

Compared with males, female tend to work in fields such as ophthalmology, dermatology, and otolaryngology.

The sex breakdown in the specialties of cardiovascular surgery, neurosurgery and orthopedics shows a high male-to-female ratio, while this ratio is low in the Departments of ophthalmology, otolaryngology, pediatrics, gynecology, and anesthesiology.

The average age of medical doctors is higher in the specialty of internal-medicine than in that of surgical-medicine.

The distributional structures of diseases among various age groups have been changing for years. It is important for the personnel planners to consider not only the number of medical doctors in various specialties, but also the age distribution in each specialty.

Table 4-8 Number of Medical Doctors in Various Specialities (1996)

Specialities	No. of medical doctors	%
Total	230,297	100.0
Internal medicine	72,746	31.6
Pediatrics	13,781	6.0
Surgery	24,919	10.8
Pediatric surgery	554	0.2
Orthopedics	16,423	7.1
Plastic surgery	1,307	0.6
Neurosurgery	5,634	2.4
Obstetrics/gynecology	10,847	4.7
Ophthalmology	10,982	4.8
Otolaryngology	8,834	3.8
Dermatology	6,796	3.0
Urology	5,174	2.2
Radiology	4,192	1.8
Rehabilitation	904	0.4
Anesthesiology	5,046	2.2

(3) Regional Distribution (working places)

National average: 169.9 MDs/10⁵ persons.

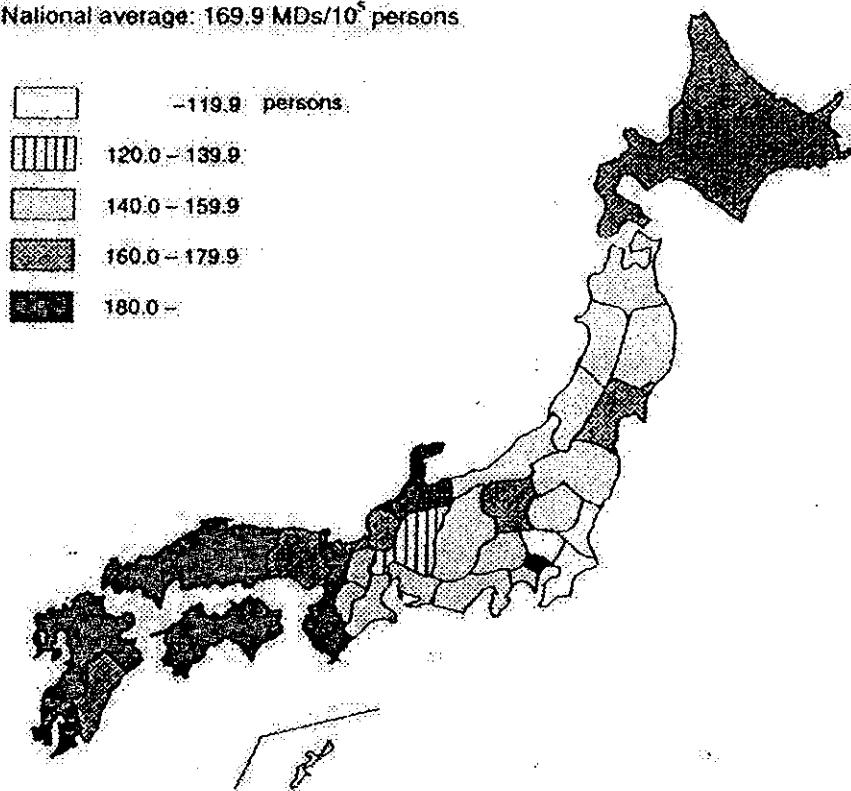


Fig. 5-1 Regional Distribution of Medical Doctors in Japan (Dec. 1992)

As shown in Fig. 5-1, medical doctors in medical care facilities are uneven in Japan. The number is the highest in Tokushima, which has 227.1 per 100,000, much higher than the national average of 169.9. While there are surplus medical doctors in Tokyo, there are not enough doctors in the surrounding prefectures. Approximately one-quarter of Japan's population lives in the Tokyo Metropolitan area, which consists of about 6 prefectures, and where the number of people is increasing.

(3) Varieties of Specialties

As of the end of 1996, nursing personnel in active service consisted of 31,581 public health nurses, 23,615 midwives, 492,352 nurses, and 369,661 assistant nurses, for a total of 928,896.

Of the public health nurses, 77.6% are local civil servants working for health centers and self-governing bodies of cities, towns and villages, engaged in the promotion of health nursing and preventive medicine for local communities. The rest is retained by business firms, hospitals, clinics, or nursing schools.

1) Public health nurses

Table 4-9 Public Health Nurses (1996)

Working place	Number	Ratio (%)
Total	31,581	100.0
Health Centers	8,887	28.1
Municipal	15,641	49.5
Hospitals, clinics	3,951	12.4
Nursing schools	379	1.1
Other	2,726	8.7

2) Midwives

Table 4-10. Midwives (1996)

Working place	Number	Ratio (%)
Total	23,615	100.0
Hospitals	16,958	71.8
Clinics	2,545	10.8
Maternity homes	2,539	10.8
Midwifery schools	502	2.1
Health Centers	347	1.5
Other	723	3.1

Midwives in private practice used to play a highly active role, yet today they are having growing trouble in finding volunteers for independent midwives because the majority of babies are born at hospitals and other such institutions these days. In addition, the fact that current practitioners are increasingly advanced in age further accelerates the downward trend from year to year in the profession of midwifery in terms of the absolute number of its practitioners. On the other hand, since graduates from training institutions tend to be employed by hospitals the number of licensed midwives working at hospitals is increasing every year.

For nurses, 85.0% of them find employment at hospitals and 9.3% of them at clinics.

Table 4-11 Nurses and Assistant Nurses (1994)

Working place	Nurses		Assistant nurses	
	Number	Ratio (%)	Number	Ratio (%)
Total	492,352	100.0	367,661	100.0
Hospitals	418,647	85.0	241,553	65.3
Clinics	45,736	9.3	112,575	30.5
Nursing or assistant nursing schools	7,873	1.6	—	—
Other	20,096	4.1	155,36	4.2

4-7-4: Communicable disease control activities

New Infectious Disease Control Law

Establishment of the Law Concerning the Prevention of Infectious Diseases and Treatment of Infectious Disease Patients (New Infectious Disease Control Law)

Amid new threats of infectious diseases highlighted by phenomena such as the rise of emerging and reemerging infectious diseases and people's growing demand for improvements in medical techniques and greater attention to human rights, the need for the enhancement and reinforcement of infectious disease control is stronger than ever. However, the enactment of the existing Communicable Disease Prevention Law dates back some 100 years, and since then dramatic changes have occurred in the environment surrounding infectious diseases, making it increasingly difficult to deal with today's situation effectively and swiftly relying on this law. Against this background, the New Infectious Disease Control Law, formally called the Law concerning the Prevention of Infectious Diseases and Treatment of Infectious Disease Patients, was enacted in September 1998. The law will take effect in April 1999, abolishing the Communicable Disease Prevention Law, which is over 100 years old. This will mark a new start for the Ministry of Health and Welfare in its infectious disease control efforts envisaging the 21st century.

The enactment of the New Infectious Disease Control Law has also paved the way for the abolishment of the AIDS Prevention Law and Venereal Disease Prevention Law, with the regulatory elements of these laws integrated into the new law.

The rationale behind the enactment of the law is outlined below, along with some of its provisions.

Renewal of Communicable Disease Classification and Medical Care System

Infectious disease category	Principal response	Medical care delivery structure	Medical cost sharing
New infectious diseases	In-principle hospitalization	Specified infectious disease special medical institutions (Designated by National Government, several across Japan)	Full public funding (medical insurance not applied)
Category I infectious diseases (e.g. plague and Ebola hemorrhagic fever, etc.)		Category I infectious disease medical institutions (Designated by prefectural governors One per prefecture)	Public funding of out-of-pocket payment under medical insurance (applicable to inpatient treatment)
Category II infectious diseases (e.g. cholera and Shigellois (bacillary dysentery) etc.)	Hospitalization on a case by case basis	Category II infectious disease medical institutions (Designated by prefectural governors One institution per secondary medical care zone)	
Category III infectious diseases (E. Coli O157)	Restrictions on engagement in certain types of work	Ordinary medical institutions	Medical insurance applied (cost of out-of-pocket payment to be borne by patients)
Category IV infectious diseases (e.g. influenza, AIDS, hepatitis C, etc.)	Surveillance and feedback of findings		

* In cases where there is a need for urgent action, an infectious disease other than those classified as categories I to III may be named "a designated infectious disease" via a cabinet order to mobilize a response similar to that applicable to a category I to III infectious disease for maximum one year period.

Definition and Classification of Communicable Diseases by Law Concerning the Prevention of Infectious Diseases and Treatment of Infectious Disease Patients

	Name of communicable disease	Characteristics	Main response/measures
Infectious disease category	Category I infectious diseases · Ebola hemorrhagic fever · Crimean-Congo hemorrhagic fever · Plague · Marburg disease · Lassa fever	Infectious diseases which pose an extremely high health risk based on a comprehensive judgment encompassing infectivity, the seriousness of symptoms, etc.	· In-principle hospitalization · Disinfection and other material measures (other measures such as those aimed at buildings and restrictions on traffic movement to be also applied in exceptional cases)
	Category II infectious diseases · Poliomyelitis · Cholera · Shigellosis (Bacillary dysentery) · Diphtheria · Typhoid fever (Enteric fever) · Paratyphoid fever	Infectious diseases which pose a high health risk based on a comprehensive judgment encompassing infectivity, the seriousness of symptoms, etc.	· Hospitalization on a case by case basis · Disinfection and other material measures
	Category III infectious diseases · Enterohemorrhagic E. coli (E. Coli O157:H7)	Infectious diseases that have the epidemic potential of people in certain types of work contracted, although their general health risk is no so high based on a comprehensive judgment encompassing infectivity, the seriousness of symptoms, etc.	· Restrictions on engagement in certain types of work · Disinfection and other material measures
	Category IV infectious diseases · Influenza · Viral hepatitis · Yellow fever · Q fever · Rabies · Cryptosporidium infection · Acquired immunodeficiency syndrome (AIDS) · Genital chlamydial disease · Syphilis · Measles · Malaria · Methicillin-resistant Staphylococcus aureus (MRSA) infection · Other infectious diseases	Infectious diseases for which the National Government should undertake surveillance and supply the general public and medical community with appropriate information based on its results etc. to prevent their outbreak and spread	· Collection and analysis of information relating to infectious disease outbreaks and disclosure/supply of analysis results
Designated infectious diseases	Any infectious disease so-designated via a cabinet order for a limited period of one year	Known infectious diseases not classified as category I to III for which the need for a response comparable to that applicable to category I to III infectious diseases has arisen (to be designated via a cabinet order for a limited period of one year)	Measures comparable to those applicable to category I to III infectious diseases—including hospitalization and disinfection and other material measures—to be implemented by the Minister for Health and Welfare, taking into consideration the view of the Public Health Panel (applicable provisions to be specified via a cabinet order)
New infectious diseases	[Initially] Any infectious disease subject to urgent response by prefectural governors on a case by case basis, in accordance with the technical guidance and advice of the Minister for Health and Welfare	Diseases that are known to be passed on from person to person, exhibit clearly different characteristics from known infectious diseases in terms of symptoms etc., and pose an extremely high health risk based on a comprehensive judgment encompassing infectivity and seriousness of symptoms	Technical guidance and advice on response measures to be given to prefectural governors by the Minister for Health and Welfare on a case by case basis, taking into consideration the view of the Public Health Panel
	[After recognition of conditions] Any disease to be treated in a similar manner to a category I infectious disease as soon as symptoms and other conditions are specified via a cabinet order		Response measures comparable to those applicable to category I infectious diseases to be taken

Relevant Laws

In Japan, infectious disease control measures are based on the following six laws:

- (1) Communicable Disease Prevention Law (1897)
- (2) Preventive Vaccination Law (1948)
- (3) Venereal Disease Prevention Law (1948)
- (4) Quarantine Law (1951)
- (5) Tuberculosis Prevention Law (1951)
- (6) AIDS Prevention Law (1989)

Communicable Disease Prevention Law (1897)

This is the oldest infectious disease-related Law, enacted more than 90 years ago. Since various communicable diseases were highly prevalent in those days and sanitary conditions were bad and modern preventive medical technologies were unavailable, the countermeasures outlined in this law were restricted to physicians reports, the isolation of the people infected, the disinfection of the contaminated area, and the extermination of vermin, and broad powers were given to administrative organs to implement these measures (Fig. 1-1).

Quarantine Law

The present Quarantine Law was enacted in 1951 to protect against the invasion of pathogenic organisms of dangerous contagious diseases which are not endemic to Japan. At present, cholera, plague, small pox and yellow fever are designated as the diseases to be inspected, and quarantine stations have so far been established at 82 seaports and 21 airports.

According to the Law and related regulations, the following services are performed:

(1) Quarantine Inspection

Passengers of ships or aircraft arriving in a port are quarantined before disembarkation and questioned regarding their health by questionnaire or by direct inspection. Sampling inspections are also performed against fresh fishery products imported from cholera-epidemic areas, and are examined for possible contamination by cholera toxin-positive *V. cholerae*.

(2) Port Area Hygiene Control

To maintain good hygienic conditions at ports, ships, aircraft and all related facilities are periodically examined for possible contamination of the pathogens for Japanese encephalitis and malaria, as well as for designated quarantine diseases in food, drinking water, sewage, and vermin.

Surveillance System of Communicable Diseases

As mentioned before, we are confronted with a changing trend in communicable diseases. In order to cope with this trend, and to promote more effective disease control, new measures have been introduced in addition to the measures specified by the Laws.

Predictive Surveillance of Communicable Diseases

To obtain accurate information on epidemics rather than on case notification would be desirable in order to acquire forehand intelligence and take prospective and adequate measures to combat communicable diseases. Such work was introduced in 1962, consisting of serological surveys for antibody levels and for microbiological studies for the isolation and identification of causal agents. For seroepidemiological studies, 5–18 areas have been chosen according to disease characteristics. From each area, 150–240 persons were sampled and were divided into groups by age and 20–40 sera per age group were collected. Data is analyzed and compiled in the annual report by the Division responsible for Infectious Diseases Surveillance, the Ministry of Health and Welfare, and the Division of Serological Intelligence, the National Institute of Health, which is designated as the WHO Serum Reference Bank. Acute poliomyelitis, influenza, rubella, Japanese encephalitis, pertussis, diphtheria and measles are covered by this survey.

Laboratory Data Collection System

Laboratory diagnosis and reference services for communicable diseases important to public health were started in 1979 with the support of 72 Local Institutes of Hygiene and the National Institute of Health. The monthly report is published by the Division responsible for Infectious diseases Surveillance, the Ministry of Health and Welfare, and the national Institute of Health.

Acute Poliomyelitis

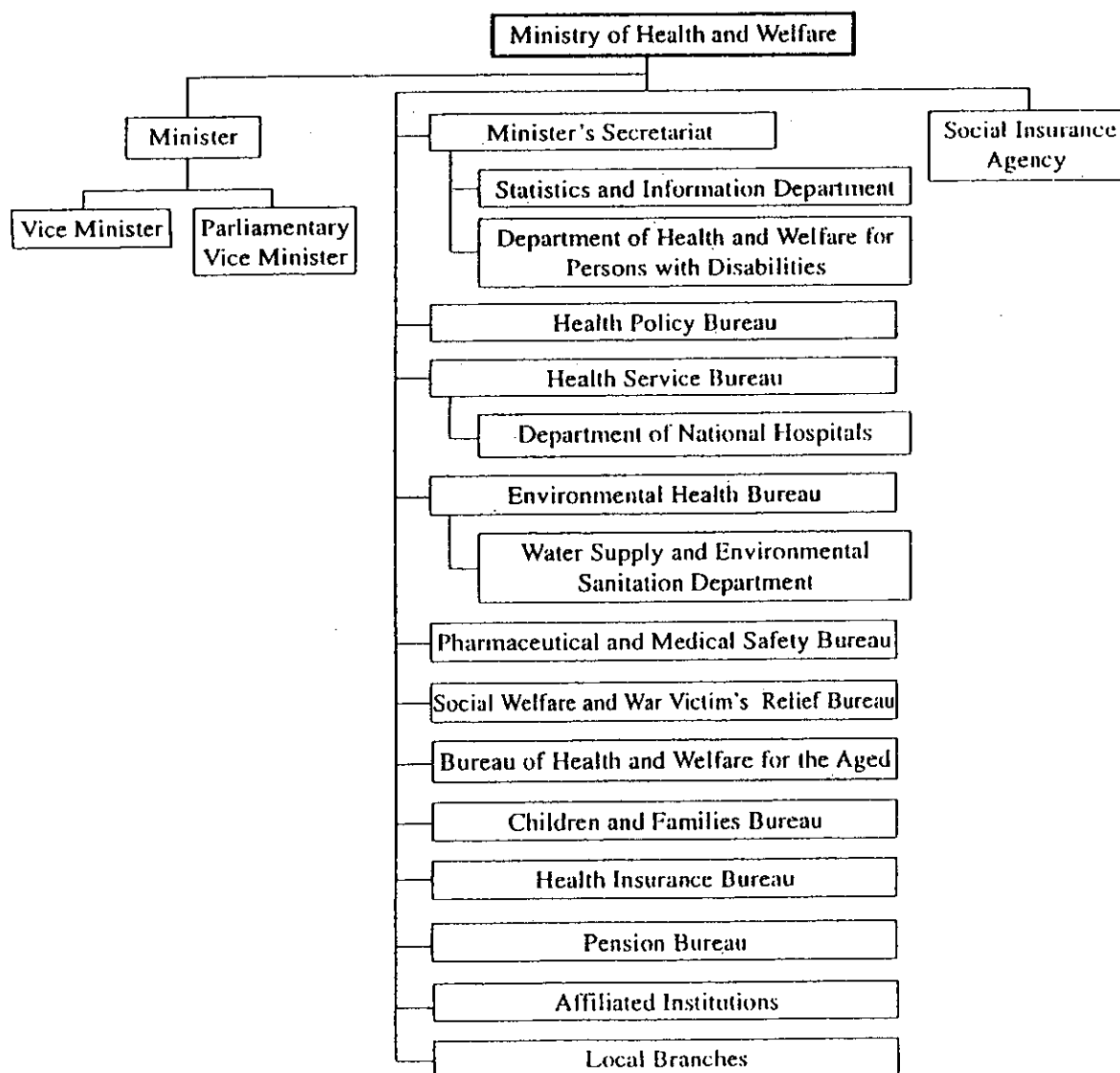
In 1960, the total number of reported cases of acute poliomyelitis amounted to 5,606, the largest number since the reporting system was initiated. In order to cope with this severe outbreak, attenuated live poliovirus vaccines (Sabin) were rapidly introduced in 1961. Since the introduction of such vaccinations the number of cases has sharply decreased and the wild-type poliovirus is believed to have been eradicated from Japan since no case of wild-type viral infection has been identified since 1985. However the surveillance of poliomyelitis still continues, all cases are registered and serological surveys for the levels of antibodies against polioviruses, and virological investigations to identify polioviruses isolated from the feces of the patients and healthy children, have been being carried out.

4-7-5: Description of private sector and relationship with public health care system (including Annex 4-7-3. Primary health care delivery)

General Administration and Local Autonomy of Public Health Administration

Which Ministry Is Responsible for Public Health Administration?

The Japanese Constitution states that the government has to make efforts to promote public health and welfare. Though public health tends to be restricted to diseases prevention and health promotion in Japan, the definition of public health in the constitution includes medical care as well. According to this statement, the Ministry of Health and Welfare (“Koseisho” in Japanese) is carrying out its works. Its organization is shown as Fig. 1-3. In addition to the Ministry of Health and Welfare, the Ministry of Education, Science and Culture (“Monbusho”), the

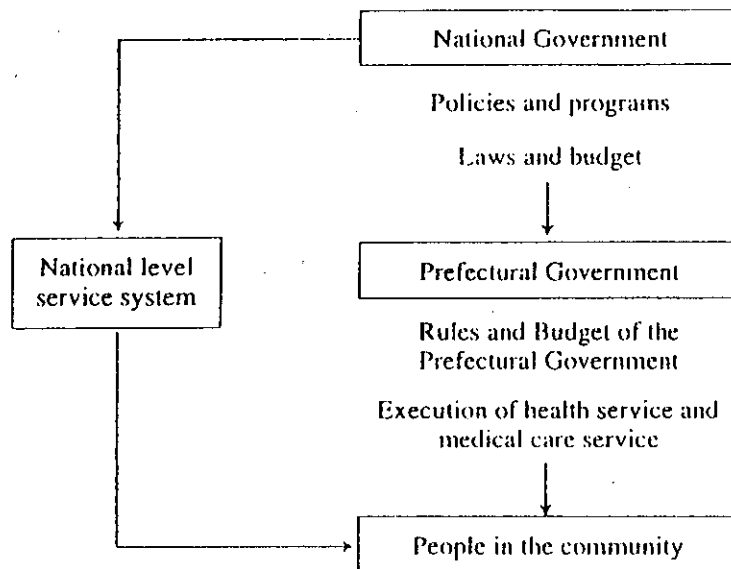


Organization of the Ministry of Health and Welfare

(Fig. 1-4)

Ministry of Labor (“*Rodosho*”) and the Environmental Agency (“*Kankyochō*”) take charge of school health, occupational health and environmental health respectively. The organizational charts related to health of such ministries are also shown as Fig. 1-4.

Health services delivery systems differ in medical care and disease prevention. Medical care service is offered by hospitals and clinics, most of which belong to private sectors. On the other hand, almost all preventive services are provided directly or indirectly by the government.

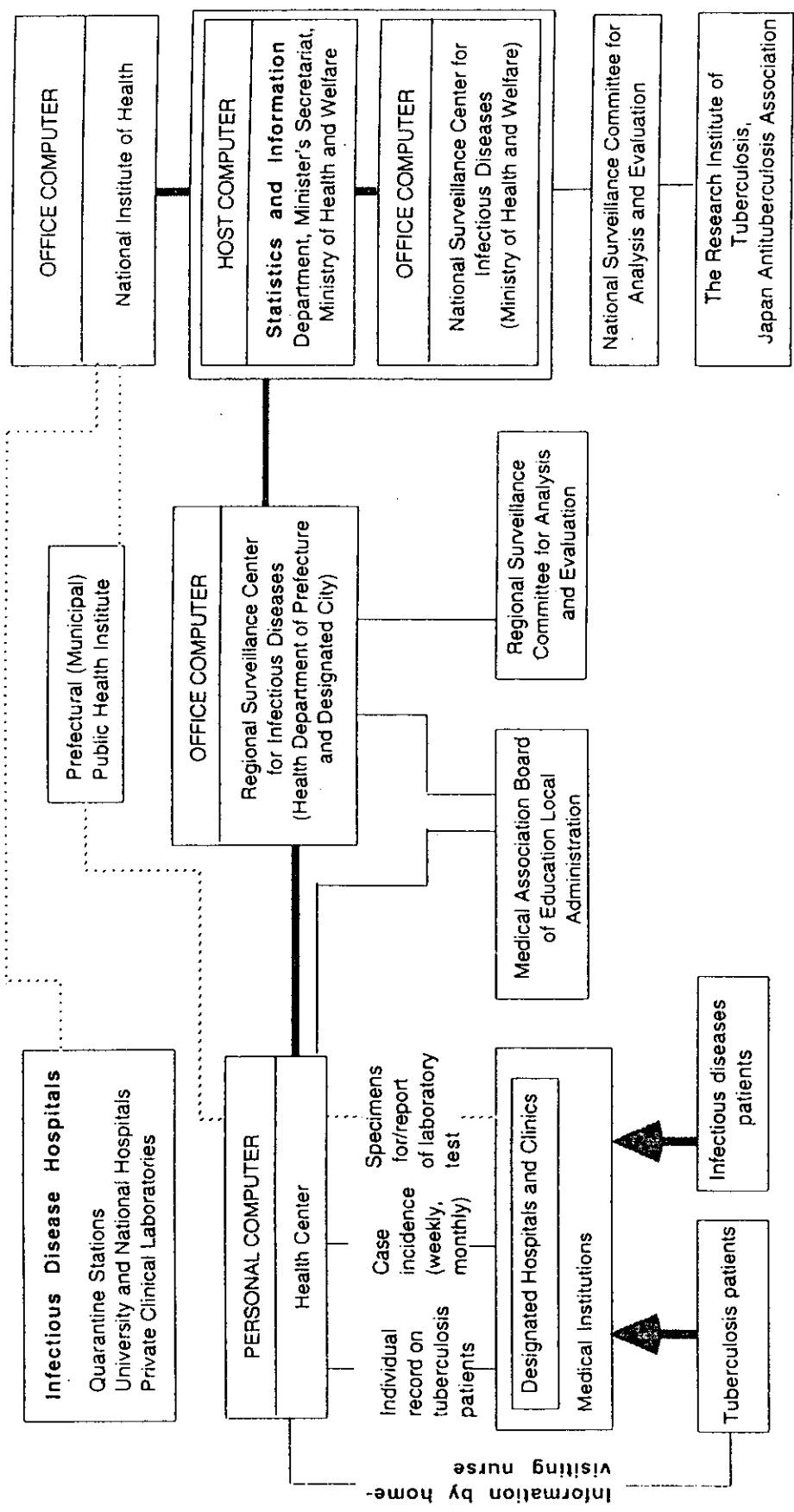


Notice and Guidance from the National Government to the Prefectural Governments

A notice from the National Government has several levels. One is from the Minister for Health and Welfare, while another is from the Director-General of the Bureau. A more detailed notice will be proposed from the Director of each Division. Generally speaking, notices on various health services from the National Government to

Prefectural and City/Town/Village Governments are of the nature of guidance or detailed explanation, or are designed to obtain understanding on, and cooperation with, the services from the officers in charge of them in Prefectural and City/Town/Village Governments. These notices enable Prefectural and City/Town/Village Governments to know the details of the services which they offer directly to the inhabitants, and formulate their budget plans and specific service provision plans based on the situation of national subsidies, etc.

Each department of the National Government staff have meetings at several levels with their counterparts of the Prefectural Governments' staff (Directors of Departments, Directors of Divisions, etc.). By holding these meetings, more detailed guidance can be given and each service system can be carried out in a uniform manner and principle.



Surveillance System for Tuberculosis and Other Infectious Diseases in Japan

What Is the Public Health Administration at a Local Level?

Public health administration in local governments have departments or sections corresponding to related ministries. Usually departments (sections) related to health, environment and welfare exist combined with others. For instance a department of health and environment, or a department of health and welfare. This is decided according to the size and the policy of each local government. On the other hand, an educational department (section) is independent from others. However, almost all departments are usually assembled in the same building of the local government and staff members rotate among various departments due to personal management, which help communications among the departments. Therefore, it becomes possible for a local government to rearrange national policies and make them fit the local situation even when they come from different ministries.

In the front line preventive services are provided by public health centers ("*Hoken-jo*" in Japanese) and municipal offices. All prefectures, designated cities (47) and special wards (23) of Tokyo Metropolis have public health centers. Public health centers are part of the local government in structural aspect and are supposed to provide services. Municipal offices employ public health nurses and are engaged in preventive services; health guidance to the people, health examinations, etc. Usually they work together with the public health center, doctors association, and other related bodies in the area.

How Are Preventive Services Conducted at the Front Line?

There were 641 public health centers all over the country as of April 1999. 474 of them are prefectural, 136 were established by designated cities, 31 by special Tokyo Wards, and 47 by cities appointed by the Ministry of Health and Welfare. 1,360 medical doctors (physicians) and dentists, 8,765 public health nurses and midwives

and 6,513 pharmacists, veterinarian, and other technicians are working in the centers. A director of a public health center must be a medical doctor considering the responsibilities of the position. Major activities which a public health center carries out are as follows: health check and disease detection, dental health, health education, environmental and food hygiene, laboratory testing and examination, etc.

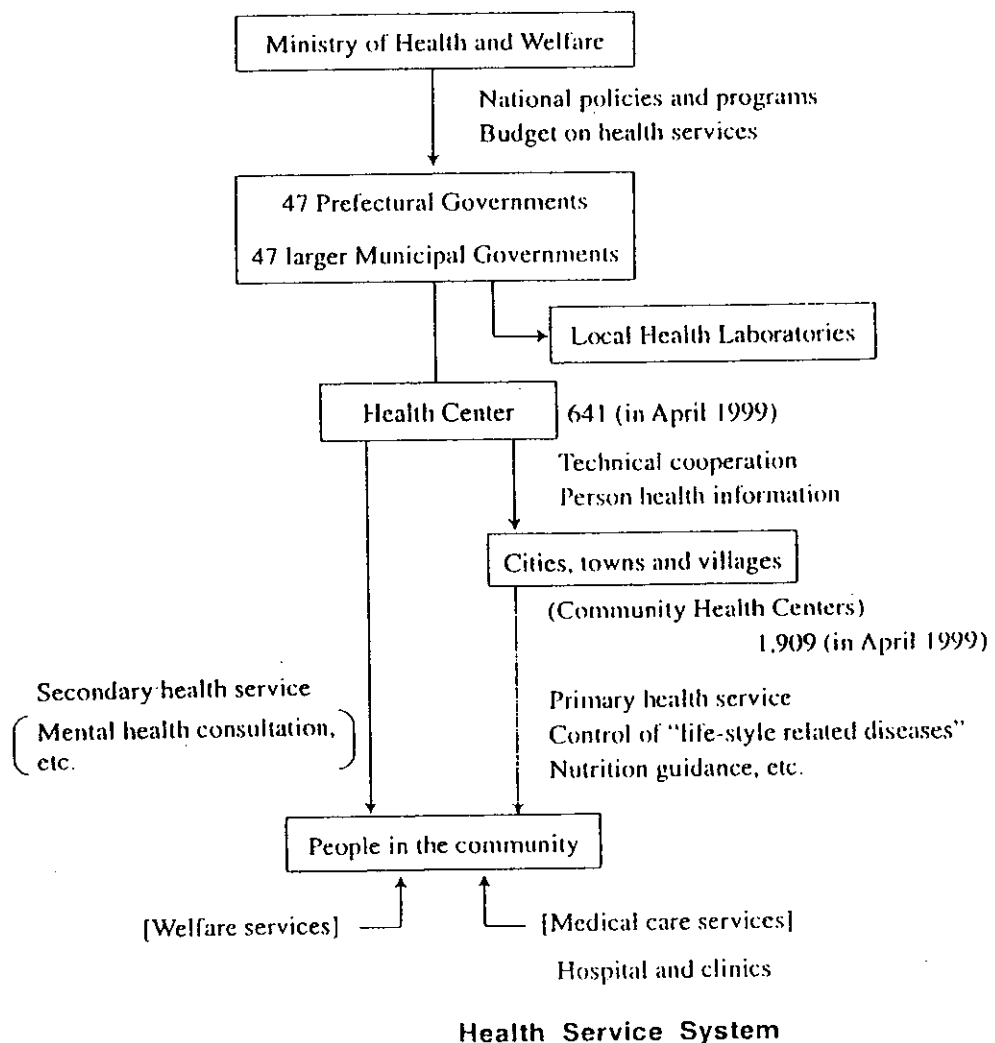
Municipal offices take charge of providing more direct services to the residents. Therefore, their services are much more closely connected with daily life than are those of prefectural government. Health related services are: immunization, health check and disease detection, issue of "Maternal and Child Health Handbook" and health check of 18-month-old infants, health education, water supply services, garbage collection and waste or night soil treatment, etc. These services are done based on resident registration, so they are announced by means of a newsletter and mail from a municipality office.

Organization of Local Health Administration

Each Prefectural Government or larger Municipal Government has its own Health Department in order to carry out its health programs in compliance with the national policies and programs, directed by the Ministry of Health and Welfare.

These Prefectural and Municipal Governments divide their administrative boundaries into several Health Center districts which cover cities, towns and villages. A Health Center is established in each one of those districts. For the reason of geographical conditions, some of the Health Centers have branch stations within their districts. Further details on the Health Centers are described in the following section.

Figure 3-1 is a chart showing the functional relationship between the M.H.W and Prefectural Governments, Health Centers Community Health Center and the health service system in each community.



Community Health Centers

For about the last 20 years, community health centers have been developed nationwide as bases of health services for people in municipalities. The enactment of the Community Health Law in 1994 gave a legal basis to these centers, with the objective of carrying out projects necessary for regional health services for residents, such as health consultation and guidance and medical checkups. They are to be developed as bases of regional health activities in municipalities separately from health centers that make up wide-area, specialist, and technical bases. (1,909 as of April 1, 1999).

Health Insurance System in Japan

Basic Principles of Medical Insurance

An insurance is a system to pool possible risks of losses of individuals in anticipation of occurrences of accidents and to bear the risks collectively.

In the cases of accidents which require government's social policy and relief measures, such as the cases in which the citizens suffer from illnesses, old age and unemployment, the government of Japan requires the citizens and corporations by law to form or participate in collective social insurance schemes. Such collective insurance associations and societies can sufficiently spread the risks involved in such cases of sufferings evenly over many people.

A medical insurance is a type of social insurance with aims to cover the cost of the treatment of diseases and injuries.

The medical insurance system in Japan has the following features:

1) Subscription is compulsory.

Subscription to a medical insurance is compulsory, as a principle, for all those who have a certain qualifying conditions. Because of this principle, the premium is determined by the subscriber's ability to pay, that is a subscriber pays a certain percentage of his/her income as premium. But the benefit theory is also adopted to some extent.

2) The insurance scheme to which one can subscribe is pre-determined.

Since it is required by the government's social policy, the medical insurance scheme to which one can subscribe is determined regardless of the subscriber's wish. Citizens can not choose a medical insurance to belong to on their own wish.

3) Uniform benefits are provided by all the insurance schemes.

The purpose of our medical insurance system is to provide uniform, standard benefits to all citizens and fulfill the requirements of the government's social policy in coping with accidents covered by the insurances.

4) A medical insurance scheme in this system must be managed by a public body.

A medical insurance scheme under this system is of public interest by nature and thus is managed by the state (logical government) or by an organization of a similar characteristics.

5) Patients pay a part of medical coinsurances is justifies to balance the burden between the patients and the other insured in good health.

Overview of the Medical Insurance System in Japan

In Japan, the cost of medical security is paid mainly by the public medical insurance schemes.

The medical insurance system is divided into two categories; namely, 1) insurance schemes organized at work places for employed persons, including the government-managed health insurance schemes; 2) the National Health Insurance, the schemes based in geographical region. Each and every citizen subscribes to either one of the above two. this universal health insurance system was introduced in 1961 in this country.

Medical Insurance Schemes	Schemes for the employed (at work places)	Health Insurance	Schemes for general employed persons	Municipality	Those who are employed at places where no insurance society is formed mostly small & medium companies
			National Health Insurance Association	Those who are employed at places where an insurance society is formed mostly big companies	
			Schemes for day laborers		Those who are employed on daily basis or employed for a fixed length of period less than two months
			Seamen's Insurance Schemes	Ship crews—those who work on a certain types of ships	
			Mutual Aid Associations for the National Government Employees, etc.	National government employees and employees of Japan Railways, Nippon Telegraph and Telephone Co., Japan Tobacco Industry	
			Mutual Aid Associations for the Local Government's Employees, etc.	Local government employees	
			Mutual Aid Associations for the Private School Teachers & Staffs	Teachers and staffs of private schools	
	Regional Insurances	National Health Insurance	Government-managed schemes	Those other than subscribers of the employees' insurance schemes—farmers, self-employed, carpenters, doctors, etc.	
			Society-managed schemes	same as the above	

Note: Those who are over 70 years old in each of the above scheme and those between ages 65 and 70 and bed-ridden are entitled to the medical service benefits provided by the Law for the Health and Welfare for the Aged.

Medical Services Covered by Medical Insurance

Medical services which are covered by medical insurance are specified by the provisions of the Health Insurance Law, the National Health Insurance Law, and others.

Art. 43 Para. 1 of the Health Insurance Law gives the scope of coverage, as follows:

- 1) Medical consultation
- 2) Provision of medication and therapeutic supplies
- 3) Procedures, operations, and other treatment
- 4) Accommodation of a patient in a hospital or clinic
- 5) Nursing
- 6) Transfer of a patient from one institution to another

The following medical services are not covered by medical insurance:

- 1) An illness or an injury during work or during the commute to or from the workplace. (In this case, the Workmen's Accident Compensation Insurance Law is applied.)
- 2) Services provided for conditions not regarded as disease.
 1. a. Uncomplicated fatigue or a dull feeling
 - b. Cosmetic surgery
 - c. Congenital dermatological minor abnormalities
 - d. Normal pregnancy and delivery
 2. Physical check-ups and associated tests
 3. Vaccinations
 4. Abortions due to economic reasons
- 3) Others
 1. Restrictions on unjust or unfair actions
If the case falls in one of the following categories, it is not covered medical insurance policy.
 - a) A disease or an injury caused by a criminal action or an intentional accident (e.g. in the case when a person is hospitalized after an aborted suicide), except for an accident in abnormal mental state, such as psychiatric disease.
 - b) A disease or an injury caused by an accident due to marked immoral behavior, drunkenness, the use of unprescribed narcotics, etc.