. Since 1980, WHO’s aim has been to work with Member States, using an integrated approach that combines technical cooperation and information transfer in the strengthening of national health legislation. Thus the 1980s saw a major change in emphasis in WHO’s legislative work, shifting from the disease-specific, hospital-based and technology-oriented approach to an approach geared to the promotion of universal access to basic health services.

From 1990 onwards, legislation bears witness to the decline of political ideologies, with power vested in people through more representative structures. This extended the scope of legislative functions to include a greater use of enabling and normative roles, coupled with a revival of the principles of ethics, equity and human rights in public health. WHO has been particularly active in legislation and guidelines addressing research on human subjects, vaccine trials, patients’ rights, reproductive technologies, genetics, euthanasia and organ transplantation.

Increased international movement of persons and goods and the ever-increasing emphasis on global health has led to an unprecedented growth of international health legislation, with closer international cooperation by intergovernmental organizations and in the elaboration of common standards and guiding principles, a movement amplified during the period 1992-1995 by the recent United Nations summits.

More specifically in 1997, WHO extended its cooperation with the Health Care Committee of the Russian Parliament with a view to drafting a law on the structure of health care in the Russian Federation. A number of legislative strategies for the realization of the right to health were examined at the International Conference on Human Rights, Bioethics and Health held in cooperation with CIOMS. WHO also collaborated in a workshop on the rights of patients organized by the Research Centre for European Health Law, and an international colloquium on patients’ rights as a health-for-all objective, organized by the International Association for Law, Ethics and Science and the Turkish Medical Association.

Of the many areas which WHO must address through a legislative strategy (ranging from health as a human right to the biological determinants of health and the need to safeguard medical confidentiality in the face of the ongoing information and communication revolution) the issue of rapid advances in science and technology is of particular significance. The benefits as well as the potential risks of new technologies must be evaluated in terms of the integrity, dignity and health of the individual. Seeking a balance is not easy, and the problems created fall within the fields of both medical ethics and health law. Policy-makers will need to intervene in accordance with the value system of each country and culture.

**Informing the world**

The WHO Constitution asserts that “informed opinion and active cooperation on the part of the public are of the utmost importance in the improvement of health”. From the start, WHO has used all existing means of communication to convey information around the globe (print, telegraph, photographs, magnetic sound recording and television). In 50 years, WHO has built up extensive networks providing regular input to its comprehensive data banks on health and disease.
The exciting and rapid developments in communication and the dissemination of information that have taken place during that half-century have had a profound impact on how WHO does its work. In 1977 the first personal computers went on sale to the general public, and are now commonplace in many parts of the world. They enable the daily use by millions of people worldwide of the Internet (originally a network of computers in government, academic and scientific institutions developed in the 1960s in the United States to enable researchers to share information). The number of Internet users is predicted to reach 700 million by the year 2000. By connecting to WHO’s site on the World Wide Web, Internet surfers can find out about the work of WHO’s programmes relating to all aspects of health and disease, and have access to the database of WHO’s library. Abstracts from WHO’s journals are available, as is the complete text of many WHO newsletters and documents. The Internet user can choose from the hundreds of books in WHO’s publications catalogue and send in an order, or can consult any of the resolutions and decisions of the WHO governing bodies dating back to 1948. WHO has also produced several CD-ROMs that contain either encyclopaedic collections of data or compilations of journal issues.

Communication is not merely a one-way process. WHO’s computers are host to over 60 e-mail discussion groups on a whole range of health concerns and aspects of the Organization’s work. These e-mail lists exist so that information can be shared and ideas exchanged openly in an informal manner.

A strong working library was recognized as essential to the technical work of WHO as early as 1946. By 1947 the library collection was begun and a monthly Library news was distributed free of charge. In its early years, the library supplied thousands of books, journals, photostats and microfilms to Member governments to replace collections damaged during the Second World War and to furnish core sets of medical literature to countries. In the early 1970s, the WHO Medline Centre operated from the library, providing searches from Medline, and photocopies of articles to people working in developing countries. In 1986 the library moved from a manual to an automated library information system and all library functions were automated simultaneously. From the mid-1980s onwards the library moved ahead with its electronic library initiative. Library services were offered 24 hours a day, CD-ROM databases were introduced, and an optical disk system replaced paper for full-text storage of WHO technical documents.

The WHO library acts as a central purchasing agent to obtain books, journals and information material for libraries worldwide, enabling libraries with a lack of foreign currency to order material under the WHO revolving fund. It also runs an international exchange of free books and journals in 72 countries (comprising 219 libraries). Document delivery is provided under an agreement with the National Library of Medicine in Washington and the Library of the British Medical Association.

In 1997, WHO’s reference librarians answered an estimated 17 000 queries from around the globe dealing with the work of WHO that came in by letter, fax, e-mail, telephone and in person. The indexing and cataloguing of recently-acquired non-WHO publications are being outsourced to a commercial firm, and procedures for online input of these data to the library database have been established.
While dissemination of information by electronic means has become a vital part of what WHO does, the Organization is equally concerned to ensure that information on health and disease is also transmitted in more conventional forms. WHO's publishing activities cover books and journals on a variety of topics, often in six official languages (Box 6), such as manuals on preventing and controlling disease, recommendations on international standards and procedures, guidance on health service management, training materials for health workers, and reports of expert groups. Arrangements are often made with other institutions or with commercial publishers for translation and publication in national languages.

A commitment to the dissemination of information also means helping others to disseminate it too. The Bulletin of the World Health Organization regularly publishes research papers from developing countries, but WHO is aware that the results of much health research in developing countries do not come to the notice of scientists elsewhere because of the limited English writing skills of the researchers. This can be remedied by holding scientific writing workshops in developing countries to guide health researchers in presenting the results of their work for publication. A survey of the impact of workshops already held in Latin America has shown that, after attending the workshops, health researchers published more papers than before and were more confident in their ability to prepare scientific papers for national and international journals.

For WHO's voice to be heard, the publishing effort must also make an impact within the global publishing industry. This impact was achieved by the development of a commercial capability for publications that has put WHO at the forefront of commercial success in terms of sales income within the UN system. Commercial capability was primarily achieved by outsourcing country-level sales and marketing to WHO sales agents, who are generally among the most important scientific, technical and medical booksellers in their countries.

Accessibility and commercial goals could not be achieved without an efficient delivery system. The delivery system was gradually developed using modern technology. WHO’s master mailing list manages over 300,000 addresses, tracks dissemination patterns and provides geographical and reader category profiles to achieve specific goals. This system has recently been improved, by specifically developed technology to ensure rapid invoicing, so that significant increases in sales occurred without the need to sizeably increase staff, thanks to the productivity gains achieved.

Sales in 1997 were worth around $4 million, recording more than a decade of uninterrupted sales growth for WHO publications. Sales income has doubled since 1986, the WHO sales agent network has grown to cover more than 100 Member States (with more than a dozen new agents or clients on account appointed in 1997), and the distribution function is now more than 90% self-financed through sales income. WHO publications were displayed at major book fairs and scientific congresses throughout the world, the Frankfurt Book Fair, the International Conference on Health Promotion (Indonesia), the IFGO World Congress on Gynaecology and Obstetrics (Denmark) and the World Congress of Gerontology (Australia).

Large numbers of books are distributed free while many others are sold at reduced prices in developing countries.
Recognizing that the extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health, WHO seeks to communicate the best available health information to all Member States in the most effective way. To ensure equity of access to health information in a polyglot, multicultural world, WHO must communicate essential health information in different languages.

WHO’s translators – a judicious mix of fixed-term, temporary and free-lance staff – work on a wide range of material, especially scientific and technical information, and policy documents for the deliberations of the governing bodies.

The rules of procedure of the World Health Assembly and Executive Board provide that Arabic, Chinese, English, French, Russian and Spanish shall be the official languages. Regional committees have their own distinctive pattern of languages. In 1948, the Executive Board decided that publications should appear in English and French. Spanish was added in 1954. Russian became a language of publication in 1960. Arabic and Chinese were included shortly before the Alma-Ata Conference in 1978.

Recognizing that equity of access to health information cannot be ensured by six official languages that are unknown to many millions of intended readers, WHO has sought to encourage translations into national and regional languages outside the Organization, in collaboration with country and regional offices. By 1997, translations of WHO technical books and documents in over 60 target languages had been published with some 100 translated WHO books published annually by publishers and scientific institutions, ministries and professional associations in countries, at no additional cost to WHO.

While the principles of parity of official languages and equity of access to health information have been consistently affirmed, the means of communication of WHO’s language services have kept pace with the development of information and communication technologies. Thus, WHO’s wealth of expertise in technical terminology, built up over 50 years, is no longer archived on index cards and disseminated in printed bulletins, but is maintained and disseminated in the form of a computerized terminology database.

A just-completed study of the translation process as part of WHO’s documentation chain has yielded recommendations that, when implemented, will result in efficiency savings. The integrated management of the multilingual flow is to be achieved through a computerized job tracking system, while an electronic document processing system will make possible for the first time an electronic repository for all WHO documents and publications in all languages.

At the same time, technology is of little help without the human values of scientific training, linguistic talent, and respect for the author and the reader, as appears daily in the work of WHO’s language services. Since any information pertaining to human health must meet the highest standards, WHO translators must also render ideas from one language into another with understanding and accuracy of meaning, context and style. At WHO, translation talent serves health workers in countries throughout the world.

For example, it is likely that many of the 476 million speakers of Hindi, 207 million speakers of Bengali, 187 million speakers of Portuguese, 126 million speakers each of Japanese and German, 170 million speakers of Malay and Indonesian – particularly primary or intermediate-level health workers – are unable to read or work in one of WHO’s official languages.

countries. In addition, hundreds of documents for general or limited circulation are issued every year by WHO’s technical programmes, giving detailed reports on the latest developments in health and health care. Accessibility through free distribution, primarily in developing countries, was improved in 1997 by the expansion of the WHO depository library network to 158 and the growth of the public reference point network to 915 participants. Even so the total number of publications distributed free was kept at zero-growth.

Three issues are foreseen as priorities in the next century. How will technology continue to influence dissemination policies and procedures? How will WHO be able to maintain services to developing countries? How can the Organization cope with
Leading and responding

the ever-increasing demand for publications and information in an environment of static staffing and shrinking financial resources? Demand from developing countries is increasing, and servicing that demand is labour-intensive. To satisfy it, innovative ways to achieve economies must be found.

WHO management

Since 1950, WHO’s successive general programmes of work have emphasized the need for the Organization to be effective and efficient and able to yield results which can be demonstrable to governments. In 1965, the importance of introducing evaluation criteria into programme planning was stressed and in 1971 the use of modern scientific and technical methods in programme management was recommended. In 1994, the harsh political climate led to the rigorous stipulation of managerial requirements for WHO, to an extent never yet experienced in earlier general programmes of work. WHO keeps under constant review administrative procedures to ascertain consistency with the Organization’s objectives, determining compliance with established rules and regulations, ascertaining the reliability of internally-developed financial and management data, reviewing the economical and efficient use of the Organization’s resources and the extent to which assets are safeguarded from loss, as well as assessing measures taken to prevent fraud, waste and malfeasance.

The financial situation of the regular budget for 1997 was difficult owing to a serious shortfall in the collection of contributions, which considerably weakened WHO’s financial position. Consequently, programme implementation was unstable and required very close monitoring. During the course of 1997, a modernized computer programme for the regional office administration and finance information system was introduced in three regional offices. Extrabudgetary contributions continued to increase. As in previous years governments were the main source of such voluntary donations, but significant sums were also received from multilateral development agencies, foundations and nongovernmental organizations.

Providing an adequate and efficient level of logistics support for the smooth and effective functioning of WHO’s technical programmes is the primary concern of the general administration. This has required ongoing adjustment in response to the reduction in resources. In order to maintain acceptable levels of service, the scope of several outsourced contracts has been increased. Furthermore, with the recent deregulation in the global telecommunications market, important economies will be realized through the renegotiation of WHO’s communications contract. With a view to taking full advantage of new and emerging technologies, video conferencing has been introduced as a further means of communication, and multimedia technology is under study for the production of documents.

WHO’s supply services have adapted their role from a purely demand-led procurement entity to become a more active and efficient partner of WHO’s technical programmes, thus responding better to country needs. For example, important quantities of vaccines and injection materials to meet the cyclical epidemics of meningitis are kept in stock ready for immediate shipment, and various medical kits have been developed and are available for use during emergencies. Increased bulk purchasing should lead to further economies.

Since 1950, WHO’s successive general programmes of work have emphasized the need for the Organization to be effective and efficient and able to yield results which can be demonstrable to governments.
All staff members of WHO are international civil servants. Their responsibilities are not national but exclusively international. By accepting appointment, they pledge themselves to discharge their functions and to regulate their conduct with the interests of the World Health Organization only in view. In addition to displaying the highest level of technical competence and integrity, they must also be sensitive to cultural differences in order to be effective in a multicultural environment (Box 7).

The staff have traditionally had the right of association for the purpose of developing staff activities and making proposals and representations to the Organization concerning personnel policy and conditions of service, and since 1976 the Executive Board has invited a representative of the staff to present a statement reflecting staff views on such matters.

During 1997, work continued on implementing the reforms in the Organization’s personnel policy initiated in 1996. In keeping with recent trends in both the public and private sectors, personnel management has been redirected to become less process- and more service-oriented, with greater emphasis on the role of human resources management as a support service and facilitator for the technical programmes in the achievement of their goals.

In 1997 there was a 50% increase in the number of short-term consultancy contracts, and a 28% increase in short-term professional contracts, compared with the same period in 1996. While this was partly due to the considerable reduction in the number of posts in 1995, it also reflects a general tendency to rely more on short-term professionals and consultants to provide highly specialized services for specific activities of limited duration. While the total number of staff in the professional category decreased in 1997, the proportion of women rose slightly (by 0.6%) to just over 27%.

Box 7. Staff allegiance to WHO

All staff members of WHO subscribe to the following oath or declaration:

“I solemnly swear (undertake, affirm, promise) to exercise in all loyalty, discretion, and conscience the functions entrusted to me as an international civil servant of the World Health Organization, to discharge those functions and regulate my conduct with the interests of the World Health Organization only in view, and not to seek or accept instructions in regard to the performance of my duties from any government or other authority external to the Organization.”

WHO Staff Regulations, article 1.10.