



Global Medium-term Programme

Programme 13.14

OTHER COMMUNICABLE DISEASE PREVENTION AND CONTROL ACTIVITIES

This medium term programme reflects the continuation of the WHO strategy for the prevention and control of "other" communicable diseases. From the managerial standpoint, it is aimed at fostering national and international action to establish national capabilities for worldwide vigilance over those diseases covered by the Programme and to ensure that those that show signs of assuming major public health importance are immediately and properly contained. Since immunological mechanisms are involved in almost all disease processes, immunological components are present in many WHO programmes. The assistance to other organizational programmes is reflected in this document.

The programme is based on (1) development and transfer to Member States of health technologies for the prevention and control of bacterial and viral diseases not covered by other Programmes, such as meningitis, plague, influenza, arthropod-borne diseases, viral hepatitis, etc.; (2) development and transfer of simple laboratory techniques for diagnosis of diseases under this programme that can be carried out at the peripheral level; (3) development of improved (and inexpensive) or new bacterial and viral vaccines not covered by Programme 13.12, Programme for research and development in the field of vaccines; (4) periodic evaluation of new antibacterial and antiviral drugs and interferons; (5) promotion of surveillance systems for nosocomial infections and antibiotic resistance; (6) advice on biosafety measures, the biotechnologies and the transfer of microorganisms between laboratories and countries; (7) application of existing knowledge by collaborating with Member States to develop their own immunological reagents; (8) training of immunologists in immunology and biotechnology applied to infectious diseases; (9) continued assessment of the socio-economic importance of allergic diseases and development of both preventive and curative measures for application at the primary health care level; (10) collaboration with Member States in strengthening emergency preparedness and response capabilities and (11) maintenance of post-smallpox eradication policies.

CONTENTS

	<u>Page</u>
1. INTRODUCTION AND POLICY BASIS	2
2. SITUATION ANALYSIS	2
3. OBJECTIVES	7
4. TARGETS	7
5. APPROACHES	8
6. ACTIVITIES	9
7. PROGRAMME MANAGEMENT AND RESOURCES	13
8. MONITORING, EVALUATION AND INDICATORS	13
9. LINKAGES	14

1. INTRODUCTION AND POLICY BASIS

This programme comprises four distinct areas of divisional activity: prevention and control of bacterial and viral diseases, research and development, immunological support services, and other programme support services, including technical collaboration in emergency preparedness and response activities, maintenance of existing post-smallpox eradication policies, safety measures in microbiology, and epidemiological, operational, and behavioural research support to divisional units.

The guiding principles governing the WHO Programme on Other Communicable Diseases stem from the WHO Constitution, the Eighth General Programme of Work and the innumerable resolutions which have been endorsed by Regional Committees, the Executive Board and the World Health Assembly.

2. SITUATION ANALYSIS

2.1 Prevention and control of bacterial and viral diseases

Epidemiological evidence, accumulating over recent years, has shown that cerebrospinal meningitis, plague, viral encephalitis, haemorrhagic fevers (including yellow fever), influenza and hepatitis continue to occur in vast territories of the world. Activities to control these diseases have been directed towards the development of new or improved diagnostic, prophylactic and therapeutic measures and appropriate case management schemes. They also include collaboration with Member States in implementing epidemiological surveillance systems and in implementing the most recent achievements in diagnosis, prevention and treatment. Furthermore, laboratory and field research on developing new technology and intervention strategies is supported, and the technology transferred, through training initiatives, into action programmes.

(a) Cerebrospinal meningitis

Cerebrospinal meningitis (CSM) is known to occur in epidemic or in sporadic cases. Although different bacteria cause the disease, the three most frequent etiological agents constitute a serious public health problem, contributing to high mortality particularly in children and the elderly. Meningococcal disease is endemic throughout the world, with epidemic waves occurring at intervals of several years. Large epidemics continue to occur not only in Member States of the so-called "CSM belt" in Africa, but in other geographical areas as well, thereby causing a dramatic increase in morbidity with an accompanying case fatality rate of 10% or greater.

The availability of rapid diagnostic kits has made identification of specific etiological agents possible in areas without sophisticated laboratory capabilities. In addition, four meningococcal vaccines are now available, although these have been shown to be less effective in children than in adults. Further research on vaccines which are immunogenic in young children is being supported under the Programme 13.12, Programme for Research and Development in the Field of Vaccines.

(b) Viral hepatitis

Viral hepatitis constitutes a major public health problem in most parts of the world. At least four etiological forms of the disease are recognized: hepatitis A, hepatitis B and two varieties of hepatitis non-A, non-B. In 1987, the Technical Advisory Group (TAG) on Viral Hepatitis recommended that WHO take an active role in global efforts to address this public health problem and that the major programme emphasis should be on the prevention of hepatitis B virus through immunization, thus contributing to the prevention of

hepatocellular carcinoma. A major effort to raise extrabudgetary funds for this global activity was initiated at the end of the 7th GPW. Joint government/WHO studies on mechanisms of transmission of hepatitis B and on the efficacy of hepatitis B vaccine have been carried out in several Member States. Data have been obtained on the epidemiology of hepatitis B in different countries and optimal immunization strategies have been determined. Vaccines which are currently available are safe and effective in the range of 90-95% for pre-exposure prophylaxis. For post-exposure prophylaxis of infants born to HBsAg/HBeAg+ mothers, efficacies of 75-85% are attained.

(c) Haemorrhagic fevers and viral encephalitis

Several viruses, most of which are transmitted by arthropods or rodents, cause life-threatening haemorrhagic syndromes leading frequently to death. Of these, dengue haemorrhagic fever (DHF) is the most widespread and occurs in many countries in South-East Asia and the Western Pacific, where the disease is not only spreading geographically but also showing a significantly increased incidence. Epidemic DHF appeared for the first time in the Americas (in Cuba) in 1981 and sporadic cases are now occurring with increasing frequency in other Member States of the Caribbean basin, as well as in some parts of Africa. Yellow fever continues to be a serious health problem in tropical areas of South America, where jungle yellow fever remains endemic and in Africa, where large outbreaks periodically occur.

Lassa fever remains endemic in many regions of Africa, causing high morbidity and mortality. Haemorrhagic fever with renal syndrome is now recognized in many parts of the world, constituting a major problem in some Member States of Asia. Other haemorrhagic fevers, such as Rift Valley fever, Crimean-Congo haemorrhagic fever, Argentinian and Bolivian haemorrhagic fevers, Marburg and Ebola diseases, are less widespread but are serious threats in many regions of the world.

Viral encephalitis, a major clinical feature in a variety of arbovirus infections causing large-scale outbreaks, has restricted geographical distribution, e.g. Japanese encephalitis in South-East Asia and the Western Pacific, several types of viral encephalitis in the Americas and tick-borne encephalitis in Europe. Japanese encephalitis is spreading through severe outbreaks with mortality of 20-40% and residual neurological sequelae affecting perhaps 30% of survivors.

Much of WHO's collaboration with Member States in the areas of haemorrhagic fevers and viral encephalitis is based on the expertise found in 15 collaborating centres on arboviruses and special pathogens. In epidemic situations, WHO coordinates the provision of technical assistance to affected Member States and collaborates in the implementation of short-, medium- and long-term responses, including strengthening of laboratory facilities, epidemiological surveillance and improvement of vaccine production.

(d) Influenza

Influenza remains an important disease, causing high levels of morbidity in many developed countries. The impact of influenza in the developing world, however, is less well known. The effect of influenza epidemics can be reduced by immunoprophylaxis with available inactivated or live-attenuated influenza vaccine and by using some antiviral drugs. In closed and semi-closed settings, maximum benefit from immunization is likely to be achieved when more than 75% of the population is vaccinated. Other strategies to reduce the impact of influenza include mass immunization of certain populations not only to protect such persons, but to reduce illness in the community as a whole.

The difficulty in preventing influenza lies in the capacity of the influenza viruses to change antigenic specificity frequently, calling for periodic changes

in the composition of the vaccine. The programme maintains constant communication with a network of 110 WHO-recognized national institutions for influenza in 79 Member States and with two collaborating centres. This network makes it possible for WHO to keep Member States constantly informed on influenza occurrence, the antigenic characteristics of any new variant of the virus and to make new viruses available for vaccine production.

(e) Plague

Sporadic cases and localized outbreaks of human plague continue to occur in areas known as the natural foci of the disease. Statistics demonstrate a general downward trend of plague incidence, although recent experience points to the possibility of sporadic outbreaks recurring in former known foci. This recent trend emphasizes the need to implement effective systems of epidemiological surveillance in Member States with natural foci and to continue efforts to increase community and health personnel awareness to detect initial cases. The programme continues to promote international cooperation to further operational research in the epidemiology, ecology, microbiology and immunology of plague.

(f) Nosocomial infections

The results of the WHO Hospital Infection Prevalence Survey, completed in 1986, show that nosocomial infections (HAI) should be considered as an important problem, both in developed and developing countries (the mean prevalence rate was 8.7%). The similarity of the types of infection and their frequency throughout the sample of hospitals suggest that the problem is global, with little difference between hospitals in different regions and climates. International collaboration in HAI prevention and control is promoted through appropriate surveillance systems, courses, etc.

(g) Antimicrobial resistance to antibiotics

Data available from a number of countries demonstrate the worldwide importance of the problem caused by the acquired resistance to antibiotics among bacteria of public health importance. An international study has been initiated on antimicrobial resistance surveillance. The objective is to furnish Member States with accurate information on the current status and developing trends of bacterial resistance to antibiotics, both in their own areas and throughout the world. This information will assist individual countries in taking decision on antibiotic usage.

2.2 Research and development

(a) Rapid diagnostic technology

Simple, rapid diagnostic techniques are being developed that could be applied at the peripheral level in the developed and developing world. As a result, several techniques for the diagnosis of viral and bacterial diseases are already available and others look very promising. A number of regional workshops and collaborative studies on simple diagnostic techniques have been organized.

Progress has been made in SEAR, with the assistance of UNDP, in the promotion of rapid diagnosis of infectious diseases in public health laboratories. The availability of high quality reagents is essential for the implementation of these techniques. Special laboratory units were created to produce simple diagnostic reagents and the staff of these new production units were trained in collaborating centres. A similar UNDP-supported project in AFR was initiated in 1987. Through extrabudgetary funding, similar projects may be implemented in other Regions.

International collaborative studies on rapid diagnosis permitted the evaluation of newly developed techniques, the standardization and quality control of reagents and promoted better understanding of the ecology and epidemiology of various viruses and bacteria in different parts of the world. The collaborative study on the development and evaluation of different diagnostic methods made it necessary to revise and improve national standards. To meet this need, a panel of international reference reagents was developed and is continually being enlarged. The currently available collection contains antigens, antisera, immunoglobulins and monoclonal antibodies. Standards from the collection are used for the standardization of the diagnosis of entero-, ortho-, paramyxo-, adeno-, arbo-, herpes- and arenaviruses, group A streptococcus, *S. pneumoniae* and plague. Several working diagnostic kits are available on request. New kits are being developed for the diagnosis of viral hepatitis, acute respiratory viruses and streptococcal infections.

New technologies, such as those based on DNA recombination or hybridization techniques, synthetic peptides and hybridoma production, pave the way for large-scale production of diagnostic reagents at lower cost.

(b) Basic vaccinology

Many vaccines in current use require multiple administrations to provide sufficient protection. As a result, many children, especially in developing countries, do not receive the full course of immunization and are not thus fully protected. Modern biotechnology may help to solve this problem by the use of improved adjuvants, by the use of devices that can release a vaccine over a long period of time, or by the use of recombinant live organisms. These new methods of administering vaccine will be particularly useful when synthetic antigens are used as vaccines. Areas of priority include: (1) determining whether existing multiple injection vaccine can be made as effective using one-injection approach, thus improving greatly the cost-effectiveness of vaccine delivery; (2) defining means to improve systemic or local immunity induced by orally administered vaccines; (3) defining optimal peptide structures to be used in sub-unit vaccines; (4) defining the rules for generating memory at the level of T and B cells and (5) defining ways to influence and/or select the specific effector-cell functions generated by vaccines to trigger protective immune response.

2.3 Immunological support services

Immunological methods have proved effective for the control of communicable diseases (e.g., smallpox, polio, in developed countries). It is also well established that immunological mechanisms are operating in many diseases and in some cases are even responsible for the pathological condition. Furthermore, immunological methods are used for the diagnosis of many communicable and non-communicable diseases. Recent developments in immunological research hold the promise that in the not-too-distant future it will be possible to regulate the immune responses to maximize their protective effects and to minimize their adverse effects. In addition, it may be possible to identify protective antigens of pathogens (by the use of monoclonal antibodies) and to produce them in the laboratory using gene cloning or chemical synthesis. These discoveries will facilitate the development of simple, inexpensive and stable vaccines, suitable for use in field conditions, before the year 2000. However, even after the protective antigens have been synthesized, they may need to be linked to a carrier molecule and possibly administered with an adjuvant. The carrier and the adjuvant may be different for each disease because protective mechanisms (humoral versus cellular) may be different (See Programme 13.12, Programme for Research and Development in the Field of Vaccines).

(a) Immunodiagnostic Methods

Immunodiagnostic methods have been used for a long time. If they are to be reliable, it is essential to have reagents of good quality. The WHO/International Union of Immunological Societies (IUIS) programme for the standardization of immunological reagents ensures their quality control. Some of the reagents used in immunodiagnosis are produced in industrialized countries and are expensive. The production of many of these, however, is very simple and many Member States can be assisted to produce their own.

In the past, diagnostic methods have lacked either the specificity or the sensitivity required. Furthermore, all current methods are based on antibody detection and could not differentiate between active and past infections. It is now theoretically possible to develop highly-specific and simple immunodiagnostic methods able to detect antigens and provide positive results only when an active infection is present.

Although this technology is presently carried out in a few industrialized countries, it is essential that the required technology be progressively introduced into developing countries. For this reason, a large proportion of resources (budget and staff) in this Programme are devoted to training.

(b) Allergic diseases

Allergic diseases are recognized as being a serious burden on health services as well as having serious economic effects in some Member States. The economic importance of allergic diseases in tropical countries is not well documented but, according to informed observers, it appears to be increasing, particularly in those Member States developing their own industry. It is now possible to prevent some allergic conditions and to control some symptoms, thus permitting a patient to live a productive life.

(c) Training

WHO has been training scientists from developing countries on immunology and biotechnology applied to infectious diseases. These scientists, with specialized training in immunology, are employed in applied research in the diagnosis, treatment and prevention of infectious diseases. Approximately 50 participants are trained each year in the WHO Immunology Training Centre. Through a Complementary Programme of Information and Technical Cooperation, 500 participants remain in contact with the scientist working at the WHO Centre.

(d) Support to other WHO programmes

Activities to support other WHO programmes include the evaluation and further development of diagnostic and prophylactic methods, procedures and vaccine development (See Item 9, LINKAGES)

2.4 Other programme support services

(a) Technical collaboration in emergency preparedness and response

Throughout the 7th GPW, emphasis in Organizational emergency response gradually shifted from the provision of health relief to promotional/developmental activities. Despite the undoubted importance of relief in emergencies, collaboration in preventive measures and preparedness are now viewed to be of fundamental importance. By the end of the 7th GPW, technical collaboration in this area emphasized: (1) strengthening passive and/or active surveillance systems, or supporting the development of modified early warning systems, to

improve emergency preparedness and response capabilities at the country level; (2) implementing, in emergency situations, rapid assessments and post-emergency evaluation systems; (3) supporting post-emergency remedial action and (4) strengthening communication and information systems between Member States and WHO.

(b) Microbiological safety

Five collaborating centres assist WHO in advising Member States on the safety aspects of working with and transporting dangerous microbiological substances.

(c) Post-smallpox eradication policies

An ad hoc Committee on Orthopoxvirus Infections met in 1988 to approve a number of final recommendations to the Director-General, including a major reduction in the WHO global reserve of smallpox vaccine, the destruction of the remaining stock of viable variola virus, and the termination of smallpox vaccination for protecting military personnel. The Organization, however, will continue to assist Member States in the investigation of rumours of suspected cases and to provide support to WHO Collaborating Centres which provide these confirmatory laboratory services to Member States.

3. OBJECTIVES

3.1 General Objective

- . To prevent and control major communicable and non-communicable diseases.

3.2 Specific Objectives

- . To progressively reduce the incidence and prevalence of "other" communicable diseases, thereby reducing morbidity and mortality associated with these diseases;
- . To promote and support research which will contribute to a better Organizational, understanding of the immunological characteristics of major communicable and non-communicable diseases.

4. TARGETS

4.1 Targets of the Eighth General Programme of Work

In line with the target of the 8th General Programme of Work, the Programme will foster national and international action so that by 1995 30% of Member States will have established national capabilities for:

- . Prevention and control of bacterial and viral diseases under this Programme within primary health care, as well as control of immunodeficiencies and other immunological disorders;
- . Laboratory support at the peripheral level on the diagnosis of these diseases;
- . Emergency preparedness and response.

4.2 Specific targets

Special targets for the purpose of programming have been defined as follows:

(a) Technical collaboration with Member States

- . By 1995, 70% of developing countries will have developed a nucleus of immunologists and microbiologists for their research training and clinical programmes;
- . By 1995, 40% of developing countries will be self-reliant in clinical immunology and microbiological technology and will be able to produce simple reagents for diagnosis of infectious and immunological diseases.

By 1995, 40% of developing countries will be able to diagnose diseases under this programme through laboratory support at the peripheral level.

(b) Research development

- . By 1992, a suitable live vector for such vaccines as hepatitis B, malaria, leprosy, leishmaniasis, rotaviruses, cholera, typhoid, etc., will have been selected;
- . By 1992, a suitable adjuvant for use in man and capable of stimulating a good immune response against synthetic peptides will have been identified;
- . By 1992, methods for improving vaccination efficacy through the use of programmed delivery systems will have been identified.

5. APPROACHES

At the country level, WHO will collaborate with Member States on the development of health technologies for the prevention and control of "other" communicable diseases of major public health importance, such as meningitis, plague, influenza, viral hepatitis and arthropod-borne viral diseases, e.g. dengue and yellow fever. Where applicable, countries will be supported in developing expertise for biosafety in the laboratory and, particularly, in the use of biotechnology.

At the regional level, collaborating centres will promote and foster specific activities for each of the diseases included in this group, including biosafety aspects, and promote specialized training and research. WHO will disseminate information on the epidemiology of these diseases.

At the global level WHO will coordinate national and international efforts and support in the evaluation of newly developed antiviral agents as well as antibody/antigen tests, and provide training in basic and applied immunology of infectious diseases. It will provide up-to-date knowledge of biosafety programmes through the existing network of collaborating centres. Research and development will be promoted, particularly in evaluating new epidemiological methods in support of the technology applied through primary health care.

The programme will continue to devise, test and promote early warning systems for increasing national capacity to detect and cope with emergency epidemic situations. The integration of such systems in health infrastructure development will be studied jointly with other WHO programmes involved in the establishment and strengthening of information for health management and those concerned with disease-specific surveillance. Advisory and consultative services will be made available on request to research and development projects and to other health science and technology programmes. The exchange of information among Member States and specialized institutions will be encouraged.

6. ACTIVITIES

6.1 Technical cooperation with Member States

Targets

- By 1995, 70% of developing countries will have developed a nucleus of immunologists and microbiologists for their research training and clinical programmes.
- By 1995, 40% of developing countries will be self-reliant in immunological and microbiological research, technology and services, production of reagents and prevention, diagnosis and treatment.
- By 1995, 40% of developing countries will be able to recognize diseases under this programme through laboratory support at the peripheral level.

Activities	1990 - 1991	1992 - 1993	1994 - 1995	Linkages ¹
1. Support for development and implementation of strategies/methodology for diagnosis, prophylaxis and treatment of bacterial and viral infections under this programme: (a) assist in establishing and expanding networks of national institutions for surveillance of selected infectious diseases, hospital infections and antibiotic resistance; (b) provide reference services through collaborating centres in support of national and international surveillance; (c) promote and support the development of laboratory capabilities at the peripheral level for the diagnosis of diseases under this programme; (d) assist in evaluating the cost-effectiveness of strategies in the control of communicable diseases.				PHC
	HQ/All Regions			
2. Technical collaboration with Member States to strengthen their capabilities for emergency preparedness and response: (a) promote and support the development of early-warning and surveillance systems for dangerous pathogens; (b) provide expertise, laboratory backup, equipment, vaccines and other resources to investigate and contain outbreaks when required; (c) promote and support post-emergency evaluation and remedial actions.				COR
	HQ/All Regions			
3. Technical advice to national institutes on development of vaccines in humans and on clinical trials.				PHC, DSE
	HQ/All Regions			
4. Promote the integration of hepatitis B vaccine within the Expanded Programme on Immunization.				PHC, EPI, DSE
	HQ/AFRO/AMRO/SEARO/WPRO/EMRO			
5. Standardization of reagents for epidemiological studies and clinical practice at all levels; advice through network of collaborating centres on production of reagents for bacterial and viral diseases.				NGO (IUIS)
	HQ/All Regions			
6. Dissemination of information and provision of technical advice on the application of new technology for diagnosis, prophylaxis and treatment of bacterial and viral infections.				All Regions
	HQ			
7. Organization of training on new/conventional techniques, development/updating of guidelines/manuals on management of nosocomial infections and antimicrobial resistance.				CCs
	HQ			
8. Provision of essential reagents, etc. to laboratories involved in work especially relevant to the WHO programme.				All Regions, CCs
	HQ			

¹ All jointly funded activities have not been identified at this time. Details will be available closer to the time of implementation.

Activities	1990 - 1991	1992 - 1993	1994 - 1995	Linkages ¹
9. Technical advice to Member States on request on the public health implications of allergic diseases, including interrelation with other diseases.		HQ/AMRO/EURO		CCs
10. Technical advice as required on dealing with microbiological safety in laboratory practices.		HQ		CCs
11. Training at WHO Immunology Research and Training Centres, Lausanne/Geneva on immunology and biotechnology applied to infectious diseases (in English and French).		HQ		Donor Regions
12. Advanced course on molecular and cellular aspects of antigenicity at Immunology Research and Training Centre for Advanced Studies, Rehovot, Israel.	HQ		HQ	
		HQ		Donor
13. Post-training support to scientists previously trained in the WHO Immunology Research and Training Centre through provision of technical advice, reagents, etc. for the establishment of their own research programmes.		HQ		

¹ All jointly funded activities have not been identified at this time. Details will be available closer to the time of implementation.

6.2 Research and development

Targets

- By 1992, within the Basic Vaccinology programme, a suitable live vector for such vaccines as hepatitis B, malaria, leprosy, leishmaniasis, rotaviruses, cholera, typhoid, will have been selected.
- By 1992 to have identified a suitable adjuvant for use in man capable of stimulating a good immune response against synthetic peptides will be identified.
- By 1992, methods for continuous release for use in vaccines will have been developed.

Activities	1990 - 1991	1992 - 1993	1994 - 1995	Linkages ¹
1. Coordination and support of studies of prevention and control strategies for cerebro-spinal meningitis, plague, influenza, parainfluenza, arboviruses, pertussis, poliomyelitis, herpesvirus, streptococcal diseases and their sequelae and human papilloma virus.		HQ		EPI, DSE CDD, MCH CVD
2. Evaluation of DNA-hybridization techniques for the detection of infectious agents.		HQ		All Regions
3. Coordination/support of development of new/improved vaccination strategies against selected infectious diseases (apart from those in 13.12) for which vaccines are needed, being developed or improved (Rift valley fever, yellow fever, Japanese encephalitis, Hantaan virus, Lassa fever, Argentinian haemorrhagic fever, hepatitis B, hepatitis non-A, non-B, influenza and pertussis).		HQ		EPI, DSE
4. Continuation and expansion of support for research on both the immunological mechanisms responsible for protection and for immunopathology in malaria, trypanosomiasis, leishmaniasis, schistosomiasis and leprosy.		HQ		TDR
5. Support for studies on the immunopathology of viral diseases.		HQ		
6. Support of further studies on the epidemiology and ecology of arthropod- and rodent-borne diseases in different types of natural foci to determine the dynamics of epizootic spread.		HQ		VBC
7. Support for the development and evaluation of simple diagnostic methods which can be applied at the PHC level and subsequent field testing of those methods found satisfactory.		HQ/All Regions		TDR, SPA Regions

¹ All jointly funded activities have not been identified at this time. Details will be available closer to the time of implementation.

Activities	1990 - 1991	1992 - 1993	1994 - 1995	Linkages ¹
8. Establishment of research standards for the production of immunological reagents.		HQ		DSE, NCO (LUIS)
9. Coordinate and support research activities on laboratory methods for monitoring anti-microbial resistance.		HQ		DSE, CC
10. Biennial consultation on immunological research relevant to WHO.		HQ		TDR, CDD, HRP
11. Steering Committee on Basic Vaccinology on research areas relevant to WHO.		HQ		TDR, HRP, CDD EPI, CPA
12. Support for research on live vectors for vaccines, adjuvants and delayed-release mechanisms on the basis of recommendations of Steering Committee on Basic Vaccinology		HQ		HRP, TDR CDD, CPA EPI, UNDP Donor
13. Support for epidemiological, operational and behavioural research, including the development and testing of methodologies for evaluating communicable disease strategies.		HQ		TUB, LEP, VPH VDT, PBD

¹ All jointly funded activities have not been identified at this time. Details will be available closer to the time of implementation.

7. PROGRAMME MANAGEMENT AND RESOURCES

Global policies and strategies will promote regional and national programme development. Two general approaches will be especially emphasized: coordination and technical cooperation on all levels.

Periodic review by the directors of collaborating centres and members of expert advisory panels at scientific groups and other meetings, and WHO-sponsored international conferences of the progress achieved in operational research, technical cooperation with and training activities in Member States is considered to be an excellent tool for the formulation of recommendations for the management of programme components concerned. Efforts will be made to establish closer contacts with national health authorities responsible for diagnosis, surveillance and control of bacterial and viral diseases and the biosafety programme.

The WHO regular budget represents only a small proportion of the funds required for the development of the programmes. Substantial support is received from UNDP for the project on vaccinology which is jointly managed by EPI (applied vaccinology) and OCD (basic vaccinology). The collaborating centres and recognized national institutions play an important role in the programme activities, since they provide not only expertise on technical aspects of surveillance and control of bacterial and viral diseases, but also contribute with their resources (reagents, technical information and training). In emergency situations, these centres and institutions provide the technical assessment and laboratory capabilities required to evaluate the situation.

Training in immunology is carried out in collaboration with the Universities of Geneva and Lausanne and is entirely funded by the Government of Switzerland.

8. MONITORING, EVALUATION AND INDICATORS

The programme on basic vaccinology will be guided and monitored by a special Steering Committee.

The evaluation of programmes will be carried out every two to three years by the directors of the appropriate collaborating centres and by using the information on the programme activities that have been successfully developed and maintained by Member States.

The following indicators will be used to measure achievements in relation to the targets defined in the Medium-Term Programme for 1990-1995:

1. In areas of technical collaboration with developing countries:
 - . number of Member States with functioning bacterial and viral surveillance systems;
 - . number of Member States applying simplified techniques for the diagnosis of bacterial and viral infections;
 - . number of Member States (and persons) participating in WHO-organized training and number of training centres established;
 - . number of Member States meeting epidemic emergencies on their own and/or within regional self-reliance schemes;
 - . number of Member States applying newer and more simple diagnostic techniques.

2. In areas of research and development:

- . progress towards the development of new/improved vaccines under the mandate of this Programme;
- . number and quality of scientific publications resulting in WHO-sponsored/supported programmes;
- . development of methods applicable at PHC level in diagnosis, treatment and surveillance of bacterial and viral diseases.

9. LINKAGES

As indicated in Items 6 and 7, programme activities proposed in this document will require close collaboration with the regional offices and with a number of headquarters programmes. By virtue of the proposed activities, strong, collaborative linkages will be maintained with the following programmes:

- . for development of strategies/methodologies for the control of bacterial and viral diseases at the peripheral level, including evaluation of simple diagnostic methods; PHC, TDR, CPA, DSE, CLR
- . for the development of new or improved (but inexpensive) "new" generation of vaccines, (not covered by PROGRAMME 13.12), including support on immunological components to other WHO programmes; EPI, DSE, CDD, CPA, TDR, CVD, HRP
- . for the development and the application of new drugs and interferons for the important bacterial and viral infections; DSE
- . for the development and testing of methodologies for the prevention and control of communicable diseases, including support for epidemiological, operational and behavioural research; TUB, LEP, VPH, VDT, PBL
- . for technical collaboration in emergency preparedness and response. COR, HST

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