"A.ŠTAMPAR" SCHOOL OF PUBLIC HEALTH,
MEDICAL SCHOOL, UNIVERSITY OF ZAGREB
ZAGREB

INSTITUTE FOR ORGANIZATION
AND ECONOMICS OF HEALTH
ZAGREB

as members of

CENTRE FOR HEALTH COOPERATIN WITH
NON-ALIGNED AND DEVELOPING COUNTRIES
Z A G R E B

Project: Continuing education for primary health care

SCIENTIFIC ASPECTS OF THE PROJECT

Zagreb, January 1985

SCIENTIFIC ASPECTS OF THE PROJECTS

"CONTINUING EDUCATION FOR PRIMARY HEALTH CARE"

In the project: "Continuing education for primary health care" being implemented by the Medical School, through its "Andrija Štampar" School of Public Health, and the Institute for Organization and Economics of Health in collaboration with the Japanese Agency for International Co-operation, a very important part refers to scientific-research aspects, for the following main reasons:

1. The Project enters into a field which is completely new for our health system due to the restricted possibilities for applying modern technology. That is why the application of this technology is to be subjected to scientific evaluation.

2. It is a field which is not sufficiently explored, concerning the main tasks of the conception of the primary health care system as well as practical and technical aspects of its application.

3. It is an entirely new Project in continuing education and there is no positive experience which might be applied. That is why scientific analyses are required of all aspects which might contribute to the development and/or the revision of the system.

In a wider sense, scientific aspects of the Project are important also for the following reasons:

4. Since the Project has the international importance it is indispensable to develop its scientific aspects in order to insure not only the transfer of the present technology but also its further improvement, realized by proper resources and forces.

5. The Project supports the intentions of our scientific policy tending to build up such technical and scientific capacities that will enable us to follow very fast development of the new scientific fields, such as information of communication and expert systems in medical, social and other activities.

In this field our general underdevelopment is obvious, while at the same time technical development is going on fastly. Consequently,

scientific evaluation of the new aspects of social (selfmanaging) and other conditions for implementation of the new system becoms very important.

6. Social system and other conditions (tradition of the work in primary health care) offer objective possibilities for the realization of creative, scientific contribution to the improvement of the continuous education in the field that the Project referes to.

That is why the research project is suggested to be made, the summary of which is enclosed herewith.

S U M M A R Y

OF THE RESEARCH PROJECT

"RESEARCH OF THE NEW TECHNOLOGIES OF MEDICAL EVALUATION AND DECISION MAKING IN PRIMARY HEALTH CARE"

Goals of the research

With the development of new technologies in communication and information with its application in medical decision making some critical points appeared, which requires further research actions, since they could offer no reliable scientific facts, and the experience gaind so far cannot satisfy new needs and possibilities.

Therefore, the goals of research can be defined as follows:

1. To establish the social interest and motivative aspects of application of the new technology in communication information handling.

2. To estimate the importance of various media (audio-visual, computer and others) for communication in primary health care.

3. To estimate the importance and possibilities for applying the expert systems for medical decision making in primary health care.

Main tasks of the research

The Project will develop the system of feed back information in primary health care. It is foreseen that a dynamic technical background to the health system is created, that can be qualified as an "intelligent" (in the sense of expert systems) technological support to practice. This support, which is to be based on real (not supposed) technical problems met in everyday practice, will enable deep and efficient analyses of these problems, applying the knowledge and experience of the most developed scientific institutions. The results of these analyses will be transfered to practice by the most efficient and stimulating media, and their effects will be continuosly controlled, what will result in further development of the system.

The system of continuing education must not be considered as a system for distribution of the existing knowledge but it makes an active part of

the sybernetic control. Acutally, the main task of the research is to introduce a system of continuing education which is completely different from the existing practice and the extended attitudes.

According to the studies done in this field one can identify four main elements (subsystems) in the continuing education subsystem:

A. Subsystem of the active participants in the health system, which are at the same time main subjects and users of the system of continuing education;

B. Subsystem of communications (interphase) between the center for continuing education and the users;

C. Subsystem of medical decision making, comprising specific expert systems applied in primary health care, and formation of knowledge bases required in continuing education;

D. Subsystem evaluating the performance of the Project.

Each of the subsystem is subject to changes, which result in new prospects and enable to reach new synthesis and solutions of the existing problems. Still, they have also to be treated as a unique system if we wish these solutions to be original and creative.

For example, all below stated problems require new solutions:

- In the subsystem of users the conception of the primary health care is changing, subjects which are outside of the system of medicine play more and more active part in the system, there are differences in ways of providing primary health care, our system of joint companies on social-economic and interest basis is a very specific one. These problems directly influence not only the implementation of the continuing education Project, but also its main goals, concerning technical solutions, forms, etc.

- Very little is known about the subsystem of communications in public health, although there are many papers dealing with spreading of innovations, specially new drugs and other technology. Still, it is well known that various new methods of communication becomes more and more actual in health care practice. Modern technology enables the replacement of some methods of interpersonal communication, traditionally dominating in our health system. For example, modern video techniques are probably very important for the improvement of medical diagnostics. Still, we know only a little about the range of these changes and their importance.

- In the subsystem of medical decision making the attempts trying to define specificities of primary health care, which becomes more and more dominated by specialized, so called high medical technology which are considered very actual and important. Although, when this problem is in question primary health care is only an example for the same situation in many other social activities. The problem might arise till the statement saying that this is only a period of evolution, when actual practice is being neglected because of domination of specialized teorethical patterns. For example, the integration of pshyhological, somatic and social aspects of health and illness, which is of prime importance in primary health care, nowadays is in a great degree broken due to psychiatric, social-medical and a great number of other paradigmas of specialized disciplines in medicine.

Methods of scientific research:

The requirements for a new knowledge and experience will be analysed on the sample of about 200 primary health units. Differences of interests, needs and reactions will be observed in different groups, with regard to the type of the applied primary health care /for example: regions, village-town, local community, working organizations etc.).

Upon these analyses the problems will be worked out and solutions will try to be found, which will then be transferred by different media back to the operating units.

The influence of the different communication media to the transfer of knowledge will be analysed, trying to find out the most efficient solutions of the established problems.

Through the analyses of the described process, the most suitable expet systems will try to be defined, which would then be corrected and improved in further development of the system of continuing education.

It is expected that this new education system will required formation of experimental knowledge bases, organized in a completely new way.

Finally, when estimating the extent to which the Project has been applied and analysing factors influencing this application and models of system implementation, and when estimating its economic and organization characteristics contraints including the relation between technology and organization, it will be necessary to analyse the realization of the Project plans and to evaluate the results achieved.

The Project is planned to be realized in five years, but the most significant creative scientific contribution will be required in the first half of its implementation.

Nos.	Description of Goods	Quantity
1.	Portable Overhead Projector 220V, Model: 615	1 unit
2.	TP Art Kit for OHP	1 set
3.	Blank Sheet for OHP Size: A4, 100 sheets/set	1 set
4.	Spare Lamp for OHP, 24V-250W	10 pcs.
5.	Water Pen for OHP, 6 colors/set	5 sets
6.	Oil Pen for OHP, 6 colors/set	5 sets
7.	Teaching Materials for OHP (TP)	1 set
8.	Plug Set (Table Tap & Plug)	1 set
9.	Screen for OHP, Size: 1,500x1,500mm Model: HW-3	1 pc.
10.	VHS Video Tape Recorder PAL/SECOM/NTSC, Model: BR-6400TR	1 unit
11.	14-inch Color Monitor PAL/SECOM/NTSC, Model: VM-14PSN	1 unit
12.	Color Camera(PAL), Model: GX-N7E	1 unit
13.	Portable VHS Video Tape Recorder(PAL) Model: BR-6200EG	1 unit
14.	AC Adapter(220V), Model: AA-P26EG	1 pc.
15.	Battery Pack, Model: NB-P1	3 pcs.
16.	Connector Cable	1 set
17.	VHS Video Tape, Model: T-60HG	10 pcs.

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Project: CONTINUING EDUCATION
FOR PRIMARY HEALTH CARE

ELECTRONIC (VIDEO AND COMPUTER) ASSISTED
CONTINUING EDUCATION IN HEALTH CARE

S U M M A R Y

OF THE GENESIS, RECENT AND FUTURE ACTIVITIES OF THE PROJECT

Zagreb, July 1985

I. Genesis of the project, main goals and tasks

The health care of every nation is considered as the integral part of its development and needs.

For the implementation of health care it is necessary to have a qualified and well trained health personnel (manpower). For the education of this personnel undergraduate training does not suffice but of greater importance is the so-called continuing postgraduate education.

That is why continuing education of health workers is considered as the key instrument for a better quality of health care as well as for the improvement of the health status as the prerequisite of every economic and social development of any country.

Those were motivating factors according to which the Agreement between the Socialist Federal Republic of Yugoslavia and Japan for cooperation in the field of scientific technology was signed in Tokyo on 22 May 1981 and which included the implementation of the first programme on bilateral scientific-technical cooperation in the field of health devoted to this theme.

During the preparation phase from 1981-1984, after several visits of the Japanese delegations organized by JICA and one visit of Yugoslav experts, all details of the project were worked out, including its education of professional components, organizational, technical and financial elements, etc.

The corresponding partner from the Yugoslav side is the Federal Administration for international, scientific, cultural-educational and technical cooperation which, through the Republic Administration for Technical Cooperation, has carried out all legal-organizational and technical issues so that during November 1984 the Record of discussion was signed between the Japanese implementation survey team and the authorities concerned of the Socialist Federal Republic of Yugoslavia on the Japanese cooperation for the project of continuing education for primary health care.

The executive institutions from the Yugoslav side are members of the Centre for cooperation with non-aligned and developing countries in the field of health and primarily the Medical School, University of Zagreb, through its A. Štampar School of Public Health and the Institute for organization and economics of health. The other members of the Centre are also joining the project gradually.

The principal investigator of the project is Professor Želimir Jakšić and the Director of the project is Dr Berislav Skupnjak. For the implementation of the project a joint Yugoslav--Japanese committee has been formed as well as several technical groups and commissions (boards) from the Yugoslav side.

II. Goals and tasks of the project and way of implementation

The main goal of the project has been jointly defined: "set up and apply in practice a system of continuing education of health workers especially in primary health care by applying electronic (video and computer) technology. It is expected that the continuing education of health workers will improve the quality of health care. It is further expected that this will contribute to the development of educational technology and exchange of experiences in this field between the two countries".

This joint work is considered as very significant for the cooperation between the two countries and as a condition for international friendship and understanding.

That is why within the general and professional cooperation between Japan and Yugoslavia in the field of health the focus was placed on the exchange of experiences and achievements in the health care system of both countries.

Furthermore, a permanent professional and technical cooperation between the two health systems will be established as well as the exchange of experiences in audio-visual and computer assisted educational systems between the two countries, transferring it further on.

One of the immediate goals is to form a Centre for production and distribution of educational material for continuing education, to start with the production of these educational materials and to organize groups of users according to certain prerequisites.

Full attention will be given to elaboration and ap-

plication of a model for the follow-up and evaluation of such a form of continuing education using scientific methods of work.

The users of the project will be all health workers on different levels of health care but also certain groups of population in the community.

Primary users are, however, health workers in primary health care.

That is why a system has been worked out to set up the so-called network of units for continuing health care from certain locations (educational units) where production materials will be installed so that the entire area of the Socialist Republic of Croatia will be covered.

Besides, this network is worked out in such a way that it will cover all types of institutions, all kinds of health care, all profiles of health workers, urban and rural areas, etc.

All this is foreseen in the so-called Master Plan and Plan of implementation.

It has been agreed that every year an annual plan of work is submitted, which has already been done for the first of the 5 years of the project implementation.

The educational material will be worked out in accordance with defined goals of education which are subordinated to priority needs and demands of users.

As media video tapes will be used as well as computer--programme packages. An audio-visual journal and an electronic library are also foreseen.

It was especially pointed out that a scientific evaluation programme of the whole undertaking will be elaborated.

Evaluation will be performed not only on explicitely scientific methods but it will also be based on (ensuring) the so-called feed back from users.

That is why in the implementation of the project will be included not only members of the working team of the project but also all health workers in the health system of our Republic, several administrative bodies and several scientific institutions. Technical, legal and organizational coordination is executed by the Administration for Technical Cooperation of the SR of Croatia while the coordination for the health sector in the administrative sense is conducted by the Republic Committee for health and social welfare, and in the institutional sense by the Association of health work organizations of the SR of Croatia.

III. Implementation of the project - summary of recent activities

1. The involvement of partners

The main task in the preparation for the implementation of the project was the involvement of future users of continuous educational services as partners in the organization of the system. Three strategies have been applied:

- to get formal political support
- to involve future users in organization of the project structure
- to involve future users and other contributors to the system (experts, research and other institutions, etc.) in designing the functions and contents of the

system.

To achieve this the following activities have been accomplished:

- the four Republic committees (equivalent to Ministry) have been informed about the project and asked to consider its importance. All of them have been contacted personally and the essential documentation was supplied. In several occasions additional information was given in meetings with highest officials. All of them have responded, analysed the main implications of the project and issued formal statements underlining the great importance of the project. These have been the:

  - Committee for health and social welfare
  - Committee for education, culture and physical culture
  - Committee for science, technology and informatics
  - Administration for technical cooperation

- Besides that, the Chairman of the Executive Committee (the Prime Minister of the Government) was informed about the project and gave his support,

- The socio-political organizations have been informed, including responsible individuals and groups in the republic authorities of the Trade Unions, Socialist Alliance of the Working People and Alliance of Communists,

- The main partner, the Association of the health work organizations was involved in building the network in the field and organizing the first contribution in financial and material support for the project. Besides, the contribution in identification of needs for continuous educations was achieved. In two meetings of the Presidency of the Association the project

was discussed as well as in several regional meetings. A "Self--managing contract" for participation of users was conceived and is now under discussion in the field. The formal acceptance of that contract is time-consuming and connected with some administrative difficulties (it has to be discussed and accepted by more than 300 individual subjects). However, the initial acceptanece of the project by the work organizations is encouraging.

During the exibition "Medicine and Technology" (May a985) a special symposium was organized to inform participants and collect their opinions and suggestions. The Project' s scientific and research aspects were formulated and a proposal was submitted to the Self-managing Community of Interest for science of the SR of Croatia. Supported by the recommendation of the Republic Committee for Science, Technology and Informatics this proposal was accepted and a financial contribution has been granted opening the possibilities for future support from this side.

Many other organizations have been contacted and a partnership was considered (e.g.Radio-television, the educational television programme, the Film producing enterprises, the film educational unit, different units of the University). Besides that, a number of health institutions and the main research and scientific institutions have been involved as well.

- Regularly scheduled scientific and technical meetings of professional and other organizations have been used to propagate the project, involve interested, and get advice and suggestions for the organization of the project. Among others, the Congress of General Practitioners of Yugoslavia (Bled, May 1985) was important.

2. Technical preparations

The technical preparations of the team was considered to be one of the most important activities, although it was slowed down by financial, organizational and managerial problems.

The following was accomplished:

- a symbol, format (in principle) and way of application were developed by the working group;

- the script for videospot on the project was proposed, discussed and ageed upon in general terms;

- several tentative scenarios on the most frequent problems of health workers in primary health care have been written and discussed;

- an international symposium on the training of teachers in general medical practice (Inter-University Centre, Dubrovnik) has been used to gain experience in developing skills in using video-system in training;

- further opportunities for extension of technical aspects of the project have been considered.

3. Organization of work and preparation of facilities

The organization of the working group started as it was envisaged by the Plan of Action. This includes:

- contracts among the participating institutions,

- staff planning, job description and recruitment (one computer expert and video manager - unsuccessfully so far),

- preparation of space for the future central studio, including:
- construction works on the building
- moving present tenants
- elaboration of construction and other plans in order to start works on 1 August as was planned.

4. Future activities

The future activities are foreseen in the Plan of Action on which Japanese and Yugoslav working group agrred upon. As the main activities the following will be included:

- training of two experts in Japan starting 1 August;
- another additional training of an expert in Japan later during the year;
- starting with construction work of the premises for the TV studio;
- further activities in propagating the system among the users;
- further financial arrangements;
- the joint work with a group of Japanese experts in the methodology of education, as well as the sampling and evaluation techniques for the purpose of the project.

5. Estimate situation, problems and difficulties

So far the foreseen plans have been successfully fulfilled. A stimulating permanent interest from the Japanese side is very much appreciated, as well as direct help in solvong many technical problems. The support of the governmental organizations in the SR of Croatia and the expressed and active interest of the future users (health services in Croatia) was rewarding and helped the fulfilment of the Project Plan of Action.

The main difficulties experienced so far are:

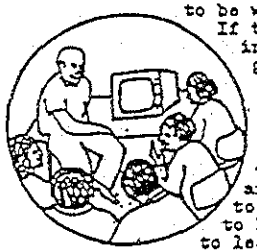
- slow mobilization of financial resources;
- experts in several fields of project, technical activities i.e. computer sciences, some special aspects of video production - in short supply in the country;
- insufficient support by information on similar projects already working in other countries.

sted by computer technology.Regional educational units will be able to use this programme on their microprocessors, as well as any other institution possesing a microprocessor.

WHO CAN USE EDUCATIONAL MATERIAL AND HOW?

Educational material is expected to be used by all members of educational teams in primary health care and in other health organizations.

If some material is made specially for doctors, or nurses, or population it will be explicitely stated in the enclosed form.The material can be used individually, but it is suggested to be worked out in small groups. If there is a problem set up in educational material the group is expected to solve it.Consequently, every working organization (included in the network), which want to be actively included into the system with its own problems and experience, will have to find a person qualified to handle the equipment and to lead the groups.



The required equipment will be distributed to the educational units according to the distribution scheme made by the Association of the Health Work Organizations Socialist Republic Croatia (in the name of its members - health wporking organizations).

HOW TO JOIN THE SYSTEM?

Health working organizations of the Socialist Republic of Croatia, trough Health Work Organizations get the right and take the obligatio to join the new system of continuing education.

It is foreseen that the equipment will be received and distributed in the course of 1985, while the system will start functioning in the first half of 1986.Full capacity is expected to be reached in a year and a half from starting.

The Health Work Organizations of the Socialist Republic Croatia is authorised to carry out all actions in connection with the inclusion of health working organizations into the system.

ADVANTAGES OF THE NEW SYSTEM

According to professional and social opinion the new system offers significant advantages and will surely contribute to better information and communication and to more efficient work in primary health care and then graduyll in the health system in general.

It will help us to overcome the enormous technical backwardness in our health education a will bring us closer to the new technology.

The system remains in the hands of users, its main principle being to achieve a balance in spreading technical informations, keeping always to the method "from practice to practice".

The experience of some other countries confir that the proposed system might overcome almos all defects of the present system of continui education: inadequate subjects, communication methods and the organization of work.

FURTHER INFORMATIONS AND COLLABORATION

The executive institutions of the Project:

Andrija Stampar School of Pul Health, Medical School, Univ ti of Zagreb, and

Institute for Organization a nomics of Health, Zagreb

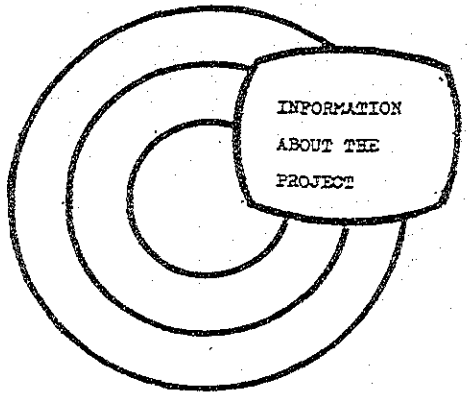
as members of

Centre for Health Cooperatio with Non-aligned and Develop Countries, Zagreb

Address: Educational Media Center
41000 ZAGREB
Rockefellerova 4

THIS IS YOUR SYSTEM.
SO PLEASE JOIN IT SOONEST POSSIBLE AND HELP ITS REALIZATION.

CONTINUING EDUCATION FOR PRIMARY HEALTH CARE ASSISTED BY ELECTRONIC TECHNOLOGY



A new possibility appeared for health to be included into the broad system of modern communications,based on its own needs and experience,which will greatly improve the information and the quality of work in primary health care and in the health system in general

Zagreb,May 1985

CONTINUING EDUCATION IS INDISPENSABLE IF WE WISH TO HAVE HIGLHLY PROFESSIONAL AND EFFICIENT HEALTH WORKERS

There are well known statements about importance of continuing education ("medicine is a lifelong study").Nobody tries to deny them,these statements being supported by public,legal and professional opinion.Still,in the last decades new theories appeared,stating that the existing system is not very efficient,the obtained results being very often worse than expected.In spite of significant interest shown in advance,some lectures and professional meetings remain unattended while only a small number of health workers regularly provide technical literature.

POSSIBLE CAUSES FOR RELATIVE FAILURE OF THE FORMER SYSTEMS

In numerous background materials and symposiums they tried to find out possible reasons for relative failure of the present system of continuing education (for example,Symposium of the Academy of Doctors Association,professional associations,Medical School,Trade Union of Health Workers,Association of the Health Work Organizations,etc.).

Mostly,the following reasons were mentioned:

- Subjects are in great part unsuitable,because they do not treat the problems important for everyday practice.
- Educational methods are nothing else but passive listening or reading.
- Mostly theoretical and verbal teaching is applied and very often those who speak about some problems have no experience at all in the problems which the attendants meet in their everyday practice.
- The existing organization offers no possibility for regular training and does not stimulate active participation of the attendants.

Using all these analyses and the experience of those who have well organized system of continuing education, Medical School in Zagreb and the Institute for Organization and Economics of Health Zagreb, in collaboration with the Association of Health Work Organization of the Socialist Republic Croatia, and supported by collaboration with Japan, have started the Project of continuing education for primary health care.Owing to the agreement between the Government of the Socialist Federal Republic of Yugoslavia and the Government of Japan there is a possibility to provide from Japan the equipment necessary for development of the regular system of continuing education, assisted by electronic technology.Japanese Government will deliver the equipment for Educational Media Center (EMC) where educational material will be worked out as well as 50 reproduction units to be installed in lokal institutions, included in so called network of units in primary health care covering the entire territory of the Socialist Republic of Croatia.

HOW DOES THE NEW SYSTEM WORK?

The educational units for reproduction of the educational video materia (recorder,monitor and portable stand) will be delivered to any health working organization in the Socialist Republic of Croatia, which is ready to join the system of a new electronic assisted education.In that way Medical Centres, Primary Health Care Centres, Public Health Institutions and other organizations will set up the network of units for continuing education.The new system is based on the active part of all participants and on their own experience, examples and problems they meet in everyday practice.Therefore, four regional "production" units are planned to be set up, eachone being equipped not only with equipment for reproduction but also with the equipment shooting in the field (camera, etc.) for shooting in ordinations or in homes of the users of health care.

Central studio will be placed in Educational Media Center (EMC) of Medical School, in the Andrija Stampar School of Public Health, where educational materials will be worked out.The Center will provide informations about the users needs and requirements, about the experience gained with this system in our country and abroad and about new ideas and inovations.It will also organize a team of collaborators and consultants,ensuring at the same time the feedback informations from users and evaluation of the new system of continuing education.

Once a month video tapes of duration 30 minutes will be produced in the Center.This sort of educational material is called video-journal and like all journals it will be divided into columns,dealing with various contents.

COLUMNS OF THE VIDEO - JOURNAL
- Standard and new working methods in primary health care
- Actual problems in practice
- Actual experience from practice
- Experience from other countries
- News
- Health educational models

These main subjects are treated in video-journal: problems and experiences met in everyday practice, explanation of standard working methods and introduction of the new methods and models.Columns which are expected to have its actuality for a longer time can be easily taken out and a sort of library can be made. This columns, intended for education of young and new workers and others.That means, they have for permanent use thematic tapes showing emergency, diagnostic and therapeutic methods etc.

Video-journal can be kept in an institution for one month (until the next number is received), while thematic tape remains there for permanent use .For each educational unit there is a possibility to borrow again any educational material and even to order filming of its own video tape, at the lowest possible costs.Four regional units are expected to be equipped with computer technology for continuing education. Twice a year they will have at their disposal the programme for medical decision making as

ASSOCIATION OF HEALTH WORK
ORGANIZATIONS OF THE SOCIALIST
REPUBLIC OF CROATIA

CONCLUSIONS FROM THE 9th MEETING HELD ON 12 MARCH 1985

ZAGREB, MARCH 1985

A G E N D A

1. Information about possibilities for realization of the Project of continuing education for health workers;
2. Acceptance of the record from the 8th meeting of Chairmanship, held on 21 January 1985;
3. Report on the implementation of the Working programme for 1984;
4. Report on the financial results in 1984 and the report of Supervising committee about the examination of the financial results of the Association in 1984;
5. Determination of the working programme for the Association for 1985, and discussion about financial plans;
6. Decision about daily wages for business trips;
7. Discussion and suggestions about organization of the working process in health organizations, and
8. Other subjects.

Ad. 1 - Information about possibilities for realization of the Project of continuing education for health workers. Introduction was given by Dr B.Skupnjak and Prof. Ž. Jakšić.

The discussion followed, in which took part: Dr.To.Vuković, Prof. Ž.Jakšić, Dr. B.Skupnjak, Dr. I.Eterović and Mr.J.Kuzminski. After detailed discussion and explanation of some vague points the chairmanship made the following

C O N C L U S I O N

1. The project of continuing education, assisted by modern audio--visual and computer technology is considered extremely important for development of health system in our Republic. Actually, it is expected to give a decisive contribution to the expansion and modernization of continuing education what is required by our legal provisions, being also a constant need and wish of our health workers : Health workers must be able to follow new and very fast development of medical and health technology. Besides, it would be the most significant step towards a systematic and programmed adoption of the new electronic technology that will help us to start overcoming the enormous difference between new technological possibilities and their application in our health care system.

2. For all said reasons the Chairmanship accepts the invitation of the Republic Committee for Health and Social Welfare of Croatia to be actively included in implementation of this Project. Association of Health Work organizations get the right and take the obligation to joint the new system.

3. Working community and all sections of the Association are charged with making a detailed programme for the engagement in implementation of the Project and the use of its results.

4. Working community and respective sections of the Association are specially charged with making a scheme for distribution of 60 reproduction kits for electronic equipment and for 4 regional centers, having in mind that the entire territory of SR Croatia is to be covered and that all health working organizations -- members of the Association, are to be included in the use of this equipment.

Besides, it is necessary to work out plan and programme for subscriptions to audio-visual and computer materials (kits) and examine all formal and legal regulations, which are to be fulfilled when taking over the equipment, providing that required funds have been obtained for this purpose, through joined arrangements between working organizations.

5. Loyers of the Association Working community will make a document for the Association entering to the Agreement.

6. For the next meeting of the Chairmanship, Association Working Comunity will prepare a proposal of the Agreement about the acceptance of the new technology, to be distributed to health working organizations according to the agreed plan, and which will, upon completion of the Project, remain in this organizations for their use.

7. Secreatary of the Association Assembly will be a member of the Coordination board of the Project, and he is authorised to make operative decisions in realization of the above conclusions.

8. The Chairmanship considers very important to use all possible means and methods in order to get all health working organizations - members of the Association, informed about prospective chances and possibilities offered by the Project through medical journal "Zdravstvo", the exhibition "Medicine and technique", through discussions about the Projects in sections of the Association, etc.

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Research Project: CONTINUING EDUCATION
FOR PRIMARY HEALTH CARE

FEED - BACK AND EVALUATION METHODS AND PROCEDURES

Zagreb, August 1985

FEED-BACK AND EVALUATION METHODS AND PROCEDURES

INTRODUCTION

The main assumption of the Project is that the continuous education will be successful if the users will be involved as the main subject of the system. They should participate not only proposing subjects to be tackled, but also providing the experiences from practice and in that way building the appropriate structure of thoughts and paradigm in solving medical and health problems. The new knowledge and skills should not destroy, but support, enlarge and improve their own way of thinking and practical experiences. According with some of the results in research of adult education, it should reinterpret the experiences if they are not in accordance with the contemporary scientific interpretations, but it should not negate the fact or impose new ways of thinking, coming from experiences which are strange to the practice of primary health care. Because of that demonstration of good practices and explanations will be the most important educational methods.

Because of the described basic assumptions the role of feed-back mechanisms and evaluation methods build-in the Project makes essential part of it, guiding the whole educational process and not just measuring the achievement of the educational efforts based on preconceived educational objectives.

OBJECTIVES

The evaluation and feed-back mechanisms in the Poject have to fulfill the following objectives:

1. to involve the users in the process;
2. to provide the subject areas for continuous education;
3. to provide the essential (core) problem-solving paradigm;
4. to help in discovering the main constraints in implementation of qualitative services;
5. to identify the communication problems in the system;
6. to measure overall achievements of the Project (coverage, attitudes, results in practice).

CRITERIA AND EXPECTED CHOOSING CONSTRAINTS

In discussing and choosing different evaluation and feed-back method the following criteria are proposed:

1. do the methods help the learning process;
2. do the methods help participation and involvement of users;
3. do the methods fulfill time limits and balance the time economy;
4. are the methods feasible under conditions of the Project (criterion of efficiency);
5. the method should be valid (dealing with important issues) and realiable (allowing comparability in time and among the the observed units);

In spite of all these criteria and,especially because of ones listed under number (3) and (4), the evaluation and feed-back methods have to be simple. A compromising trade-off has to be foreseen. The perfectionism in methodology should be avoided. The adaptivness and flexibility has to be stressed. Among other reasons the concept is important of the realistic estimates of environment in which the Project is operating (an open social system reflecting all kinds of historic, cultural, developmental characteristics and position and difficulties of existing health services, health economics, etc.).

Among the expected constraints one can list the following based on experiences and some research existing in the area:

- rather low and short lasting motivation in spite of initial interests;
- rather high sensitivity to failures of the system trying to blame "the system" for poor own performance;
- very wide range of individual experiences and attitudes as well as conditions of work so that not all can be satisfied in one time;
- preference for the "passive" educational methods and technical information in spite of understanding that it is mostly inappropriate and inefficient in comparison with proposed "active" methods, like problem solving, etc.

THREE AREAS IN APPLICATION OF EVALUATION AND FEED-BACK METHODS

In planning the educational programme of the Project there are three areas in which the evaluation and feed-back methods have to be further considered and elaborated:

1. feed-back methods built into the AV teaching materials;
2. formative evaluation during the production of AV materials;
3. evaluation of the Project as the whole (mostly described already in previous documents).

In the following part the ideas identified dilemmas are listed for purposes of stimulating more of new initiatives, considering the existing ones and solving the dilemmas. Overall purpose is to design realistically, especially based on experiences in different similar projects, the feed-back and evaluation system for the first year of the implementation of the Project.

FEED-BACK METHODS BUILT INTO THE AV TEACHING MATERIALS

The regular AV materials (the AV Journal) will represent a combination of different educational methods of which three will dominate:

- information (with different degrees of explanation);
- demonstration (how the problems are solved in practice and/or which difficulties are experienced);
- problem-solving exercises (with typical circles: real practical case-problem identification, alternative solutions, testing solutions in practice, comments and explanations).

In all forms there will be the opportunity for active participation of users what in itself is a kind of feed-back; e.g. an special effort should be to collect information from the field and not only from the scientific sources or teching institutions. The demonstration method will be mostly based on positive experiences in the practice in application of different programmes and problems connected with implementation. Among the most difficult is the problem solving because it should involve "both sides": experts of different disciplines and the workers in practice.

A special opportunity for active and problem solving method is the application of the AV materials in the groups. The problem solving in that way is not only individual but a team approach and group dynamics are involved. The feasibility and effectivness of that method has to be tested. In some occasions the " competitivness" which is involved might be a destructive element, as in other occasions it might be extremly efficient.

The different types of subjects continuous education has to deal with are expected to have different relation to the described AV methods. The classification schematically should separate: clinical health problems (individual diagnostic and treatment problems), communication problems (especially between people and health workers), and health programmes implementation problems (mostly dealing with health promotion and prevention in groups and communities). So far the problem-solving approach is most developed for the first group (clinical health problems), and scarcely for other two. The AV method by its very nature is most effective for conveying messages about the second group (communication problems), but there are only general experiences, e.g. TV news, with the third group. Obviously the problems of feed-back are not simple and experimental application is needed of different techniques such as "role-playing in groups", panel discussions

based on demonstration of practical experiences, etc. For the third group (health programme implementation) the demonstration would be obviously the preferable methods, but again for feed-back different methods have to be developed such as a modified "critical incident" method, "competition" for best quality or efficiency, results reported of small projects, etc.

One of the problems connected with the problem-solving is the complexity of many problems and existance of multiple "correct" solutions. This situation is not educationally productive. An effort has to be made that not all the solutions are acceptable, what is often very difficult. Experiences are needed with criteria applicable to the real life situation and avoiding the black/white approach.

The ways of feed-back envisaged so far are several:

- tests and questionaries (paper through post, AV summary);
- reports and descriptions (paper through post, AV by EMC);
- reports on group education effort (paper, AV by observers);
- comments and reaction to the problems (paper, AV by EMC or themselves);
- panel discussions (AV by EMC);
- project reports and demonstrations (AV by EMC).

For the time being there is not possibility to have it "on line" and the problem of time-lag and time coordination will be a considerable one. This is especially important for the "problem-solving circle" which has to involve users in several steps in a definitive order.

The organizational aspects for providing feed-back are considerable. It would be important to plan involvement of some health authorities so that the health programme and clinical method which are suggested through the system are followed by provision of adequate materials and economic support. This opens the whole new area of activities which are peculiar for the existing health system in the country. It is also connected with the rewarding aspects of the continuous education which has to be solved gradually. The balance between positive and negative approaches has to be in favour of positive.

FORMATIVE EVALUATION DURING THE PRODUCTION OF THE AV MATERIALS

The tentative schedule for the evaluation of the AV material during its production was considered in several previous materials. The list of participants (editorial board) and the flow-chart how the AV material has to be produced have been developed.

Along with experiences it would be necessary to revise and simplify the proposed scheme and also to clear some of the dilemmas which have not been solved:

- how much of authors' freedom is possible, and what should be the Project policy;
- relation of technical experts in different medical discipline and educational and AV experts;
- involvement of users during the formative evaluation.

So far it was experienced that it is a tendency to establish clumpsy bodies of different representatives of experts, which are often destructive by "wise" comments and ideas of different kinds, resulting in paralysing the creative workers and favourising the ineffective bureaucratic and neutral materials.

The internal testing during the production is not yet solved. Should it be : students, practicing users, experts, a mixture, should it be individual or group (collective), how much formal should it be? Should it be done always in the same way? Should the group of evaluators be the same or changed?

A special problem is the hidden curriculum by which all the subjects during one year have to be combined.

EVALUATION OF THE PROJECT AS THE WHOLE

As it was mentioned the major part of evaluation methodology for the Project as the whole was already discussed and defined.

From this it is clear it was accepted the evaluation should be more of the action-type research than formal evaluation by comparison before/after or even less of comparison involved/non-involved. Because this is not usual and because it is important to be cleared before the Project starts, a reconsideration might be necessary. The criteria mentioned at the beginning of this paper are very important for this part also. One additional criterion, however, appears here, i.e. the extrapolation of experiences of the Project to other situation. In that connection it was also realized that a considerable part of scientific research would be needed for the successful implementation of the Project and in that sense one should an addition consider the proposed scientific research approach as a part of the overall evaluation of the Project.

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I N T R O D U C T I O N

The members of the Centre for the cooperation with the developing countries - Institute for the organization and economics of health services, Zagreb, Medical Faculty with the School of Public Health "Andrija Štampar", Zagreb, Association of Health Organizations of the Socialist Republic of Croatia, have - after a few years`preparations - started together with JICA (Japanese International Cooperation Agency) a mutual project entitled "Project on Continuous Education of Primary Health Care Physicians by means of Electronic (Audiovisual and Computer) Devices".

This is - according to the first results - very successful and useful cooperation for both sides. It will significantly contribute to the fastening of the process of continuous education of physicians and its modernization, as well as to the better relations among Japanese and Yugoslav health professionals through learning about their health systems.

Regarding the geographical distance and the so far rare contacts, the systems of health in our countries are not so well known. The only exception was the World Hospital Congress in Zagreb and in Tokyo.

It is an assumption, and probably also a fact, that the mentioned project significantly reduces this somewhat not so good knowledge of mutual health systems. The carrying out of this project will provide prerequisites for closer cooperation among the health professionals in our two countries and for better mutual understanding and knowing each other.

Among other measures, this Centre would like to contribute through

publishing an "information booklet" on the Japanese health system within the already founded series "Country Health Systems". This systems is more and more known in the world out of a very simple reason -the Japanese health services are considered the best in the world at the moment. That is why there are more and more publications on Japanese health system. Numerous data are to be found in the official publications of the World Health Organization, as well as in some other publications of other UN agencies.

In order to enable issuing and publication of it, we are now having this collection of data on the Japanese health system and photo-copies of some more important study-summaries that have recently been issued regarding this topic.

This provisional booklet should therefore be treated as a wish to get to know as soon as possible and as complete as possible the health system of this friendly country.

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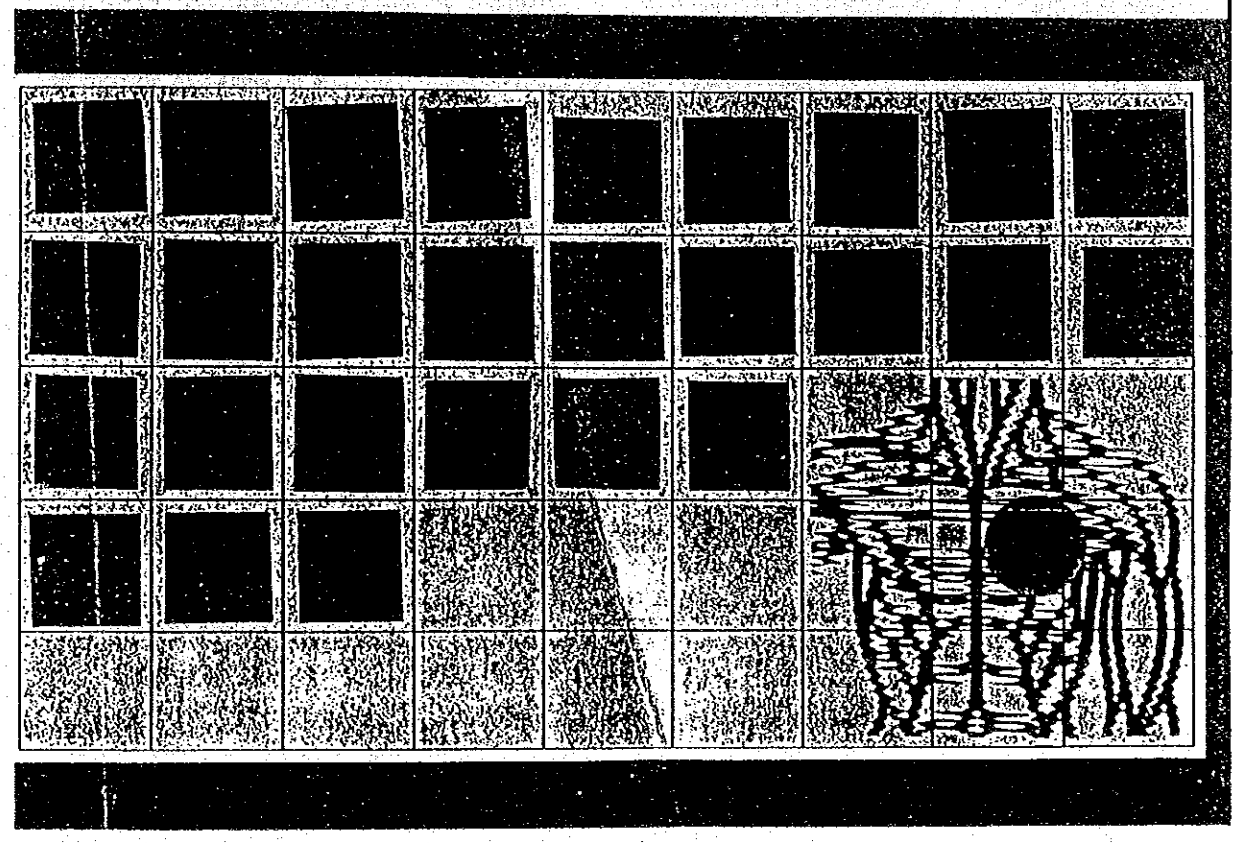

DISEASE PREVENTION AND CONTROL

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HEALTH DEVELOPMENT IN JAPAN: DETERMINANTS, IMPLICATIONS AND PERSPECTIVES

Yoshiyuki Ohno[a]

In 1980, the crude death rate from all causes in Japan was 6.2 per 1 000 population *(1)*. The age-standardized mortality rate for the same year based on the age composition of the Japanese population in 1935 was 3.6 per 1 000 population *(2)*. This age-adjusted mortality rate is slightly lower than the corresponding rates for the Netherlands (3.9) and Sweden (3.9), and considerably lower than those prevailing in Canada (4.5) and the United States (4.6) *(3)*. In Japan, as in other developed countries, there *has been a substantial decline in mortality during the* course of this century. The age-adjusted mortality rate in Japan from all causes was 25.2 per 1 000 population in 1920, falling to 16.8 per 1 000 in 1935, and to 10.8 per 1 000 in 1950 (see *Table 1)*. In other words, the death rate, after controlling for changes in population composition, has fallen by 85% over the last 60 years. This substantial decline in mortality from all causes in Japan has attracted considerable attention from a number of countries, not the least because of the sustained decline in death rates since 1950 when mortality reductions in other developed countries had slowed dramatically. This article will examine the changing pattern of Japanese mortality, and discuss its possible determinants and sociomedical implications.

Changing patterns of mortality and morbidity in Japan

A convenient summary index of mortality levels at all ages is the expectation of life at birth. The trend in this measure for Japan over the period 1921-1925 to 1983 is shown in *Fig. 1* for both sexes separately. Life expectanty at birth was 42.1 years for males and 43.2 years for females in 1921-1925 increasing to 46.9 years and 49.6 years respectively in 1935-1936. By 1983, life expectancy at birth had reached 74.2 years for males and almost 80 years for females, a level considerably in advance of most European and other developed countries *(3)*. By the year 2000, life expectancy at birth in Japan has been projected to reach 77.5 years for males and 82.9 years for females. A similar development is apparent from *Table 1* which presents the trends in the age-adjusted *mortality rate from all causes* and the infant mortality rate over the period 1916 to 1981 *(2, 4)*. *Fig. 2* illustrates the trends in the age-adjusted mortality rates per 100 000 population from all causes of death as well as for major cause groupings between 1935 and 1980 *(2)*. Death rates were not available for 3 years between 1944 and 1946 due to the social disruption caused by the Second World War. One may note the remarkable decline in the age-adjusted rate from all causes from 15.1 per 1 000 in 1947 to 3.4 per 1 000 in 1981 *(Table 1)*.

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LES PROGRÈS DE LA SANTÉ AU JAPON: CAUSES, INCIDENCES ET PERSPECTIVES

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En 1980, le taux brut de mortalité, toutes causes confondues, était au Japon de 6,2 pour 1 000 habitants *(1)*. Pour la même année, le taux de mortalité unifié selon l'âge, sur la base de la composition par âge de la population japonaise en 1935, atteignait 3,6 pour 1 000 *(2)*. Ce taux de mortalité corrigé est légèrement inférieur aux taux correspondants des Pays-Bas (3,9) et de la Suède (3,9), et il est très nettement inférieur à ceux du Canada (4,5) et des Etats-Unis d'Amérique (4,6) *(3)*. Au Japon, de même que dans d'autres pays développés, *on a assisté pendant ce siècle à une diminution considérable* de la mortalité. Le taux de mortalité corrigé selon l'âge, pour toutes les causes de décès, a passé au Japon de 25, 2 pour 1 000 en 1920 à 16,8 pour 1 000 en 1935, et à 10,8 pour 1 000 en 1950 *(voir Tableau 1)*. En d'autres termes, le taux de mortalité, après avoir été ajusté pour tenir compte des changements intervenus dans la composition de la population, a fléchi de 85% au cours des 60 dernières années. Cette régression considérable de la mortalité au Japon, toutes causes confondues, n'a pas manqué de retenir très largement l'attention d'un grand nombre de pays, et notamment la baisse constante de la mortalité à partir de 1950, car dans d'autres pays développés la tendance s'était très nettement ralentie à ce moment-là. Le présent article se propose d'étudier les changements intervenus dans le tableau de la mortalité au Japon, et d'étudier les causes possibles de ce phénomène ainsi que ses incidences socio-médicales.

Evolution du tableau de la mortalité et de la morbidité au Japon

L'espérance de vie à la naissance constitue un bon indicateur des taux de mortalité à tous les âges. On trouvera à la *fig. 1*, séparément pour les 2 sexes, une indication des tendances observées pour la période 1921-1925 à 1983. L'espérance de vie à la naissance était de 42,1 ans pour les hommes et 43,2 ans pour les femmes en 1921-1925, puis elle a passé à 46,9 ans et 49,6 ans, respectivement, en 1935-1936. En 1983, elle avait atteint 74,2 ans pour l'homme et près de 80 ans pour la femme, soit des chiffres nettement supérieurs à ceux de la plupart des pays européens et autres pays développés. *(3)*. Les projections relatives à l'espérance de vie à la naissance au Japon donnent pour l'an 2000 un chiffre de 77,5 ans pour les hommes et 82,9 ans pour les femmes. *(12)*. Une évolution analogue est illustrée dans le *tableau 1* qui reproduit les tendances du taux de mortalité corrigé selon l'âge, toutes causes confondues, ainsi que des taux de mortalité infantile pour la période 1916 à 1981. *(2, 4)*. La *fig.2* donne les tendances des taux de mortalité corrigés selon l'âge pour 100 000 habitants et pour toutes les causes de décès, de même que pour les principales classes de causes de décès entre 1935 et 1980. *(2)*. Les taux de mortalité ne sont pas disponibles pour les 3 années comprises entre 1944 et 1946, en raison des bouleversements sociaux dus à la Seconde Guerre mondiale. On peut noter le fléchissement très net du taux de mortalité pour toutes les causes de décès, corrigé selon l'âge, qui est ainsi tombé de 15,1 pour 1 000 en 1947 à 3,4 pour 1 000 en 1981 *(Tableau 1)*.

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Among the major causes of death, the mortality rate from tuberculosis, which had been a leading health problem in Japan for many years, decreased dramatically from 190.8 per 100 000 population in 1935 to 3.0 per 100 000 in 1980, a reduction of approximately 98% *(Fig. 2)*. Significant declines in mortality were also observed for pneumonia and bronchitis (from 161.9 to 1.7 per 1 000), nephritis and nephrosis (from 80.9 to 4.8 per 1 000), and gastric and duodenal ulcer (from 16.3 to 2.5 per 1 000) *(2)*. The age-adjusted mortality rate from cerebrovascular disease, which was the leading cause of death from 1951 to 1977, has declined significantly over the last 15 years after remaining practically unchanged between 1950 and 1965. Mortality rates from malignant neoplasms and heart diseases (mostly ischaemic heart disease) have been virtually stationary for the last 3 decades. The mortality rate from accidents has recently decreased from 38.8 per 100 000 in 1970 to 20.5 in 1980. In 1980, the 3 leading causes of death in Japan were malignant neoplasms (with an age-adjusted mortality rate of 82.7 per 100 000), cerebrovascular disease (69.7), and heart disease (54.6).

On the basis of these trends, one may conclude that the decline in mortality from all causes over the period 1950-1965 was mainly due to a reduction in mortality from tuberculosis and other infectious diseases such as pneumonia, bronchitis and diarrhoeal diseases, while thereafter the decline was largely a result of the more gradual decrease in mortality from cerebrovascular disease and, more recently, reduced mortality from accidents.

The trends in age-specific death rates from all causes for the period 1935-1980 are shown in *Fig. 3 (1)*. Mortality has declined in every age group, but the rate of decrease has varied substantially among different age groups, particularly between those below and those above 50 years of age. The rate of mortality decline has been much more moderate for the latter compared with the former. It is also interesting to note that the rates of decline for various age groups below 50 years old is similar, as it is among those aged 50 years or more.

One may also observe the higher mortality rates at ages 20-24 years compared with the figures for those aged 30-34 prior to 1950. This was primarily due to the higher mortality rate from tuberculosis in the younger age group *(1)*.

Undoubtedly, the largest decline in mortality has occurred among infants *(see Table 1)*. Between 1920 and 1943, the infant mortality rate fell by almost 50% and by 1947 was just over 75 per 1 000 live births. Subsequently the rate declined dramatically to reach 7.5 per 1 000 live births in 1981, among the lowest in the world. The causes in infant death have also changed markedly over the years *(1)*. In 1950, almost one-half of infant deaths were accounted for by infectious diseases such as pneumonia, bronchitis and other infectious respiratory diseases, whooping cough and measles. In 1980, on the other hand, roughly 70% of infant deaths arose from causes associated with or immediately preceding birth, such as birth injuries, asphyxia, hypoxia and other respiratory disorders, and congenital anomalies.

Similarly, there has been a dramatic decline in morbidity in Japan, especially since the Second World War *(5)*. The trends for selected diseases are shown in *Fig. 4a* and *4b*. Incidence rates for infectious diseases such as leprosy, tetanus, poliomyelitis, and Japanese encephalitis had decreased to below 0.1 per 100 000 population by 1975. In 1980, the morbidity rate per 100 000 population was 0.1 for diphtheria, 0.2 for typhoid fever, 0.8 for dysentery, and 2.4 for scarlet fever. Measles and whooping cough,

Parmi les causes essentielles de décès, la mortalité par tuberculose — alors que cette maladie a constitué pendant de nombreuses années un grave problème de santé au Japon — a chuté dans des proportions très considérables, passant de 190,8 pour 100 000 en 1935 à 3,0 pour 100 000 en 1980, soit une diminution d'environ 98% *(Fig. 2)*. Une baisse importante de la mortalité a également été observée en ce qui concerne la pneumonie et la bronchite (de 161,9 à 1,7 pour 1 000), la néphrite et la néphrose (de 80,9 à 4,8 pour 1 000), ainsi que l'ulcère de l'estomac et du duodénum (de 16,3 à 2,5 pour 1 000) *(2)*. Le taux de mortalité corrigé selon l'âge pour les maladies cérébrovasculaires, qui représentaient la principale cause de décès de 1951 à 1977, a nettement fléchi ces 15 dernières années, après être demeuré pratiquement inchangé entre 1950 et 1965. Les taux de mortalité due aux tumeurs malignes et aux cardiopathies (ischémiques dans la plupart des cas) sont restés à peu près stationnaires au cours des 3 dernières décennies. Le taux de mortalité par accidents a récemment diminué, passant de 38,8 pour 100 000 en 1970, à 20,5 en 1980. Cette même année, les 3 principales causes de décès au Japon étaient des tumeurs malignes (avec un taux de mortalité, corrigé selon l'âge, de 82,7 pour 100 000), les maladies cérébrovasculaires (69,7) et les cardiopathies (54,6).

Au vu de ces tendances, il est permis de conclure que la baisse de la mortalité, pour toutes les causes de décès, pendant la période 1950-1965, était due essentiellement à une régression dans les secteurs de la tuberculose et d'autres maladies infectieuses, telles que la pneumonie, la bronchite et les maladies diarrhéiques, alors que, par la suite, cette même baisse a été provoquée en grande partie par une réduction progressive des décès occasionnés par les maladies cardio-vasculaires et, plus récemment, par les accidents.

On trouvera à la *fig. 3 (1)* l'indication des tendances des taux de décès par classe d'âge, toutes causes confondues, pour la période 1935-1980. La mortalité a diminué dans chaque classe d'âge, mais dans une proportion qui a varié considérablement selon les classes, et notamment entre celles inférieures et supérieures à 50 ans. La diminution du taux de mortalité a été beaucoup plus modérée dans les classes supérieures à 50 ans que dans les autres. Il est également intéressant de noter que le taux de baisse dans les différentes classes d'âge au-dessous de 50 ans demeure identique à celui observé chez les sujets âgés de 50 ans ou davantage.

On note également des taux de mortalité plus élevés entre 20 et 24 ans par rapport aux sujets âgés de 30-34 ans, avant 1950. Cette différence est essentiellement due à un taux de mortalité par tuberculose plus élevé dans la classe d'âge plus jeune *(1)*.

Sans aucun doute, la plus forte baisse de mortalité s'est produite chez les très jeunes enfants *(voir Tableau 1)*. Entre 1920 et 1943, la mortalité infantile a diminué de près de 50% et, en 1947, elle était à peine supérieure à 75 pour 1 000 naissances vivantes. Par la suite, ce taux a diminué très considérablement, pour tomber à 7,5 pour 1 000 naissances vivantes en 1981, ce qui est l'un des taux les plus faibles du monde. Les causes de la mortalité infantile ont également beaucoup changé au cours des années *(1)*. En 1950, près de la moitié de ces décès étaient imputables à des maladies infectieuses telles que la pneumonie, la bronchite et d'autres maladies respiratoires, ainsi qu'à la coqueluche et à la rougeole. En 1980, en revanche près de 70% des décès infantiles étaient provoqués par des causes associées à la naissance ou la précédant immédiatement, telles que les lésions obstétricales, l'asphyxie, l'hypoxie et d'autres troubles respiratoires, ainsi que les anomalies congénitales.

De même, on a assisté à une forte baisse de la morbidité au Japon, notamment depuis la Seconde Guerre mondiale *(5)*. Les tendances relatives à diverses maladies sélectionnées à cet effet sont indiquées aux *fig. 4a* et *4b*. Les taux d'incidence de maladies infectieuses telles que la lèpre, le tétanos, la poliomyélite et l'encéphalite japonaise étaient tombés au-dessous de 0,1 pour 100 000 en 1975. En 1980, le taux de morbidité pour 100 000 habitants était de 0,1 pour la diphtérie, 0,2 pour la fièvre typhoïde, 0,8 pour la dysenterie et 2,4

which were leading causes of infant death in earlier years, showed, respectively, a morbidity rate of 6.1 and 2.1 per 100 000 population in 1980. The morbidity rate due to measles has decreased over the years with cyclic variation. Whooping cough, however, showed an unusual pattern of increase and decrease in recent years. The resurgence can be attributed to the temporary cessation of whooping cough vaccination in 1975, following 2 accidental deaths from vaccination. Subsequently, the programme was reinstated and the morbidity rates fell *(3)*. This particular trend indicates that the whooping cough bacillus is still prevalent in Japan and that vaccination is an effective countermeasure to prevent infection.

Possible determinants of mortality decline in Japan

Changes in mortality are generally related, either directly or indirectly, to sociocultural, economic and biomedical developments. To delineate the relative contribution of each of the factors involved is therefore often very difficult, if not impossible. The rapid and substantial decline of mortality from all causes in Japan, particularly after the Second World War, has undoubtedly resulted from several factors including the expansion of medical services throughout the country, the introduction of new drugs, the development of new medical techniques, the application of antibiotics, and progress with immunization programmes *(6)*. The ensuing discussion will focus mainly on the role of *(i)* immunization programmes and new drugs, *(ii)* environmental sanitation, *(iii)* education and nutrition, and *(iv)* medical service facilities and allied factors.

Immunization programmes and new drugs

As stated above, infectious diseases were the major cause of death before and shortly after the Second World War. Principal among these was tuberculosis. Tuberculosis control was accorded highest priority and various countermeasures were integrated into a single programme which included tuberculin testing, case-finding through mass screening at schools, factories and residential areas throughout the country, treatment and care of patients in tuberculosis sanitoria, and BCG innoculation. This strategy was vigorously implemented for many years by health centres and other institutions. These activities were supported *(7)* by the Tuberculosis Prevention Law enacted in 1919, the National Campaign for Tuberculosis Prevention which began in 1936, BCG inoculation of all primary school pupils since 1942, registration of tuberculosis patients since 1947, compulsory BCG inoculation of those aged under 30 years since 1948, widespread use of anti-tuberculosis drugs such as streptomycin since 1952, the introduction of free treatment and care in 1951, mass screening covering the whole population since 1955, and the introduction of a free screening programme for tuberculosis in 1957.

Many other infectious diseases were prevalent in Japan before and shortly after the Second World War, including diarrhoeal diseases such as dysentery, typhoid fever and gastroenteritis; pneumonia and bronchitis; and acute infectious diseases of childhood such as measles, whooping cough, diphtheria, tetanus, scarlet fever, and poliomyelitis. The virulence of most of these infectious diseases was drastically reduced in Japan after the inte-

pour la scarlatine. La rougeole et la coqueluche, qui étaient auparavant des causes majeures de mortalité infantile, ont accusé respectivement un taux de morbidité de 6,1 et 2,1 pour 100 000 en 1980. Le taux de morbidité par rougeole a diminué au cours des années avec des variations cycliques. La coqueluche toutefois a manifesté ces dernières années un profil inhabituel de recrudescence et de régression. Cette recrudescence peut être attribuée à l'interruption provisoire de la vaccination anticoquelucheuse en 1975, à la suite de 2 décès accidentels imputables à la vaccination. A la suite de quoi le programme de vaccination a repris et les taux de morbidité ont diminué *(3)*. Cette tendance particulière indique que le bacille de la coqueluche demeure prévalent au Japon et que la vaccination constitue une contre-mesure efficace de prévention.

Causes possibles de la baisse de la mortalité au Japon

Les modifications du tableau de la mortalité sont habituellement liées, directement ou indirectement, à une évolution du contexte socio-culturel, économique et biomédical. Il est donc souvent très difficile, sinon impossible, de faire la part de l'influence relative de chacun de ces facteurs. Il ne fait pas de doute que la baisse rapide et importante de la mortalité au Japon, toutes causes confondues, notamment après la Seconde Guerre mondiale, résulte de l'action de plusieurs facteurs, tels que le développement des services médicaux, l'introduction de nouveaux médicaments, l'élaboration de techniques médicales modernes, l'utilisation des antibiotiques et l'extension des programmes de vaccination *(6)*. L'exposé qui suit sera essentiellement axé sur le rôle *i)* des programmes de vaccination et des nouveaux médicaments, *ii)* de l'assainissement, *iii)* de l'éducation et de la nutrition, et *iv)* des prestations médicales offertes ainsi que d'autres facteurs apparentés.

Programmes de vaccination et nouveaux médicaments

Comme indiqué plus haut, les maladies infectieuses constituaient la principale cause de décès avant et peu après la Seconde Guerre mondiale. La tuberculose figurait au premier rang de ces maladies. La lutte antituberculeuse a donc bénéficié d'une très haute priorité et diverses mesures ont été intégrées dans un programme unique comportant les activités suivantes: épreuves tuberculiniques, dépistage de masse dans les écoles, les usines et les zones résidentielles de l'ensemble du pays, traitement et cures dans les sanatoriums, et vaccination BCG. Cette stratégie a été appliquée sans faillir pendant de nombreuses années par les centres de santé et d'autres institutions. Les mesures suivantes ont contribué à renforcer cette action *(7)*: Loi sur la prévention de la tuberculose promulguée en 1919, campagne nationale de prévention de la tuberculose, lancée en 1936, vaccination BCG de tous les élèves des écoles primaires à partir de 1942, déclaration obligatoire de tous les tuberculeux à partir de 1947, vaccination BCG obligatoire de tous les moins de 30 ans à partir de 1948, utilisation généralisée de médicaments antituberculeux tels que la streptomycine à partir de 1952, introduction de traitements et de soins gratuits en 1951, dépistage de masse au niveau de l'ensemble de la population à partir de 1955, et introduction d'un programme gratuit de dépistage de la tuberculose en 1957.

Beaucoup d'autres maladies infectieuses étaient largement répandues au Japon avant et peu après la Seconde Guerre mondiale: maladies diarrhéiques telles que la dysenterie, la fièvre typhoïde et la gastroentérite; pneumonie et bronchite; et maladies infectieuses aiguës de l'enfance, comme la rougeole, la coqueluche, la diphtérie, le tétanos, la scarlatine et la poliomyélite. La virulence de la plupart de ces maladies infectieuses a considérablement diminué dans le pays à la suite de

grated programme of vaccination, environmental sanitation and treatment by new drugs such as antibiotics, were implemented *(3)*. In Japan, penicillin was first produced in 1946 *(8)* and began to be widely used in the early 1950s. The production of antibiotics increased almost 50-fold between 1960 and 1980. A rapid escalation in the production of a number of other drugs was also observed during this period, including drugs for circulatory diseases, drugs for diseases of the alimentary tract, and anti-neoplastic drugs.

Environmental sanitation

Good environmental sanitation is a prerequisite for the reduction of infectious diseases, including disorders of the alimentary tract such as dysentery, typhoid fever and other diarrhoeal diseases. In Japan, a modern piped water supply system was first provided in Yokohama City in 1887. Legislation for a piped water supply system was enacted in 1890, and that for sewerage disposal in 1900. However, the installation of a piped water supply system was limited to larger cities such as Tokyo, Osaka, Kobe, Nagasaki, Hakodate and Hiroshima.

After the Second World War, piped water became increasingly available in smaller cities, towns and villages as the importance of sanitary living conditions was recognized. In 1955, the coverage rate with a piped water supply system, calculated as the percentage of the population served, was 32.2% *(Table 2)*. The coverage rate gradually increased to 91.5% in 1980, being 96.9% in the 4 major metropolitan areas and 87.2% in the remainder of the country. Adequate sewerage also became more widespread in Japan after the Second World War and was accelerated under the first national 5-year installation plan which started in 1963. The fifth such plan is now in progress. Nevertheless, the present coverage rate is still around 30% which is considerably lower than in other developed countries. An adequate waste processing service and flush toilets were gradually introduced, as shown in *Table 2*.

This gradual improvement in sanitary conditions was a major factor in the reduction of mortality and morbidity from gastrointestinal infections.

Education and nutrition

In Japan, the modernization of school education began in 1872 with the foundation of the Ministry of Education *(9)*. Four years of compulsory education was introduced in 1880; this was extended to 6 years in 1908 and to 9 years in 1947, including 3 years of schooling for those aged 13-15 years at secondary or junior high schools. The enrolment rate of children in compulsory education was already 99.5% in 1927. Currently, the proportion is 99.9%. Moreover, enrolment in senior high schools has risen from 42.5% in 1950 to 94.2% in 1980. The proportion of students attending colleges or universities among senior high school graduates has also risen sharply—from 15.3% to 41.3% between 1954 and 1980 for males and from 4.6% to 33.3% for females. Among new employees in 1980 in Japan, 6% had completed compulsory education only, with 55% who were senior high school graduates and 39% who had graduated from a college or university *(10)*.

This continuous enrolment of nearly 100% of children in compulsory education and the gradual attainment of higher educational levels has probably indirectly aided the

l'adoption d'un programme intégré de vaccination, assorti de mesures d'assainissement et de nouvelles formes de traitement, par exemple aux antibiotiques *(3)*. Au Japon, la pénicilline a été produite pour la première fois en 1946 *(8)* et son utilisation a commencé à se développer au début des années 50. La production d'antibiotiques a augmenté de près de 50 fois entre 1960 et 1980. Un développement rapide de la production d'un certain nombre d'autres médicaments a également été observé pendant cette période, notamment en ce qui concerne les médicaments destinés au traitement des maladies de l'appareil circulatoire et de l'appareil digestif, ainsi que les médicaments antinéoplasiques.

Assainissement

Un assainissement satisfaisant est un préalable indispensable à toute régression des maladies infectieuses, et plus particulièrement de certaines affections de l'appareil digestif telles que la dysenterie, la fièvre typhoïde et d'autres maladies diarrhéiques. Au Japon, c'est en 1887 qu'a été installé pour la première fois, à Yokohama, un réseau d'adduction d'eau par canalisations. Une législation a été adoptée en 1890 pour ce type d'approvisionnement en eau, et en 1900 pour l'évacuation des eaux usées. Cependant, l'installation de canalisations d'adduction d'eau a été limitée à de grandes villes telles que Tokyo, Osaka, Kobe, Nagasaki, Hakodate et Hiroshima.

Après la Seconde Guerre mondiale, l'adduction d'eau par canalisations s'est étendue à des villes de moindre importance, ainsi qu'aux agglomérations et villages, à mesure que se faisait davantage sentir l'importance de créer des conditions de vie hygiéniques. En 1955, les réseaux de distribution d'eau par canalisations couvraient 32,2% de la population, sur la base du pourcentage de la population desservie *(Tableau 2)*. Cette couverture s'est étendue progressivement, pour atteindre 91,5% en 1980, soit 96,9% dans 4 grandes zones métropolitaines et 87,2% dans le reste du pays. Les réseaux d'égouts se sont également développés au Japon après la Seconde Guerre mondiale et leur construction a été accélérée grâce à l'adoption d'un premier plan quinquennal lancé en 1963. Le cinquième plan quinquennal est en cours d'exécution. Cependant, la couverture actuelle ne dépasse guère 30%, chiffre beaucoup moins élevé que dans d'autres pays développés. Des services appropriés de traitement des déchets ont été progressivement mis en place, de même que l'installation de toilettes à chasse d'eau, comme indiqué au *tableau 2*.

Cette amélioration progressive des conditions d'hygiène a été un facteur essentiel de la baisse de la mortalité et de la morbidité par maladies gastrointestinales.

Education et nutrition

Au Japon, la modernisation de l'enseignement scolaire a commencé en 1872 avec la création du Ministère de l'éducation *(9)*. Quatre années d'enseignement obligatoire ont été introduites en 1880; ce chiffre a été porté à 6 ans en 1890 et à 9 ans en 1947, dont 3 ans d'études dans des écoles secondaires, ou secondaires du premier cycle, pour les élèves âgés de 13 à 15 ans. Le taux d'inscription à l'enseignement obligatoire atteignait déjà 99,5% en 1927. Aujourd'hui, il est de 99,9%. En outre, le taux des inscriptions dans les établissements d'enseignement secondaire du deuxième cycle a passé de 42,5% en 1950 à 95,2% en 1980. La proportion de diplômés de l'enseignement secondaire inscrits dans des établissements d'enseignement supérieur ou universitaire a également considérablement augmenté — passant de 15,3% à 41,3% entre 1954 et 1980, pour les hommes, et de 4,6% à 33,3% pour les femmes. En 1980, 6% seulement des nouveaux salariés engagés au Japon avaient suivi la scolarité obligatoire, alors que 55% possédaient un diplôme de l'enseignement secondaire et 39% un diplôme de niveau universitaire *(10)*.

L'inscription, depuis longtemps déjà, de la quasi totalité des enfants dans les établissements d'enseignement obligatoire et l'accès progressif à des études de plus haut niveau

reduction in mortality among the Japanese population. Since health education forms part of the regular curriculum at each educational level from primary school to university, schooling enhances the understanding of the health implications of better sanitation and nutrition, resulting in positive participation in immunization programmes, and better practice of personal hygiene.

Another aspect of importance related to education is the school lunch programme initiated under the School Lunch Law of 1954. Primary school pupils are served a complete lunch, including milk, bread and other foods. In junior high schools, almost half of the pupils qualify for a complete lunch, with the remainder receiving milk only. The implementation of this programme increased markedly in 1963, particularly in junior high schools, due to the start of the milk programme. The nationwide implementation of the school lunch programme has contributed to better physical development and health promotion among children, particularly since 1963.

Traditionally, the Japanese diet has been very high in carbohydrate and very low in fat and animal protein. However, with the rapid socioeconomic and industrial development after the Second World War, food preference became more westernized, though not to the extent common in the United States of America or Europe. *Fig. 5* shows the changes in daily per capita intake of the 3 major nutritional components between 1950 and 1980 in Japan. Daily carbohydrate intake per capita decreased from 418 g in 1950 to 313 g in 1980. Meanwhile, daily fat intake increased from 18 g to 52 g total protein from 68 g to 78 g, and animal protein from 17 g to 39 g. At the same time, vegetable protein decreased from 51 g to 39 g. The changing composition of these components in total energy intake is shown in *Fig. 6 (11)*. Total energy intake has remained virtually unchanged over the period. In 1950, the average daily per capita energy intake was 2 098 kcal. In 1960, the figure was 2 096 kcal, rising to 2 210 in 1970 and declining to 2 084 in 1980. Meanwhile, the proportion of fat in total energy intake increased from 7.7% in 1950 to 22.6% in 1980, whereas that of carbohydrate decreased from 79.3% to 62.4%.

Fat and animal protein have been relatively deficient in the Japanese diet for many years. The gradual increase in intake of these nutrients may have played a significant role in increasing resistance to infectious diseases in particular, and ultimately in reducing mortality in Japan.

Excessive salt consumption has been associated with the development of hypertension and gastric cancer in recent years. Estimated daily salt intake per capita in Japan *(3)* has declined steadily from 14.5 g in 1972 to 12.3 g in 1982. This decrease in salt intake may well have contributed to the reduced incidence of hypertension and thereby to the recent reduction of mortality from cerebrovascular accidents.

Medical service facilities and allied factors

In 1950, there were 5 119 hospitals, 51 349 clinics and 24 773 dental clinics in Japan. The corresponding figures in 1980 were 9 055, 77 611 and 38 834 *(3)*. The numbers of hospitals, clinics and dental clinics per 100 000 population were 5.7, 57.5 and 27.7 in 1950 and 7.7, 66.4 and

ont probablement contribué indirectement à réduire la mortalité parmi la population japonaise. Etant donné que l'éducation pour la santé fait partie de tous les programmes d'études à tous les échelons de l'enseignement, de l'école primaire à l'université, l'enseignement ainsi dispensé dans les écoles contribue donc à mieux faire connaître les avantages d'une amélioration de la nutrition et de l'assainissement, ce qui se traduit par une participation plus large aux programmes de vaccination et par une meilleure pratique de l'hygiène personnelle.

Le programme de repas scolaire inauguré en 1954, aux termes d'une loi spéciale, représente un autre aspect positif du rôle important de l'éducation. Les élèves des écoles primaires reçoivent un déjeûner complet, comprenant du lait, du pain et d'autres aliments. Dans les écoles secondaires du premier cycle, près de la moitié des élèves ont droit à un déjeûner complet, alors que les autres ne bénéficient que d'une distribution de lait. Ce programme a connu un net regain d'activité en 1963, notamment dans les écoles secondaires du premier cycle, grâce au lancement du programme de distribution de lait. L'application à l'échelle nationale de ce programme de repas scolaires a contribué à améliorer le développement physique et à promouvoir la santé de l'enfant, notamment à partir de 1963.

Au Japon, l'alimentation traditionnelle est très riche en hydrates de carbone, et très pauvre en graisses et en protéines animales. Toutefois, en raison de la rapidité du développement socio-économique et industriel consécutif à la Seconde Guerre mondiale, les préférences en matière de nourriture se sont occidentalisées, sans devenir toutefois comparables à ce que l'on peut observer aux Etats-Unis d'Amérique ou en Europe. La *fig. 5* montre les modifications intervenues au Japon entre 1950 et 1980 en ce qui concerne l'apport quotidien individuel des 3 substances nutritives essentielles. L'apport journalier en hydrate de carbone, par individu, est tombé de 418 g en 1950 à 313 g en 1980. Dans l'intervalle, l'apport quotidien en corps gras a passé de 18 g à 52 g, celui des protéines totales de 68 g à 78 g et des protéines animales de 17 g à 39 g. En même temps, l'apport de protéines végétales tombait de 51 g à 39 g. La *fig 6* illustre les changements intervenus en ce qui concerne la proportion relative de ces substances dans l'apport énergétique total *(11)*. Cet apport est resté pratiquement inchangé pendant la période considérée. En 1950, l'apport énergétique total était de 2 098 kcal en moyenne par jour et par individu. En 1960, le chiffre était de 2 096 kcal en moyenne par jour et par individu. En 1960, le chiffre était de 2 096 kcal et il a atteint 2 210 en 1970, pour retomber à 2 084 en 1980. Dans l'intervalle, la proportion des graisses dans l'apport énergétique total a passé de 7,7% en 1950 à 22,6% en 1980, alors que la proportion des hydrates de carbone régressait de 79,3% à 62,4%.

Pendant de nombreuses années, le régime alimentaire japonais a été relativement pauvre en protéines animales et en graisses. L'augmentation progressive de l'apport de ces nutriments a sans doute joué un rôle important afin d'accroître la résistance aux maladies infectieuses notamment, et en dernier ressort dans la baisse de la mortalité au Japon.

Un rapprochement a été établi entre une consommation excessive de sel et la recrudescence, ces dernières années, de l'hypertension et du cancer de l'estomac. Selon les estimations, l'apport individuel quotidien en sel, au Japon *(3)*, n'a cessé de diminuer, passant de 14,5 g en 1972 à 12,3 g en 1982. Cette diminution a sans doute contribué à restreindre l'incidence de l'hypertension et, par voie de conséquence, la mortalité due à des accidents cérébrovasculaires, comme on a pu le constater récemment.

Equipements médicaux et autres

En 1950, le Japon comptait 5 119 hôpitaux, 51 349 dispensaires et 24 773 cliniques dentaires. En 1980, les chiffres étaient respectivement de 9 055, 77 611 et 38 834 *(3)*. Le nombre d'hôpitaux, de dispensaires et de cliniques dentaires pour 100 000 habitants était respectivement de 5,7, 57,5 et

33.2 in 1980, respectively. The number of hospital beds and clinic beds per 100 000 population also rose from 574.3 and 127.6 in 1950 to 1128.5 and 246.2 in 1980, respectively. In general, the number of all health professionals except midwives, increased. Among them, the number of nutritionists increased substantially from 21 per 100 000 population in 1950 to 290 per 100 000 in 1980. Physicians increased in number from 95 000 in 1950 to 156 000 in 1980. The corresponding numbers (in thousands) for dentists were 31 and 54, 52 and 116 for pharmacists, 12 and 18 for public health nurses, 55 and 26 for midwives, 130 and 487 for nurses, and 18 and 338 for nutritionists.

These increases in health care facilities and health professionals have led to a gradual improvement in health services delivery and health promotion, which is a basic prerequisite for mortality decline. Health services delivery was further enhanced by national health policies such as the prepaid health insurance system covering the entire Japanese population since 1961, and the free medical care system for the aged established in 1973, as well as for such diseases as tuberculosis and psychosis.

The gradual improvement of the medical service delivery system, along with the increasing numbers of health facilities and professionals, has been facilitated by the rapid socioeconomic development of the country after the Second World War and the ensuing rise in national income.

Implications of mortality changes

The remarkable decline of total and infant mortality rates and of the birth rate in recent decades has been accompanied by several important sociodemographic changes. Projections to the year 2000 *(12)* suggest that male life expectancy will reach 77.5 years while that for females will be as high as 83 years. The result will be an increase in the aged population and a change in the disease structure. Health and social policies have had to be adapted accordingly. In this section some of the more important sociomedical implications of these health and demographic developments will be discussed.

Increase in aged population

Fewer total and infant deaths with fewer births have resulted in a remarkable increase in the aged population. This is clear from *Fig. 7* which shows actual and projected trends in population aging and dependency indices. The old age dependency ratio, calculated as the ratio of the population aged 65 years and over to that aged 15-64 years multiplied by 100, was 9.0 in 1920 and only slightly higher (9.2) in 1965. By 1980, however, it had increased to 13.5 and is expected *(13)* to rise to 23.3 in the year 2000 and to 35.5 by 2020. As an index of aging, one may examine the aged-child ratio, calculated as the ratio of the population aged 65 years or more to the population aged 0-14 years multiplied by 100. In 1920, the value of this index was 14.4 and slightly less (13.9) in 1950. Since then, the index has risen rapidly, reaching 29.4 in 1970 and 38.7 in 1980. It is expected to be 88.6 in 2000 and 130.5 in 2020. In other words, whereas the aged population was only about 14% greater than the number of children in 1950, it was almost 40% larger in 1980 and by the end of the century there will be almost twice as many old age dependents as childhood dependents for the population of working age to support.

27,7 en 1950, et de 7,7, 66,4 et 33,2 en 1980. Le nombre de lits d'hôpitaux et de lits de dispensaires, pour 100 000 habitants, a également augmenté, passant respectivement de 574,3 et 127,6 en 1950, à 1 128,5 et 246,2 en 1980. D'une manière générale, les effectifs de tous les personnels qualifiés de santé ont augmenté, à l'exception des sages-femmes. C'est ainsi que les nutritionnistes ont vu leurs effectifs s'accroître considérablement, de 21 pour 100 000 habitants en 1950 à 290 en 1980. Le nombre des médecins a passé de 95 000 en 1950 à 156 000 en 1980. Les chiffres correspondants (en milliers) étaient de 31 et 54 pour les dentistes, 52 et 116 pour les pharmaciens, 12 et 18 pour les infirmières de santé publique, 55 et 26 pour les sages-femmes, 130 et 487 pour les infirmières, et 18 et 338 pour les nutritionnistes.

Cette augmentation des équipements de soins médicaux et des effectifs de personnel de santé qualifié s'est traduite par une amélioration progressive des prestations sanitaires et de la promotion de la santé — ce qui est un préalable indispensable à la baisse de la mortalité. Les prestations sanitaires sont en outre renforcées par l'adoption de diverses dispositions au plan national, telles que le système de prépaiement de l'assurance maladie, qui couvre depuis 1961 la totalité de la population japonaise, et les soins médicaux gratuits pour les personnes âgées, institués en 1973, ainsi que la gratuité des soins pour des affections telles que la tuberculose et les troubles mentaux.

L'amélioration progressive du système de prestations médicales, de pair avec l'accroissement des effectifs de personnel qualifié et des équipements sanitaires, a été facilitée par le rapide développement socio-économique que le pays a connu après la Seconde Guerre mondiale et l'augmentation du revenu national qui a suivi.

Les effets de l'évolution de la mortalité

La baisse remarquable, pendant les dernières décennies, des taux de mortalité totale et de mortalité infantile, ainsi que du taux de natalité, a été accompagnée par d'importants changements sociodémographiques. Les projections jusqu'à l'an 2000 suggèrent que l'espérance de vie des hommes atteindra 77,5 ans, alors que pour les femmes elle sera aussi élevée que 83 ans. Il en résultera un accroissement des effectifs de population âgée et un changement structurel de la morbidité. Il a fallu adapter les politiques sanitaires et sociales à cette situation. Nous étudierons dans la présente section diverses incidences sociomédicales importantes de cette évolution de la situation sanitaire et démographique.

Accroissement des effectifs de la population âgée

La baisse de la mortalité totale et de la mortalité infantile, associée à une diminution des naissances, a entraîné un net accroissement de la population âgée. Ce phénomène ressort clairement de la *fig. 7* qui indique les tendances actuelles et les projections concernant le vieillissement de la population et les indices de dépendance économique. L'indice de dépendance des personnes âgées — calculé sur la base du rapport entre la population âgée de 65 ans et plus et celle âgée de 15-64 ans, multiplié par 100, — atteignait 9,0 en 1920 et à peine plus (9,2) en 1965. En 1980, toutefois, il était de 13,5 et, selon les prévisions, *(13)* il atteindra 23,3 en l'an 2000 et 35,5 en 2020. Pour obtenir un indicateur du vieillissement de la population, on peut comparer la proportion des personnes âgées à celle des enfants, sur la base du rapport entre la population âgée de 65 ans et plus et celle agée de 0-14 ans, multiplié par 100. En 1920, cet indicateur était de 14,4, et il était légèrement inférieur (13,9) en 1950. Depuis lors, il a rapidement augmenté, pour atteindre 29,4 en 1970 et 38,7 en 1980. Selon les prévisions, il devrait être de 88,6 en l'an 2000 et de 130,5 en 2020. En d'autres termes, alors que les effectifs de population âgée ne dépassaient que d'environ 14% ceux des enfants en 1950, ils ont atteint près de 40% en 1980 et, à la fin du siècle, il y aura près de 2 fois plus de personnes âgées que d'enfants à charge de la population d'âge actif.

Perhaps a more common indicator of aging is the proportion of the population aged 65 years and over in the total population. This proportion was 5.3% in 1920 and 4.9% in 1950, rising to 5.7% in 1960, 7.1% in 1970, and to 9.1% in 1980. It is projected to reach 15.6% in the year 2000, and 21.8% by 2020. In Japan, the increase in this proportion from 8% to 14% is expected to occur within a period of only 25 years (from 1975 to 2000), whereas the same increase (from 8% to 14%) took 46 years in England, 80 years in Sweden, and 125 years in France *(14)*. An increase in the aged population is a common phenomenon among all the developed countries, but this very rapid shift in the proportion of the aged is especially marked in Japan.

The increase in the proportion of the aged has, of course, serious sociomedical consequences due to the increased number of aged couples or single aged living *alone. These include housing difficulties, less satisfactory* job opportunities, and increasing demands on pension and medical care expenditure *(15)*.

Health and social services expenditure

Changes in expenditure on health and social services over the last 20 years or so can be seen from *Table 3 (3)*. The proportion of the total budget allocated to the Ministry of Health and Welfare increased from 10.5% in 1960 to 19.1% in 1980. Of the total Ministry of Health and Welfare budget in 1960, 40%, 27% and 16% were allocated for social insurance, livelihood protection[b] and public health activities, respectively. The allocation has shifted considerably over the years. Expenditure on social welfare services for the aged has increased almost 10-fold. Government subsidies for social insurance, pensions and national health insurance have accounted for about 60% of the total Ministry of Health and Welfare budget in recent years. These rising allocations reflect the demands associated with the increasing number of the aged in Japan. Also, changes in the disease spectrum referred to earlier have led to consultations for different conditions, namely adult diseases and mental disorders *(16)*.

Expenditure for public health activities by prefectures and local governments is summarized in *Table 4 (3)*. At *prefectural level, money has been increasingly allocated* for public health activities with the exception of prevention of infectious diseases. At local level, more than one-half of the public health budget has been allocated to the establishment of sanitary facilities such as the installation of a piped water supply system, and sewerage disposal system and human wastes processing services.

Between 1955 and 1980, the total monthly expenditure among wage earners increased from 26 786 yen to 282 263 yen per household (i.e. by a factor of 10.5). Meanwhile, monthly expenses for medical care rose from 506 yen to 5 771 yen, or by 11.4 times *(17)*. The proportion of medical care expenses among total disbursements has, however, remained virtually unchanged, being 1.9% in 1955, 2.2% in 1965, 2.1% in 1975 and 2.0% in 1980. This invariability over the years confirms that subsidies from the social and health insurance schemes have increased at the personal level, since expenditures for medical care have increased dramatically over the period at the national, prefectural and local levels.

National health policy and disease control programmes

In accordance with socioeconomic and public health developments in Japan, the orientation of health pro-

[b] Under the Daily Life Security Act, financial assistance is provided to indigent families in order to ensure their minimum needs.

Un indicateur sans doute plus courant du vieillissement de la population consiste à établir une comparaison entre la population totale et la proportion de personnes âgées de 65 ans et plus. Cette proportion était de 5,3% en 1920 et 4,9% en 1950, puis elle a passé à 5,7% en 1960, 7,1% en 1970 et 9,1% en 1980. Selon les projections, le pourcentage atteindra 15,6% en l'an 2000 et 21,8% en 2020. Au Japon, on s'attend à ce qu'une progression passant de 8% à 14% se réalise dans un délai de 25 ans seulement (entre 1975 et l'an 2000), alors que pour une progression identique, le délai sera de 46 ans en Angleterre, de 80 ans en Suède et de 125 ans en France *(14)*. L'accroissement des effectifs de la population âgée est un phénomène commun à tous les pays développés, mais cet accroissement est particulièrement rapide au Japon.

Il a, bien entendu, de sérieuses incidences sociomédicales, étant donné la proportion plus élevée de ménages âgés ou de personnes âgées vivant seules. Il s'ensuit des difficultés de *logement, une diminution des occasions d'emploi et une augmentation* des prestations des caisses de pension et d'assurance maladie *(15)*.

Dépenses des services sociaux et sanitaires

Le *tableau 3 donne un aperçu de l'évolution des dépenses* des services sociaux et sanitaires au cours des 20 dernières années *(3)*. La proportion du budget total allouée au Ministère de la santé et des affaires sociales a passé de 10,5% en 1960 à 19,8% en 1980. En 1960, 40%, 27% et 16% de l'ensemble du budget de ce ministère ont été consacrés, respectivement, aux assurances sociales, à la garantie du minimum vital[b] et aux activités de santé publique. La ventilation des crédits a considérablement varié au cours des années. Les dépenses de services de sécurité sociale pour les personnes âgées ont augmenté de près de 10 fois. Les subsides d'État pour les assurances sociales, les pensions et l'assurance nationale maladie représentaient ces dernières années environ 60% du budget total du Ministère de la santé et des affaires sociales. Cette augmentation illustre bien les besoins liés au vieillissement de la population au Japon. En outre, l'évolution de la pathologie évoquée plus haut a motivé des consultations pour des affections différentes, en l'occurrence des maladies de l'âge adulte et des troubles mentaux *(16)*.

On trouvera au *tableau 4* une récapitulation des dépenses consacrées par les préfectures et les autorités locales aux *activités de santé publique (3). Au niveau préfectoral, les* activités de santé publique, à l'exception de la prévention des maladies infectieuses, ont bénéficié d'une augmentation constante de crédits. Au niveau local, plus de la moitié du budget de santé publique est consacrée à des travaux de génie sanitaire tels que l'installation de systèmes d'adduction d'eau potable sous canalisations, ou encore de réseaux d'évacuation des eaux usées et de services de traitement des déchets humains.

Entre 1955 et 1980, l'ensemble des dépenses mensuelles des salariés a passé de 26 786 yens à 282 263 yens par ménage (soit un multiple de 10,5). Dans l'intervalle, les dépenses consacrées chaque mois aux frais médicaux ont passé de 506 yens à 5 771 yens, soit un multiple de 11,4 *(17)*. Cependant, la proportion des frais médicaux par rapport aux dépenses totales est restée pratiquement inchangée, avec 1,9% en 1955, 2,2% en 1965, 2,1% en 1975 et 2,0% en 1980. Cette stabilité au cours des années confirme que les allocations consenties par les caisses d'assurance sociale et maladie ont augmenté au niveau de l'individu, car les frais médicaux ont énormément progressé pendant la période considérée sur les plans national, préfectoral et local.

Politique sanitaire nationale et programmes de lutte contre la maladie

Parallèlement aux développements intervenus au Japon dans le domaine socio-économique et en santé publique, les

[b] En vertu d'une Loi sur la protection de l'existence quotidienne, une aide financière est offerte aux familles indigentes afin de leur garantir un minimum vital journalier.

grammes and policies has progressively shifted from infectious diseases to chronic diseases, from the single disease to the multiple disease approach, and from treatment to prevention and even further, to health promotion in recent years.

Before and immediately after the Second World War, disease control was targeted at conditions that were infectious in origin. Case finding by mass screening, treatment and care of patients, and immunization were the 3 major strategies for the control of tuberculosis. Effective vaccines and efficient immunization procedures were introduced to combat infectious diseases in childhood, and improvement in environmental sanitation were effective in lowering morbidity and death from diarrhoeal diseases.

Some infectious diseases such as cholera, plague, smallpox, typhus, and rabies have now been completely eradicated in Japan *(5)*. For other infectious diseases which include paratyphoid fever, diphtheria, Japanese encephalitis, poliomyelitis, malaria, tetanus, anthrax, leprosy, epidemic diarrhoea, and parasitoses such as ascariasis, oxyuriasis, hookworm or tape worm disease and filariasis, the morbidity rate is now 0.1, or less, per 100 000 population. The control programmes undertaken against these infectious diseases were generally orientated towards eradicating a single disease at a time.

The emergence of chronic or degenerative diseases such as stroke, hypertension, heart disease and cancer has underlined the need not only for treatment and care programmes, but also for research and preventive action. To assess the extent of the problem, national surveys of morbidity due to malignant neoplasms were conducted in 1958, 1960, 1963 and 1979, and of circulatory diseases in 1961-1962, 1971-1972 and 1980 *(3)*.

In 1965, a national cancer control programme was initiated with 5 major elements: education and information, mass screening, establishment of cancer centres, training of cancer specialists, and research promotion.

In 1969, a national stroke prevention programme was started, which included hypertension detection by mass screening, treatment and care of patients, and health education.

Along with the nationwide implementation of these programmes, the Ministry of Health and Welfare has allocated part of the budget specifically for cancer control since 1965, and for stroke prevention since 1973 *(3)*. For the cancer control programme, the Ministry of Health and Welfare appropriated 1 330 million yen in 1965, 3 367 million yen in 1970, 10 046 million yen in 1975,14 788 million yen in 1980, and 18 227 million yen in 1982. Of this annual expenditure, 91% was set aside for establishing medical institutions in 1965 but only 77% in 1980. Meanwhile the proportion allocated for research promotion rose from 9.0% to 10.6%, while that for preventive mass-screening activities increased from 0% to 7.2%. For the stroke prevention programmes, the Ministry of Health and Welfare appropriated 1 798 million yen in 1973, 2 946 million yen in 1975, 12 647 million yen in 1980, and 13 018 million yen in 1982. Of the expenditure for stroke prevention in 1982, 83% was allocated for the establishment of medical institutions, 15% to prevention by mass screening, and 2% to research.

The success of these programmes can be gauged from the rapid rise in population covered and the concomitant fall in mortality. In 1965, 567 000 people were screened for gastric cancer, rising to 2 165 000 in 1970 and 3 830 000 in 1980. Ninety-five thousand females were screened for cervical cancer in 1965, rising to 748 000 in 1970 and 2 444 000 in 1980. The age-adjusted mortality

politiques et les programmes de santé ont progressivement changé d'orientation: on est passé des maladies infectieuses aux maladies chroniques, de l'approche monopathologique à une approche pluripathologique, et du traitement de la maladie à sa prévention et même, ces dernières années, à la promotion de la santé.

Avant et immédiatement après la Seconde Guerre mondiale, la lutte contre la maladie avait pour cible des états pathologiques d'origine infectieuse. Le dépistage de masse, le traitement et les soins, ainsi que la vaccination constituaient les 3 stratégies essentielles de la lutte antituberculeuse. Des vaccins efficaces et des méthodes efficientes de vaccination ont été utilisées pour lutter contre les maladies infectieuses de l'enfance, et l'amélioration de l'assainissement a permis de réduire la mortalité et la morbidité dues aux maladies diarrhéiques.

Certaines maladies infectieuses telles que le choléra, la peste, la variole, le typhus et la rage sont aujourd'hui complètement éradiquées au Japon *(5)*. Pour d'autres maladies infectieuses, le taux de morbidité est actuellement de 0,1 au *maximum, pour 100 000 habitants. Parmi ces maladies figurent* la fièvre paratyphoïde, la diphtérie, l'encéphalite japonaise, la poliomyélite, le paludisme, le tétanos, le charbon, la lèpre, la diarrhée épidémique et des parasitoses telles que l'ascaridiose, l'oxyurose, l'ankylostomiase ou le ver solitaire, et la filariose. Les programmes de lutte contre ces maladies infectieuses ont généralement été axés sur l'éradication d'une seule maladie à la fois.

L'apparition de maladies chroniques ou dégénératives telles que les accidents cérébrovasculaires, l'hypertension, les cardiopathies et le cancer a montré la nécessité de recourir non seulement à des programmes de traitement et de soins, mais également à l'action préventive et à la recherche. Pour évaluer l'étendue du problème, des enquêtes nationales relatives à la morbidité due aux tumeurs malignes ont été faites en 1958, 1960, 1963 et 1979, ainsi que sur les maladies de l'appareil circulatoire en 1961-1962, 1971-1972 et 1980 *(3)*.

En 1965, un programme national de lutte anticancéreuse a été lancé, qui comprenait 5 éléments essentiels: éducation et information, dépistage de masse, création de centres anticancéreux, formation de spécialistes du cancer et promotion de la recherche.

En 1969, a débuté un programme national de prévention des accidents cérébrovasculaires, faisant appel au dépistage de masse de l'hypertension, au traitement et aux soins, ainsi qu'à l'éducation pour la santé.

Parallèlement à l'exécution de ces programmes à l'échelon national, le Ministère de la santé et des affaires sociales a affecté une partie de son budget plus particulièrement à la lutte anticancéreuse, à partir de 1965, et à la prévention des accidents cérébrovasculaires à partir de 1973 *(3)*. Les crédits accordés par le ministère au programme de lutte anticancéreuse ont atteint 1 330 millions yens en 1965, 3 367 millions en 1970, 10 046 millions en 1975, 14 788 millions en 1980 et 18 227 millions en 1982. En 1965, 91% de ces dépenses annuelles ont été consacrées à la création d'établissements médicaux, contre 77% en 1980. Dans l'intervalle, la part des crédits alloués à la promotion de la recherche est passée de 9,0% à 10,6%, alors que la progression allait de 0% à 7,2% pour les travaux de dépistage de masse exécutés à titre préventif. Le Ministère de la santé et des affaires sociales a alloué aux programmes de prévention des accidents cérébrovasculaires 1 798 millions yens en 1973, 2 946 millions en 1975, 12 647 millions en 1980 et 13 018 millions en 1982. En 1982, 83% des crédits affectés à la prévention des accidents cérébrovasculaires ont été consacrés à la création d'établissements médicaux, 15% à la prévention par le dépistage de masse et 2% à la recherche.

Le succès de ces programmes peut se mesurer à la rapide extension de la couverture de la population et à la baisse de mortalité qui a suivi. En 1965, le dépistage du cancer de l'estomac a porté sur 567 000 personnes, contre 2 165 000 en 1970 et 3 830 000 en 1980. Le dépistage du cancer du col de l'utérus a été pratiqué sur 95 000 femmes en 1965, 748 000 en 1970 et 2 444 000 en 1980. En ce qui concerne le cancer

rate from gastric cancer decreased from 46.3 per 100 000 in 1965 to 31.4 in 1980 among males and from 28.5 to 19.2 for females *(2)*. The age-adjusted mortality rate from uterine cancer also decreased, from 11.0 per 100 000 in 1965 to 5.5 per 100 000 in 1980.

Similarly, those screened by blood pressure measurement rose from 1 488 000 in 1965 to 2 371 000 in 1970, and to 7 160 000 in 1980. The number of electrocardiographic examinations also increased sharply from 255 000 in 1965 to 623 000 in 1970 and to 1 668 000 in 1980. Meanwhile, the age-adjusted mortality rate from stroke decreased from 111.1 per 100 000 in 1973 to 72.9 in 1980 among males and from 98.4 to 67.2 per 100 000 among females *(3)*.

In addition to gastric and cervical cancer, cancers of other sites are included in the cancer control programme. *In the stroke prevention programmes target diseases* include not only stroke but also hypertension, heart disease, liver disease and diabetes mellitus. Thus, these control programmes are multiple-disease oriented and are *preventive in as much as they focus on secondary prevention.*

In 1982, the control programmes for stroke and cancer *were integrated under new legislation (3). This legislation* defines 65 major activities: *(i)* distribution of "health notebooks", *(ii)*, health education, *(iii)* health consultation, *(iv)* medical checkups, *(v)* rehabilitation, and *(vi)* home visits to bedridden persons. These activities are offered to all persons aged 40 years or more (with the exception of cervical cancer screening which is offered to females over 30 years of age), and are now promoted in cities, towns and villages throughout the country.

According to the 1983 national health survey *(18)*, of about 16 000 households randomly selected throughout the country, 68.2% of the 53 000 respondents aged 20 years and over had had one or more medical checkups during 1982. Of those examined, 54% had their blood pressure measured, 46.3% had urinalysis, 23.0% were given a gastric x-ray examination, 49.6% had a chest x-ray, and 13.8% of women were screened for cervical cancer. On the basis of these data on attendance for medical examination, it appears that there is a high degree of health consciousness among the Japanese population geared towards prevention of adulthood diseases and health promotion.

Perspectives

Japan now enjoys low total and infant mortality rates and economic prosperity, but it is faced with serious sociomedical problems inherent in the increasing aged population. As a result of the conquest of the infectious *diseases, there is now a growing number of patients suf*fering from chronic ailments. At the same time expenditure for medical treatment and care, and for social insurance and welfare is increasing very rapidly.

The legislative framework to cope with these problems has already been established. Following the nationwide implementation of activities proposed under this policy, the framework should be evaluated in the near future from a legislative and sociomedical viewpoint. Other national health policies for coping with essential health problems should ensure the efficient development and distribution of the medical service delivery system, a balanced evolution and integration of medical technology, public health and welfare, the implementation of intensive health pro-

de l'estomac, le taux de mortalité corrigé selon l'âge, a régressé de 46,3 pour 100 000 en 1965, à 31,4 en 1980 chez les hommes, et de 28,5 à 19,2 chez les femmes *(2)*. Le taux de mortalité corrigé selon l'âge a également diminué pour le cancer de l'utérus, passant de 11,0 pour 100 000 en 1965 à 5,5 en 1980.

De même, des mesures de tension artérielle ont été pratiquées en 1965 sur 1 488 00 personnes, contre 2 371 000 en 1970 et 7 160 000 en 1980. Le nombre d'électrocardiogrammes a également fortement augmenté, passant de 255 000 en 1965 à 623 000 en 1970 et 1 668 000 en 1980. Dans l'intervalle, le taux de mortalité corrigé selon l'âge, pour les accidents cérébrovasculaires, a régressé de 111,1 pour 100 000 en 1973 à 72,9 en 1980 chez les hommes, et de 98,4 à 67,2 chez les femmes *(3)*.

D'autres cancers sont englobés dans le programme de lutte anticancéreuse, en plus des cancers de l'estomac et du col de l'utérus. Dans les programmes de prévention des accidents cérébrovasculaires, ce sont non seulement ceux-ci qui sont visés, mais encore l'hypertension, les cardiopathies, les hépatites et le diabète sucré. Ces programmes de lutte ont *donc un caractère pluri-pathologique et également préventif*, dans la mesure où ils sont axés sur la prévention secondaire.

En 1982, une législation nouvelle est entrée en vigueur, *englobant les programmes de lutte contre le cancer et les* accidents cérébrovasculaires *(3)*. Ces dispositions visent 6 activités essentielles: *i)* distribution de «carnets de santé», *ii)* éducation pour la santé, *iii)* consultations médicales, *iv)* contrôles médicaux, *v)* réadaptation et *vi)* visites à domicile aux personnes alitées. Ces prestations sont offertes à toutes les personnes âgées de 40 ans ou plus (à l'exception du dépistage du cancer du col de l'utérus, dont bénéficient les femmes de plus de 30 ans), et une large publicité leur est actuellement faite dans les villes, agglomérations et villages sur l'ensemble du territoire national.

D'après l'enquête nationale de santé de 1983 *(18)* portant sur environ 16 000 ménages sélectionnés au hasard dans l'ensemble du pays, 60,2% des 53 000 personnes âgées de 20 ans et plus qui ont répondu aux enquêteurs avaient subi un ou plusieurs contrôles médicaux en 1982. Elles s'étaient soumises aux examens suivants: mesure de la tension artérielle, 54%, analyses d'urine, 46,3%; radiographie de l'estomac, 23,0%; radiographie thoracique, 49,6%; et dépistage du cancer du col de l'utérus chez la femme, 13,8%. Ces données sur la pratique des examens médicaux tendent à démontrer que la population japonaise a hautement conscience des problèmes de santé, et qu'elle se préoccupe surtout de la prévention des maladies de l'âge adulte et de la promotion de la santé.

Perspectives

*Le Japon connaît aujourd'hui, avec la prospérité économi*que, des taux peu élevés de mortalité totale et de mortalité infantile, mais il doit faire face à de graves problèmes médico-sociaux liés au vieillissement de la population. Après que les *maladies infectieuses ont été maîtrisées*, on observe aujourd'hui un nombre croissant de malades atteints de troubles chroniques en même temps que les frais occasionnés par les traitements et les soins médicaux, ainsi que le coût des assurances sociales, augmentent très rapidement.

Les structures législatives nécessaires pour faire face à ces difficultés ont déjà été mises en place. Après l'exécution, à l'échelle nationale, des activités proposées au titre de cette politique, il conviendra de procéder dans un proche avenir à une évaluation de ces structures, sur le plan législatif comme sur le plan médico-social. D'autres directives sanitaires nationales destinées à résoudre des problèmes majeurs de santé doivent garantir l'extension et une répartition efficaces des prestations médicales, ainsi qu'une évolution et une intégration équilibrées des techniques médicales, de la santé publi-

motion activities including primary prevention, and promotion of appropriate research. As for the national health insurance system, its present and future functions in the context of national medical care and health promotion policies should be evaluated with respect to various facets of the system and, if necessary, the system should be *partly, largely or wholly* improved.

To resolve these problems and to rationalize the health care and promotion system in Japan, education is of utmost importance since an understanding of the present sociomedical situation is the key to the changes required, and since a well-educated individual is usually an important catalyst of social evolution and changes. The exchange of knowledge and of the results of research on such problems between countries with similar sociomedical problems is critical to this goal.

que et de la sécurité sociale, et encore l'application de mesures énergiques de promotion de la santé, dont la prévention primaire, et d'encouragement de travaux appropriés de recherche. Pour ce qui est du système national d'assurance maladie, il conviendrait de procéder à une évaluation de ses attributions présentes et futures, dans le contexte des politiques nationales de prestations médicales et de promotion de la santé, afin d'explorer les différents aspects du système et, si nécessaire, de le modifier partiellement, largement ou totalement.

L'éducation joue un rôle d'une extrême importance dans la solution de ces problèmes et dans la rationalisation du système de soins et de promotion de la santé au Japon, car une certaine connaissance de l'actuelle situation médico-sociale est indispensable pour que les changements nécessaires puissent être apportés, et une bonne instruction personnelle constitue habituellement un important catalyseur de l'évolution sociale. Pour atteindre cet objectif, il est nécessaire aussi de procéder à des échanges de connaissances et de résultats de travaux de recherche sur ces problèmes entre les pays qui se trouvent dans la même situation médico-sociale.

REFERENCES — RÉFÉRENCES

1. MINISTRY OF HEALTH AND WELFARE, JAPAN. *[Vital statistics, Japan]*. Tokyo, Statistics and Information Department, Ministry of Health and Welfare. (Various years — in Japanese).

   MINISTÈRE DE LA SANTÉ ET DES AFFAIRES SOCIALES, JAPON. *[Statistiques démographiques, Japon]*. Tokyo, Département des Statistiques et de l'Information, Ministère de la santé et des affaires sociales (années sélectionnées — en japonais).

2. MINISTRY OF HEALTH AND WELFARE, JAPAN. [*Age-adjusted mortality rates by major causes, 1980*. Vital Statistics Special Report 1983]. Tokyo, Statistics and Information Department, Ministry of Health and Welfare. 1983. (In Japanese).

   MINISTÈRE DE LA SANTÉ ET DES AFFAIRES SOCIALES, JAPON, [*Taux de mortalité corrigés selon l'âge, par principales causes de décès, 1980*. Rapport spécial de statistiques démographiques, 1983]. Tokyo, Département des Statistiques et de l'Information, Ministère de la santé et des affaires sociales, 1983. (En japonais).

3. HEALTH AND WELFARE STATISTICS ASSOCIATION, JAPAN. *[National health trends in Japan]*. Tokyo, Health and Welfare Statistics Association. (Various years — in Japanese).

   ASSOCIATION POUR LES STATISTIQUES SANITAIRES ET D'ASSISTANCE SOCIALE, JAPON, *[Les tendances nationales de la santé au Japon]*. Tokyo, Association pour les statistiques sanitaires et d'assistance sociale, (années sélectionnées — en japonais).

4. HEALTH AND WELFARE STATISTICS ASSOCIATION, JAPAN. *[National health trends in Japan, 1943, Vol. 1]*. Tokyo, Health and Welfare Statistics Association, 1944. (In Japanese).

   ASSOCIATION POUR LES STATISTIQUES SANITAIRES ET D'ASSISTANCE SOCIALE, JAPON, [*Les tendances nationales de la santé au Japon, 1943, Vol. 1*]. Tokyo, Association pour les statistiques sanitaires et d'assistance sociale, 1944. (En japonais).

5. MINISTRY OF HEALTH AND WELFARE, JAPAN. *[Statistics for infectious diseases and food poisoning]*. Tokyo. Statistics and Information Department, Ministry of Health and Welfare. (Various years — in Japanese).

   MINISTÈRE DE LA SANTÉ ET DES AFFAIRES SOCIALES, JAPON *[Statistiques relatives aux maladies infectieuses et aux intoxications alimentaires]*. Tokyo, Département des Statistiques et de l'Information, Ministère de la santé et des affaires sociales (années sélectionnées — en japonais).

6. MURAMATSU, M. Introductory remarks on health policies and their effects on mortality in developed countries. In: *Mortality and health policy*. Proceedings of the Expert Group on Mortality and Health Policy. International Conference on Population, 1984. Rome, 30 May-3 June 1983. New York, Department of International Economic and Social Affairs, United Nations, 1984.

   MURAMATSU, M. Observations liminaires sur les directives sanitaires et leurs effets sur la mortalité dans les pays développés. Dans: *Mortalité et politique sanitaire*. Compte rendu des travaux d'un groupe d'experts. Mortalité et politique sanitaire. Conférence internationale sur la population, 1984. Rome, 30 mai-3 juin 1983. New York, Département des Affaires économiques et sociales internationales, Nations Unies, 1984.

7. DEPARTMENT OF HYGIENE, NAGOYA CITY *[Progress in health centres]*. Nagoya, Department of Hygiene, 1984. (In Japanese).

   DÉPARTEMENT D'HYGIÈNE, NAGOYA. *[Le développement des centres de santé]*. Nagoya, Département d'Hygiène, 1984. (En japonais).

8. *[Progress in chemotherapeutics]*. Tokyo, Yakuji-Shinpo-Sha, 1973. (In Japanese).

   [Les progrès en chimiothérapie]. Tokyo, Yakuji-Shinpo-Sha, 1973. (En japonais).

9. MINISTRY OF EDUCATION, JAPAN. *[Manual for educational statistics]*. Tokyo, Ministry of Education, 1981. (In Japanese).

   MINISTÈRE DE L'ÉDUCATION, JAPON. *[Manuel de statistiques relatives à l'enseignement]*. Tokyo, Ministère de l'éducation, 1981. (En japonais).

10. [*Numerical overview of Japan, 100 years*. Edition of longitudinal statistics]. Tokyo, Kokusei-Sha, 1984. (In Japanese).

    [*Cent années de chiffres sur le Japon*. Présentation de statistiques longitudinales]. Tokyo, Kokusei-Sha, 1984. (En japonais).

11. FOOD AND NUTRITION STUDY GROUP. *[Data book on food, nutrition and health, 1984]*. Tokyo, Ishiyaku-Shyuppan, 1984. (In Japanese).
GROUPE D'ÉTUDES SUR LA NUTRITION ET L'ALIMENTATION. *[Recueil de données sur l'alimentation, la nutrition et la santé, 1984]*. Tokyo, Ishiyaku-Shyuppan, 1984. (En japonais).

12. HISHIMURA, S. *[Some problems in the age of longevity]*. Kosei, 1984. (pp. 3-4) (In Japanese).
HISHIMURA, S. *[Quelques problèmes à l'âge de la longévité]*. Kosei, 1984 (pp. 3-4) (En japonais).

13. INSTITUTE OF POPULATION PROBLEMS, JAPAN. *[New estimates of future population in Japan]*. Tokyo, Institute of Population Problems, 1981. (In Japanese).
INSTITUT POUR LES QUESTIONS DE POPULATION, Japon. *[Nouvelles estimations concernant la future population japonaise]*. Tokyo, Institut pour les questions de population, 1981. (En japonais).

14. LIFE INSURANCE CULTURAL CENTRE. *[Aging society]*. Tokyo, Nippon-Seisansei-Honbu, 1980. (In Japanese).
CENTRE CULTUREL DE L'ASSURANCE-VIE. *[Société en vieillissement]*. Tokyo, Nippon-Seisansei-Honbu, 1980. (En japonais).

15. SODA, N. & MIURA, F. *[Illustrated white paper on the elderly]*. Tokyo, Sekibun-Sha, 1982. (In Japanese).
SODA, N. & MIURA, F. *[Livre blanc illustré sur le troisième âge]*. Tokyo, Sekubun-Sha, 1982. (En japonais).

16. MINISTRY OF HEALTH AND WELFARE, JAPAN. *[National patients survey, 1982]*. Tokyo, Ministry of Health and Welfare, 1983. (In Japanese).
MINISTÈRE DE LA SANTÉ ET DES AFFAIRES SOCIALES, JAPON. *[Enquête nationale sur les malades, 1982]*. Tokyo, Ministère de la santé et des affaires sociales, 1983. (En japonais).

17. MINISTRY OF LABOUR, JAPAN. *[Manual for labour statistics, 1982]*. Tokyo, Department of Statistics and Information, Ministry of Labour, 1983. (In Japanese).
MINISTÈRE DU TRAVAIL, JAPON. *[Manuel de statistiques du travail, 1982]*. Tokyo, Département des statistiques et de l'information, Ministère du travail, 1983. (En japonais).

18. MINISTRY OF HEALTH AND WELFARE, JAPAN. *[National health survey, 1983]*. Tokyo, Ministry of Health and Welfare, 1984. (In Japanese).
MINISTÈRE DE LA SANTÉ ET DES AFFAIRES SOCIALES, JAPON. *[Enquête nationale de santé, 1983]*. Tokyo, Ministère de la santé et des affaires sociales, 1984. (En japonais).

TABLE 1. AGE-ADJUSTED DEATH RATES FROM ALL CAUSES PER 1 000 POPULATION, AND INFANT MORTALITY RATES PER 1 000 LIVE BIRTHS, JAPAN, 1916-1981

TABLEAU 1. TAUX DE MORTALITÉ CORRIGÉ SELON L'ÂGE, TOUTES CAUSES CONFONDUES, POUR 1 000 HABITANTS, ET TAUX DE MORTALITÉ INFANTILE POUR 1 000 NAISSANCES VIVANTES, JAPON, 1916-1981

Year Année	AADR[a] Taux de mortalité corrigé selon l'âge[a]	IMR[b] Taux de mortalité infantile[b]	Year Année	AADR Taux de mortalité corrigé selon l'âge	IMR Taux de mortalité infantile	Year Année	AADR Taux de mortalité corrigé selon l'âge	IMR Taux de mortalité infantile
1916	21.1	—	1938	17.6	114.4	1960	6.9	30.7
1917	21.4	—	1939	18.1	106.2	1961	6.6	28.6
1918	26.8	—	1940	16.7	90.0	1962	6.5	26.4
1919	23.0	—	1941	16.1	84.1	1963	6.0	23.2
1920	25.2	165.7	1942	16.1	85.5	1964	5.8	20.4
1921	22.5	168.3	1943	16.7	86.6	1965	5.9	18.5
1922	22.1	166.4	1944	—	—	1966	5.5	19.3
1923	22.5	163.4	1945	—	—	1967	5.4	14.9
1924	20.8	156.2	1946	—	—	1968	5.3	15.3
1925	19.9	142.4	1947	15.1	76.7	1969	5.2	14.2
1926	18.7	137.5	1948	12.1	61.7	1970	5.1	13.1
1927	19.3	141.3	1949	11.7	62.5	1971	4.8	12.4
1928	19.3	137.6	1950	10.8	60.1	1972	4.6	11.7
1929	19.4	142.1	1951	9.7	57.5	1973	4.6	11.3
1930	17.8	124.1	1952	8.7	49.4	1974	4.4	10.8
1931	18.8	131.5	1953	8.7	48.9	1975	4.2	10.0
1932	17.6	117.5	1954	8.0	44.6	1976	4.0	9.3
1933	17.7	121.3	1955	7.6	39.8	1977	3.8	8.9
1934	18.0	124.8	1956	7.7	40.6	1978	3.7	8.4
1935	16.8	106.7	1957	7.9	40.0	1979	3.5	7.9
1936	17.5	116.7	1958	7.0	34.5	1980	3.6	7.5
1937	17.0	105.8	1959	6.9	33.7	1981	3.4	7.1

1939: Beginning of the Second World War. — 1939: Commencement de la Seconde Guerre mondiale.
1941: Beginning of the Pacific Ocean War. — 1941: Commencement de la Guerre du Pacifique.
1945: End of the Second World War. — 1945: Fin de la Seconde Guerre mondiale.

[a] AADR: Age-adjusted death rate (standard population: Japanese population in 1935) — (Population standard: Population japonaise en 1935)
[b] IMR: Infant mortality rate

TABLE 2. DIFFUSION RATE OF INDEX FOR SANITARY ENVIRONMENT, JAPAN, 1955, 1960-1982
TABLEAU 2. INDICATEUR D'ASSAINISSEMENT ET TAUX DE COUVERTURE, JAPON, 1955, 1960-1982

Year — Année	Percentage of the population served by: — Pourcentage de la population desservie par:			
	Piped water supply Eau courante (canalisations)	Sewerage system Système d'égouts	Waste processing service Service de traitement des déchets	Flush toilet Toilettes à chasse d'eau
1955	32.2	—	—	—
1960	53.4	—	—	—
1961	57.2	—	—	—
1962	60.4	—	—	—
1963	63.7	7.1	60.9	9.2
1964	66.7	7.9	62.3	10.4
1965	69.4	8.3	65.4	12.6
1966	72.2	10.1	68.5	14.6
1967	74.7	11.1	71.5	16.8
1968	76.9	12.7	76.0	17.7
1969	79.0	14.0	78.6	19.1
1970	80.8	15.6	81.6	21.1
1971	82.7	16.6	95.0	21.1
1972	84.3	18.5	95.5	23.6
1973	85.4	19.5	98.6	26.1
1974	86.7	20.5	98.7	29.1
1975	87.6	22.8	99.3	32.4
1976	88.6	24.6	98.9	34.7
1977	84.9	26.7	99.1	37.9
1978	90.3	26.7	99.3	41.2
1979	91.0	28.0	99.4	43.2
1980	91.5	29.5	99.6	45.5
1981	91.9	30.7	99.7	47.5
1982	92.2	32.0		

TABLE 3. TRENDS IN NATIONAL BUDGET FOR MINISTRY OF HEALTH AND WELFARE AND ITS ALLOCATION, JAPAN
TABLEAU 3. TENDANCES: PART DU BUDGET NATIONAL ALLOUÉE AU MINISTÈRE DE LA SANTÉ ET DES AFFAIRES SOCIALES ET VENTILATIONS DES CRÉDITS, JAPON

Total budget (million yen) — Budget total (en millions yen) Budget for MHW — Budget du Ministère de la Santé et des Affaires sociales	1960 1 569 875 164 034 (10.5%)	1965 3 658 090 478 741 (13.1%)	1970 7 949 764 1 103 473 (13.9%)	1975 21 288 800 3 906 729 (18.4%)	1980 42 568 843 8 149 475 (19.1%)	1983 50 379 603 9 061 468 (18.0%)
Expenditure items — Postes de dépenses	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Livelihood protection — Garantie du minimum vital	27.2	22.1	19.7	13.7	11.7	12.0
Social welfare — Assistance sociale:	8.0	9.0	10.1	15.8	16.8	21.2
children — enfants	5.2	6.0	6.9	7.9	7.3	9.2
the elderly — personnes âgées	1.1	1.4	1.6	5.7	5.8	9.8
the handicapped — handicapés	0.3	0.3	0.3	0.4	0.5	0.6
other categories — autres catégories	12.6	5.4	1.3	1.8	3.2	1.6
Social insurance — Assurances sociales:	39.6	43.8	52.9	59.3	62.1	58.0
government subsidy for social insurance — subvention du gouvernement pour les assurances sociales	4.7	5.4	7.8	10.8	7.0	7.6
government subsidy for national pension — subvention du gouvernement pour pensions nationales	17.6	13.2	12.4	19.6	20.7	17.1
government subsidy for national insurance — subvention du gouvernement pour l'assurance nationale	16.9	25.0	32.4	27.2	26.1	25.5
others — autres	0.4	0.2	0.7	1.7	8.3	7.8
Public health — Santé publique:	16.4	19.4	12.7	7.0	4.9	4.7
treatment of tuberculosis — traitement de la tuberculose	1.6	6.8	3.9	1.7	0.6	0.3
treatment of psychiatric disorders — traitement des troubles psychiatriques	0.6	3.3	3.2	2.2	1.0	0.8
A-bomb impairments — séquelles de la bombe A	0.1	0.3	0.6	0.6	1.0	1.1
other public health activities — autres activités de santé publique	2.4	1.3	1.2	0.8	0.8	0.9
public health institutions — établissements de santé publique	10.5	6.8	3.1	1.3	1.1	1.2
quarantine — *quarantaine*	0.2	0.1	0.1	0.1	0.05	0.05
others — autres	1.1	0.8	0.6	0.3	6.3	0.4
Promotion of scientific technology — Promotion de la technologie scientifique	0.4	0.4	0.3	0.3	0.2	0.3
Sanitation — Assainissement	1.5	1.5	0.9	1.5	1.9	1.7
Others — Autres	6.9	3.8	3.4	2.4	2.4	2.1

TABLE 4. EXPENDITURE FOR PUBLIC HEALTH IN PREFECTURAL AND LOCAL GOVERNMENTS, AND ITS ALLOCATION, JAPAN

TABLEAU 4. VENTILATION DES DÉPENSES DE SANTÉ PUBLIQUE DES AUTORITÉS PRÉFECTORALES ET LOCALES, JAPON

Prefectural governments Autorités préfectorales	1955	1960	1965	1970	1975	1980	1982
Total expenditure (million yen) — Dépenses totales (millions de yens)	12 319 100.0%	21 766 100.0%	140 647 100.0%	280 897 100.0%	729 226 100.0%	1 033 795 100.0%	1 114 604 100.0%
Expenditure items — Postes de dépenses							
Prevention of tuberculosis — Prévention de la tuberculose	35.0%	27.3%	26.9%	18.4%	8.6%	5.0%	4.0%
Prevention of other infectious diseases — Prévention d'autres maladies infectieuses	13.0	10.3					
Other public health activities — Autres activités de santé publique		28.2	40.4	55.6	59.1	68.0	69.5
Health centres — Centres de santé	52.0	12.0	13.8	14.9	12.0	11.7	11.4
Establishment of sanitary environment — *Création d'un environnement sain*		22.2	19.2	13.0	20.5	15.3	15.1
Local (city town, village) governments Autorités locales (villes agglomérations, villages)							
Total expenditure (in yen) — Dépenses totales (en yen)	18 419 100.0%	26 112 100.0%	148 674 100.0%	306 134 100.0%	1 058 847 100.0%	1 857 636 100.0%	2 090 958 100.0%
Expenditure items — Postes de dépenses							
Prevention of tuberculosis — Prévention de la tuberculose	7.7	8.9	7.8	6.3	3.2	1.8	1.6
Prevention of other infectious diseases — Prévention d'autres maladies infectieuses	11.6	14.0 17.9	29.3	35.5	34.7	40.6	41.4
Other public health activities — Autres activités de santé publique	41.0						
Health centres — Centres de santé		3.5	4.1	3.8	3.8	3.2	3.1
Sanitation — Assainissement	39.7	55.7	58.8	55.4	58.3	54.4	53.9

FIG. 1

TRENDS IN LIFE EXPECTANCY AT BIRTH, IN JAPAN, BY SEX, 1921-1925 TO 1983

LES TENDANCES DE L'ESPÉRANCE DE VIE À LA NAISSANCE, PAR SEXE, AU JAPON 1921-1925 À 1983

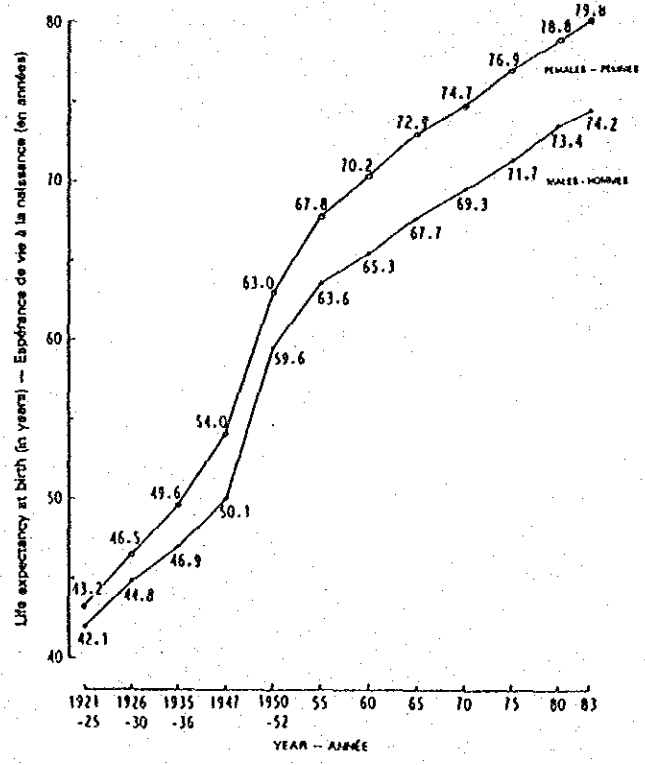


FIG. 2
TRENDS IN AGE-ADJUSTED MORTALITY RATES BY CAUSE, JAPAN 1935-1980
TENDANCES DES TAUX DE MORTALITÉ CORRIGÉS SELON L'ÂGE
PAR CAUSE DE DÉCÈS, JAPON, 1935-1980

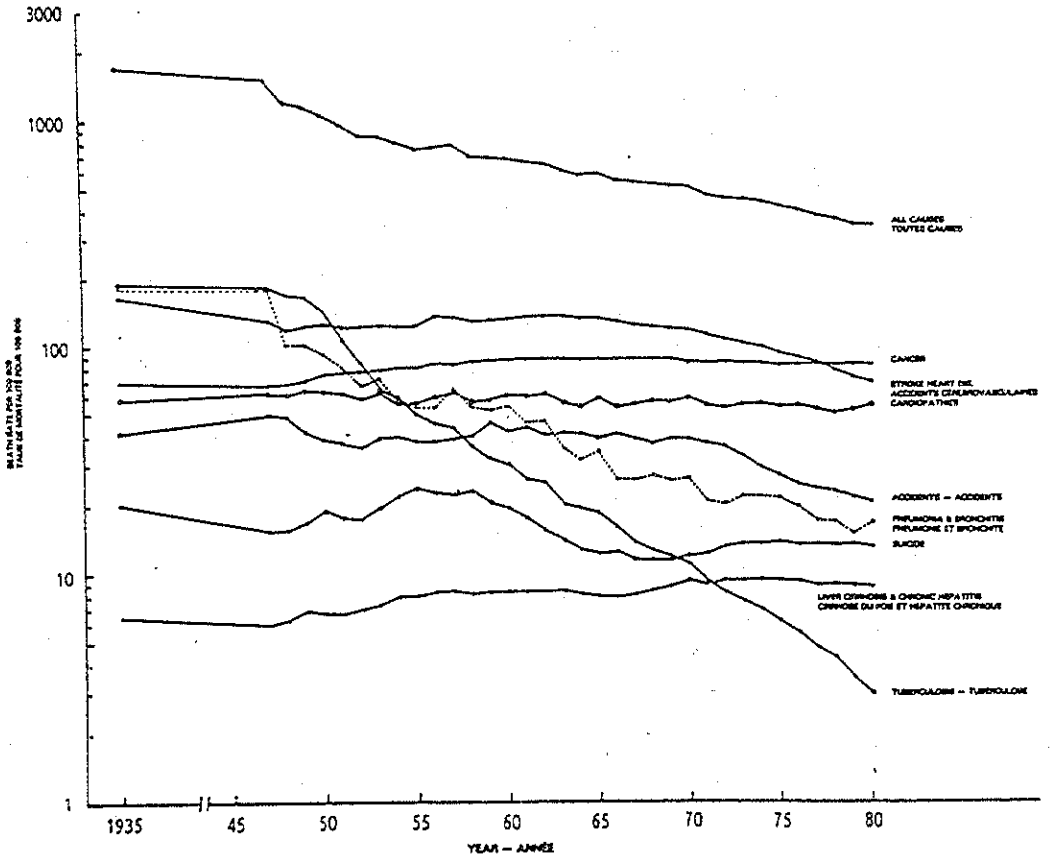


FIG. 3
TRENDS IN AGE-SPECIFIC DEATH RATE
FROM ALL CAUSES OF DEATH, JAPAN, 1935-1980
TENDANCES DES TAUX SPÉCIFIQUES DE MORTALITÉ PAR ÂGE,
TOUTES CAUSES CONFONDUES, JAPON, 1935-1980

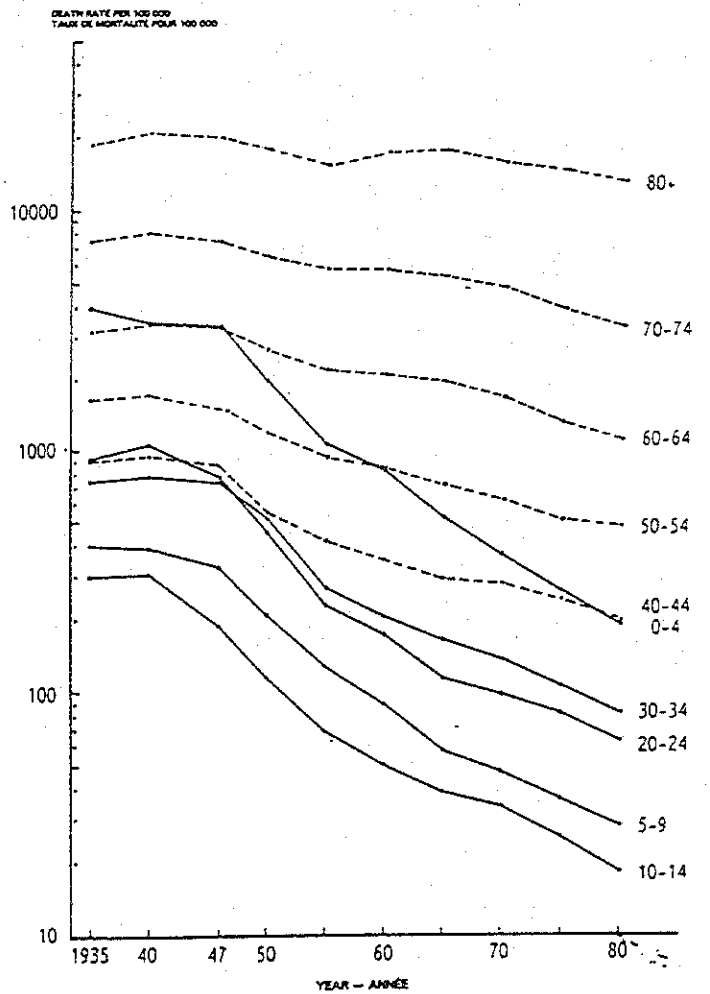
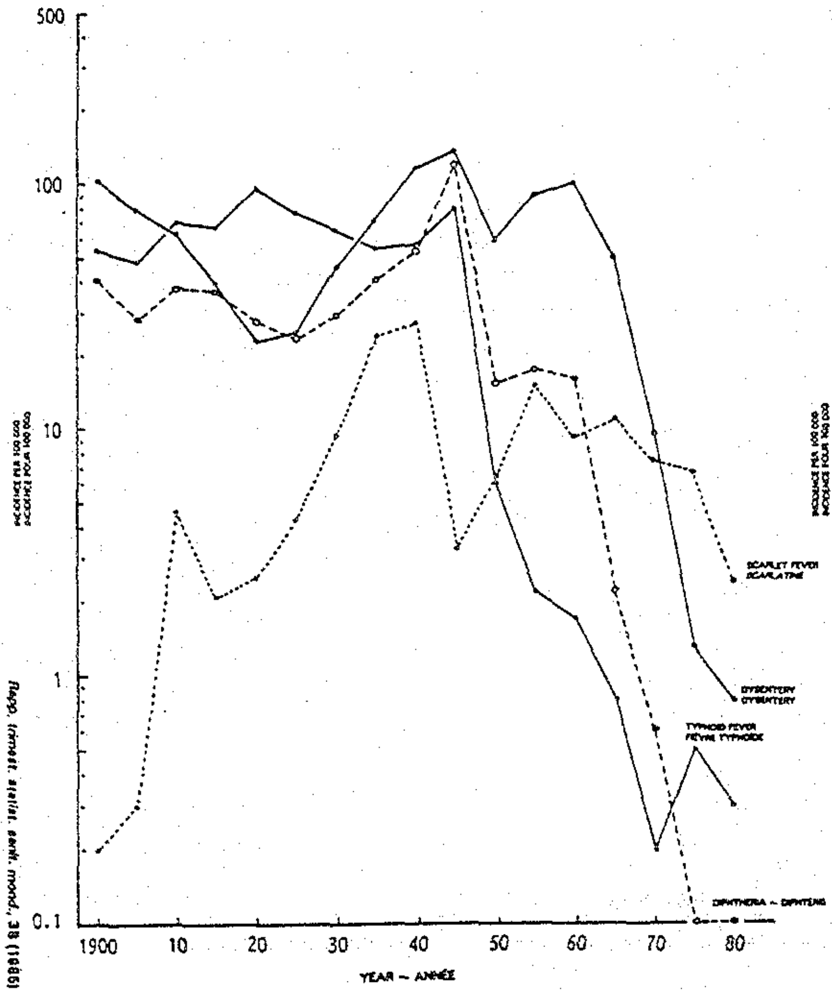


FIG. 4a
TRENDS IN INCIDENCE OF SELECTED INFECTIOUS DISEASES, JAPAN, 1900-1980
LES TENDANCES DE L'INCIDENCE DE CERTAINES MALADIES INFECTIEUSES, JAPON 1900-1980



Rapp. trimest. statist. sanit. mond., 38 (1985)

FIG. 4b
TRENDS IN INCIDENCE OF SELECTED INFECTIOUS DISEASES, JAPAN, 1945-1983
LES TENDANCES DE L'INCIDENCE DE CERTAINES MALADIES INFECTIEUSES, JAPON, 1945-1983

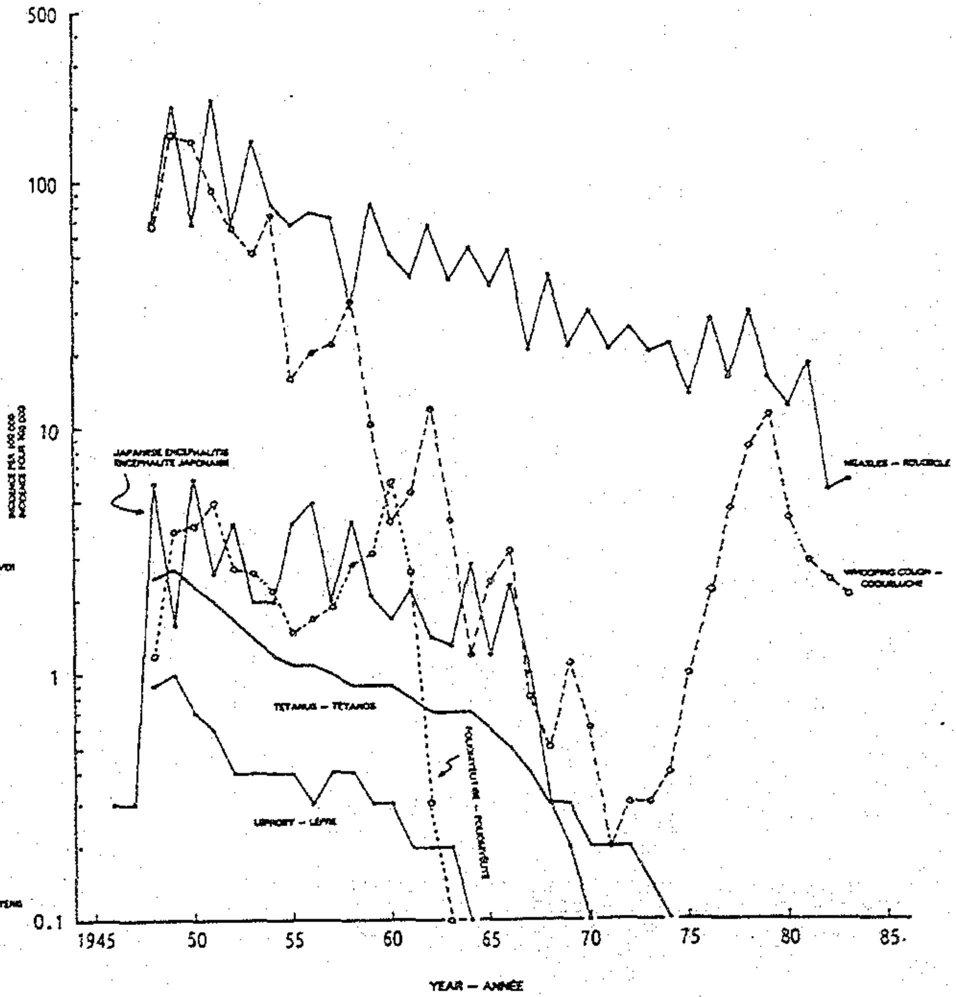


FIG. 5
NUTRITIONAL INTAKE, JAPAN, 1950-1980
APPORT NUTRITIONNEL, JAPON, 1950-1980

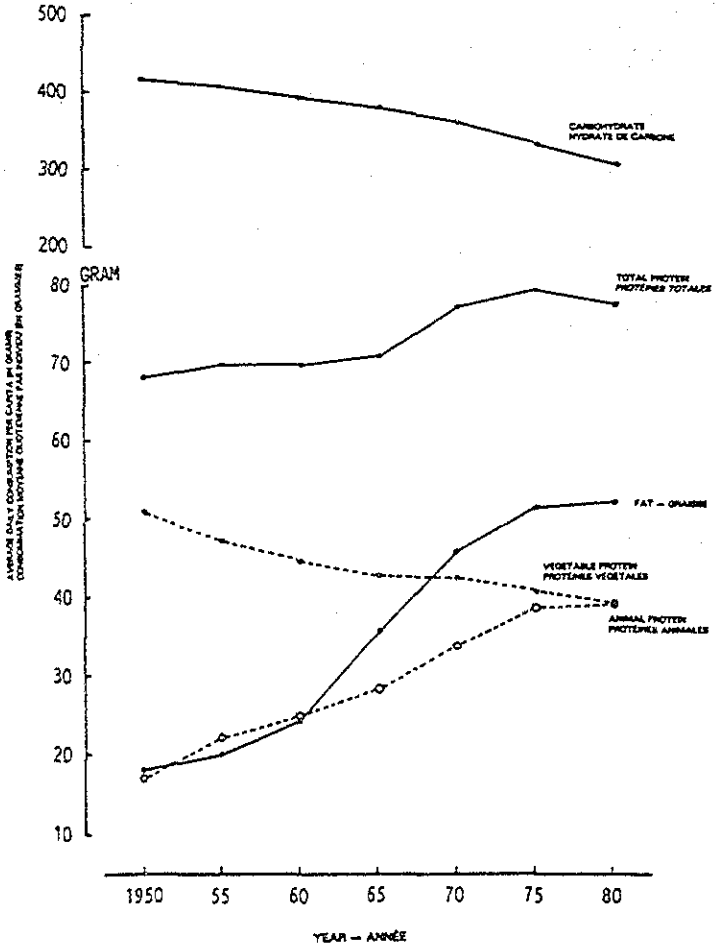


FIG. 6
CHANGING COMPOSITION OF NUTRIENTS IN TOTAL ENERGY INTAKE, JAPAN, 1950-1980
MODIFICATIONS DE LA COMPOSITION EN NUTRIMENTS DE L'APPORT ÉNERGÉTIQUE TOTAL, JAPON, 1950-1980

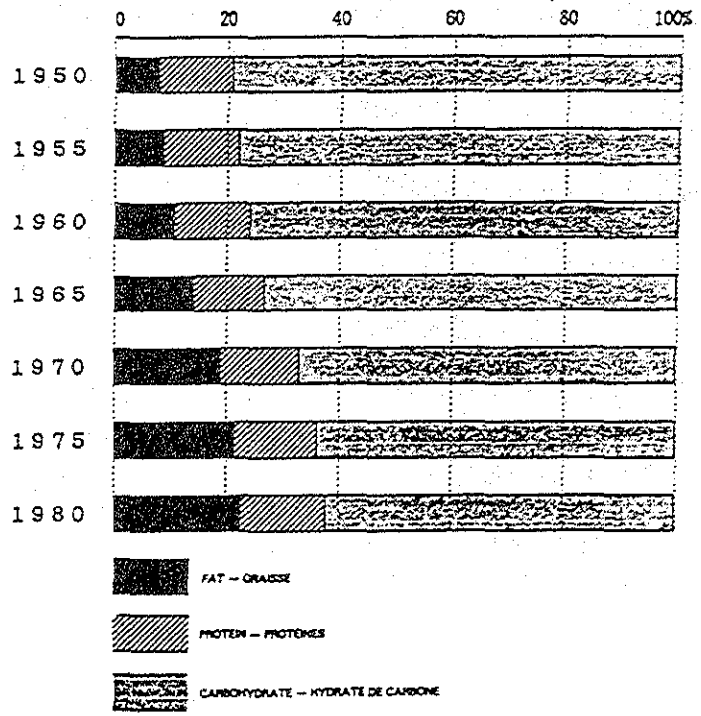
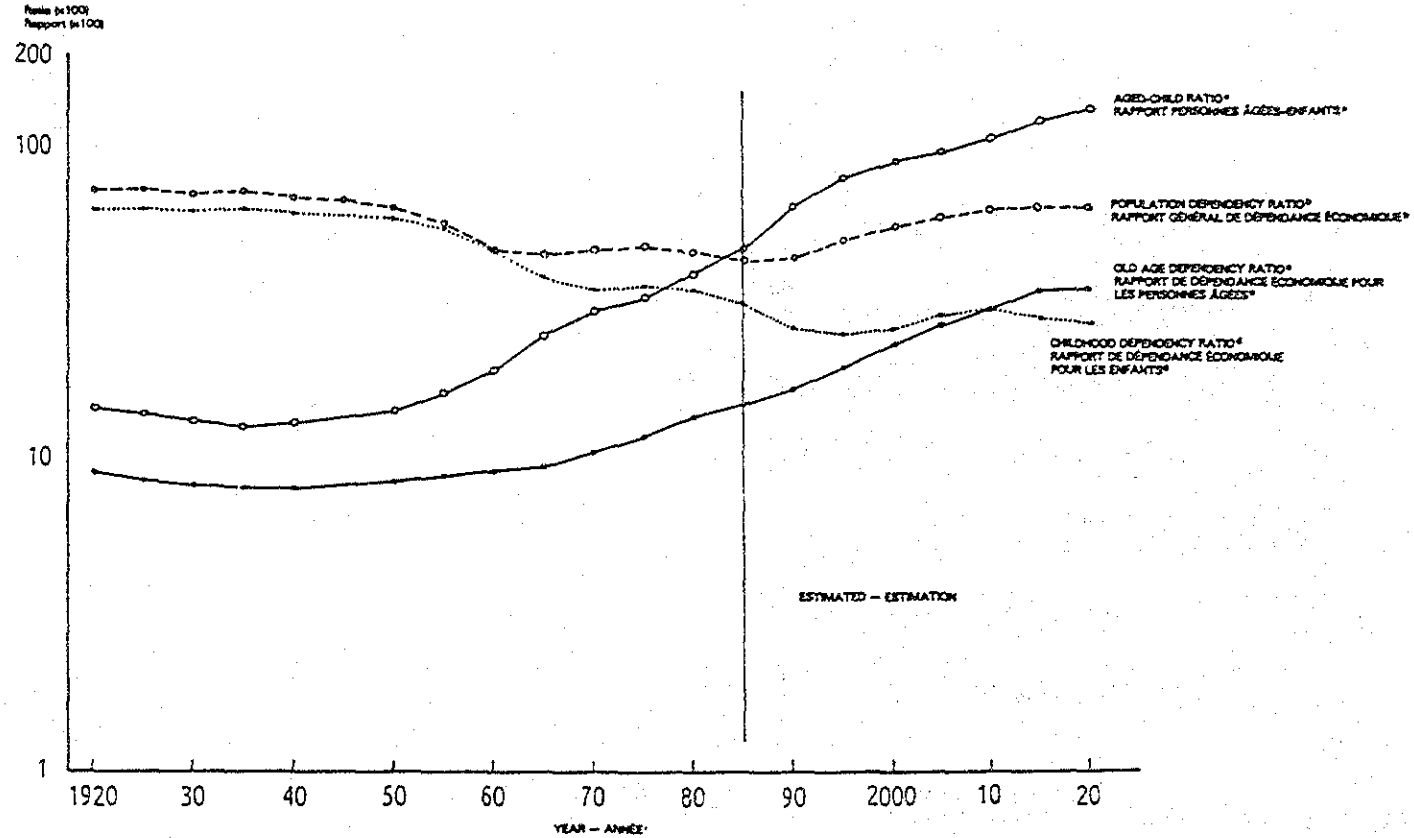


FIG. 7

TRENDS AND PROJECTIONS OF SELECTED AGE-COMPOSITION INDICES, JAPAN, 1920-2020

TENDANCES ET PROJECTIONS CONCERNANT QUELQUES INDICATEURS DE LA COMPOSITION PAR AGE DE LA POPULATION, JAPON, 1920-2020



* (Population aged 65+/Population aged 0-14 × 100

† (Population aged 0-14 and 65+/Population aged 15-64) × 100

‡ (Population aged 65+/Population aged 15-64) × 100

§ (Population aged 0-14/Population aged 15-64) × 100

Rapp. annuel. statist. sanit. mond., 38 (1985)

WORLD HEALTH STATISTICS ANNUAL

ANNUAIRE DE STATISTIQUES SANITAIRES MONDIALES

1984

WORLD HEALTH ORGANIZATION
ORGANISATION MONDIALE DE LA SANTÉ

GENÈVE

1984

(SEE NOTES AND SYMBOLS FOLLOWING THE INTRODUCTION) (VOIR LES NOTES ET SIGNES A LA SUITE DE L'INTRODUCTION)

COUNTRY OR AREA PAYS OU ZONE	POPULATION[1,2,3]						VITAL EVENTS[1,2,3] MOUVEMENT NATUREL DE LA POPULATION[1,2,3]			
	LATEST OFFICIAL ESTIMATE (IN THOUSANDS) DERNIERE ESTIMATION OFFICIELLE (EN MILLIERS)		PERCENTAGE DISTRIBUTION BY AGE IN YEARS[4] STRUCTURE PAR GROUPE D'AGE (ANNEES)[4]				RATE PER 1000 POPULATION[5] TAUX P. 1000 HABITANTS[5]			
	YEAR ANNEE	NUMBER NOMBRE	YEAR ANNEE	0-14	15-64	65+	YEAR(S) ANNEE(S)	LIVE BIRTHS NAISSANCES VIVANTES	DEATHS MORTS	NATURAL INCREASE ACCROISSEMENT NATUREL
ASIA — ASIE										
AFGHANISTAN	1983	17 222*	1979	44.6	53.0	2.5	1979[7]	48.1	22.3	25.8
BAHRAIN — BAHREIN	1982	371	1980[M]	34.7	63.5	1.1	1980-85[M]	32.3	5.3	27.0
BANGLADESH	1983	84 661*	1981	41.2	56.0	2.8	1982	36.1	12.0	23.1
BHUTAN — BHOUTAN	1984	1 388[M]	1980[M]	40.4	56.4	3.2	1980-85[M]	38.4	18.1	20.3
BRUNEI	1982	200	1982	38.0	56.9	2.9	1982	26.8	3.8	26.8
BURMA — BIRMANIE	1983	36 314*	1982	38.3	56.7	4.0	1980-85[M]	37.0	12.7	25.2
CHINA — CHINE	1982	1 031 883	1980[M]	38.9	56.4	4.7	1980-85[M]	18.6	6.8	11.7
CYPRUS — CHYPRE	1983	666*	1982	24.7	65.3	10.0	1983	22.3	8.5	13.8
DEMOCRATIC KAMPUCHEA KAMPUCHEA DEMOCRATIQUE	1984	7 149[M]	1980[M]	32.0	54.6	2.5	1980-85[M]	46.5	19.6	26.8
DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA — REPUBLIQUE POPULAIRE DEMOCRATIQUE DE COREE	1984	19 830[M]	1980[M]	40.0	56.3	3.7	1980-85[M]	30.6	7.4	23.1
DEMOCRATIC YEMEN YEMEN DEMOCRATIQUE	1983	2 186*	1977	49.4	47.0	3.6	1980-85[M]	47.8	18.5	28.6
EAST TIMOR — TIMOR ORIENTAL	1980	666		...	...	...	1980-85[M]	48.0	23.0	25.0
HONG KONG	1983	5 313*	1982	24.3	68.8	6.8	1982	16.6	4.8	11.8
INDIA — INDE	1981	676 218*	1981	39.1	57.4	3.5	1980-85[M]	33.2	13.3	19.8
INDONESIA — INDONESIE	1983	156 442*	1980	40.9	55.8	3.2	1980-85[M]	30.7	13.0	17.7
IRAN (ISLAMIC REPUBLIC OF) IRAN (REPUBLIQUE ISLAMIQUE D')	1983	40 680*	1978	44.6	52.0	3.5	1982	51.8	3.0	48.8
IRAQ	1979	12 767*	1977	48.9	46.8	4.0	1980-85[M]	44.9	10.7	34.2
ISRAEL	1983	4 128*	1981	33.2	58.2	8.6	1982	24.0	8.8	15.1
JAPAN — JAPON	1983	119 269*	1981	23.6	67.2	9.3	1982	12.6	6.0	6.6
JORDAN — JORDANIE	1979	2 779*	1979	50.0	48.0	2.0	1980-85[M]	44.0	8.4	35.6
KUWAIT — KOWEIT	1983	1 872	1979	44.4	54.1	1.5	1982	34.7	3.2	31.5
LAO PEOPLE'S DEMOCRATIC REPUBLIC — REPUBLIQUE DEMOCRATIQUE POPULAIRE LAO	1977	3 427	1980[M]	43.4	53.7	2.9	1980-85[M]	40.6	15.5	25.1
LEBANON — LIBAN	1984	2 844[M]	1980[M]	40.1	54.5	5.4	1980-85[M]	28.3	8.8	20.5
MACAO	1982	350*		...	...	...	1982	18.0	4.1	10.9
MALAYSIA — MALAISIE	1980	13 393	1979	38.0	57.4	3.6	1979	30.2	6.7	24.6
MALDIVES	1982	168	1977	44.6	52.6	2.3	1982	44.6	13.3	31.2
MONGOLIA — MONGOLIE	1982	1 732*	1980[M]	43.0	53.8	3.2	1981	36.7	9.2	27.5
NEPAL	1981	16 023	1980[M]	43.8	53.5	3.0	1980-85[M]	41.7	18.4	23.2
OMAN	1984	1 181[M]	1980[M]	44.0	53.4	2.6	1980-85[M]	47.3	15.9	31.4
PAKISTAN	1983	89 729*	1981	45.2	50.7	4.1	1980-85[M]	42.8	15.2	27.4
PHILIPPINES	1983	51 360*	1980	43.0	53.6	3.4	1979	30.8	6.5	24.3
QATAR	1982	267	1981	32.3	66.6	1.1	1980-85[M]	30.1	4.0	26.5
REPUBLIC OF KOREA REPUBLIQUE DE COREE	1983	39 861*	1981	33.3	62.8	3.9	1983*	29.2	6.3	18.9
SAUDI ARABIA — ARABIE SAOUDITE	1984	10 824[M]	1980[M]	43.3	53.9	2.8	1980-85[M]	43.0	12.1	30.9
SINGAPORE — SINGAPOUR	1983	2 817*	1983	26.1	69.9	5.0	1982*	17.3	5.2	12.1
SRI LANKA	1983	15 416*	1981	35.3	60.4	4.3	1981	28.0	6.0	22.0
SYRIAN ARAB REPUBLIC REPUBLIQUE ARABE SYRIENNE	1983	9 606*	1981	47.0	49.1	3.0	1982	48.7	8.9	39.8
THAILAND — THAILANDE	1983	49 459*	1982	38.6	58.2	3.2	1982	21.7	5.0	16.7
TURKEY — TURQUIE	1983	47 279*	1980	38.6	56.7	4.6	1980-85[M]	32.8	9.0	23.8
UNITED ARAB EMIRATES EMIRATS ARABES UNIS	1983	1 208*	1977	26.3	72.1	1.6	1980-85[M]	27.0	4.0	23.0
VIET NAM	1979	52 742	1980[M]	41.8	54.6	3.6	1980-85[M]	31.2	10.1	21.1
YEMEN	1976	5 230*	1980[M]	46.7	51.0	2.3	1980-85[M]	48.5	21.6	26.9
EUROPE										
ALBANIA — ALBANIE	1983	2 941*	1980[M]	37.3	57.9	4.8	1982	27.6	5.9	21.8
ANDORRA — ANDORRE	1982	40	1981	22.0	70.9	7.1	1981	14.8	4.1	10.7
AUSTRIA — AUTRICHE	1983	7 551*	1981	20.1	64.7	15.2	1983*	11.9	12.3	-0.4
BELGIUM — BELGIQUE	1983	9 856*	1981	20.0	65.6	14.4	1983*	11.9	11.3	0.6
BULGARIA — BULGARIE	1983	8 939*	1981	22.1	66.0	11.9	1983*	13.6	11.4	2.2
CHANNEL ISLANDS ILES ANGLO-NORMANDES	1983	128	1981	18.0	66.6	15.4	1982*	10.8	10.9	-0.1
CZECHOSLOVAKIA TCHECOSLOVAQUIE	1983	15 436*	1981	24.3	63.5	12.2	1983*	14.8	12.0	2.9
DENMARK — DANEMARK	1983	5 114*	1981	20.3	65.2	14.5	1983*	9.8	11.2	-1.3
FAROE ISLANDS — ILES FEROE	1983	46*	1981	27.6	61.9	10.5	1983*	15.7	7.2	8.5

COUNTRY OR AREA PAYS OU ZONE	TAUX DE MORTALITE INFANTILE P. 1000 NAISSANCES VIVANTES			ESPERANCE DE VIE A LA NAISSANCE (EN ANNEES)		
	1970-75	1980-85	CHANGE BETWEEN 1970-75 AND 1980-85 - VARIATION ENTRE 1970-75 ET 1980-85	1970-75	1980-85	CHANGE BETWEEN 1970-75 AND 1980-85 - VARIATION ENTRE 1970-75 ET 1980-85
AMERICA — AMERIQUE						
COLOMBIA — COLOMBIE	97	83	-14	60.4	63.6	3.2
COSTA RICA	61	30	-31	68.1	72.9	4.8
CUBA	34	20	-14	70.9	73.4	2.5
DOMINICAN REPUBLIC REPUBLIQUE DOMINICAINE	84	64	-20	57.9	62.6	4.7
ECUADOR — EQUATEUR	100	67	-33	57.1	62.6	5.5
EL SALVADOR	101	71	-30	58.1	64.5	6.7
GUADELOUPE	42	22	-19	67.6	70.4	2.8
GUATEMALA	90	58	-32	54.8	60.7	6.1
GUYANA	58	33	-25	64.3	66.2	2.9
HAITI	135	108	-27	48.8	52.7	4.2
HONDURAS	111	68	-43	54.1	58.8	6.8
JAMAICA — JAMAIQUE	42	28	-14	67.8	70.8	2.5
MARTINIQUE	35	20	-15	68.1	70.9	2.8
MEXICO — MEXIQUE	69	53	-16	62.2	65.7	3.5
NICARAGUA	109	86	-24	54.7	59.8	5.1
PANAMA	44	26	-18	66.4	71.0	4.6
PARAGUAY	53	45	-8	63.1	65.1	2.0
PERU — PEROU	110	99	-11	56.5	59.6	3.1
PUERTO RICO — PORTO RICO	25	17	-8	72.5	73.9	1.4
SURINAME	47	31	-16	65.8	69.4	3.6
TRINIDAD AND TOBAGO TRINITE-ET-TOBAGO	40	28	-12	67.0	70.1	3.1
UNITED STATES OF AMERICA ETATS-UNIS D'AMERIQUE	18	12	-6	71.3	74.0	2.7
URUGUAY	46	38	-8	66.8	70.3	1.5
VENEZUELA	62	39	-13	64.6	67.8	3.3
ASIA — ASIE						
AFGHANISTAN	205	205	0	37.0	37.0	0.0
BAHRAIN — BAHREIN	66	37	-29	63.5	68.2	4.7
BANGLADESH	150	133	-17	44.9	47.8	2.9
BHUTAN — BHOUTAN	167	144	-23	42.3	45.9	3.6
BURMA — BIRMANIE	121	94	-27	50.0	56.0	6.0
CHINA — CHINE	66	38	-28	59.1	67.4	8.3
CYPRUS — CHYPRE	28	17	-11	71.4	74.3	2.9
DEMOCRATIC KAMPUCHEA KAMPUCHEA DEMOCRATIQUE	181	150	-31	40.3	43.4	3.1
DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA — REPUBLIQUE POPULAIRE DEMOCRATIQUE DE COREE	43	32	-11	60.6	64.6	4.0
DEMOCRATIC YEMEN YEMEN DEMOCRATIQUE	169	138	-31	41.5	46.5	5.0
EAST TIMOR — TIMOR ORIENTAL	183	183	0	40.0	39.9	-0.1
HONG KONG	17	12	-6	70.0	73.9	3.9
INDIA — INDE	133	118	-16	48.4	52.5	4.1
INDONESIA — INDONESIE	112	87	-25	47.5	52.5	5.0
IRAN (ISLAMIC REPUBLIC OF) IRAN (REPUBLIQUE ISLAMIQUE D')	129	101	-28	55.9	60.2	4.3
IRAQ	96	72	-24	56.0	59.0	3.0
ISRAEL	21	15	-6	71.6	74.0	2.4
JAPAN — JAPON	12	8	-4	73.3	76.6	3.3
JORDAN — JORDANIE	87	63	-24	56.6	64.2	7.6
KUWAIT — KOWEIT	43	30	-13	67.3	71.2	3.9
LAO PEOPLE'S DEMOCRATIC REPUBLIC — REPUBLIQUE DEMOCRATIQUE POPULAIRE LAO	145	122	-23	45.8	49.7	3.9
LEBANON — LIBAN	46	46	0	66.0	66.0	0.0
MALAYSIA — MALAISIE	40	29	-11	63.0	66.9	3.9
MONGOLIA — MONGOLIE	87	50	-17	60.7	64.6	3.9
NEPAL	167	144	-23	42.3	45.9	3.6
OMAN	150	122	-28	44.8	49.7	4.9
PAKISTAN	140	120	-20	48.5	50.0	3.5
PHILIPPINES	66	50	-16	60.4	64.5	4.1
QATAR	66	45	-21	67.2	70.6	3.4

NOTE: NAMES APPEARING IN BOLD PRINT ARE THOSE OF COUNTRIES OR AREAS FOR WHICH THE ESTIMATED INFANT MORTALITY RATE AND/OR THE ESTIMATED LIFE EXPECTANCY AT BIRTH IN 1980-1985 HAD NOT YET REACHED THE VALUES OF LESS THAN 50 INFANT DEATHS PER 1000 LIVE BIRTHS AND OVER 60 YEARS, RESPECTIVELY, AS SPECIFIED IN THE WHO GLOBAL STRATEGY FOR HEALTH FOR ALL BY THE YEAR 2000 (SEE INTRODUCTION).

NOTE: LES PAYS OU TERRITOIRES DONT LES NOMS SONT IMPRIMES EN CARACTERES GRAS SONT CEUX OU LE TAUX ESTIMATIF DE MORTALITE INFANTILE ET/OU L'ESPERANCE DE VIE ESTIMATIVE A LA NAISSANCE EN 1980-1985 N'AVAIENT PAS ENCORE ATTEINT LES VALEURS SPECIFIEES DANS LA STRATEGIE MONDIALE DE LA SANTE POUR TOUS D'ICI L'AN 2000 (VOIR INTRODUCTION), SOIT, RESPECTIVEMENT, MOINS DE 50 DECES POUR 1000 NAISSANCES VIVANTES ET PLUS DE 60 ANS.

4. LIFE EXPECTANCY, NUMBER OF SURVIVORS, AND CHANCES PER 1000 OF EVENTUALLY DYING FROM SPECIFIED CAUSES, AT SELECTED AGES, BY SEX

MALES — HOMMES

COUNTRY OR AREA		AGE (X)	LIFE EXPECTANCY AT AGE X	NUMBER OF SURVIVORS TO AGE X OUT OF 100 000 AT BIRTH	CHANCES (PER 1000) OF EVENTUALLY DYING FROM: INFECTIOUS AND PARASITIC DISEASES (01-07)	MALIGNANT NEOPLASMS (09-14)	CEREBRO-VASCULAR DISEASES (29)	ALL OTHER DISEASES OF THE CIRCULATORY SYSTEM (25-28,30)	DISEASES OF THE RESPIRATORY SYSTEM (31-33)	INJURY AND POISONING (E47-E59)	MOTOR VEHICLE TRAFFIC ACCIDENTS (E471)
AFRICA											
MAURITIUS	1981	0	63.2	100 000	37.5	86.8	127.8	348.6	109.4	62.6	8.1
		1	64.7	98 190	31.3	88.9	132.8	368.6	100.8	64.6	8.3
		15	51.4	96 036	28.1	89.8	134.1	382.1	108.7	63.0	8.0
		45	24.1	87 469	27.6	93.0	142.8	372.1	109.8	30.3	3.1
		65	10.4	67 095	24.2	87.9	137.9	376.1	110.9	13.9	1.7
AMERICA											
CANADA	1979	0	71.1	100 000	4.1	223.5	84.4	417.0	78.3	77.1	23.9
		1	71.0	98 774	4.0	228.3	88.4	422.0	78.4	77.6	24.1
		15	57.6	98 108	3.9	227.0	86.9	424.8	78.7	74.1	22.4
		45	29.8	92 690	3.7	234.1	89.7	442.0	82.2	42.7	9.4
		65	14.8	72 866	3.7	220.9	102.0	481.8	93.2	26.1	5.4
	1980	0	71.4	100 000	4.2	226.7	80.8	414.1	83.2	73.3	21.8
		1	71.3	98 853	4.1	228.4	81.8	418.8	83.7	73.7	22.1
		15	57.7	98 170	4.0	229.0	82.0	421.6	83.9	70.8	20.8
		45	30.0	93 104	3.9	235.6	86.4	437.1	87.6	41.8	8.8
		65	14.8	73 786	3.7	219.9	97.2	448.1	98.8	26.9	5.1
	1981	0	71.9	100 000	4.7	229.2	80.2	409.0	83.4	71.6	22.1
		1	71.7	98 924	4.7	231.7	81.1	413.9	83.8	72.0	22.3
		15	58.1	98 332	4.6	232.2	81.8	416.7	84.2	69.0	20.8
		45	30.3	93 353	4.8	238.7	84.9	431.0	87.8	40.2	8.7
		65	14.7	74 717	4.6	224.1	96.2	439.3	99.0	26.9	4.9
	1982	0	72.0	100 000	4.8	236.4	74.4	406.7	80.8	66.8	10.8
		1	71.8	98 963	4.8	238.8	75.2	409.8	80.5	66.2	10.7
		15	58.1	98 441	4.8	239.4	75.6	411.9	80.8	63.8	10.8
		45	30.1	93 812	4.8	245.2	78.2	426.8	83.0	38.8	7.0
		65	14.6	76 040	4.7	228.9	88.3	435.8	106.4	26.7	4.3
PUERTO RICO	1981	0	70.8	100 000	12.0	176.6	84.6	342.8	106.7	82.9	20.8
		1	71.3	97 898	11.9	179.3	86.3	349.7	106.8	84.2	21.5
		15	57.7	97 317	11.8	179.6	86.7	351.2	108.6	82.8	20.8
		45	30.9	90 100	11.9	188.7	91.8	371.6	110.8	44.0	11.4
		65	16.1	70 647	10.8	187.3	103.2	393.2	121.6	26.3	8.0
	1982	0	73.2	100 000	20.7	181.0	68.0	378.1	109.7	68.3	18.7
		1	73.0	98 184	20.7	184.1	67.2	385.7	110.1	69.4	19.0
		15	59.9	97 736	20.7	184.1	67.4	387.0	110.2	68.1	18.6
		45	32.6	91 700	20.5	170.4	70.8	406.9	113.9	38.8	11.6
		65	17.1	75 062	19.9	166.3	80.2	426.6	128.0	26.6	6.8
UNITED STATES OF AMERICA	1980	0	70.1	100 000	8.3	209.0	74.0	433.2	78.3	76.7	22.8
		1	70.1	98 598	8.2	211.9	75.0	439.1	78.8	77.4	23.1
		15	56.8	97 953	8.1	212.6	75.4	441.8	79.1	74.3	21.9
		45	29.2	91 614	8.1	220.6	79.4	463.1	83.1	39.1	8.8
		65	14.3	70 640	8.0	204.7	91.3	477.0	93.0	26.2	4.9
ASIA											
HONG KONG	1982	0	73.6	100 000	31.8	238.0	123.6	190.2	201.6	43.8	11.6
		1	73.2	98 976	31.6	240.4	124.8	192.2	202.9	43.8	11.7
		15	59.6	98 486	31.5	240.8	126.6	193.1	203.1	42.1	11.4
		45	31.2	94 658	31.2	238.3	129.4	198.0	208.4	20.8	8.7
		65	16.8	76 789	28.6	198.6	136.6	211.1	226.1	23.7	7.3
JAPAN	1982	0	74.6	100 000	16.0	226.8	210.9	216.9	110.9	88.1	13.6
		1	74.1	99 270	15.9	226.4	212.4	217.3	111.3	88.0	13.7
		15	60.4	98 766	15.9	228.9	213.4	218.1	111.3	89.0	13.9
		45	32.0	95 314	16.9	231.0	218.4	221.6	114.7	41.2	8.9
		65	15.6	80 801	14.9	207.2	230.4	233.1	127.6	26.9	6.7
KUWAIT	1982	0	69.0	100 000	38.3	127.3	32.2	385.7	86.2	79.4	88.6
		1	69.9	97 361	38.4	130.7	32.8	378.8	84.8	81.0	88.9
		15	56.7	96 236	36.0	131.0	33.2	380.4	84.6	76.3	82.9
		45	28.3	92 264	38.7	132.2	33.7	387.7	87.1	38.8	40.0
		65	12.5	72 280	39.9	117.7	38.8	386.8	97.3	40.9	30.9
EUROPE											
AUSTRIA	1982	0	69.4	100 000	6.7	218.0	126.0	358.7	88.1	91.6	26.4
		1	69.4	98 492	6.7	221.3	126.9	374.4	87.9	92.3	26.7
		15	56.8	97 944	6.8	221.7	127.8	378.4	87.9	89.9	25.7
		45	28.4	91 707	6.4	229.3	134.3	394.0	90.6	46.8	11.6
		65	13.2	70 687	5.1	215.8	164.7	413.0	98.0	39.0	7.1
BELGIUM	1979	0	69.9	100 000	5.8	265.1	91.3	318.9	83.9	74.0	23.9
		1	69.9	98 661	5.6	268.8	92.5	323.2	84.9	74.4	24.1
		15	56.2	98 097	5.4	269.2	92.9	324.8	85.3	72.3	23.0
		45	28.3	93 103	6.3	265.6	98.8	336.8	88.4	46.5	10.6
		65	12.9	71 703	5.5	248.9	111.2	339.0	94.6	36.2	8.3
BULGARIA	1982	0	68.6	100 000	7.8	139.3	198.8	365.7	88.3	86.4	14.2
		1	68.9	97 952	6.8	142.2	203.0	383.0	84.3	87.0	14.5
		15	55.6	97 038	6.5	142.5	204.6	386.1	83.4	83.8	13.6
		45	27.8	91 230	6.1	143.0	214.3	378.9	86.3	39.8	8.8
		65	12.7	69 316	4.3	113.9	231.8	400.3	88.9	23.8	3.4
CZECHOSLOVAKIA	1981	0	67.0	100 000	5.4	211.9	137.1	360.8	85.7	74.8	12.8
		1	67.3	98 046	5.3	218.0	139.8	368.0	88.8	78.2	13.7
		15	53.9	97 388	5.3	216.4	140.7	370.4	85.8	72.7	13.1
		45	26.1	91 276	5.1	220.6	147.8	384.2	89.0	40.4	7.7
		65	11.7	84 617	4.7	191.1	172.1	397.0	103.6	34.4	4.7
DENMARK	1982	0	71.8	100 000	3.8	242.4	83.1	396.8	78.7	68.5	13.8
		1	71.4	99 082	3.2	244.7	83.9	400.7	80.1	68.9	13.7
		15	57.7	98 622	3.2	244.8	84.2	402.4	80.3	66.3	12.9
		45	28.6	94 305	3.2	249.2	87.0	418.0	83.2	43.7	7.5
		65	14.0	74 644	3.1	237.2	98.9	430.3	92.3	30.1	5.8
FINLAND	1980	0	69.2	100 000	9.3	206.6	92.8	420.1	102.6	83.4	13.2
		1	68.9	99 156	9.0	207.3	93.6	423.7	103.3	83.6	13.8
		15	56.1	98 690	9.0	207.4	94.0	426.9	103.8	80.4	13.2
		45	27.4	92 782	9.2	214.0	97.6	443.2	109.1	37.9	8.9
		65	12.6	68 700	6.9	211.6	111.3	435.6	130.8	34.2	6.4
FRANCE	1981	0	70.8	100 000	12.8	268.2	104.3	336.1	77.0	90.7	21.6
		1	70.7	98 851	12.8	271.1	106.8	338.7	77.8	90.7	21.7
		15	57.1	98 285	12.7	261.9	106.1	339.9	77.8	86.5	20.8
		45	29.5	92 714	12.8	269.3	110.6	349.6	81.4	42.8	8.8
		65	14.3	72 832	12.6	241.5	127.1	367.6	92.1	49.8	8.7
GERMANY, FEDERAL REPUBLIC OF	1982	0	70.8	100 000	7.4	229.5	114.8	387.4	74.1	82.2	17.7
		1	70.4	98 796	7.1	232.3	116.9	371.9	74.7	82.2	17.9
		15	56.7	98 245	6.8	233.1	116.8	373.7	74.9	80.9	16.9
		45	28.8	93 268	6.8	236.3	121.4	387.4	77.7	37.9	7.2
		65	13.2	73 389	6.3	224.3	138.2	397.7	87.5	37.6	4.9
GREECE	1982	0	73.6	100 000	9.9	211.9	169.4	271.0	70.3	54.9	22.7
		1	73.8	98 359	9.8	215.3	172.3	275.6	71.0	56.1	23.1
		15	60.2	97 863	9.5	215.6	173.1	276.8	70.9	53.2	22.1
		45	31.8	94 198	9.6	217.8	178.6	281.3	72.8	36.8	10.9
		65	16.4	79 187	8.7	191.8	197.1	277.7	79.9	28.2	9.2

11 CAS DES MALADIES CIBLES DU PROGRAMME ELARGI DE VACCINATION COMMUNIQUES A L'OMS, 1974 - 1983

WHO WESTERN PACIFIC REGION
REGION DU PACIFIQUE OCCIDENTAL DE L'OMS

COUNTRY OR AREA PAYS OU ZONE	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
					DIPHTHERIA – DIPHTERIE					
TOTAL NUMBER OF CASES NOMBRE TOTAL DE CAS	4 070	821	5 736	5 876	24 224	19 461	14 912	8 240	17 803	6 774
NUMBER OF COUNTRIES/AREAS REPORTING – NOMBRE DE PAYS/ZONES AYANT NOTIFIE	14	24	29	29	31	29	30	31	29	2
PERCENTAGE OF COUNTRIES/AREAS REPORTING – POURCENTAGE DE PAYS/ZONES AYANT NOTIFIE	44	76	91	91	97	91	94	97	91	6
AMERICAN SAMOA SAMOA AMERICAINES	.	0	0	0	0	0	0	0	0	.
AUSTRALIA – AUSTRALIE	32	22	3	7	3	0	1	18	1	..
BRUNEI	...	...	0	...	1	...	...	0	0	...
CHINA – CHINE	...	...	..	.	20 084	16 921	9 767	3 481	8 502	6 770
COOK ISLANDS – ILES COOK	..	0	0	0	0	0	..	0	0	...
DEMOCRATIC KAMPUCHEA KAMPUCHEA DEMOCRATIQUE	...	...	...	...	...	..	1 664	1 279	7 094	.
FIJI – FIDJI	0	0	0	0	0	0	0	0	0	..
FRENCH POLYNESIA POLYNESIE FRANCAISE	...	0	0	0	0	0	0	0	0	...
GUAM	...	0	0	0	0	0	0	0	0	...
HONG KONG	...	0	1	1	0	0	2	0	1	.
JAPAN – JAPON	173	139	145	122	69	104	66	47	29	...
KIRIBATI	...	0	0	0	0	0	1	24	2	...
LAO PEOPLE'S DEMOCRATIC REPUBLIC – REPUBLIQUE DEMOCRATIQUE POPULAIRE LAO	13	9	48	16	12	...	11	...	813	...
MACAO	...	18	5	0	0	0	0	0	...	...
MALAYSIA – MALAISIE	248	164	222	113	85	94	131	16	10	..
NAURU	...	...	...	0	0	0	0	0	0	...
NEW CALEDONIA AND DEPENDENCIES NOUVELLE-CALEDONIE ET DEPENDANCES	0	0	0	0	0	0	0	0	0	...
NEW ZEALAND – NOUVELLE-ZELANDE	21	8	6	1	1	2	1	0	1	...
NIUE – NIOUE	...	0	0	0	0	0	0	0	0	...
PACIFIC ISLANDS, TRUST TERRITORY OF THE USA – ILES DU PACIFIQUE (TERR. SOUS TUTELLE DES ETATS-UNIS D'AMERIQUE)	0	0	0	0	0	0	0	0	0	...
PAPUA NEW GUINEA PAPOUASIE-NOUVELLE-GUINEE	14	11	88	65	14	4	1	2	0	...
PHILIPPINES	2 884	450	2 905	2 808	1 389	1 723	1 920	1 856	1 275	...
REPUBLIC OF KOREA REPUBLIQUE DE COREE	283	...	493	185	120	80	51	43	...	...
SAMOA	...	0	0	0	0	0	0	0	4	...
SINGAPORE – SINGAPOUR	4	0	0	1	0	0	0	0	6	4
SOLOMON ISLANDS – ILES SALOMON	...	...	1 740	0	0	0	0	0	...	...
TOKELAU	...	0	0	0	0	0	0	0	0	...
TONGA	0	0	0	0	0	0	0	0	0	...
TUVALU	...	...	0	0	0	0	0	0	0	...
VANUATU	...	0	0	0	0	0	0	0	0	...
VIET NAM	418	...	0	2 476	2 446	533	1 276	1 674	2 065	...
WALLIS AND FUTUNA ISLANDS ILES WALLIS-ET-FUTUNA	...	0	0	0	0	0	0	0	0	...
					MEASLES – ROUGEOLE					
TOTAL NUMBER OF CASES NOMBRE TOTAL DE CAS	104 278	28 061	185 993	200 676	1 316 268	1 037 896	807 842	699 942	844 170	726 997
NUMBER OF COUNTRIES/AREAS REPORTING – NOMBRE DE PAYS/ZONES AYANT NOTIFIE	18	24	28	29	28	27	30	29	27	2
PERCENTAGE OF COUNTRIES/AREAS REPORTING – POURCENTAGE DE PAYS/ZONES AYANT NOTIFIE	60	76	88	91	88	84	94	91	84	6
AMERICAN SAMOA SAMOA AMERICAINES	34	445	11	56	31	3	18	3	2	...
AUSTRALIA – AUSTRALIE	597	632	...	0	...	...	170	...	...	...
BRUNEI	...	....	133	..	2 136	249	485	775	155	...
CHINA – CHINE	...	...	...	...	1 112 600	900 075	570 037	485 934	451 045	726 320
COOK ISLANDS – ILES COOK	...	58	83	31	9	8	363	57	0	...
DEMOCRATIC KAMPUCHEA KAMPUCHEA DEMOCRATIQUE	...	...	...	...	...	...	106 791	93 144	73 031	...
FIJI – FIDJI	1 911	1 036	212	2 364	441	1 621	913	1 003	902	...
FRENCH POLYNESIA POLYNESIE FRANCAISE	...	17	40	3 478	293	311	379	1 281	1 187	...
GUAM	...	33	18	6	28	13	7	6	9	...
HONG KONG	...	138	1 463	1 537	240	1 929	1 669	249	1 863	...
JAPAN – JAPON	24 002	15 217	31 647	18 081	34 385	18 866	13 219	21 471	6 716	...
KIRIBATI	9 212	0	3	78	2 683	0	170	70	11	
LAO PEOPLE'S DEMOCRATIC REPUBLIC – REPUBLIQUE DEMOCRATIQUE POPULAIRE LAO	22	169	186	153	208	..	1 380	...	383	
MACAO	.	5	274	0	135	41	73	9	...	

11. CASES OF THE TARGET DISEASES OF THE EXPANDED PROGRAMME ON IMMUNIZATION REPORTED TO WHO, 1974 – 1983
11. CAS DES MALADIES CIBLES DU PROGRAMME ELARGI DE VACCINATION COMMUNIQUES A L'OMS, 1974 – 1983

WHO WESTERN PACIFIC REGION
REGION DU PACIFIQUE OCCIDENTAL, OMS/L'OMS

COUNTRY OR AREA PAYS OU ZONE	1974	1976	1978	1977	1978	1979	1980	1981	1982	1983
MEASLES (CONTINUED) – ROUGEOLE (SUITE)										
MALAYSIA – MALAISIE	7 800	1 377	4 766	6 972	7 217	6 279	6 727	6 690	9 628	...
NAURU	...	...	...	80	33	0	10	0	1	...
NEW CALEDONIA AND DEPENDENCIES NOUVELLE-CALEDONIE ET DEPENDANCES	947	232	864	982	268	794	800	77	1 398	...
NEW ZEALAND – NOUVELLE-ZELANDE	...	...	0	0	...	...	...	...	...	...
NIUE – NIOUE	...	4	0	1	0	2	22	2	0	...
PACIFIC ISLANDS, TRUST TERRITORY OF THE USA – ILES DU PACIFIQUE (TERR. SOUS TUTELLE DES ETATS-UNIS D'AMERIQUE)	5	0	2 467	893	649	10	12	3	1	...
PAPUA NEW GUINEA PAPOUASIE-NOUVELLE-GUINEE	4 141	4 172	5 135	7 121	5 059	9 384	12 126	16 619	12 771	...
PHILIPPINES	23 099	4 096	26 406	27 094	27 642	26 161	23 470	30 666	23 678	...
REPUBLIC OF KOREA REPUBLIQUE DE COREE	4 867	...	7 328	5 064	6 149	2 533	5 097	2 207	...	...
SAMOA	536	314	1 203	240	1 026	68	378	72	27	...
SINGAPORE – SINGAPOUR	2	7	0	268	...	...	...	771	1 068	877
SOLOMON ISLANDS – ILES SALOMON	...	...	98 302	2 036	2 995	1	315	1 460	...	...
TOKELAU	...	0	1 841	0	0	0	0	0	0	...
TONGA	34	0	2 467	84	17	76	2 336	187	19	...
TUVALU	...	0	1	0	0	94	809	3	0	...
VANUATU	...	129	0	376	10	7	39	45	0	...
VIET NAM	26 976	...	86	122 556	108 808	69 369	67 691	38 130	69 300	...
WALLIS AND FUTUNA ISLANDS ILES WALLIS-ET-FUTUNA	...	0	185	49	7	0	342	19	87	...
PERTUSSIS – COQUELUCHE										
TOTAL NUMBER OF CASES NOMBRE TOTAL DE CAS	121 617	7 160	81 090	145 389	699 364	608 167	569 666	447 260	335 781	305 602
NUMBER OF COUNTRIES/AREAS REPORTING – NOMBRE DE PAYS/ZONES AYANT NOTIFIE	14	23	27	26	26	27	30	29	29	1
PERCENTAGE OF COUNTRIES/AREAS REPORTING – POURCENTAGE DE PAYS/ZONES AYANT NOTIFIE	44	72	84	81	88	84	94	91	91	3
AMERICAN SAMOA SAMOA AMERICAINES	...	0	0	0	1	0	0	0	1	...
AUSTRALIA – AUSTRALIE	...	...	...	0	...	174	124	170	106	...
BRUNEI	...	...	0	...	0	...	1	3	0	...
CHINA – CHINE	...	...	...	...	595 174	401 372	316 206	269 871	232 803	305 602
COOK ISLANDS – ILES COOK	...	0	0	0	0	0	...	8	0	...
DEMOCRATIC KAMPUCHEA KAMPUCHEA DEMOCRATIQUE	...	...	...	...	...	...	156 255	108 869	41 060	...
FIJI – FIDJI	41	7	28	15	23	10	13	8	18	...
FRENCH POLYNESIA POLYNESIE FRANCAISE	...	8	1	32	15	280	7	6	8	...
GUAM	...	0	0	0	0	0	0	0	0	...
HONG KONG	...	0	2	1	0	0	12	2	1	...
JAPAN – JAPON	393	1 084	2 508	5 470	9 626	13 036	6 033	3 366	2 632	...
KIRIBATI	369	138	28	181	179	68	181	101	17	...
LAO PEOPLE'S DEMOCRATIC REPUBLIC – REPUBLIQUE DEMOCRATIQUE POPULAIRE LAO	402	796	152	12	864	...	2 718	...	886	...
MACAO	...	3	18	0	0	0	0	0	...	...
MALAYSIA – MALAISIE	106	81	188	123	78	105	87	106	128	...
NAURU	...	...	...	0	0	0	0	4	0	...
NEW CALEDONIA AND DEPENDENCIES NOUVELLE-CALEDONIE ET DEPENDANCES	60	33	0	1	168	84	48	8	0	...
NEW ZEALAND – NOUVELLE-ZELANDE	...	...	0	0	...	...	0	...	0	...
NIUE – NIOUE	...	0	0	3	0	0	0	0	0	...
PACIFIC ISLANDS, TRUST TERRITORY OF THE USA – ILES DU PACIFIQUE (TERR. SOUS TUTELLE DES ETATS-UNIS D'AMERIQUE)	150	87	0	0	0	121	0	0	0	...
PAPUA NEW GUINEA PAPOUASIE-NOUVELLE-GUINEE	829	1 243	1 704	1 102	800	1 942	2 693	2 864	1 422	...
PHILIPPINES	22 042	3 837	24 641	21 403	15 243	21 243	17 066	10 701	8 206	...
REPUBLIC OF KOREA REPUBLIQUE DE COREE	3 077	...	1 177	3 162	713	769	1 844	1 822	...	...
SAMOA	12	65	88	91	28	40	113	8	86	...
SINGAPORE – SINGAPOUR	1	0	...	3	...	...	...	...	0	...
SOLOMON ISLANDS – ILES SALOMON	...	...	0	1	0	14	0	0	...	...
TOKELAU	...	0	0	0	0	0	22	0	0	...
TONGA	6	0	0	0	210	147	2	0	828	...
TUVALU	...	0	0	0	2	1	1	1	0	...
VANUATU	...	40	26	10	193	40	231	7	2	...
VIET NAM	94 031	...	60 623	113 770	76 310	69 732	67 318	49 388	48 824	...
WALLIS AND FUTUNA ISLANDS ILES WALLIS-ET-FUTUNA	...	0	0	0	0	0	1	120	0	...

11. CASES OF THE TARGET DISEASES OF THE EXPANDED PROGRAMME ON IMMUNIZATION REPORTED IN WHO AFRO REGION, 1974 – 1983

11. CAS DES MALADIES CIBLES DU PROGRAMME ELARGI DE VACCINATION COMMUNIQUES A L'OMS, 1974 – 1983

WHO WESTERN PACIFIC REGION
REGION DU PACIFIQUE OCCIDENTAL DE L'OMS

COUNTRY OR AREA PAYS OU ZONE	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
POLIOMYELITIS – POLIOMYELITE										
TOTAL NUMBER OF CASES NOMBRE TOTAL DE CAS	1 144	1 001	1 421	2 620	12 566	6 776	10 407	6 414	6 066	2 883
NUMBER OF COUNTRIES/AREAS REPORTING – NOMBRE DE PAYS/ZONES AYANT NOTIFIE	14	27	28	28	31	28	26	30	27	2
PERCENTAGE OF COUNTRIES/AREAS REPORTING – POURCENTAGE DE PAYS/ZONES AYANT NOTIFIE	44	84	88	88	97	88	78	94	84	6
AMERICAN SAMOA SAMOA AMERICAINES	...	0	0	0	0	0	0	0	0	...
AUSTRALIA – AUSTRALIE	1	1	0	2	1	0	0	0	0	...
BRUNEI	...	...	1	0	1	...	...	0	0	...
CHINA – CHINE	...	...	...	...	10 408	5 472	7 442	4 834	7 741	2 881
COOK ISLANDS – ILES COOK	...	0	0	0	0	0	...	0	0	...
DEMOCRATIC KAMPUCHEA KAMPUCHEA DEMOCRATIQUE	87	...	...	...	...	...	...	...	...	...
FIJI – FIDJI	0	0	0	0	0	0	0	0	0	...
FRENCH POLYNESIA POLYNESIE FRANCAISE	...	1	0	0	0	0	0	0	1	...
GUAM	...	0	0	0	0	0	0	0	0	...
HONG KONG	...	0	0	0	0	0	2	3	0	...
JAPAN – JAPON	4	4	0	0	0	0	2	2	1	...
KIRIBATI	...	0	0	0	0	0	0	0	0	...
LAO PEOPLE'S DEMOCRATIC REPUBLIC – REPUBLIQUE DEMOCRATIQUE POPULAIRE LAO	4	8	1	...	62	...	1 186	...	46	...
MACAO	...	1	0	0	0	0	...	0	...	...
MALAYSIA – MALAISIE	26	25	32	121	18	4	5	2	6	...
NAURU	...	...	...	0	0	0	0	0	0	...
NEW CALEDONIA AND DEPENDENCIES NOUVELLE-CALEDONIE ET DEPENDANCES	...	0	0	0	0	0	...	0	5	...
NEW ZEALAND – NOUVELLE-ZELANDE	0	0	0	1	0	0	...	0	...	...
NIUE – NIOUE	...	0	0	0	0	0	0	0	0	...
PACIFIC ISLANDS, TRUST TERRITORY OF THE USA – ILES DU PACIFIQUE (TERR. SOUS TUTELLE DES ETATS-UNIS D'AMERIQUE)	0	0	0	0	0	0	0	0	0	...
PAPUA NEW GUINEA PAPOUASIE-NOUVELLE-GUINEE	32	20	68	102	48	68	22	9	18	...
PHILIPPINES	916	731	616	1 464	835	980	790	353	268	...
REPUBLIC OF KOREA REPUBLIQUE DE COREE	22	23	77	36	2	...	14	2	...	...
SAMOA	...	0	...	...	0	0	0	0	0	...
SINGAPORE – SINGAPOUR	0	0	1	2	1	1	1	0	1	2
SOLOMON ISLANDS – ILES SALOMON	...	...	0	0	0	0	...	0	...	...
TOKELAU	...	0	0	0	0	0	0	0	0	...
TONGA	0	0	0	0	0	0	0	0	0	...
TUVALU	...	0	0	0	0	0	0	0	0	...
VANUATU	...	1	8	0	0	0	2	1	0	...
VIET NAM	82	178	817	903	1 190	253	461	403	892	...
WALLIS AND FUTUNA ISLANDS ILES WALLIS-ET-FUTUNA	...	0	0	0	0	0	0	0	0	...
TETANUS – TETANOS *										
TOTAL NUMBER OF CASES NOMBRE TOTAL DE CAS	898	940	4 806	7 987	6 769	3 314	7 619	4 920	4 709	...
NUMBER OF COUNTRIES/AREAS REPORTING – NOMBRE DE PAYS/ZONES AYANT NOTIFIE	6	22	24	26	26	25	25	29	28	...
PERCENTAGE OF COUNTRIES/AREAS REPORTING – POURCENTAGE DE PAYS/ZONES AYANT NOTIFIE	19	69	75	81	88	81	88	91	88	...
AMERICAN SAMOA SAMOA AMERICAINES	...	0	0	2	0	0	1	0	0	...
AUSTRALIA – AUSTRALIE	12	11	3	13	14	16	9	12	11	...
BRUNEI	...	...	2	...	2	1	...	1	1	...
CHINA – CHINE	...	...	...	...	...	...	...	...	...	...
COOK ISLANDS – ILES COOK	...	0	0	1	0	0	1	0	0	...
DEMOCRATIC KAMPUCHEA KAMPUCHEA DEMOCRATIQUE	...	...	...	...	...	...	2 449	1 676	3 994	...
FIJI – FIDJI	...	3	3	2	3	0	1	0	1	...
FRENCH POLYNESIA POLYNESIE FRANCAISE	...	5	1	3	1	6	6	4	1	...
GUAM	...	0	0	0	1	0	0	0	1	...
HONG KONG	...	39	23	24	22	29	15	14	22	...
JAPAN – JAPON	...	65	90	72	74	59	80	41	36	...
KIRIBATI	...	0	1	2	7	0	0	2	3	...

* INCLUDING NEONATAL TETANUS – Y COMPRIS TETANOS NEONATAL

11. CASES OF THE TARGET DISEASES OF THE EXPANDED PROGRAMME ON IMMUNIZATION REPORTED TO WHO, 1974 – 1983:
11. CAS DES MALADIES CIBLES DU PROGRAMME ELARGI DE VACCINATION COMMUNIQUÉS À L'OMS, 1974 – 1983:

WHO WESTERN PACIFIC REGION
REGION DU PACIFIQUE OCCIDENTAL DE L'OMS

COUNTRY OR AREA PAYS OU ZONE	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
				TETANUS (CONTINUED) – TETANOS (SUITE) [a]						
LAO PEOPLE'S DEMOCRATIC REPUBLIC – REPUBLIQUE DEMOCRATIQUE POPULAIRE LAO	...	...	0	...	31	...	1 016	...	464	
MACAO	...	...	...	1	0	8	...	4	...	
MALAYSIA – MALAISIE	...	283	...	...	...	...	60	36	38	
NAURU	...	...	...	0	0	0	0	0	0	
NEW CALEDONIA AND DEPENDENCIES NOUVELLE-CALEDONIE ET DEPENDANCES	2	8	6	2	1	0	1	0	0	
NEW ZEALAND – NOUVELLE-ZELANDE	...	4	7	6	10	2	2	4	5	
NIUE – NIOUE	...	1	0	0	0	0	0	0	0	
PACIFIC ISLANDS, TRUST TERRITORY OF THE USA – ILES DU PACIFIQUE (TERR. SOUS TUTELLE DES ETATS-UNIS D'AMERIQUE)	0	0	8	0	0	1	0	0	0	
PAPUA NEW GUINEA PAPOUASIE-NOUVELLE-GUINEE	124	40	39	34	44	47	68	80	40	
PHILIPPINES	...	419	3 088	5 639	4 236	2 822	2 600	1 953	1 427	
REPUBLIC OF KOREA REPUBLIQUE DE COREE	...	...	...	0	1	...	1	8	...	
SAMOA	...	11	11	4	1	0	0	0	0	
SINGAPORE – SINGAPOUR	...	0	...	...	...	...	...	...	0	
SOLOMON ISLANDS – ILES SALOMON	...	...	13	20	13	0	2	6	...	
TOKELAU	...	7	...	0	0	0	0	0	0	
TONGA	5	16	6	7	2	5	2	3	2	
TUVALU	...	...	0	0	0	0	0	0	0	
VANUATU	...	4	4	4	3	3	0	3	0	
VIET NAM	758	...	1 621	2 231	2 323	619	1 334	1 080	872	
WALLIS AND FUTUNA ISLANDS ILES WALLIS-ET-FUTUNA	...	0	1	0	0	0	0	6	0	
				NEONATAL TETANUS – TETANOS NEONATAL						
TOTAL NUMBER OF CASES NOMBRE TOTAL DE CAS	...	...	...	...	0	0	60	38	47	
NUMBER OF COUNTRIES/AREAS REPORTING – NOMBRE DE PAYS/ZONES AYANT NOTIFIE	...	...	...	...	1	1	2	2	2	
PERCENTAGE OF COUNTRIES/AREAS REPORTING – POURCENTAGE DE PAYS/ZONES AYANT NOTIFIE	...	...	...	...	3	3	6	6	6	
AMERICAN SAMOA SAMOA AMERICAINES	...	...	...	...	...	...	...	...	...	
AUSTRALIA – AUSTRALIE	...	...	...	...	...	...	...	...	...	
BRUNEI	...	...	...	...	...	...	...	...	...	
CHINA – CHINE	...	...	...	...	...	...	...	...	...	
COOK ISLANDS – ILES COOK	...	...	...	...	...	...	...	...	...	
DEMOCRATIC KAMPUCHEA KAMPUCHEA DEMOCRATIQUE	...	...	...	...	...	...	...	...	...	
FIJI – FIDJI	...	...	...	...	...	...	...	...	...	
FRENCH POLYNESIA POLYNESIE FRANCAISE	...	...	...	...	...	...	...	...	...	
GUAM	...	...	...	...	...	...	...	...	...	
HONG KONG	...	...	...	...	...	...	...	...	...	
JAPAN – JAPON	...	...	...	...	...	...	...	...	...	
KIRIBATI	...	...	...	...	...	...	...	...	...	
LAO PEOPLE'S DEMOCRATIC REPUBLIC – REPUBLIQUE DEMOCRATIQUE POPULAIRE LAO	...	...	...	...	...	...	...	...	...	
MACAO	...	...	...	...	...	...	...	...	...	
MALAYSIA – MALAISIE	...	...	...	...	...	...	60	36	47	
NAURU	...	...	...	...	...	...	...	...	...	
NEW CALEDONIA AND DEPENDENCIES NOUVELLE-CALEDONIE ET DEPENDANCES	...	...	...	...	...	...	...	...	...	
NEW ZEALAND – NOUVELLE-ZELANDE	...	...	...	...	...	...	...	...	...	
NIUE – NIOUE	...	...	...	...	...	...	...	...	...	
PACIFIC ISLANDS, TRUST TERRITORY OF THE USA – ILES DU PACIFIQUE (TERR. SOUS TUTELLE DES ETATS-UNIS D'AMERIQUE)	...	...	...	...	...	...	...	...	...	
PAPUA NEW GUINEA PAPOUASIE-NOUVELLE-GUINEE	...	...	...	...	...	...	...	...	...	
PHILIPPINES	...	...	...	...	...	...	...	...	...	
REPUBLIC OF KOREA REPUBLIQUE DE COREE	...	...	...	...	...	...	...	...	...	
SAMOA	...	...	...	...	...	...	...	...	...	
SINGAPORE – SINGAPOUR	...	...	...	...	...	...	...	...	...	
SOLOMON ISLANDS – ILES SALOMON	...	...	...	...	...	...	...	...	...	
TOKELAU	...	...	...	...	...	...	...	...	...	

[a] INCLUDING NEONATAL TETANUS – Y COMPRIS TETANOS NEONATAL

WHO WESTERN PACIFIC REGION
REGION DU PACIFIQUE OCCIDENTAL DE L'OMS

COUNTRY OR AREA PAYS OU ZONE	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
NEONATAL TETANUS (CONTINUED) – TETANOS NEONATAL (SUITE)										
TONGA	...	...	...	...	0	0	0	0	0	...
TUVALU	...	...	...	...	...	...	...	...	...	...
VANUATU	...	...	...	...	...	...	...	...	...	...
VIET NAM	...	...	...	...	...	...	...	...	...	...
WALLIS AND FUTUNA ISLANDS ILES WALLIS-ET-FUTUNA	...	...	...	...	...	...	...	...	...	...
TUBERCULOSIS – TUBERCULOSE										
TOTAL NUMBER OF CASES NOMBRE TOTAL DE CAS	377 100	169 676	319 131	539 978	287 242	328 961	277 609	363 257	178 309	1 689
NUMBER OF COUNTRIES/AREAS REPORTING – NOMBRE DE PAYS/ZONES AYANT NOTIFIE	16	24	28	28	30	27	30	29	27	1
PERCENTAGE OF COUNTRIES/AREAS REPORTING – POURCENTAGE DE PAYS/ZONES AYANT NOTIFIE	47	78	88	88	94	84	94	91	84	3
AMERICAN SAMOA SAMOA AMERICAINES	19	13	12	7	8	2	2	6	4	...
AUSTRALIA – AUSTRALIE	1 408	1 508	1 387	1 301	1 292	1 587	1 649	1 460	1 169	...
BRUNEI	...	...	336	...	356	213	217	311	285	...
CHINA – CHINE	...	...	...	...	...	...	...	...	...	...
COOK ISLANDS – ILES COOK	...	2	16	3	10	12	20	879	0	...
DEMOCRATIC KAMPUCHEA KAMPUCHEA DEMOCRATIQUE	...	...	...	...	...	...	36 089	22 448	16 611	...
FIJI – FIDJI	294	270	256	184	163	204	210	180	163	...
FRENCH POLYNESIA POLYNESIE FRANCAISE	...	112	116	91	83	43	88	86	87	...
GUAM	...	64	46	58	67	70	86	41	44	...
HONG KONG	...	6 192	7 928	7 191	6 523	7 907	8 066	7 739	7 827	...
JAPAN – JAPON	117 728	110 116	100 376	92 219	84 260	78 986	73 230	68 319	66 600	...
KIRIBATI	162	171	116	46	48	7	143	129	62	...
LAO PEOPLE'S DEMOCRATIC REPUBLIC – REPUBLIQUE DEMOCRATIQUE POPULAIRE LAO	17	1 906	1 132	999	1 026	...	7 361	...	4 706	...
MACAO	...	1 383	1 088	120	1 017	442	1 101	1 121	...	...
MALAYSIA – MALAISIE	10 207	10 483	7 816	...	6 918	...	7 025	7 080	9 056	...
NAURU	...	...	...	7	4	2	0	2	8	...
NEW CALEDONIA AND DEPENDENCIES NOUVELLE-CALEDONIE ET DEPENDANCES	370	183	188	186	108	68	108	128	74	...
NEW ZEALAND – NOUVELLE-ZELANDE	613	664	611	606	595	579	474	486	434	...
NIUE – NIOUE	...	16	0	0	0	0	1	0	2	...
PACIFIC ISLANDS, TRUST TERRITORY OF THE USA – ILES DU PACIFIQUE (TERR. SOUS TUTELLE DES ETATS-UNIS D'AMERIQUE)	122	80	82	88	82	44	68	72	122	...
PAPUA NEW GUINEA PAPOUASIE-NOUVELLE-GUINEE	...	1 856	1 801	2 244	2 798	2 269	2 841	2 808	4 342	...
PHILIPPINES	142 250	19 438	135 767	107 108	116 887	126 493	92 704	82 846	61 829	...
REPUBLIC OF KOREA REPUBLIQUE DE COREE	103 398	...	782	163 334	893	103 834	...	164 377	...	...
SAMOA	44	32	46	44	62	77	48	20	28	...
SINGAPORE – SINGAPOUR	472	3 035	2 816	2 760	2 964	2 878	2 784	2 618	2 170	1 959
SOLOMON ISLANDS – ILES SALOMON	...	...	296	382	468	43	62	311	...	...
TOKELAU	...	0	...	0	0	10	0	1	0	...
TONGA	88	84	66	79	89	70	85	40	45	...
TUVALU	...	...	17	6	16	7	33	18	12	...
VANUATU	...	81	91	86	89	123	90	199	35	...
VIET NAM	...	...	86 272	170 878	66 859	...	43 062	...	...	...
WALLIS AND FUTUNA ISLANDS ILES WALLIS-ET-FUTUNA	...	4	34	44	8	1	23	24	8	...

JAPAN 1982

CAUSES OF DEATH ICD-9 BASIC TABULATION LIST		NUMBER OF DEATHS AT AGES (IN YEARS) NOMBRE DE DECES SELON L'AGE (EN ANNEES) ALL AGES	0	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75 & +	N.SP.
ALL CAUSES	T	711 883	9 969	3 037	4 043	9 729	14 125	25 074	59 830	87 782	180 084	331 644	386
	M	386 404	5 685	2 000	2 638	6 376	9 047	16 467	40 110	53 070	96 700	152 518	308
	F	326 369	4 284	1 647	1 606	2 353	5 078	9 217	19 720	34 712	83 384	179 126	80
01–07 INFECTIOUS AND PARASITIC DISEASES	T	11 039	203	114	103	108	261	481	1 120	1 508	2 942	3 909	
	M	6 782	119	84	55	69	133	311	778	1 215	1 981	2 094	3
	F	4 257	84	30	48	49	128	170	342	293	961	1 812	3
011 TYPHOID FEVER	T	2	–	–	–	–	–	–	2	–	–	–	
	M	1	–	–	–	–	–	–	1	–	–	–	
	F	1	–	–	–	–	–	–	1	–	–	–	
010,012–018 OTHER INTESTINAL INFECTIOUS DISEASES	T	1 258	50	24	7	8	19	21	34	66	163	873	
	M	812	30	14	3	4	11	12	23	36	78	301	
	F	743	20	10	4	4	8	9	11	30	76	572	
020–021 TUBERCULOSIS OF RESPIRATORY SYSTEM	T	5 070	1	–	1	6	43	106	578	991	1 611	1 841	
	M	3 782	1	–	1	5	27	134	428	764	1 266	1 156	2
	F	1 288	–	–	–	3	16	62	150	227	346	478	2
022–026 TUBERCULOSIS, OTHER FORMS	T	273	1	3	–	1	13	22	38	46	80	71	
	M	148	1	1	–	–	7	8	24	26	47	34	1
	F	125	–	2	–	1	6	14	11	21	33	37	
034 WHOOPING COUGH	T	14	8	6	1	–	–	–	–	–	–	–	
	M	7	5	2	–	–	–	–	–	–	–	–	
	F	7	3	3	1	–	–	–	–	–	–	–	
036 MENINGOCOCCAL INFECTION	T	3	–	–	–	–	–	1	1	–	1	–	
	M	2	–	–	–	–	–	1	1	–	–	–	
	F	1	–	–	–	–	–	–	–	–	1	–	
037 TETANUS	T	25	–	–	1	–	2	–	2	5	3	13	
	M	8	–	–	1	–	1	–	2	2	1	2	
	F	17	–	–	–	–	1	–	–	3	2	11	
038 SEPTICAEMIA	T	1 715	79	28	10	18	30	80	126	207	444	726	
	M	780	41	10	7	10	16	27	83	103	204	279	
	F	935	38	18	3	8	14	23	43	104	240	447	
030–033 OTHER BACTERIAL DISEASES	T	106	–	2	–	–	1	2	9	20	32	40	
035,039 DISEASES	M	62	–	1	–	–	1	1	7	14	18	20	
	F	44	–	1	–	–	–	1	2	6	14	20	
042 MEASLES	T	24	6	13	6	–	–	–	–	–	1	–	
	M	8	2	5	1	–	–	–	–	–	–	–	
	F	16	3	8	4	–	–	–	–	–	1	–	
040,041 OTHER VIRAL DISEASES	T	1 481	53	37	70	69	111	148	224	267	279	203	
043–049	M	795	34	20	43	38	60	100	138	141	140	94	
	F	686	19	17	27	31	51	48	86	126	139	109	
052 MALARIA	T	4	–	–	–	–	2	–	–	–	1	1	
	M	4	–	–	–	–	2	–	–	–	1	1	
	F	–	–	–	–	–	–	–	–	–	–	–	
050,051,053 OTHER ARTHROPOD-BORNE DISEASES	T	–	–	–	–	–	–	–	–	–	–	–	
054,059	M	–	–	–	–	–	–	–	–	–	–	–	
	F	–	–	–	–	–	–	–	–	–	–	–	
06 VENEREAL DISEASES	T	121	–	–	–	–	1	4	10	29	54	23	
	M	76	–	–	–	–	1	3	8	22	33	9	
	F	45	–	–	–	–	–	1	2	7	21	14	
07 OTHER INFECTIOUS AND PARASITIC DISEASES	T	965	8	5	8	4	29	37	101	177	283	316	
	M	596	5	1	2	2	17	25	83	118	173	188	
	F	369	1	4	6	2	12	12	18	59	110	127	
08–14 MALIGNANT NEOPLASMS	T	170 130	69	226	751	860	2 948	7 558	21 292	34 981	62 480	48 840	6
	M	99 114	38	185	420	510	1 564	3 654	12 585	20 932	32 169	27 358	4
	F	71 016	31	140	331	370	1 384	3 904	8 707	14 149	30 314	21 484	2
08 MALIGNANT NEOPLASM OF LIP, ORAL CAVITY AND PHARYNX	T	1 878	–	–	4	13	32	100	316	469	504	438	
	M	1 283	–	–	2	9	16	71	237	334	362	250	
	F	595	–	–	2	4	14	29	79	135	142	188	
090 MALIGNANT NEOPLASM OF OESOPHAGUS	T	5 854	–	–	–	–	4	89	652	1 315	1 962	1 832	
	M	4 646	–	–	–	–	1	80	560	1 117	1 577	1 311	
	F	1 208	–	–	–	–	3	9	92	198	385	521	
091 MALIGNANT NEOPLASM OF STOMACH	T	48 013	–	–	–	68	929	2 849	6 917	9 838	16 034	11 477	1
	M	30 039	–	–	–	30	582	1 245	3 723	6 367	9 407	8 482	1
	F	18 977	–	–	–	38	348	1 604	3 194	3 471	6 227	6 195	–
093 MALIGNANT NEOPLASM OF COLON	T	9 223	–	–	2	23	171	449	1 088	1 782	2 881	3 057	–
	M	4 494	–	–	2	13	88	244	570	849	1 331	1 397	–
	F	4 729	–	–	–	10	83	206	518	903	1 550	1 660	–
094 MALIGNANT NEOPLASM OF RECTUM, RECTOSIGMOID JUNCTION AND ANUS	T	7 284	–	–	–	11	84	334	984	1 394	2 083	2 384	–
	M	4 131	–	–	–	7	47	183	609	838	1 191	1 279	–
	F	3 153	–	–	–	4	47	171	378	559	892	1 105	–
095 MALIGNANT NEOPLASM OF LIVER, SPECIFIED AS PRIMARY	T	10 521	3	18	10	12	93	378	2 162	2 870	3 023	1 964	1
	M	7 807	–	8	8	7	72	311	1 691	2 287	2 128	1 124	1
	F	2 714	3	7	2	5	21	67	271	613	895	930	–
100 MALIGNANT NEOPLASM OF LARYNX	T	842	–	–	–	–	2	8	49	184	298	331	–
	M	738	–	–	–	–	2	7	47	135	281	264	–
	F	106	–	–	–	–	–	1	2	19	37	47	–
101 MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS AND LUNG	T	24 218	–	–	1	18	134	648	2 002	4 662	9 169	7 703	–
	M	17 555	–	–	1	11	83	310	1 428	3 402	5 856	5 464	–
	F	6 661	–	–	–	5	51	238	573	1 260	3 304	2 239	–
113 MALIGNANT NEOPLASM OF FEMALE BREAST	F	4 311	–	–	–	4	174	604	1 124	1 197	780	488	–
120 MALIGNANT NEOPLASM OF CERVIX UTERI	F	1 731	–	–	–	1	38	113	379	443	465	301	1
122 MALIGNANT NEOPLASM OF UTERUS, OTHER AND UNSPEC.	F	3 398	–	–	–	1	35	139	488	782	950	1 032	1
124 MALIGNANT NEOPLASM OF PROSTATE	M	2 083	–	–	–	1	3	6	26	170	668	1 188	1
128 MALIGNANT NEOPLASM OF BLADDER	T	2 421	–	2	3	1	10	23	132	298	788	1 183	–
	M	1 671	–	2	2	1	8	17	108	221	652	760	–
	F	750	–	–	1	–	2	6	24	77	217	423	–
REST MALIGNANT NEOPLASM OF OTHER SITES	T	37 248	31	158	232	302	882	1 420	4 899	7 748	11 548	10 487	1
	M	18 817	19	81	109	174	336	717	2 806	4 004	6 996	4 818	1
	F	18 431	13	77	123	128	316	703	2 093	3 884	5 652	5 842	–
141 LEUKAEMIA	T	4 883	25	128	402	323	417	638	716	793	898	628	–
	M	2 789	13	81	220	195	217	313	442	450	521	337	–
	F	2 074	12	48	182	128	200	325	274	343	374	291	–
140,149 OTHER MALIGNANT NEOPLASMS OF LYMPHATIC AND HAEMOPOIETIC TISSUE	T	8 279	10	24	97	104	180	282	688	1 108	1 811	1 217	–
	M	3 998	7	13	76	62	108	170	437	631	927	668	–
	F	2 183	3	11	21	42	52	92	281	478	884	552	–
18–17 BENIGN NEOPLASM, OTHER AND UNSPECIFIED NEOPLASM	T	8 057	25	58	173	89	171	278	648	882	1 676	2 063	1
	M	3 379	11	31	92	57	99	188	386	578	919	1 031	–
	F	4 678	14	24	81	32	72	113	287	403	858	1 022	1

TAUX SPECIFIQUES DE MORTALITE PAR SEXE ET AGE, POUR 100 000 PERSONNES
(TAUX DE MORTALITE INFANTILE POUR 100 000 NAISSANCES VIVANTES)

TOUS AGES	0	1–4	5–14	15–24	25–34	35–44	45–64	65–74	75 & +		CAUSES DE DECES CIM–8 LISTE DE BASE POUR LA MISE EN TABLEAUX
899.9	667.6	86.4	21.0	83.6	73.8	144.0	377.5	800.7	2261.0	6281.2	T	TOUTES CAUSES
880.1	730.0	83.1	25.6	76.8	93.9	184.8	609.5	1093.6	3041.9	6732.5	M	
841.4	580.9	48.2	16.1	29.4	63.4	103.3	247.4	667.4	1666.3	7348.8	F	
9.2	13.4	1.9	0.6	0.7	1.3	2.7	7.1	16.6	40.1	97.5	T	01–07 MALADIES INFECTIEUSES ET PARASITAIRES
11.6	16.3	1.8	0.6	0.7	1.4	3.5	9.6	24.5	61.7	133.6	M	
7.1	11.4	1.9	0.5	0.6	1.2	1.9	4.3	8.9	23.6	74.3	F	
0.0	--	--	--	--	--	--	0.0	--	--	--	T	011 FIEVRE TYPHOIDE
0.0	--	--	--	--	--	--	0.0	--	--	--	M	
0.0	--	--	--	--	--	--	0.0	--	--	--	F	
1.1	3.3	0.4	0.0	0.0	0.1	0.1	0.2	0.6	2.1	21.8	T	010,019 AUTRES MALADIES INFECTIEUSES
0.9	3.9	0.4	0.0	0.0	0.1	0.1	0.3	0.7	2.8	19.2	M	012–018 INTESTINALES
1.2	2.7	0.3	0.0	0.1	0.1	0.1	0.1	0.5	1.8	23.5	F	
4.3	0.1	--	0.0	0.0	0.2	1.1	3.6	9.0	21.9	41.0	T	020–021 TUBERCULOSE DE L'APPAREIL
6.6	0.1	--	0.0	0.1	0.3	1.8	5.4	16.2	38.5	74.4	M	RESPIRATOIRE
2.1	--	--	--	0.0	0.2	0.7	1.9	3.8	8.3	19.6	F	
0.2	0.1	0.0	--	0.0	0.1	0.1	0.2	0.4	1.1	1.8	T	022–028 AUTRES FORMES DE TUBERCULOSE
0.3	0.1	0.0	--	--	0.1	0.1	0.3	0.6	1.5	2.2	M	029
0.2	--	0.1	--	0.0	0.1	0.2	0.1	0.3	0.8	1.6	F	
0.0	0.6	0.1	0.0	--	--	--	--	--	--	--	T	034 COQUELUCHE
0.0	0.6	0.1	--	--	--	--	--	--	--	--	M	
0.0	0.4	0.2	0.0	--	--	--	--	--	--	--	F	
0.0	--	--	--	--	--	0.0	0.0	--	0.0	--	T	036 INFECTIONS A MENINGOCOQUES
0.0	--	--	--	--	--	0.0	0.0	--	--	--	M	
0.0	--	--	--	--	--	--	--	--	0.0	--	F	
0.0	--	--	0.0	--	0.0	--	0.0	0.0	0.0	0.3	T	037 TETANOS
0.0	--	--	0.0	--	0.0	--	0.0	0.0	0.0	0.1	M	
0.0	--	--	--	--	0.0	--	--	0.0	0.0	0.5	F	
1.4	5.2	0.4	0.1	0.1	0.2	0.3	0.8	1.9	6.0	18.1	T	038 SEPTICEMIE
1.3	5.3	0.3	0.1	0.1	0.2	0.3	1.1	2.1	8.4	17.8	M	
1.6	5.2	0.6	0.0	0.1	0.1	0.3	0.5	1.7	5.0	18.3	F	
0.1	--	0.0	--	--	0.0	0.0	0.1	0.2	0.4	1.0	T	030–033 AUTRES MALADIES BACTERIENNES
0.1	--	0.0	--	--	0.0	0.0	0.1	0.3	0.6	1.3	M	035,039
0.1	--	0.0	--	--	--	0.0	0.0	0.1	0.3	0.8	F	
0.0	0.3	0.2	0.0	--	--	--	--	--	0.0	--	T	042 ROUGEOLE
0.0	0.3	0.2	0.0	--	--	--	--	--	--	--	M	
0.0	0.4	0.3	0.0	--	--	--	--	--	0.0	--	F	
1.2	3.5	0.8	0.4	0.4	0.6	0.8	1.4	2.4	3.8	6.1	T	040,041 AUTRES MALADIES A VIRUS
1.4	4.4	0.5	0.4	0.6	0.5	1.1	1.7	2.8	4.4	8.0	M	043–049
1.1	2.6	0.6	0.3	0.4	0.6	0.5	1.1	2.1	3.3	4.6	F	
0.0	--	--	--	--	0.0	--	--	--	0.0	0.0	T	052 PALUDISME
0.0	--	--	--	--	0.0	--	--	--	0.0	0.1	M	
--	--	--	--	--	--	--	--	--	--	--	F	
--	--	--	--	--	--	--	--	--	--	--	T	050,051 AUTRES MALADIES TRANSMISES
--	--	--	--	--	--	--	--	--	--	--	M	053,054 PAR LES ARTHROPODES
--	--	--	--	--	--	--	--	--	--	--	F	059
0.1	--	--	--	--	0.0	0.0	0.1	0.3	0.7	0.6	T	05 MALADIES VENERIENNES
0.1	--	--	--	--	0.0	0.0	0.1	0.4	1.0	0.6	M	
0.1	--	--	--	--	--	0.0	0.0	0.1	0.6	0.8	F	
0.8	0.4	0.1	0.0	0.0	0.2	0.2	0.6	1.6	3.8	7.9	T	07 AUTRES MALADIES INFECTIEUSES
1.0	0.6	0.0	0.0	0.0	0.2	0.3	0.8	2.4	5.4	12.0	M	ET PARASITAIRES
0.6	0.1	0.1	0.1	0.0	0.1	0.1	0.5	1.0	2.6	6.2	F	
143.3	4.8	8.0	3.8	8.4	16.4	42.4	134.4	319.1	714.5	1219.8	T	08–14 TUMEURS MALIGNES
169.7	4.9	8.8	4.2	8.1	14.2	41.0	169.6	420.7	1011.8	1748.8	M	
117.8	4.2	4.8	3.8	4.8	18.8	43.8	109.2	235.4	497.8	881.4	F	
1.6	--	--	0.0	0.1	0.2	0.8	2.0	4.3	8.9	10.9	T	08 TUMEURS MALIGNES DE LA
2.2	--	--	0.0	0.1	0.2	0.8	3.0	6.7	11.4	16.0	M	LEVRE, DE LA CAVITE BUCCALE
1.0	--	--	0.0	0.1	0.1	0.3	1.0	2.2	5.4	7.7	F	ET DU PHARYNX
4.9	--	--	--	--	0.0	0.5	4.1	12.0	26.7	45.7	T	090 TUMEUR MALIGNE DE
8.0	--	--	--	--	0.0	0.9	7.1	22.6	49.6	83.7	M	L'OESOPHAGE
2.0	--	--	--	--	0.0	0.1	1.2	3.3	9.2	21.4	F	
41.3	--	--	--	0.4	4.9	14.3	37.3	89.7	204.7	366.5	T	091 TUMEUR MALIGNE DE L'ESTOMAC
51.4	--	--	--	0.4	4.0	14.0	47.3	128.8	308.8	541.9	M	
31.8	--	--	--	0.5	5.8	14.6	27.5	67.7	126.6	264.1	F	
7.8	--	--	0.0	0.1	0.9	2.5	6.9	16.0	36.5	76.3	T	093 TUMEUR MALIGNE DU GROS
7.7	--	--	0.0	0.2	0.9	2.7	7.2	17.1	41.9	80.1	M	INTESTIN
7.8	--	--	--	0.1	0.9	2.3	6.6	15.0	32.4	68.1	F	
6.1	--	--	--	0.1	0.6	1.9	6.2	12.7	28.4	59.6	T	094 TUMEUR MALIGNE DU RECTUM ET
7.1	--	--	--	0.1	0.5	1.8	7.7	16.9	37.5	81.5	M	DU CANAL ANAL
5.2	--	--	--	0.1	0.8	1.9	4.7	9.3	21.4	46.3	F	
8.9	0.2	0.2	0.1	0.1	0.5	2.1	13.6	26.2	41.2	48.8	T	095 TUMEUR MALIGNE DU FOIE,
13.4	--	0.2	0.1	0.1	0.7	3.5	24.0	46.6	68.9	71.7	M	SPECIFIEE COMME PRIMITIVE
4.5	0.4	0.2	0.0	0.1	0.2	0.8	3.4	10.2	21.5	34.0	F	
0.7	--	--	--	--	0.0	0.0	0.3	1.4	4.1	8.3	T	100 TUMEUR MALIGNE DU LARYNX
1.3	--	--	--	--	0.0	0.1	0.6	2.7	8.2	16.1	M	
0.2	--	--	--	--	--	0.0	0.0	0.3	0.9	1.9	F	
20.4	--	--	0.0	0.1	0.7	3.1	12.6	42.4	124.7	182.3	T	101 TUMEUR MALIGNE DE LA
30.1	--	--	0.0	0.1	0.6	3.5	16.1	66.7	216.8	348.7	M	TRACHEE, DES BRONCHES
11.0	--	--	--	0.1	0.8	2.7	7.2	20.8	55.3	91.9	F	ET DU POUMON
7.2	--	--	--	0.1	1.8	8.8	14.1	19.8	15.0	18.8	F	113 TUMEUR MALIGNE DU SEIN DE LA FEMME
2.9	--	--	--	0.0	0.4	1.3	4.8	7.4	10.8	12.3	F	120 TUMEUR MALIGNE DU COL DE L'UTERUS
5.6	--	--	--	0.0	0.4	1.6	5.7	13.0	22.8	42.3	F	122 TUMEUR MALIGNE DE L'UTERUS
3.6	--	--	--	0.0	0.0	0.1	0.3	3.4	20.7	75.8	H	124 TUMEUR MALIGNE DE LA PROSTATE
2.0	--	0.0	0.0	0.0	0.1	0.1	0.8	2.7	10.6	29.5	T	126 TUMEUR MALIGNE DE LA VESSIE
2.8	--	0.1	0.0	0.0	0.1	0.2	1.4	4.6	17.4	48.5	M	
1.2	--	--	0.0	--	0.0	0.1	0.3	1.3	6.2	17.4	F	
31.4	2.0	2.4	1.2	1.9	3.4	8.0	29.0	70.7	188.6	261.1	T	RESTE TUMEURS MALIGNES D'AUTRES
32.2	2.3	2.4	1.1	2.1	3.6	6.0	31.8	82.1	188.9	307.3	M	SIEGES
30.6	1.8	2.5	1.3	1.8	3.3	7.9	26.3	61.3	138.7	231.6	F	
4.1	1.9	2.0	2.1	2.0	2.2	3.0	4.5	7.2	12.2	16.7	T	141 LEUCEMIE
4.8	1.7	2.4	2.2	2.3	2.3	3.6	5.6	9.1	16.4	21.6	M	
3.4	1.6	1.4	1.9	1.6	2.1	2.6	3.4	5.7	9.0	11.9	F	
4.4	0.7	0.4	0.6	0.6	0.8	1.6	4.3	10.1	21.9	30.4	T	140,149 AUTRES TUMEURS DES TISSUS
5.3	0.9	0.4	0.6	0.7	1.1	1.9	5.8	12.7	29.2	42.4	M	LYMPHATIQUES ET
3.6	0.4	0.4	0.2	0.5	0.8	1.0	3.1	7.9	16.4	22.6	F	HEMATOPOIETIQUES
8.1	1.8	0.9	0.9	0.8	0.8	1.6	4.1	9.0	21.6	61.3	T	16–17 TUMEURS BENIGNES,
8.8	1.4	0.8	0.8	0.8	1.0	1.8	4.9	11.7	28.9	86.9	M	TUMEURS AUTRES ET NON
4.4	1.9	0.8	0.8	0.4	0.8	1.3	3.2	6.7	18.7	41.8	F	PRECISEES

12. CAUSES OF DEATH (ICD-9), BY SEX AND AGE

JAPAN 1982

CAUSES OF DEATH ICD-9 BASIC TABULATION LIST			NUMBER OF DEATHS AT AGES (IN YEARS) NOMBRE DE DECES SELON L'AGE (EN ANNEES)											
			ALL AGES	0	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75 & +	N.SP.
181	DIABETES MELLITUS	T	8 687	1	5	5	19	87	271	797	1 311	2 760	3 429	2
		M	4 121	1	3	2	12	40	166	545	662	1 241	1 448	1
		F	4 566	–	2	3	7	47	105	252	649	1 519	1 981	1
180,182 183,189	OTHER ENDOCRINE AND METABOLIC DISEASES	T	1 473	60	40	39	26	47	78	115	184	303	581	–
		M	648	36	18	16	13	23	29	59	83	132	239	–
		F	825	24	22	23	13	24	49	56	101	171	342	–
191	NUTRITIONAL MARASMUS	T	–	–	–	–	–	–	–	–	–	–	–	–
		M	–	–	–	–	–	–	–	–	–	–	–	–
		F	–	–	–	–	–	–	–	–	–	–	–	–
192	OTHER PROTEIN-CALORIE MALNUTRITION	T	236	1	1	–	2	7	11	38	32	51	91	2
		M	139	–	–	–	–	7	7	26	23	31	43	2
		F	97	1	1	–	2	–	4	12	9	20	48	–
190,193	OTHER NUTRITIONAL DEFICIENCIES	T	195	2	1	1	2	5	6	16	29	39	94	–
		M	93	–	1	1	2	2	4	13	21	18	31	–
		F	102	2	–	–	–	3	2	3	8	21	63	–
200	ANAEMIAS	T	1 523	11	19	54	52	53	56	111	153	356	658	–
		M	679	7	10	32	29	25	21	53	67	180	255	–
		F	844	4	9	22	23	28	35	58	86	176	403	–
209	OTHER DISEASES OF BLOOD AND BLOOD-FORMING ORGANS	T	989	18	19	15	21	40	65	114	167	260	270	–
		M	505	9	14	8	9	14	37	67	87	139	121	–
		F	484	9	5	7	12	26	28	47	80	121	149	–
21	MENTAL DISORDERS	T	2 801	–	2	7	36	110	216	338	291	424	1 375	2
		M	1 460	–	2	4	19	80	165	261	189	223	515	2
		F	1 341	–	–	3	17	30	51	77	102	201	860	–
220	MENINGITIS	T	709	134	37	17	12	44	59	83	105	134	84	–
		M	378	72	22	9	6	19	39	42	61	64	44	–
		F	331	62	15	8	6	25	20	41	44	70	40	–
223	MULTIPLE SCLEROSIS	T	61	–	–	2	3	2	6	15	14	9	10	–
		M	28	–	–	–	2	1	3	5	6	4	7	–
		F	33	–	–	2	1	1	3	10	8	5	3	–
226	EPILEPSY	T	505	5	20	37	81	105	92	82	39	23	21	–
		M	282	2	10	19	49	64	51	48	19	13	7	–
		F	223	3	10	18	32	41	41	34	20	10	14	–
221,222 224,229 23,24	OTHER DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS	T	4 619	98	171	192	220	149	185	395	713	1 230	1 266	–
		M	2 552	56	101	121	153	80	118	246	387	651	639	–
		F	2 067	42	70	71	67	69	67	149	326	579	627	–
25–30	DISEASES OF THE CIRCULATORY SYSTEM	T	295 212	307	227	301	711	2 172	6 090	16 783	28 263	69 038	171 277	43
		M	147 502	171	133	170	476	1 515	4 206	11 517	17 194	38 221	73 860	39
		F	147 710	136	94	131	235	657	1 884	5 266	11 069	30 817	97 417	4
260	ACUTE RHEUMATIC FEVER	T	59	–	–	1	2	–	–	6	3	15	31	–
		M	16	–	–	–	2	–	–	2	1	3	7	–
		F	43	–	–	1	–	–	–	4	2	12	24	–
261	CHRONIC RHEUMATIC HEART DISEASE	T	1 751	–	–	4	11	18	116	336	470	431	365	–
		M	563	–	–	2	7	5	43	128	147	134	97	–
		F	1 188	–	–	2	4	13	73	208	323	297	268	–
26	HYPERTENSIVE DISEASE	T	13 771	–	–	2	5	27	84	257	656	2 337	10 403	–
		M	5 556	–	–	1	2	18	47	185	378	1 147	3 778	–
		F	8 215	–	–	1	3	9	37	72	278	1 190	6 625	–
270	ACUTE MYOCARDIAL INFARCTION	T	29 585	4	2	6	20	141	602	2 202	4 398	9 379	12 829	2
		M	17 354	1	2	3	15	116	480	1 766	3 094	5 647	6 228	2
		F	12 231	3	–	3	5	25	122	436	1 304	3 732	6 601	–
279	OTHER ISCHAEMIC HEART DISEASES	T	18 805	1	–	–	11	45	148	485	1 211	3 926	12 975	3
		M	9 085	1	–	–	8	36	105	370	826	2 199	5 538	3
		F	9 720	–	–	–	3	9	43	115	385	1 727	7 438	–
28	DISEASES OF PULMONARY CIRCULATION AND OTHER FORMS OF HEART DISEASE	T	75 763	204	174	223	514	1 238	2 130	4 375	6 801	15 610	44 480	14
		M	37 575	105	99	127	352	880	1 515	3 067	4 043	8 413	18 962	12
		F	38 188	99	75	96	162	358	615	1 308	2 758	7 197	25 518	2
29	CEREBROVASCULAR DISEASE	T	147 537	66	23	54	134	661	2 877	8 758	14 136	35 777	85 028	23
		M	73 192	44	12	28	80	441	1 925	5 727	8 310	19 698	36 906	21
		F	74 345	22	11	26	54	220	952	3 031	5 826	16 079	48 122	2
300	ATHEROSCLEROSIS	T	4 383	–	–	–	1	–	2	21	65	480	3 814	–
		M	1 912	–	–	–	1	–	2	14	38	283	1 574	–
		F	2 471	–	–	–	–	–	–	7	27	197	2 240	–
301,302	EMBOLISM, THROMBOSIS AND OTHER DIS. OF ARTERIES, ARTERIOLES & CAPILLARIES	T	2 781	30	28	10	8	29	73	211	408	924	1 059	1
		M	1 804	18	20	9	5	14	41	140	288	613	655	1
		F	977	12	8	1	3	15	32	71	120	311	404	–
303	PHLEBITIS, THROMBOPHLEBITIS, VENOUS EMBOLISM AND THROMBOSIS	T	87	–	–	–	2	3	8	6	14	22	32	–
		M	50	–	–	–	2	1	8	6	7	11	15	–
		F	37	–	–	–	–	2	–	–	7	11	17	–
304,305 309	OTHER DISEASES OF THE CIRCULATORY SYSTEM	T	690	2	–	1	3	10	52	124	101	137	260	–
		M	395	2	–	–	2	4	42	110	62	73	100	–
		F	295	–	–	1	1	6	10	14	39	64	160	–
310–312	ACUTE UPPER RESPIRATORY INFECTION	T	1 538	34	40	16	12	16	20	32	46	174	1 148	–
		M	692	20	18	6	2	10	14	21	28	101	472	–
		F	846	14	22	10	10	6	6	11	18	73	676	–
320	ACUTE BRONCHITIS AND BRONCHIOLITIS	T	1 884	33	26	19	7	16	15	42	79	285	1 362	–
		M	941	20	14	15	4	8	7	28	39	187	619	–
		F	943	13	12	4	3	8	8	14	40	98	743	–
321	PNEUMONIA	T	35 338	369	181	132	140	237	311	804	1 992	7 332	23 836	4
		M	19 958	206	105	78	80	109	181	540	1 269	4 798	12 619	2
		F	15 380	163	76	54	60	128	130	264	723	2 534	11 217	2
322	INFLUENZA	T	802	5	10	10	6	9	15	30	26	138	552	–
		M	385	2	6	6	4	2	7	13	16	87	242	–
		F	417	3	4	4	2	7	8	17	10	51	310	–
323	BRONCHITIS, CHRONIC AND UNSPECIFIED, EMPHYSEMA AND ASTHMA	T	12 916	32	58	77	78	93	153	420	968	3 297	7 740	–
		M	8 213	17	32	48	51	52	84	246	614	2 264	4 805	–
		F	4 703	15	26	29	27	41	69	174	354	1 033	2 935	–
313–316,319 324–327,329	OTHER DISEASES OF THE RESPIRATORY SYSTEM	T	7 477	66	39	24	36	78	137	442	918	2 156	3 580	3
		M	4 875	31	22	15	20	47	91	301	653	1 500	2 192	3
		F	2 602	35	17	9	16	31	46	141	265	656	1 388	–
341	ULCER OF STOMACH AND DUODENUM	T	4 778	3	1	5	23	46	118	301	490	1 108	2 682	1
		M	2 758	3	1	5	20	38	93	250	345	740	1 262	1
		F	2 020	–	–	–	3	8	25	51	145	368	1 420	–
342	APPENDICITIS	T	159	–	–	9	12	5	3	8	16	29	77	–
		M	79	–	–	5	9	3	3	6	9	18	26	–
		F	80	–	–	4	3	2	–	2	7	11	51	–
343,344	HERNIA OF ABDOMINAL CAVITY AND INTESTINAL OBSTRUCTION	T	2 526	25	7	3	12	18	68	146	241	672	1 334	–
		M	1 160	15	4	2	9	13	40	99	130	316	532	–
		F	1 366	10	3	1	3	5	28	47	111	356	802	–
347	CHRONIC LIVER DISEASE AND CIRRHOSIS	T	16 562	1	5	5	16	184	1 257	4 378	3 872	3 668	3 169	7
		M	11 838	–	2	1	9	142	1 074	3 759	2 816	2 292	1 737	6
		F	4 724	1	3	4	7	42	183	619	1 056	1 376	1 432	1

AGE-SEX-SPECIFIC DEATH RATES PER 100 000 POPULATION
(INFANT MORTALITY RATES PER 100 000 LIVE BIRTHS)
TAUX SPECIFIQUES DE MORTALITE PAR SEXE ET AGE, POUR 100 000 PERSONNES
(TAUX DE MORTALITE INFANTILE POUR 100 000 NAISSANCES VIVANTES)

TOUS AGES	0	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75 & +		CAUSES DE DECES OMS-9 LISTE DE BASE POUR LA MISE EN TABLEAUX	
7.3	0.1	0.1	0.0	0.1	0.6	1.6	5.0	12.0	37.6	86.6	T	181	DIABETE SUCRE
7.1	0.1	0.1	0.0	0.1	0.4	1.9	6.5	13.4	39.0	92.4	M		
7.8	-	0.1	0.0	0.1	0.6	1.2	3.2	10.8	36.6	81.3	F		
1.2	4.0	0.6	0.2	0.2	0.2	0.4	0.7	1.7	4.1	14.6	T	180,182	AUTRES MALADIES ENDOCRI-
1.1	4.6	0.5	0.2	0.2	0.2	0.3	0.7	1.7	4.2	15.3	M	183,189	NIENNES ET DU METABOLISME
1.4	3.3	0.7	0.2	0.2	0.3	0.5	0.7	1.7	4.1	14.0	F		
-	-	-	-	-	-	-	-	-	-	-	T	181	MARASME NUTRITIONNEL
-	-	-	-	-	-	-	-	-	-	-	M		
-	-	-	-	-	-	-	-	-	-	-	F		
0.2	0.1	0.0	-	0.0	0.0	0.1	0.2	0.3	0.7	2.3	T	182	AUTRES MALNUTRITIONS
0.2	-	-	-	-	0.1	0.1	0.3	0.6	1.0	2.7	M		PROTEINO-CALORIQUES
0.2	0.1	0.0	-	0.0	-	0.0	0.2	0.1	0.5	2.0	F		
0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.6	2.3	T	180,183	AUTRES ETATS DE CARENCE
0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.8	2.0	M		
0.2	0.3	-	-	-	0.0	0.0	0.0	0.1	0.5	2.6	F		
1.3	0.7	0.3	0.3	0.3	0.3	0.3	0.7	1.4	4.8	16.4	T	200	ANEMIES
1.2	0.9	0.3	0.3	0.3	0.3	0.2	0.7	1.4	5.7	16.3	M		
1.4	0.5	0.3	0.2	0.3	0.3	0.4	0.7	1.4	4.2	16.6	F		
0.8	1.2	0.3	0.1	0.1	0.2	0.4	0.7	1.6	3.5	8.7	T	209	AUTRES MALADIES DU SANG ET
0.9	1.2	0.4	0.1	0.1	0.1	0.4	0.9	1.8	4.4	7.7	M		DES ORGANES HEMATOPOIETIQUES
0.8	1.2	0.2	0.1	0.2	0.3	0.3	0.6	1.3	2.9	8.1	F		
2.4	-	0.0	0.0	0.2	0.8	1.2	2.1	2.7	6.6	34.3	T	21	TROUBLES MENTAUX
2.6	-	0.1	0.0	0.2	0.8	1.9	3.3	3.8	7.0	32.9	M		
2.2	-	-	0.0	0.2	0.9	0.6	1.0	1.7	4.8	35.3	F		
0.6	8.8	0.6	0.1	0.1	0.2	0.3	0.5	1.0	1.8	2.1	T	320	MENINGITES
0.6	9.3	0.7	0.1	0.1	0.2	0.4	0.5	1.2	2.0	2.8	M		
0.6	8.4	0.6	0.1	0.1	0.3	0.2	0.6	0.7	1.7	1.6	F		
0.1	-	-	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	T	223	SCLEROSE EN PLAQUES
0.0	-	-	-	0.0	0.0	0.0	0.1	0.1	0.1	0.4	M		
0.1	-	-	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	F		
0.4	0.3	0.3	0.2	0.5	0.8	0.5	0.5	0.4	0.3	0.5	T	225	EPILEPSIE
0.5	0.3	0.3	0.2	0.6	0.7	0.6	0.6	0.4	0.4	0.4	M		
0.4	0.4	0.3	0.2	0.4	0.4	0.5	0.4	0.3	0.2	0.5	F		
3.9	6.5	2.7	1.0	1.4	0.8	1.0	2.5	6.5	16.7	31.5	T	221,222	AUTRES MALADIES DU SYSTEME
4.4	7.2	3.1	1.2	2.0	0.8	1.3	3.1	7.8	20.5	40.8	M	224,229	NERVEUX
3.4	5.7	2.2	0.8	0.7	0.7	0.8	1.9	5.4	13.9	25.7	F	23,24	
248.7	20.3	3.6	1.6	4.4	11.3	34.1	105.9	257.8	939.9	4278.8	T	25-30	MALADIES DE L'APPAREIL
262.6	22.0	4.0	1.7	5.7	15.7	47.2	146.2	347.2	1202.3	4713.2	M		CIRCULATOIRE
246.0	18.4	3.0	1.4	2.9	6.9	21.1	66.1	184.1	739.8	3998.4	F		
0.0	-	-	0.0	0.0	-	-	0.0	0.0	0.2	0.8	T	260	RHUMATISME ARTICULAIRE AIGU
0.0	-	-	-	0.0	-	-	0.0	0.0	0.1	0.5	M		
0.1	-	-	0.0	-	-	-	0.1	0.0	0.3	1.0	F		
1.5	-	-	0.0	0.1	0.1	0.7	2.1	4.3	5.9	9.1	T	261	CARDIOPATHIES RHUMATISMALES
1.0	-	-	0.0	0.1	0.1	0.5	1.5	3.0	4.2	6.2	M		CHRONIQUES
2.0	-	-	0.0	0.1	0.1	0.8	2.6	5.4	7.1	11.0	F		
11.4	-	-	0.0	0.0	0.1	0.6	1.6	6.0	31.6	259.6	T	26	MALADIES HYPERTENSIVES
9.8	-	-	0.0	0.0	0.2	0.5	2.3	7.6	38.1	241.1	M		
13.6	-	-	0.0	0.0	0.1	0.4	0.9	4.6	28.6	271.8	F		
24.9	0.3	0.0	0.0	0.1	0.7	3.4	13.9	40.1	127.7	320.3	T	270	INFARCTUS AIGU DU MYOCARDE
29.7	0.1	0.1	0.0	0.1	1.2	5.4	22.4	62.5	177.5	397.4	M		
20.3	0.4	-	0.0	0.1	0.3	1.4	5.5	21.7	89.6	270.8	F		
16.6	0.1	-	-	0.1	0.2	0.8	3.1	11.0	63.4	324.0	T	278	AUTRES MYOCARDIOPATHIES
16.6	0.1	-	-	0.1	0.4	1.2	4.7	16.7	89.2	353.4	M		ISCHEMIQUES
16.1	-	-	-	0.0	0.1	0.5	1.4	6.4	41.4	305.1	F		
63.8	13.5	2.7	1.2	3.2	6.6	11.9	27.6	62.0	212.6	1110.7	T	28	MALADIES DE LA CIRCULATION
64.3	13.5	3.0	1.3	4.2	9.1	17.0	38.9	81.5	264.6	1210.0	M		PULMONAIRE ET AUTRES FORMES
63.3	13.4	2.4	1.0	2.0	3.8	6.9	16.4	45.9	172.7	1046.8	F		DE CARDIOPATHIES
124.3	4.4	0.4	0.3	0.8	3.5	16.1	56.3	128.9	487.1	2123.2	T	29	MALADIES CEREBRO-VASCULAIRES
126.3	6.7	0.4	0.3	1.0	4.6	21.6	72.7	167.6	618.6	2356.1	M		
123.3	3.0	0.4	0.3	0.7	2.3	10.7	38.0	96.9	385.9	1974.2	F		
3.7	-	-	-	0.0	-	0.0	0.1	0.6	6.5	95.2	T	300	ATHEROSCLEROSE
3.3	-	-	-	0.0	-	0.0	0.2	0.8	8.9	100.4	M		
4.1	-	-	-	-	-	-	0.1	0.4	4.7	91.9	F		
2.3	2.0	0.4	0.1	0.0	0.2	0.4	1.3	3.7	12.6	26.4	T	301,302	EMBOLIE, THROMBOSE ET
3.1	2.3	0.6	0.1	0.1	0.1	0.5	1.5	5.8	19.3	41.8	M		AUTRES MALADIES DES ARTERES,
1.6	1.6	0.3	0.0	0.0	0.2	0.4	0.9	2.0	7.5	16.6	F		ARTERIOLES ET CAPILLAIRES
0.1	-	-	-	0.0	0.0	0.0	0.1	0.1	0.3	0.8	T	303	PHLEBITE ET THROMBOPHLEBITE,
0.1	-	-	-	0.0	0.0	0.1	0.1	0.1	0.3	1.0	M		EMBOLIES ET THROMBOSES
0.1	-	-	-	-	0.0	-	-	0.1	0.3	0.7	F		VEINEUSES
0.6	0.1	-	0.0	0.0	0.1	0.3	0.8	0.9	1.9	6.5	T	304,306	AUTRES MALADIES DE
0.7	0.3	-	-	0.0	0.0	0.5	1.4	1.3	2.3	8.4	M	309	L'APPAREIL CIRCULATOIRE
0.6	-	-	0.0	0.0	0.1	0.1	0.2	0.6	1.6	6.6	F		
1.3	2.2	0.6	0.1	0.1	0.1	0.1	0.2	0.4	2.4	28.7	T	310-312	INFECTIONS AIGUES DES VOIES
1.2	2.6	0.6	0.1	0.0	0.1	0.2	0.3	0.6	3.2	30.1	M		RESPIRATOIRES SUPERIEURES
1.4	1.9	0.7	0.1	0.1	0.1	0.1	0.1	0.3	1.8	27.7	F		
1.8	2.2	0.4	0.1	0.0	0.1	0.1	0.3	0.7	3.9	34.0	T	320	BRONCHITE ET BRONCHIOLITE
1.6	2.6	0.4	0.2	0.0	0.1	0.1	0.4	0.8	5.9	39.5	M		AIGUES
1.8	1.8	0.4	0.0	0.0	0.1	0.1	0.2	0.7	2.4	30.5	F		
29.8	24.4	2.8	0.7	0.9	1.2	1.7	5.1	18.2	99.8	595.2	T	321	PNEUMONIE
34.2	26.6	3.2	0.8	1.0	1.1	2.0	6.9	26.0	130.9	806.2	M		
26.6	22.1	2.4	0.6	0.8	1.3	1.5	3.3	12.0	80.8	460.2	F		
0.7	0.3	0.2	0.1	0.0	0.0	0.1	0.2	0.2	1.9	13.8	T	322	GRIPPE
0.7	0.3	0.2	0.1	0.0	0.0	0.1	0.2	0.3	2.7	18.4	M		
0.7	0.4	0.3	0.0	0.0	0.1	0.1	0.2	0.2	1.2	12.7	F		
10.9	2.1	0.9	0.4	0.6	0.8	0.9	2.7	8.8	44.7	193.6	T	323	BRONCHITE CHRONIQUE,
14.1	2.2	1.0	0.5	0.6	0.5	0.9	3.1	12.4	70.9	307.3	M		EMPHYSEME ET ASTHME
7.6	2.0	0.8	0.3	0.5	0.4	0.8	2.2	5.8	24.8	120.4	F		
6.3	4.4	0.6	0.1	0.2	0.4	0.8	2.8	8.4	29.3	80.4	T	313-316	AUTRES MALADIES DE
8.3	4.0	0.7	0.2	0.2	0.6	1.0	3.8	13.2	47.2	139.8	M	319	L'APPAREIL RESPIRATOIRE
4.3	4.7	0.5	0.1	0.2	0.3	0.5	1.8	4.4	16.7	56.9	F	324-327,329	
4.0	0.2	0.0	0.0	0.1	0.2	0.7	1.9	4.8	15.1	67.0	T	341	ULCERE DE L'ESTOMAC ET DU
4.7	0.4	0.0	0.1	0.2	0.4	1.0	3.2	7.0	23.3	80.6	M		DUODENUM
3.4	-	-	-	0.0	0.1	0.3	0.6	2.4	8.8	58.3	F		
0.1	-	-	0.0	0.1	0.0	0.0	0.1	0.1	0.4	1.9	T	342	APPENDICITE
0.1	-	-	0.0	0.1	0.0	0.0	0.1	0.2	0.6	1.7	M		
0.1	-	-	0.0	0.0	0.0	-	0.0	0.1	0.3	2.1	F		
2.1	1.6	0.1	0.0	0.1	0.1	0.4	0.9	2.2	9.1	33.3	T	343,344	HERNIE ABDOMINALE ET
2.0	1.9	0.1	0.0	0.1	0.1	0.4	1.3	2.6	9.9	33.8	M		OCCLUSION INTESTINALE
2.3	1.4	0.1	0.0	0.0	0.1	0.3	0.6	1.8	8.6	32.9	F		
14.0	0.1	0.1	0.0	0.1	1.0	7.0	27.6	36.3	49.9	78.1	T	347	MALADIES CHRONIQUES ET
20.3	-	0.1	0.0	0.1	1.5	12.0	47.7	66.9	72.1	110.8	M		CIRRHOSE DU FOIE
7.8	0.1	0.1	0.0	0.1	0.4	2.1	7.8	17.8	33.0	68.7	F		

18. CAUSES OF DEATH (ICD-8), BY SEX AND AGE

JAPAN 1982

CAUSES OF DEATH (ICD-8) BASIC TABULATION LIST		NUMBER OF DEATHS AT AGES (IN YEARS) NOMBRE DE DECES SELON L'AGE (EN ANNEES) ALL AGES	0	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75 & +	N.St.
33,340,348, 346,348,349	*OTHER DISEASES OF THE* DIGESTIVE SYSTEM	T	13 321	37	13	24	89	191	422	984	1 348	2 926	7 314	2
		M	6 676	18	7	14	36	132	314	729	827	1 809	3 038	2
		F	6 643	19	6	10	24	89	108	288	522	1 367	4 278	-
580	*NEPHRITIS, NEPHROTIC* SYNDROME AND NEPHROSIS	T	11 388	88	18	36	73	181	344	788	1 294	3 028	5 832	1
		M	5 662	41	8	21	58	127	212	449	688	1 833	2 843	1
		F	5 727	44	6	15	34	64	132	341	606	1 496	2 989	-
581	*INFECTIONS OF KIDNEY*	T	1 180	-	1	-	5	8	18	33	68	232	818	-
		M	387	-	1	-	1	3	7	16	18	77	238	-
		F	803	-	-	-	4	5	11	16	37	146	683	-
580	HYPERPLASIA OF PROSTATE	M	416	-	-	-	-	-	-	-	4	48	363	-
582,583,589	OTHER DISEASES	T	1 184	1	-	-	-	18	18	29	87	246	769	-
581–589	OF THE GENITOURINARY	M	454	1	-	-	-	8	8	13	30	113	285	-
589,37	SYSTEM	F	730	-	-	-	-	10	10	16	57	133	804	-
56	ABORTION	F	28	-	-	-	3	17	6	2	-	-	-	-
590	HAEMORRHAGE OF PREGNANCY AND CHILDBIRTH	F	76	-	-	-	11	43	21	-	-	-	-	1
591	TOXAEMIA OF PREGNANCY	F	83	-	-	-	7	34	11	1	-	-	-	-
594	COMPLICATIONS OF THE PUERPERIUM	F	43	-	-	-	14	24	5	-	-	-	-	-
592,593 599	OTHER DIRECT OBSTETRIC CAUSES	F	40	-	-	-	3	28	9	-	-	-	-	-
40,41	ALL OTHER INDIRECT OBSTETRIC CAUSES	F	38	-	-	-	4	29	6	-	-	-	-	-
42	DISEASES OF SKIN AND SUBCUTANEOUS TISSUE	T	677	3	4	6	6	100	11	17	42	68	809	-
		M	245	3	2	4	2	6	1	10	19	26	166	-
		F	432	-	2	2	4	4	6	7	23	41	343	-
43	DISEASES OF THE MUSCULO-SKELETAL SYSTEM AND CONNECTIVE TISSUE	T	3 821	1	4	23	66	145	176	286	489	892	1 713	-
		M	966	1	2	9	13	11	21	61	136	271	440	-
		F	2 866	-	2	14	72	132	155	234	363	621	1 273	-
440	SPINA BIFIDA AND HYDRO-CEPHALUS	T	177	121	31	18	4	-	1	-	2	-	-	-
		M	96	63	19	9	2	-	1	-	2	-	-	-
		F	81	58	12	9	2	-	-	-	-	-	-	-
442	CONGENITAL ANOMALIES OF HEART AND CIRCULATORY SYSTEM	T	2 721	1 572	377	163	96	92	85	112	98	78	93	1
		M	1 488	876	188	88	58	51	44	63	42	32	18	1
		F	1 253	696	189	65	39	41	41	49	83	43	38	-
441,443–447 449	OTHER CONGENITAL ANOMALIES	T	1 818	1 071	193	89	28	21	19	26	36	42	28	-
		M	830	587	106	29	18	18	10	13	18	19	16	-
		F	688	484	87	30	9	5	9	13	18	23	10	-
483	BIRTH TRAUMA	T	468	461	2	2	-	-	-	-	-	-	-	-
		M	264	261	1	2	-	-	-	-	-	-	-	-
		F	201	200	1	-	-	-	-	-	-	-	-	-
480–482 484,485 489	OTHER CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	T	4 283	4 271	8	1	1	2	1	1	-	-	1	-
		M	2 498	2 492	2	1	1	-	-	1	-	-	1	-
		F	1 785	1 779	5	-	-	2	1	-	-	-	-	-
486	SENILITY WITHOUT MENTION OF PSYCHOSIS	T	27 801	-	-	-	-	-	-	2	28	868	26 802	-
		M	9 867	-	-	-	-	-	-	2	12	492	9 081	-
		F	17 934	-	-	-	-	-	-	-	16	477	17 441	-
480–484 487 489	SIGNS, SYMPTOMS AND OTHER ILL-DEFINED CONDITIONS	T	1 710	193	84	19	35	50	99	162	143	350	581	44
		M	1 036	118	30	11	18	34	72	119	92	211	297	33
		F	676	76	54	8	17	16	27	33	51	139	284	11
E47–E63	ACCIDENTS AND ADVERSE EFFECTS	T	29 197	826	1 370	1 401	1 719	2 848	2 865	4 031	3 481	4 071	8 388	17
		M	21 048	521	846	1 014	1 166	2 164	2 171	3 333	2 593	2 743	2 668	17
		F	8 281	304	524	387	553	684	694	698	888	1 328	2 700	-
E471	MOTOR VEHICLE TRAFFIC ACCIDENTS	T	12 138	30	363	807	2 878	1 264	1 164	1 856	1 394	1 561	1 178	5
		M	9 136	17	264	411	2 488	1 064	930	1 273	889	1 031	664	5
		F	3 003	13	119	178	409	200	284	383	405	530	518	-
E470,E472–E474 E479	OTHER TRANSPORT ACCIDENTS	T	1 810	1	90	80	110	158	189	337	239	210	177	3
		M	1 308	1	43	68	106	139	183	304	196	169	109	3
		F	502	-	47	16	13	19	16	33	43	61	68	-
E48	ACCIDENTAL POISONING	T	784	2	17	18	64	110	122	133	120	97	91	-
		M	492	-	8	9	48	83	78	92	80	69	38	-
		F	272	2	11	10	16	27	44	41	40	38	43	-
E50	ACCIDENTAL FALLS	T	4 127	29	73	48	113	212	288	511	622	827	1 801	2
		M	2 719	20	54	40	101	193	269	383	431	438	610	2
		F	1 408	9	19	9	12	19	19	48	91	191	891	-
E51	ACCIDENTS CAUSED BY FIRE AND FLAMES	T	1 221	13	47	70	66	108	87	121	108	219	396	-
		M	774	10	28	42	38	71	63	86	80	133	225	-
		F	447	3	19	28	19	38	24	35	28	86	170	-
E521	ACCIDENTAL DROWNING AND SUBMERSION	T	3 293	46	864	433	230	248	211	206	266	421	587	2
		M	2 273	30	581	366	217	225	192	238	200	223	242	2
		F	1 020	16	215	77	13	23	19	61	66	198	346	-
E523	ACCIDENTS CAUSED BY MACHINERY AND BY CUTTING AND PIERCING INSTRUMENTS	T	987	-	14	15	60	120	168	263	181	69	37	-
		M	778	-	10	10	60	119	160	228	131	65	23	-
		F	81	-	4	5	-	1	18	25	20	4	4	-
E524	ACCIDENTS CAUSED BY FIREARM MISSILE	T	14	-	-	1	-	1	4	4	3	1	-	-
		M	12	-	-	-	-	-	4	4	3	1	-	-
		F	2	-	-	1	-	1	-	-	-	-	-	-
E49,E520 E522,E529	ALL OTHER ACCIDENTS INCLUDING LATE EFFECTS	T	5 134	604	182	143	207	312	387	578	644	869	1 304	5
		M	3 834	343	90	81	158	250	295	547	479	541	743	5
		F	1 300	161	92	62	51	62	86	131	166	327	561	-
E53	DRUGS, MEDICAMENTS CAUSING ADVERSE EFFECTS IN THERAPEUTIC USE	T	38	-	-	5	6	1	5	2	5	8	7	-
		M	22	-	-	1	4	-	3	-	4	5	4	-
		F	16	-	-	4	1	1	2	1	1	3	3	-
E54	SUICIDE AND SELF-INFLICTED INJURY	T	20 668	-	-	78	1 721	3 366	3 588	4 232	2 866	3 388	2 404	133
		M	13 303	-	-	64	1 202	2 329	2 837	3 017	1 843	1 132	1 078	118
		F	7 466	-	-	22	519	1 037	1 056	1 215	1 023	1 260	1 328	15
E55	HOMICIDE AND INJURY PURPOSELY INFLICTED BY OTHER PERSONS	T	1 093	80	104	159	88	140	188	186	84	64	40	11
		M	635	42	65	81	38	80	126	108	37	26	17	3
		F	458	38	49	65	30	60	60	80	47	38	23	8
E56	OTHER VIOLENCE	T	2 080	48	81	81	177	288	336	382	237	214	216	82
		M	1 484	26	73	46	141	201	266	301	166	144	102	66
		F	606	21	18	16	36	87	77	81	72	70	114	16
POPULATION (IN THOUSANDS — EN MILLIERS)		T	118 693	1 819	8 482	19 264	16 288	19 147	17 934	15 948	10 884	7 346	4 008	-
		M	58 402	740	3 310	8 500	8 303	9 630	8 918	7 678	4 862	3 178	1 687	-
		F	60 291	739	3 142	8 384	7 892	9 818	8 816	7 972	6 012	4 167	2 436	-

12. CAUSES DE DECES (CIM-9), PAR SEXE ET AGE

JAPON 1982

AGE-SEX-SPECIFIC DEATH RATES PER 100 000 POPULATION
INFANT MORTALITY RATES PER 100 000 LIVE BIRTHS)
TAUX SPECIFIQUES DE MORTALITE PAR SEXE ET AGE, POUR 100 000 PERSONNES
(TAUX DE MORTALITE INFANTILE POUR 100 000 NAISSANCES VIVANTES)

TOUS AGES	0	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75 & +		CAUSES DE DECES CIM-9 LISTE DE BASE POUR LA MISE EN TABLEAUX	
11.2	2.4	0.2	0.1	0.4	1.0	2.4	6.2	12.3	39.0	182.6	T	33,340	AUTRES MALADIES DE
11.4	2.3	0.2	0.1	0.4	1.4	3.5	9.2	16.7	49.4	193.7	M	340,346	L'APPAREIL DIGESTIF
11.0	2.6	0.2	0.1	0.3	0.6	1.2	3.2	8.7	32.6	176.6	F	348,349	
0.8	0.6	0.2	0.2	0.4	1.0	1.9	6.0	11.8	41.2	138.1	T	380	NEPHRITE, SYNDROME
0.7	0.5	0.3	0.2	0.6	1.3	2.4	8.7	13.6	48.2	142.3	M		NEPHROTIQUE ET NEPHROSE
0.8	0.6	0.2	0.2	0.4	0.7	1.5	4.3	10.1	36.9	122.6	F		
1.0	–	0.0	–	0.0	0.0	0.1	0.2	0.6	3.0	20.4	T	381	INFECTIONS RENALES
0.8	–	0.0	–	0.0	0.0	0.1	0.2	0.4	2.4	18.0	M		
1.3	–	–	–	0.1	0.1	0.1	0.2	0.8	3.6	23.9	F		
0.7	–	–	–	–	–	–	–	0.1	1.8	23.2	M	360	HYPERPLASIE DE LA PROSTATE
1.0	0.1	–	–	–	0.1	0.1	0.2	0.6	3.3	19.7	T	362,383	AUTRES MALADIES DU SYSTEME
0.9	0.1	–	–	–	0.1	0.1	0.2	0.6	3.0	18.2	M	389	GENITO-URINAIRE
1.2	–	–	–	–	0.1	0.1	0.2	0.8	3.2	20.7	F	391-393,399,37	
0.0	–	–	–	0.0	0.2	0.1	0.0	–	–	–	F	38	AVORTEMENTS
0.1	–	–	–	0.1	0.8	0.2	–	–	–	–	F	390	HEMORRAGIE DE LA GROSSESSE
0.1	–	–	–	0.1	0.4	0.1	0.0	–	–	–	F	391	TOXEMIE DE LA GROSSESSE
0.1	–	–	–	0.2	0.3	0.1	–	–	–	–	F	394	COMPLICATIONS DES SUITES DE COUCHES
0.1	–	–	–	0.0	0.3	0.1	–	–	–	–	F	392,393 399	AUTRES CAUSES OBSTETRICALES DIRECTES
0.1	–	–	–	0.1	0.3	0.1	–	–	–	–	F	40,41	AUTRES CAUSES OBSTETRICALES INDIRECTES
0.6	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.4	0.8	12.7	T	42	MALADIES DE LA PEAU ET DU
0.4	0.4	0.1	0.0	0.0	0.1	0.1	0.1	0.4	0.8	10.6	M		TISSU CELLULAIRE
0.7	–	0.1	0.0	0.1	0.0	0.1	0.1	0.4	1.0	14.1	F		SOUS-CUTANE
3.2	0.1	0.1	0.1	0.5	0.7	1.0	1.8	4.6	12.1	42.8	T	43	MALADIES DU SYSTEME OSTEO-
1.6	0.1	0.1	0.1	0.2	0.1	0.2	0.6	2.7	8.5	28.1	M		ARTICULAIRE, DES MUSCLES
4.8	–	0.1	0.1	0.8	1.4	1.7	2.9	6.0	14.9	52.2	F		ET DU TISSU CONJONCTIF
0.1	8.0	0.5	0.1	0.0	–	0.0	–	0.0	–	–	T	440	SPINA BIFIDA ET HYDRO-
0.2	8.1	0.6	0.1	0.0	–	0.0	–	0.0	–	–	M		CEPHALIE
0.1	7.9	0.4	0.1	0.0	–	–	–	–	–	–	F		
2.3	103.7	5.9	0.8	0.8	0.5	0.6	0.7	0.9	1.0	1.3	T	442	ANOMALIES CONGENITALES DU
2.5	112.8	6.7	1.0	0.7	0.6	0.6	0.8	1.0	1.0	1.0	M		COEUR ET DE L'APPAREIL
2.1	94.4	6.0	0.7	0.8	0.4	0.5	0.6	0.9	1.0	1.6	F		CIRCULATOIRE
1.3	70.7	3.0	0.3	0.2	0.1	0.1	0.2	0.3	0.6	0.6	T	441	AUTRES ANOMALIES
1.4	75.6	3.2	0.3	0.2	0.2	0.1	0.2	0.4	0.6	1.0	M	443-447	CONGENITALES
1.1	65.6	2.8	0.3	0.1	0.1	0.1	0.2	0.3	0.6	0.4	F	449	
0.4	30.4	0.0	0.0	–	–	–	–	–	–	–	T	453	TRAUMATISME OBSTETRICAL
0.6	33.6	0.0	0.0	–	–	–	–	–	–	–	M		
0.3	27.1	0.0	–	–	–	–	–	–	–	–	F		
3.8	281.8	0.1	0.0	0.0	0.0	0.0	0.0	–	–	0.0	T	450-452	AUTRES AFFECTIONS DE LA
4.3	320.4	0.1	0.0	0.0	–	–	0.0	–	–	0.1	M	454,456	PERIODE PERINATALE
3.0	241.2	0.1	–	–	0.0	0.0	–	–	–	–	F	459	
23.2	–	–	–	–	–	–	0.0	0.3	13.2	681.8	T	466	SENILITE SANS MENTION DE
16.4	–	–	–	–	–	–	0.0	0.2	15.6	578.2	M		PSYCHOSE
29.7	–	–	–	–	–	–	–	0.3	11.4	715.5	F		
1.4	12.7	1.0	0.1	0.2	0.3	0.6	1.0	1.3	4.8	14.0	T	460-464	SYMPTOMES, SIGNES ET
1.9	15.2	0.9	0.1	0.2	0.4	0.8	1.5	1.9	6.6	18.0	M	466,467	AUTRES ETATS MORBIDES
1.1	10.2	1.1	0.1	0.2	0.2	0.3	0.4	0.8	3.3	10.8	F	469	MAL DEFINIS
24.0	34.6	21.2	7.3	22.8	13.3	14.9	25.8	31.8	55.4	133.8	T	E47-E83	ACCIDENTS ET EFFETS
30.0	41.3	25.6	10.3	38.4	22.5	24.4	42.3	52.4	80.3	160.6	M		ADVERSES
13.8	27.7	16.7	4.1	6.7	4.0	5.4	9.4	14.3	31.9	110.8	F		
10.2	2.0	6.9	3.0	17.6	6.7	6.6	10.4	12.7	21.3	29.4	T	E471	ACCIDENTS DE VEHICULE A
16.6	2.2	8.0	4.2	29.7	11.3	10.4	16.2	20.0	32.4	42.4	M		MOTEUR SUR LA VOIE PUBLIQUE
6.0	1.8	5.6	1.8	6.1	2.1	2.8	4.8	6.7	12.7	21.1	F		
1.4	0.1	1.4	0.4	0.7	0.8	1.1	2.1	2.2	2.8	4.4	T	E470	AUTRES ACCIDENTS DE
2.2	0.1	1.3	0.7	1.3	1.4	2.1	3.9	4.0	5.0	7.0	M	E472-E474	TRANSPORT
0.6	–	1.5	0.2	0.2	0.2	0.2	0.4	0.7	1.2	2.8	F	E479	
0.6	0.1	0.3	0.1	0.4	0.6	0.7	0.8	1.1	1.3	2.0	T	E48	EMPOISONNEMENT ACCIDENTEL
0.8	–	0.2	0.1	0.8	0.9	0.9	1.2	1.6	1.9	2.4	M		
0.5	0.3	0.4	0.1	0.2	0.3	0.5	0.5	0.7	0.9	1.8	F		
3.5	1.8	1.1	0.3	0.7	1.1	1.6	3.9	4.8	8.5	40.0	T	E50	CHUTE ACCIDENTELLE
4.7	2.6	1.6	0.4	1.2	2.0	3.0	7.1	8.7	13.7	38.8	M		
2.3	1.2	0.6	0.1	0.2	0.2	0.2	0.6	1.6	4.6	40.7	F		
1.0	0.8	0.7	0.4	0.3	0.8	0.6	0.9	1.0	3.0	9.9	T	E51	INCENDIE
1.3	1.3	0.8	0.4	0.4	0.7	0.7	1.1	1.8	4.2	14.4	M		
0.7	0.4	0.6	0.3	0.2	0.4	0.3	0.4	0.6	2.1	7.0	F		
2.8	3.0	8.7	2.2	1.4	1.3	1.2	1.8	2.4	5.7	14.7	T	E521	SUBMERSION, SUFFOCATION
3.9	3.9	10.6	3.6	2.6	2.3	2.2	3.0	4.0	7.0	16.4	M		ACCIDENTELLE
1.7	2.2	6.8	0.8	0.2	0.2	0.2	0.6	1.1	4.8	14.2	F		
0.7	–	0.2	0.1	0.3	0.8	0.8	1.6	1.4	0.8	0.7	T	E523	ACCIDENT CAUSE PAR MACHINE
1.3	–	0.3	0.1	0.8	1.2	1.7	2.9	2.8	1.7	1.8	M		OU INSTRUMENT TRANCHANT OU
0.1	–	0.1	0.1	–	0.0	0.2	0.3	0.3	0.1	0.2	F		PERFORANT
0.0	–	–	0.0	–	0.0	0.0	0.0	0.0	0.0	–	T	E524	ACCIDENT CAUSE PAR
0.0	–	–	–	–	–	0.0	0.1	0.1	0.0	–	M		PROJECTILES D'ARMES A FEU
0.0	–	–	0.0	–	0.0	–	–	–	–	–	F		
4.3	20.7	2.8	0.7	1.3	1.8	2.2	4.3	8.0	11.8	32.6	T	E49,E520	TOUS LES AUTRES ACCIDENTS,
6.1	31.2	2.7	0.8	1.8	2.5	3.4	6.9	9.7	20.2	47.4	M	E522,E529	Y COMPRIS SEQUELLES
2.7	11.8	2.9	0.7	0.8	0.7	1.0	1.8	2.7	5.4	23.0	F		
0.0	–	–	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	T	E53	MEDICAMENTS POUVANT CAUSER
0.0	–	–	0.0	0.0	–	0.0	0.0	0.1	0.2	0.3	M		DES ACCIDENTS AU COURS DE
0.0	–	–	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	F		LEUR ADMINISTRATION
17.4	–	–	0.4	10.8	17.8	20.7	26.7	24.2	32.6	60.0	T	E54	SUICIDE
22.6	–	–	0.6	14.6	24.1	29.6	38.3	33.2	36.7	66.8	M		
12.4	–	–	0.2	6.5	10.9	11.9	16.2	16.9	30.2	64.4	F		
0.9	8.3	1.8	0.8	0.4	0.7	1.1	1.0	0.8	0.8	1.0	T	E55	HOMICIDE
1.1	6.4	1.7	0.9	0.5	0.9	1.4	1.3	0.7	0.9	1.1	M		
0.8	8.2	1.8	0.7	0.4	0.5	0.7	0.8	0.8	0.8	0.9	F		
1.6	3.0	0.8	0.3	1.1	1.6	1.9	2.4	2.2	2.9	8.4	T	E59	AUTRES CAUSES EXTERIEURES
2.5	3.2	1.0	0.5	1.7	2.1	2.9	3.8	3.3	4.8	6.6	M		
1.0	2.9	0.8	0.2	0.8	0.9	0.8	1.0	1.2	1.7	4.7	F		

NUMBER OF LIVE BIRTHS — NOMBRE DE NAISSANCES VIVANTES

T	1615 392
M	777 856
F	737 637

16. AGE-STANDARDIZED DEATH RATES, SELECTED CAUSES, BY SEX

COUNTRY OR AREA	YEAR	STD. POP.	SEX	AGE-STANDARDIZED DEATH RATE PER 100 000 OF THE STANDARD POPULATION							
				INFECTIOUS AND PARASITIC DISEASES (01-07)	MALIGNANT NEOPLASMS TUMEURS MALIGNES (08-14)	MALIGNANT NEOPLASM OF STOMACH TUMEUR MALIGNE DE L'ESTOMAC (081)	MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG TUMEUR MALIGNE DE LA TRACHEE, DES BRONCHES ET DU POUMON (101)	MALIGNANT NEOPLASM OF FEMALE BREAST TUMEUR MALIGNE DU SEIN (113)	DISEASES OF THE CIRCULATORY SYSTEM MALADIES DE L'APPAREIL CIRCULATOIRE (25-30)	ISCHAEMIC HEART DISEASE MYOCARDIO-PATHIES ISCHEMIQUES (27)	CEREBRO-VASCULAR DISEASES MALADIES CEREBRO-VASCULAIRES (29)
AFRICA											
MAURITIUS	1981	WORLD	T	41.6	83.4	12.4	12.4	.	472.1	134.9	190.1
			M	61.4	127.7	18.1	30.0		769.0	223.1	208.4
			F	36.3	66.9	7.3	4.4	7.3	347.8	66.7	98.8
		EURO-PEAN	T	49.8	124.6	18.2	19.2	.	783.4	210.4	209.2
			M	71.4	207.1	26.6	60.6		1268.6	389.7	238.7
			F	37.4	98.8	11.0	6.9	10.2	666.2	142.2	189.8
AMERICA											
CANADA	1979	WORLD	T	2.8	132.8	7.8	30.5	.	247.1	184.0	48.6
			M	3.6	164.2	11.8	51.9		330.8	220.1	60.6
			F	2.1	106.6	4.7	12.7	23.1	176.9	98.1	40.9
		EURO-PEAN	T	3.6	196.9	12.1	44.5	.	404.7	247.8	76.9
			M	4.7	248.4	18.4	78.9		530.8	348.3	88.1
			F	2.6	158.6	7.3	10.1	32.8	301.9	166.8	70.4
	1980	WORLD	T	2.8	132.4	7.0	31.4	.	242.1	181.0	42.5
			M	3.4	165.2	10.3	53.4		322.0	214.7	47.3
			F	2.3	107.1	4.4	13.2	23.0	176.8	97.6	38.7
		EURO-PEAN	T	3.8	196.7	10.8	45.8	.	397.8	243.3	72.8
			M	4.7	249.5	16.9	79.2		518.7	338.8	80.4
			F	3.1	167.1	6.8	15.9	32.7	299.9	165.4	66.9
	1981	WORLD	T	2.9	130.9	7.1	31.2	.	230.7	144.3	41.2
			M	3.8	162.2	9.9	62.2		308.0	208.4	48.6
			F	2.4	107.4	4.8	14.0	23.0	168.6	92.6	37.7
		EURO-PEAN	T	4.0	194.6	11.0	45.5	.	379.7	233.2	70.4
			M	5.1	246.0	16.6	77.7		497.4	326.7	77.8
			F	3.2	167.2	7.8	19.9	32.7	285.4	157.4	64.9
	1982	WORLD	T	3.1	136.0	6.9	33.9	.	233.1	148.1	40.2
			M	3.7	169.4	9.9	68.5		307.7	205.2	43.8
			F	2.6	110.8	4.8	16.4	23.4	170.6	94.7	37.2
		EURO-PEAN	T	4.3	202.4	10.6	49.8	.	384.9	235.3	68.0
			M	5.4	256.8	15.2	84.0		497.2	325.3	74.0
			F	3.6	162.1	7.0	22.0	33.3	293.2	161.8	64.6
PUERTO RICO	1981	WORLD	T	7.6	96.3	9.2	10.6	.	221.1	88.6	43.1
			M	9.8	118.9	13.3	16.0		264.5	111.5	46.4
			F	5.8	75.3	5.6	6.8	10.6	190.3	67.4	40.0
		EURO-PEAN	T	10.4	145.0	14.3	18.1	.	357.5	142.1	71.7
			M	13.0	180.0	20.4	22.8		399.9	174.0	78.3
			F	8.1	112.4	8.7	10.2	14.7	318.4	112.9	68.5
	1982	WORLD	T	10.9	78.7	7.6	9.8	.	190.1	76.1	37.1
			M	13.7	96.2	10.1	14.8		220.8	92.4	39.9
			F	8.3	63.1	6.4	6.3	9.1	161.8	59.4	34.6
		EURO-PEAN	T	18.5	118.1	12.0	14.5	.	309.4	121.0	48.4
			M	19.4	148.0	16.1	21.8		353.9	146.1	49.3
			F	12.0	93.4	8.4	7.9	12.4	288.6	98.3	41.7
UNITED STATES OF AMERICA	1980	WORLD	T	6.6	131.0	4.3	34.2	.	267.5	154.6	43.1
			M	6.9	164.7	6.1	58.1		356.4	210.7	47.1
			F	4.8	107.1	2.8	17.2	22.0	200.1	104.1	40.0
		EURO-PEAN	T	7.8	192.4	6.6	49.2	.	436.7	240.7	73.0
			M	9.8	240.4	9.3	82.2		568.1	347.8	78.3
			F	6.3	155.4	4.4	24.5	31.0	336.7	176.1	68.3
ASIA											
HONG KONG	1982	WORLD	T	15.6	133.3	9.1	38.3	.	145.4	44.1	62.1
			M	22.4	176.6	12.6	53.9		177.6	66.5	70.5
			F	9.6	98.4	6.1	25.1	7.7	120.4	33.3	55.1
		EURO-PEAN	T	22.1	190.2	13.3	56.1	.	232.2	71.5	89.4
			M	32.3	254.9	18.6	79.9		283.2	94.2	112.9
			F	13.6	136.6	9.1	36.9	10.8	184.6	55.4	80.0
JAPAN	1982	WORLD	T	7.4	109.7	31.2	15.2	.	180.7	29.6	89.2
			M	10.3	146.6	44.2	28.7		220.6	39.3	109.2
			F	5.1	82.0	21.5	7.4	8.4	160.0	22.0	74.9
		EURO-PEAN	T	10.8	162.7	46.9	23.2	.	306.9	49.2	151.3
			M	15.3	220.2	66.9	39.5		367.9	64.3	181.1
			F	7.4	120.5	32.1	11.3	7.4	269.6	38.0	129.4
KUWAIT	1982	WORLD	T	28.7	102.2	8.4	20.0	.	292.3	99.9	26.7
			M	37.0	111.7	8.6	29.0		337.1	126.0	24.7
			F	20.2	93.7	7.7	9.0	10.3	230.0	61.3	27.1
		EURO-PEAN	T	38.2	150.4	12.2	29.8	.	488.3	149.0	41.8
			M	52.2	187.0	12.4	43.5		523.4	184.8	40.3
			F	24.0	134.5	11.2	13.5	14.0	370.8	96.2	43.3
EUROPE											
AUSTRIA	1982	WORLD	T	3.9	139.9	16.0	23.3	.	292.6	100.8	60.8
			M	6.3	180.6	23.1	46.9		377.2	157.3	90.7
			F	2.2	118.9	11.6	8.2	20.1	236.0	63.1	73.3
		EURO-PEAN	T	8.3	209.4	25.4	34.7	.	494.8	161.1	140.3
			M	8.8	275.0	38.3	71.1		619.2	244.7	154.7
			F	2.9	172.1	18.7	12.2	29.0	412.1	106.8	130.1
BELGIUM	1979	WORLD	T	5.0	164.6	11.8	36.8	.	248.6	88.1	80.6
			M	6.6	211.2	16.6	76.6		318.2	129.0	88.9
			F	3.8	113.9	8.0	8.0	24.4	188.6	49.8	69.9
		EURO-PEAN	T	6.6	231.2	18.4	53.7	.	408.7	131.7	103.8
			M	8.9	320.2	26.0	113.8		614.2	196.0	113.8
			F	4.7	169.1	13.0	8.6	34.8	323.2	81.4	96.7
BULGARIA	1982	WORLD	T	7.5	108.4	19.0	20.9	.	397.1	123.8	149.8
			M	9.3	130.6	25.4	38.1		466.1	184.9	160.8
			F	5.8	89.4	13.3	6.3	14.2	343.7	94.7	139.3
		EURO-PEAN	T	8.1	148.9	28.2	29.6	.	654.4	202.1	244.7
			M	10.6	186.7	37.7	53.9		738.1	248.3	269.2
			F	6.8	118.3	19.9	7.8	19.6	580.8	162.2	230.7

17. CAUSES OF INFANT DEATH (ICD-9), BY SEX AND AGE

17. CAUSES DE DECES INFANTILES (CIM-9), PAR SEXE ET AGE

CAUSES OF DEATH CAUSES DE DECES ICD-9 BASIC TABULATION LIST CIM-9 LISTE DE BASE POUR LA MISE EN TABLEAUX		NUMBER OF DEATHS AT AGES NOMBRE DE DECES SELON L'AGE					RATE - TAUX < 1 YEAR < 1 AN	% OF DEATHS AT AGES % DE DECES SELON L'AGE			
		< 1 YEAR < 1 AN	< 1 DAY JOUR	1-6 DAYS JOURS	7-27 DAYS JOURS	28-364 DAYS JOURS	< 1 AN P. 100 000	< 1 DAY JOUR	1-6 DAYS JOURS	7-27 DAYS JOURS	28-364 DAYS JOURS
UNITED STATES OF AMERICA - ETATS-UNIS D'AMERIQUE 1980											
NUTRITIONAL DEFICIENCIES ETATS DE CARENCE (10)	T	29	-	-	2	27	0.6	-	-	6.9	93.1
	M	16	-	-	1	15	0.9	-	-	6.3	93.8
	F	13	-	-	1	12	0.7	-	-	7.7	92.3
DISEASES OF THE NERVOUS SYSTEM MALADIES DU SYSTEME NERVEUX (22)	T	967	9	42	108	808	26.8	0.9	4.3	11.2	83.6
	M	641	5	22	59	555	30.2	0.8	4.1	10.8	84.1
	F	326	4	20	49	253	24.2	0.9	4.7	11.8	82.9
MENINGITIS - MENINGITES (320)	T	443	8	32	81	326	12.3	1.1	7.2	18.3	73.4
	M	281	3	16	43	219	13.5	1.2	5.4	17.1	75.3
	F	162	2	16	38	106	10.9	1.0	8.3	19.8	70.6
DISEASES OF THE RESPIRATORY SYSTEM MALADIES DE L'APPAREIL RESPIRATOIRE (31 & 32)	T	1 726	71	98	169	1 388	47.8	4.1	6.7	9.2	81.0
	M	1 012	43	66	102	802	54.6	4.2	6.4	10.1	79.2
	F	714	28	33	67	586	40.6	3.9	4.6	8.0	83.6
PNEUMONIA - PNEUMONIE (321)	T	1 000	50	72	118	760	27.7	5.0	7.2	11.8	76.0
	M	591	29	50	71	441	31.9	4.9	8.5	12.0	74.6
	F	409	21	22	47	319	23.2	5.1	5.4	11.5	78.0
INFLUENZA - GRIPPE (322)	T	12	-	-	1	11	0.3	-	-	8.3	91.7
	M	7	-	-	1	6	0.4	-	-	14.3	85.7
	F	6	-	-	-	6	0.3	-	-	-	100.0
CONGENITAL ANOMALIES ANOMALIES CONGENITALES (44)	T	9 220	3 116	2 291	1 294	2 519	255.2	33.8	24.8	14.0	27.3
	M	4 968	1 688	1 297	670	1 313	268.2	34.0	26.1	13.5	26.4
	F	4 252	1 428	994	624	1 206	241.6	33.6	23.4	14.7	28.4
SPINA BIFIDA AND HYDROCEPHALUS SPINA BIFIDA ET HYDROCEPHALIE (440)	T	682	158	82	122	220	18.1	27.1	14.1	21.0	37.8
	M	312	89	44	68	121	16.8	28.5	14.1	19.6	38.8
	F	270	69	38	54	99	15.3	25.6	14.1	23.7	36.7
CONGENITAL ANOMALIES OF HEART AND CIRCULATORY SYSTEM - ANOMALIES CONGENITALES DU COEUR ET DE L'APPAREIL CIRCULATOIRE (442)	T	3 811	346	1 300	767	1 408	106.8	9.1	34.1	19.9	36.9
	M	2 136	195	766	407	768	116.2	9.1	35.8	19.1	36.0
	F	1 676	151	535	360	640	98.2	9.0	31.9	20.9	38.2
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD - CERTAINES AFFECTIONS DONT L'ORIGINE SE SITUE DANS LA PERIODE PERINATALE (45)	T	22 745	13 248	5 905	2 718	877	629.7	58.2	26.0	11.9	3.9
	M	12 984	7 480	3 425	1 540	539	700.8	57.6	26.4	11.9	4.2
	F	9 761	5 768	2 480	1 178	338	554.7	59.1	25.4	12.0	3.5
BIRTH TRAUMA TRAUMATISME OBSTETRICAL (453)	T	1 058	187	527	319	25	29.3	17.7	49.8	30.2	2.4
	M	613	118	300	181	14	33.1	19.2	48.9	29.6	2.3
	F	445	69	227	138	11	25.3	15.5	51.0	31.0	2.5
HYPOXIA AND BIRTH ASPHYXIA HYPOXIE ET ASPHYXIE (464)	T	10 183	4 898	3 427	1 207	651	281.9	48.1	33.7	11.9	6.4
	M	6 008	2 868	2 031	696	413	324.3	47.7	33.8	11.6	6.9
	F	4 175	2 030	1 396	511	238	237.3	48.6	33.4	12.2	5.7
SIGNS, SYMPTOMS AND ILL-DEFINED CONDITIONS SYMPTOMES, SIGNES ET ETATS MORBIDES MAL DEFINIS (46)	*T*	*8 088*	*72*	*85*	*405*	*7 546*	*180.6*	*1.2*	*1.1*	*6.7*	*91.1*
	M	3 579	40	33	217	3 289	193.2	1.1	0.9	6.1	91.9
	F	2 509	32	32	188	2 257	142.8	1.3	1.3	7.5	90.0
SUDDEN INFANT DEATH SYNDROME - SYNDROME DE LA MORT SUBITE CHEZ LE NOURRISSON (486)	T	5 510	19	46	353	5 092	152.5	0.3	0.8	6.4	92.4
	M	3 260	11	24	184	3 041	176.0	0.3	0.7	5.6	93.3
	F	2 250	8	22	169	2 051	127.9	0.4	1.0	7.5	91.2
ACCIDENTS (E47-E52)	T	1 163	9	20	57	1 077	32.2	0.8	1.7	4.9	92.6
	M	657	5	14	32	606	35.6	0.8	2.1	4.9	92.2
	F	506	4	6	25	471	28.8	0.8	1.2	4.9	93.1
JAPAN - JAPON 1982											
ALL CAUSES TOUTES CAUSES	T	9 969	2 433	2 534	1 358	3 544	857.8	24.4	26.4	13.6	35.6
	M	6 686	1 396	1 560	756	1 983	730.9	24.6	27.3	13.3	34.9
	F	4 264	1 037	1 084	602	1 561	680.9	24.2	25.3	14.1	36.4
INFECTIOUS AND PARASITIC DISEASES MALADIES INFECTIEUSES ET PARASITAIRES (01-07)	T	203	-	-	30	173	13.4	-	-	14.8	85.2
	M	119	-	-	15	104	16.3	-	-	12.6	87.4
	F	84	-	-	15	69	11.4	-	-	17.9	82.1
INTESTINAL INFECTIOUS DISEASES MALADIES INFECTIEUSES INTESTINALES (01)	T	50	-	-	2	48	3.3	-	-	4.0	96.0
	M	30	-	-	-	30	3.8	-	-	-	100.0
	F	20	-	-	2	18	2.7	-	-	10.0	90.0
WHOOPING COUGH - COQUELUCHE (034)	T	8	-	-	-	8	0.5	-	-	-	100.0
	M	5	-	-	-	5	0.6	-	-	-	100.0
	F	3	-	-	-	3	0.4	-	-	-	100.0
NUTRITIONAL DEFICIENCIES ETATS DE CARENCE (10)	T	3	-	-	1	2	0.2	-	-	33.3	66.7
	M	-	-	-	-	-	-	-	-	-	-
	F	3	-	-	1	2	0.4	-	-	33.3	66.7
DISEASES OF THE NERVOUS SYSTEM MALADIES DU SYSTEME NERVEUX (22)	T	237	-	19	31	187	15.6	-	8.0	13.1	78.9
	M	130	-	6	18	106	16.7	-	4.6	13.8	81.5
	F	107	-	13	13	81	14.6	-	12.1	12.1	75.7
MENINGITIS - MENINGITES (320)	T	134	-	19	30	85	8.8	-	14.2	22.4	63.4
	M	72	-	6	17	49	9.3	-	8.3	23.6	68.1
	F	62	-	13	13	36	8.4	-	21.0	21.0	58.1
DISEASES OF THE RESPIRATORY SYSTEM MALADIES DE L'APPAREIL RESPIRATOIRE (31 & 32)	T	539	4	38	81	416	36.6	0.7	7.1	15.0	77.2
	M	296	2	28	38	228	38.1	0.7	9.5	12.8	77.0
	F	243	2	10	43	188	32.9	0.8	4.1	17.7	77.4
PNEUMONIA - PNEUMONIE (321)	T	369	4	37	64	264	24.4	1.1	10.0	17.3	71.6
	M	206	2	28	31	145	26.5	1.0	13.6	15.0	70.4
	F	163	2	9	33	119	22.1	1.2	5.6	20.2	73.0
INFLUENZA - GRIPPE (322)	T	5	-	-	-	5	0.3	-	-	-	100.0
	M	2	-	-	-	2	0.3	-	-	-	100.0
	F	3	-	-	-	3	0.4	-	-	-	100.0
CONGENITAL ANOMALIES ANOMALIES CONGENITALES (44)	T	2 764	363	571	513	1 317	182.4	13.1	20.7	18.6	47.6
	M	1 626	222	306	284	714	196.2	14.8	20.1	18.6	46.8
	F	1 238	141	265	229	603	167.9	11.4	21.4	18.5	48.7
SPINA BIFIDA AND HYDROCEPHALUS SPINA BIFIDA ET HYDROCEPHALIE (440)	T	121	24	15	21	61	8.0	19.8	12.4	17.4	50.4
	M	63	16	8	10	29	8.1	25.4	12.7	15.9	46.0
	F	58	8	7	11	32	7.9	13.8	12.1	19.0	55.2
CONGENITAL ANOMALIES OF HEART AND CIRCULATORY SYSTEM - ANOMALIES CONGENITALES DU COEUR ET DE L'APPAREIL CIRCULATOIRE (442)	T	1 672	112	300	344	816	103.7	7.1	19.1	21.9	51.9
	M	816	68	171	193	444	112.6	7.8	19.8	22.0	50.7
	F	696	44	129	151	372	94.4	6.3	18.5	21.7	53.4
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD - CERTAINES AFFECTIONS DONT L'ORIGINE SE SITUE DANS LA PERIODE PERINATALE (45)	T	4 732	1 998	1 931	671	232	312.3	42.2	40.8	12.1	4.9
	M	2 763	1 136	1 165	331	121	383.9	41.3	42.3	12.0	4.4
	F	1 979	862	766	240	111	288.3	43.6	38.7	12.1	5.6
BIRTH TRAUMA TRAUMATISME OBSTETRICAL (453)	T	461	96	241	76	50	30.4	20.8	52.3	16.3	10.8
	M	281	60	147	36	26	33.6	19.2	66.3	14.6	10.0
	F	200	46	94	37	24	27.1	22.5	47.0	18.5	12.0
HYPOXIA AND BIRTH ASPHYXIA HYPOXIE ET ASPHYXIE (464)	T	2 879	1 407	1 113	259	100	190.0	48.9	38.7	9.0	3.5
	M	1 722	828	690	154	50	221.4	48.1	40.1	8.9	2.9
	F	1 157	579	423	105	50	186.9	50.0	36.6	9.1	4.3

CAUSES OF DEATH CAUSES DE DECES ICD-9 BASIC TABULATION LIST CIM-9 LISTE DE BASE POUR LA MISE EN TABLEAUX		NUMBER OF DEATHS AT AGES NOMBRE DE DECES SELON L'AGE					RATES – TAUX < 1 YEAR < 1 AN	% OF DEATHS AT AGES % DE DECES SELON L'AGE			
		< 1 YEAR < 1 AN	< 1 DAY JOUR	1–6 DAYS JOURS	7–27 DAYS JOURS	28–364 DAYS JOURS	P. 100 000	< 1 DAY JOUR	1–6 DAYS JOURS	7–27 DAYS JOURS	28–364 DAYS JOURS
JAPAN – JAPON 1982											
SIGNS, SYMPTOMS AND ILL-DEFINED CONDITIONS	T	193	2	5	10	176	12.7	1.0	2.6	5.3	91.1
SYMPTOMES, SIGNES ET ETATS MORBIDES MAL	M	118	2	4	6	106	16.2	1.7	3.4	5.1	89.8
DEFINIS (A6)	F	75	–	1	4	70	10.2	–	1.3	5.3	93.3
SUDDEN INFANT DEATH SYNDROME – SYNDROME	T	129	1	4	7	117	8.5	0.8	3.1	5.4	90.7
DE LA MORT SUBITE CHEZ LE NOURRISSON (466)	M	77	1	3	4	69	9.9	1.3	3.9	5.2	89.6
	F	52	–	1	3	48	7.1	–	1.9	5.8	92.3
ACCIDENTS (E47–E62)	T	626	8	3	23	491	34.8	1.5	0.6	4.4	93.4
	M	321	4	3	11	303	41.3	1.2	0.9	3.4	94.4
	F	204	4	–	12	188	27.7	2.0	–	5.9	92.2
AUSTRIA – AUTRICHE 1982											
ALL CAUSES	T	1 213	282	327	162	442	1279.0	23.2	27.0	13.4	36.4
TOUTES CAUSES	M	727	166	208	89	265	1508.3	22.8	28.3	13.8	36.5
	F	486	126	121	83	170	1042.0	25.9	24.9	13.0	36.2
INFECTIOUS AND PARASITIC DISEASES	T	10	–	3	2	5	10.5	–	30.0	20.0	50.0
MALADIES INFECTIEUSES ET PARASITAIRES (01–07)	M	5	–	–	1	4	10.4	–	–	20.0	80.0
	F	5	–	3	1	1	10.7	–	60.0	20.0	20.0
INTESTINAL INFECTIOUS DISEASES	T	1	–	–	–	1	1.1	–	–	–	100.0
MALADIES INFECTIEUSES INTESTINALES (01)	M	1	–	–	–	1	2.1	–	–	–	100.0
	F	–	–	–	–	–	–	–	–	–	–
WHOOPING COUGH – COQUELUCHE (034)	T	1	–	–	–	1	1.1	–	–	–	100.0
	M	1	–	–	–	1	2.1	–	–	–	100.0
	F	–	–	–	–	–	–	–	–	–	–
NUTRITIONAL DEFICIENCIES	T	1	–	–	–	1	1.1	–	–	–	100.0
ETATS DE CARENCE (10)	M	–	–	–	–	–	–	–	–	–	–
	F	1	–	–	–	1	2.1	–	–	–	100.0
DISEASES OF THE NERVOUS SYSTEM	T	27	–	3	6	18	28.8	–	11.1	22.2	66.7
MALADIES DU SYSTEME NERVEUX (22)	M	18	–	1	6	11	37.9	–	5.6	33.3	61.1
	F	9	–	2	–	7	19.3	–	22.2	–	77.8
MENINGITIS – MENINGITES (320)	T	14	–	3	6	5	14.8	–	21.4	42.8	35.7
	M	11	–	1	6	4	22.8	–	9.1	54.5	36.4
	F	3	–	2	–	1	6.4	–	66.7	–	33.3
DISEASES OF THE RESPIRATORY SYSTEM	T	82	–	1	5	76	86.6	–	1.2	6.1	92.7
MALADIES DE L'APPAREIL RESPIRATOIRE (31 & 32)	M	52	–	1	3	48	107.9	–	1.9	5.8	92.3
	F	30	–	–	2	28	64.3	–	–	6.7	93.3
PNEUMONIA – PNEUMONIE (321)	T	25	–	–	5	20	26.4	–	–	20.0	80.0
	M	17	–	–	3	14	35.3	–	–	17.6	82.4
	F	8	–	–	2	6	17.2	–	–	25.0	75.0
INFLUENZA – GRIPPE (322)	T	17	–	–	–	17	17.9	–	–	–	100.0
	M	12	–	–	–	12	24.9	–	–	–	100.0
	F	5	–	–	–	5	10.7	–	–	–	100.0
CONGENITAL ANOMALIES	T	336	78	86	54	118	354.3	23.2	25.6	16.1	35.1
ANOMALIES CONGENITALES (44)	M	192	43	54	32	63	398.3	22.4	28.1	16.7	32.8
	F	144	35	32	22	55	308.7	24.3	22.2	15.3	38.2
SPINA BIFIDA AND HYDROCEPHALUS	T	30	6	6	4	14	31.8	20.0	20.0	13.3	46.7
SPINA BIFIDA ET HYDROCEPHALIE (440)	M	16	2	3	1	10	33.2	12.5	18.8	6.3	62.5
	F	14	4	3	3	4	30.0	28.6	21.4	21.4	28.6
CONGENITAL ANOMALIES OF HEART AND CIRCULA-	T	148	12	46	26	66	156.1	8.1	30.4	16.9	44.6
TORY SYSTEM – ANOMALIES CONGENITALES DU	M	85	7	29	17	32	176.4	8.2	34.1	20.0	37.6
COEUR ET DE L'APPAREIL CIRCULATOIRE (442)	F	63	5	16	8	34	136.1	7.9	25.4	12.7	54.0
CERTAIN CONDITIONS ORIGINATING IN THE PERINA-	T	582	200	230	74	58	592.6	35.6	40.9	13.2	10.3
TAL PERIOD – CERTAINES AFFECTIONS DONT L'ORI-	M	341	111	147	47	36	707.6	32.6	43.1	13.8	10.6
GINE SE SITUE DANS LA PERIODE PERINATALE (48)	F	221	89	83	27	22	473.8	40.3	37.6	12.2	10.0
BIRTH TRAUMA	T	60	15	25	9	1	82.7	30.0	50.0	18.0	2.0
TRAUMATISME OBSTETRICAL (463)	M	31	9	15	7	–	64.3	29.0	48.4	22.6	–
	F	19	6	10	2	1	40.7	31.6	52.6	10.6	5.3
HYPOXIA AND BIRTH ASPHYXIA	T	214	67	89	31	27	226.6	31.3	41.6	14.8	12.6
HYPOXIE ET ASPHYXIE (464)	M	127	39	55	16	17	263.6	30.7	43.3	12.6	13.4
	F	87	28	34	15	10	186.6	32.2	39.1	17.2	11.5
SIGNS, SYMPTOMS AND ILL-DEFINED CONDITIONS	T	63	–	1	6	57	66.4	–	1.6	7.9	90.5
SYMPTOMES, SIGNES ET ETATS MORBIDES MAL	M	41	–	1	3	37	85.1	–	2.4	7.3	90.2
DEFINIS (A6)	F	22	–	–	2	20	47.2	–	–	9.1	90.9
SUDDEN INFANT DEATH SYNDROME – SYNDROME	T	60	–	1	5	54	63.2	–	1.7	8.3	90.0
DE LA MORT SUBITE CHEZ LE NOURRISSON (466)	M	38	–	1	3	34	78.8	–	2.6	7.9	89.5
	F	22	–	–	2	20	47.2	–	–	9.1	90.9
ACCIDENTS (E47–E62)	T	42	–	–	3	39	44.3	–	–	7.1	92.9
	M	27	–	–	2	25	56.0	–	–	7.4	92.6
	F	15	–	–	1	14	32.2	–	–	6.7	93.3
BELGIUM – BELGIQUE 1979											
ALL CAUSES	T	1 621	502	350	161	608	1228.4	33.0	23.0	10.6	33.4
TOUTES CAUSES	M	854	292	209	86	267	1332.6	34.2	24.6	10.1	31.3
	F	667	210	141	75	241	1116.7	31.5	21.1	11.2	36.1
INFECTIOUS AND PARASITIC DISEASES	T	35	–	2	8	25	28.3	–	6.7	22.9	71.4
MALADIES INFECTIEUSES ET PARASITAIRES (01–07)	M	19	–	1	5	13	29.6	–	5.3	26.3	68.4
	F	16	–	1	3	12	26.8	–	6.3	18.8	75.0
INTESTINAL INFECTIOUS DISEASES	T	14	–	2	5	7	11.3	–	14.3	35.7	50.0
MALADIES INFECTIEUSES INTESTINALES (01)	M	7	–	1	2	4	10.9	–	14.3	28.6	57.1
	F	7	–	1	3	3	11.7	–	14.3	42.9	42.9
WHOOPING COUGH – COQUELUCHE (034)	T	–	–	–	–	–	–	–	–	–	–
	M	–	–	–	–	–	–	–	–	–	–
	F	–	–	–	–	–	–	–	–	–	–
NUTRITIONAL DEFICIENCIES	T	–	–	–	–	–	–	–	–	–	–
ETATS DE CARENCE (10)	M	–	–	–	–	–	–	–	–	–	–
	F	–	–	–	–	–	–	–	–	–	–
DISEASES OF THE NERVOUS SYSTEM	T	39	1	–	8	33	31.6	2.6	–	12.8	84.6
MALADIES DU SYSTEME NERVEUX (22)	M	22	1	–	3	18	34.3	4.5	–	13.6	81.8
	F	17	–	–	2	15	28.8	–	–	11.8	88.2
MENINGITIS – MENINGITES (320)	T	13	1	–	6	7	10.6	7.7	–	38.6	53.8
	M	9	1	–	3	5	14.0	11.1	–	33.3	55.6
	F	4	–	–	3	2	8.7	–	–	80.0	50.0
DISEASES OF THE RESPIRATORY SYSTEM	T	22	–	–	–	22	17.8	–	–	–	100.0
MALADIES DE L'APPAREIL RESPIRATOIRE (31 & 32)	M	11	–	–	–	11	17.2	–	–	–	100.0
	F	11	–	–	–	11	18.4	–	–	–	100.0