Chapter 1 The History of Public Health and Medical Services

In order to understand the general condition of public health and medical services in Japan, we will first review changes in population demographics, birth and mortality rates, and disease prevalence. We will then introduce the history of Japan's initiatives in the field of public health and medical services from the Meiji Era (1868~) to the present day, to gain an overview of what initiatives were conducted in each phase.

1. Demographics: Population, Birth and Mortality Rate, Disease Prevalence

1-1 Population Change

As of October 1, 2002, the total population of Japan was 127,430,000, making it the 7th most populous nation in the world. In the late 1800's, corresponding to the early Meiji Era, the

population of Japan was estimated at 35 million. With subsequent establishment of a capitalist society and economic development came an increase in population, exceeding 64 million by the year 1930 (see Figure 1-1).

Following the end of the Second World War, with the return of soldiers and civilians from overseas, and natural increase due to the first Baby Boom in the 3 years from 1947 to 1949, the population increased by roughly 10 million people, reaching 83.2 million in 1950. Since 1950, the population growth rate has been stable at roughly 1% per year.

Since 1970, a reduced birth rate and increased life expectancy have led to a rapid aging of the Japanese population. In 1970, the elderly population (population aged 65 years old and over) exceeded 7% of the total population, meeting the UN definition of an "aging society." Life expectancy

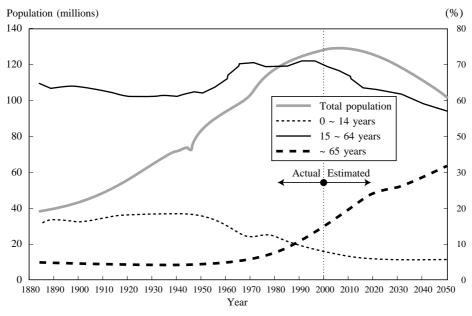


Figure 1-1 Trends in Total Population and Population Demographics

Source: Complied by the author on the basis of data from the National Institute of Population and Social Security Research.

has subsequently continued to increase, and a tendency to marry later or to remain unmarried has further reduced the birth rate. As of April 2002, the proportion of elderly was 18.3% of the total population, considerably greater than the proportion of children (aged under 14 years) of 14.3%. As a result of the long term reduction in the birth rate, the Japanese population is expected to reach a peak in 2006, and subsequently decline (estimates as of January 2002).

1-2 Birth and Mortality Rate

Until around 1870 (early Meiji Era), both the birth rate and mortality rate were high in Japan, a period of "high fertility and mortality" (see Figure 1-2). While mortality rate subsequently declined, the birth rate tended to rise until around 1910, and then went into a gradual decline. This was the period of "high fertility but low mortality."

After the chaos of the Second World War, the first post-war Baby Boom saw the birth rate soar,

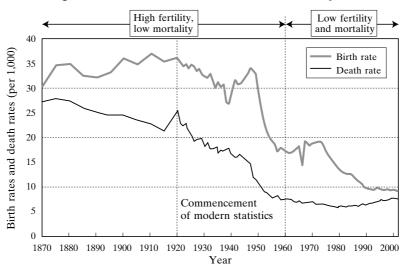


Figure 1-2 Trends in Birth Rate and Mortality Rate

Source: Compiled by the author on the basis of data from the National Institute of Population and Social Security Research.

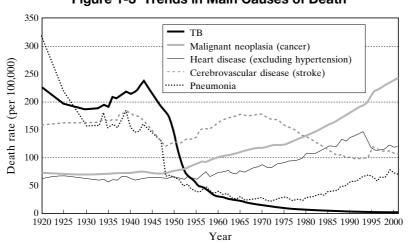


Figure 1-3 Trends in Main Causes of Death

Source: Compiled by the author on the basis of data from Ministry of Health, Labour and Welfare

¹ Ato, Makoto (2000) Gendai Jinko-gaku [Modern Demography], Nihon Hyoron-sha.

reaching at its peak of 2.7 million births per year. However, the birth rate fell dramatically after 1949, and declined most precipitously during the period 1949~1957. The main reason for this decline was the Eugenic Protection Law of 1948 (now the Mother's Body Protection Law), that allowed induced abortion under certain conditions. In 1955, the number of reported induced abortions had reached 1.17 million, a figure to rival the 1.73 million births recorded in the same year. The mortality rate also declined markedly during the same period.

The birth rate has continued to decline from 1973 until the present day. On the other hand, the mortality rate began a gradual but steady increase from the late 1980's, as a result of the aging population. With both the birth rate and the mortality rate at low levels, the period after 1960 has been called that of "low fertility and mortality."

1-3 The Structure of Disease Prevalence

If we examine changes in the structure of

disease prevalence in terms of changes in the main causes of death (mortality rates per 100,000), we see that pneumonia was the number one cause of death until the end of the Meiji Era, and then tuberculosis became the number one cause. This situation continued until 1951. In 1951, tuberculosis was replaced as the leading cause of death by "cerebrovascular disease (stroke)," followed by "malignant neoplasia (cancer)" as the second and "pneumonia, etc." as the third.

This brought together what remain today the three leading causes of death. It can be said that at this time the major causes of death changed from infectious diseases to lifestyle-related diseases. Since the late 1960's, cerebrovascular disease (stroke) has steadily declined, whereas heart disease has increased as a cause of death. Malignant neoplasia (cancer) increased steadily throughout the post-war period, becoming the number one cause of death in 1981, and has subsequently continued to increase (see Figure 1-3)³.

Table 1-1 Classification of the Phases in Public Health and Medical Systems in Japan

	Phase I	Phase II	Phase III	Phase IV	Phase V
	1868~1919	1920~1945	1946~1960	1961~1979	1980~present
Period	Acute infectious diseases control	Chronic infectious diseases control and formation of maternal and child health services	Restructuring the health administration	Expanding medical services	Challenge of an aging society
Main Issues	Acute infectious diseases	Chronic infectious diseases Maternal and child health	Postwar acute infectious diseases Chronic infectious diseases Maternal and child health Sanitation	Lifestyle-related diseases Traffic accidents Environmental pollution Occupational health	Low birth rate and aging population
Initiatives	Establishment of a centrally directed epidemic prevention systems Collation of statistics	• Initiation of a community-based approach to public health, centered on public health nurses	Restructure of the health administration Community-based health approach to public health	Universal health insurance coverage Expansion of medical services National movement demanding better public health and medical services	Effective and efficient distribution of medical institutions and personnel Radical reform of the social security system Promotion of new community-based public health

Source: compiled by the author.

³ Causes of death were classified in accordance with the WHO criteria, but major modifications to these criteria in 1995 (set in 1979) mean that caution is required in making comparison of data from before and after 1995.

2. The History of Public Health and Medical Services⁴

In this study, we examined changes in public health and medical services in Japan since the Meiji Era (1868~1912), dividing this period into five phases, looking at both the principal challenges in each phase and the main initiatives taken to meet those challenges (see Table 1-1).⁵ We will briefly outline the characteristics of each phase.

Phase I "Acute Infectious Diseases Control" was the period in which Western medicine was introduced to Japan as part of its modernization, and acute infectious diseases were the greatest challenge.

Phase II "Chronic Infectious Disease Control and Formation of Maternal and Child Health Services" was the period when, in accordance with the Kenpei-Kenmin (Healthy Soldier, Healthy People) concept, public health services were strengthened to combat chronic infectious diseases and to improve maternal and child health. The basic structure of the public health system of today was established during this phase.

Phase III "Restructuring the Health Administration" was the period in which the administration of public health and medical services was restructured as part of the recovery from the defeat in the Second World War. Initiatives during this period dealt with the urgent challenge of acute infectious diseases, as well as tuberculosis. Other programs strongly promoted maternal and child health and family planning, bringing rapid reductions in the infant mortality rate as well as the birth rate in this phase.

Phase IV "Expanding Medical Services" was the period in which universal health insurance coverage was achieved, leading to a rapid increase in the demand for medical services, necessitating expansion of the capacity of the medical system. Environmental pollution from the flourishing heavy chemical industry at this time became a major social problem. Lifestyle-related diseases replaced infectious diseases as the major health challenge during this period.

Phase V "Challenge of an Aging Society" is the period in which we need to make drastic reforms in the health care and medical system to meet the challenges caused by a rapidly aging population. In the midst of large scale restructuring of the social security system, the provision of health care and medical services is also undergoing reexamination. This is a period when the providing system of community-based service is also being reinforced in the health care field in the decentralization of many governmental activities.

We will now provide an overview of the characteristics of Japan's initiatives in the field of public health and medical services for each phase.

2-1 Phase I: Acute Infectious Disease Control (1868~1919)

[The Birth of a Modern Nation]

In 1868, Japan ended a 250 year period of isolationism and the Bakuhan-taisei (Shogunate and domain system, feudal system comprising the Shogun and the lords of each domain). The newly established Meiji Government strived to remake and develop Japan into a modern nation the equal of the Western nations. Public health administration was also part of this process of becoming a modern nation.

[Introduction of a Western Medical System]

In 1868, Japan decided to introduce Western modern medicine, and a medical section was set up within the Ministry of Education. By 1872, public health services were commenced. The purpose of the establishment of the medical

⁴ This subsection is written based on Part II, so for details of initiatives in each field, please refer to the relevant chapter in Part II.

⁵ In setting the time divisions, as described in the Appendix at the end of this chapter, a number of commonly used systems were considered before deciding on the time divisions, that should be easily understandable to people in developing countries using the Western calendar.

section was to manage medical education and medical administration uniformly. The following year in 1873, the medical section became the Medical Bureau. In 1874, the "Comprehensive Medical Code" was promulgated, setting the standards for central and regional public health administrative structures, medical education systems, the establishment and management of medical institutions, the disposition of medical personnel, and pharmacological administration.

The most notable aspect of the Comprehensive Medical Code was that it established a system for provision of medical services under central governmental control, that it expanded medical education and the medical registration system, and that it set up a national medical system centered on private clinics/hospitals. In 1875, with the exception of medical education, all medical and health administration was transferred to the Ministry of Home Affairs.

[Professional Training]

Schools that had taught traditional medicine were progressively reborn as Western medical schools. These medical schools set up programs, raced one another to employ well-known medical educators from Germany and England, and trained the first generation of doctors to practice Western medicine in Japan.

During the Edo Era (1603~1868) there were a variety of "self-styled doctors," including practitioners of traditional Chinese medicine (Kanpo). In 1879, the "Medical License Examination Regulations" were promulgated, establishing a system whereby only candidates who had studied Western medicine were eligible for a license to practice medicine. Subsequent increases in the number of regional medical schools saw the number of licensed qualified doctors rise sharply from 36,000 in 1907 to 40,000 in 1911, and 49,000 in 1931⁶. In 1906, with the passage of the Medical Practitioners' Law and the Dental Practitioners' Law, the medical

license became an accreditation rather than a license to practice.

During the Edo Era, "sanba," traditional birth attendants, practiced widely, but there was no system of accreditation or training, as well as a lack of scientific knowledge or technical skill, and some specialized in performing abortions. Immediately following the Restoration (in 1868), the new Meiji Government accordingly issued a proclamation prohibiting the sale of medicines or procuring of abortions by sanba (abortion was made a criminal offense in the (Old) Penal Code enacted in 1880). Nationwide accreditation of sanba commenced with the "Sanba Kisoku (Midwifery Regulations)" in 1899. These regulations set national standards for the age, range of permitted activities, and accreditation of midwives. Midwifery training schools were subsequently established in all parts of the nation.

In comparison to doctors and midwives, the history of nurses in Japan is much more recent. The profession of nursing was established nationally with the promulgation of the "Kangofu Kisoku (Nursing Regulations)" in 1915, as until that time the accreditation of nurses had been the jurisdiction of the individual prefectural government.

[Health Administration as Part of a Social Security System]

With the end of Japan's period of isolation, trade flourished with foreign countries. With the trade came repeated epidemics of exotic infections, including cholera, bubonic plague, and smallpox. To combat this situation, the public health administration was strengthened, with emphasis on controlling acute infectious diseases through hygiene and sanitation measures. The basis of this program was "social defense," with the police making up the front line. The public health and medical system was expanded in this way under firm central government control.

Recognizing the need for a systematic

⁶ Kawakami, Takeshi (1965) Gendai Nihon Iryoshi-Kaigyoisei no Hensen [Japan's History of Modern Medical Care —History of System of Medical Practitioners] Keiso Shobo.

approach to infectious disease control, in 1879 the Ministry for Home Affairs directed all prefectures to establish a Health Bureau. At the same time, due to financial restrictions "Community Public Hygiene Committees" were set up as local government bodies to provide community-based public health services. In 1885, a regional system of government was established along with the introduction of the Cabinet system. The organization of the regional health administration was also revised at this time, and brought under central governmental control. Public health administration in remote areas became one of the duties of the police departments of local government, and the Community Public Hygiene Committee system was abolished.

In 1893, the Department of Police at the local government took over responsibility for public health administration, and essentially this situation continued until the end of the Second World War in 1945.

[Collection of Statistics and Determination of Policies Based on Scientific Evidence]

Accurate statistics are fundamental to a public health and medical information system. Mortality statistics from 1876, and "population statistics" from 1899, allowed the collation of reasonably accurate data concerning births and deaths. Collation of these statistics and the conduct of national surveys set the course for policy formulation based on scientific evidence, and boosted the performance of the administration of public health and medical services.

In 1916 the Ministry of Home Affairs established the "Health and Sanitation Research Council." This council conducted research principally in the eight areas of 1) infants, toddlers, school-age children and adolescents; 2) tuberculosis; 3) venereal disease (sexually transmitted disease); 4) leprosy (Hansen's Disease); 5) mental illness; 6) food, clothing, and housing; 7) sanitation in rural villages; and 8) statistics. These surveys revealed many hitherto unknown aspects throughout the country. Chronic infectious diseases such as

tuberculosis, infant mortality rates, and problems with the development and health of the populace were found to be markedly more serious than in foreign countries.

As a result, a number of new laws, including the Tuberculosis Prevention Law, Leprosy Prevention Law, Trachoma Prevention Law, Venereal Disease Prevention Law, and Parasitic Disease Prevention Law were enacted. Progress was seen in chronic infectious disease control measures. Statistics were collected, and surveys conducted, over the ensuing decades, and the first modern National Census was conducted in 1920. Population statistics were now collected using fully scientific methods, enabling policy formulation based on accurate understanding of the present situation, and soundly based predictions of the future.

[Public Health Infrastructure]

In the early Meiji Era (1868~), there was recognition that it would be important to improve sanitation. These improvements included improved drinking water quality, street cleaning and refuse collection, sewage treatment and better housing, as control measures for acute infectious diseases, especially cholera, and steps to eliminate the cause of such contagions. In practice, however, the health administration was fully occupied dealing with repeated epidemics, and found it difficult to devote resources to sanitation.

An effective approach to cholera was developed by the late 1800's, and programs commenced to improve water supplies and sewage. Public water supplies were tackled first. Following the laying of the first piped water supply in Yokohama in 1887, and the enforcement of the municipal system in 1889, water supplies were planned throughout the country as municipal projects. In 1890 the government set regulations to further promote the provision of water supplies. The Sewerage Law (obsolete law) and Waste Management Law were also enacted in 1900.

2-2 Phase II: Chronic Infectious Disease Control and Formation of Maternal and Child Health Services (1920~1945)

[Continues Development of the Public Health and Medical System during Wartime]

During wartime, Japan functioned under military rule. War-related industries flourished, and centralized administrative organizations expanded. In accordance with the *Kenpei-Kenmin* (Healthy Soldier, Healthy People) concept, a series of related programs were set up to control chronic infectious diseases, ameliorate maternal and child health, and improve the physique of the population. The Ministry of Health and Welfare was established in 1938, completing the present structure of the public health and medical system particularly programs to combat tuberculosis and reduce the infant and maternal mortality rates, the two great national challenges.

[Tuberculosis—the National Scourge]

During this period, tuberculosis spread through female textile mill workers, workers in munitions factories, as well as the armed forces. When those infected returned to their home towns, they took tuberculosis with them, spreading the infection throughout the country. There was no specific treatment for tuberculosis at that time, and the only recourse was to build up the strength of sufferers using the three elements of rest, nutrition, clean air, and wait for them to recover. Deaths from tuberculosis rose steadily from the 1900's, reaching a peak of 140,000 deaths, and a mortality rate of 257.1 (per 100,000 population) in 1918. Tuberculosis was feared as a "national scourge" by the general population (see Chapter 5 Figure 5-1). In the face of this situation, the government enacted the "Tuberculosis Prevention Law" in 1919, and commenced a systematic tuberculosis control program.

[From Epidemic Prevention to Disease Prevention]

As part of a program to reduce the infant

mortality rate, in 1926 the the Ministry of Health and Welfare established Infant Welfare Centers in each locality, staffed by public health nurses. The public health nurses performed home visits, offering lifestyle guidance and disease prevention activities for pregnant women and their children. Similar outreach health counseling was conducted in each municipality, leading establishment of the public health center system.

During this phase, regional villages in northeast Honshu (the main island of Japan) were gripped by poverty caused by economic depression and natural disasters. Medical expenses were a tremendous burden on poor farmers, so they were unable to see a doctor, leading to an extremely high infant mortality rate. In regions such as this, charity organizations such as the *Onshi Zaidan Saiseikai* (Imperial Gift Foundation Saisei Association, established in 1911 under Imperial aegis) and the *Tohokukoshin-kai* (Tohoku Association for Revitalization, a community organization established in 1935) conducted programs to save lives in rural villages, posting public health nurses to remote doctorless areas.

These programs only reached a small proportion of the needy areas, however, and with the enactment of the National Health Insurance Law in 1938 came the establishment of a system of "community public health nurses," with public health nurses stationed nationwide, including local industrial guilds and municipalities. The activities of public health nurses changed from an emphasis on controlling the epidemics to an emphasis on disease prevention in general. Until the end of the Second World War, public health nurses played a central role in community-based public health activities, working to improve the health of their community.

[The Establishment of Public Health Centers and the Ministry of Health and Welfare]

In accordance with the wartime *Kenpei-Kenmin* (Healthy Soldier, Healthy People) concept, the "Public Health Center Law" was enacted in 1937. Based on various types of health centers

already operating in a number of localities, about 40 public health centers were established nationwide, to provide guidance and consult in a number of areas including tuberculosis control measures, maternal and child health, and improved nutrition.

In 1938, the Ministry of Health and Welfare was established. It is the first time that Japan unified all aspects of the administration of public health and medical services under a single authority. In the same year, the National Health Insurance Law was promulgated. By the end of 1943 the national health insurance (NHI) system had covered over 95% of municipalities in Japan, so this period is known as the "First Era of Universal Health Insurance Coverage."

Towards the end of the Second World War in 1944, health centers that had been set up for various purposes and were run by local government and other organizations, had all been accredited as public health centers under the Public Health Center Law, and the number of public health centers had reached over 700 nationwide.

[Increased Numbers and Activity of Public Health Nurses]

As outlined above, the 1938 National Health Insurance Law included provisions for the placement of public health nurses, so their numbers were increased at this time. The Public Health Center Law created public health nurses positions as local government employees in the public health centers. As their numbers increased, public health nurses working for various organizations with different qualifications began to call for uniform nationwide qualifications. In 1941, under the Public Health Nurse Regulations, a national system of accreditation of public health nurses had begun. The social demands on public health nurses were at their highest in the midst of wartime privations. With death in infancy and from tuberculosis common, public health nurses traversed their districts at all hours respondingto the needs of their communities. They became an essential presence in rural and doctorless villages, providing services ranging from basic health guidance to, at times, simple medical treatment. The dedicated commitment that the public health nurses at this time made, responding flexibly to their clients' needs, should set an example for community-based public health today.

[Commencement of the "Pregnant Mother's Handbook" System]

As part of the Kenpei-Kenmin (Healthy Soldier, Healthy People) policy, in 1942 the "Pregnant Mother's Handbook" system, the precursor of the "Maternal and Child Health Handbook," was launched. A survey conducted in 1940 revealed that of an estimated 2 million pregnancies in Japan that year, 280,000 ended in miscarriage or stillbirth, and 60,000 in induced abortions, with 60,000 premature births. With the aim of improving outcomes in the puerperal period, based on the German "Mutterpass" a comprehensive Japanese Pregnant Mother's Handbook system was developed. This system aimed to provide a comprehensive health monitoring system for pregnant women, new mothers and infants. Under this system, pregnant women were required to register their pregnancy with their local municipality, at which time they were issued with the Handbook, and were advised to undergo medical examinations at least 3 times during the pregnancy.

At each visit, entries were made in the handbook concerning the progress of the pregnancy and birth, and any abnormalities, under the headings "date of check up and consultation," "number of months in pregnancy, etc.," "notes (examination findings, results of investigations)," and "delivery notes." These notes were then available for perusal during the next pregnancy. At the time, there was no concept among the general Japanese population of taking responsibility for one's own health, and the handbooks therefore also served as a revolutionary health education tool. Further impetus was given to the uptake of this system by the realization that, despite wartime food shortages, pregnant women in possession of a Handbook received special rations of sanitary napkins (for use at the time of delivery), gauze, soap and (chicken) eggs.

[Endowments to the Institute of Public Health and Health Care Centers]

The public health training institute of note during this period was the Institute of Public Health⁷ (opened in March 1938), established as an educational institution for Japanese public health professionals with a grant from the Rockefeller Foundation. To this day, the Institute of Public Health plays an important role in education and research in the field of public health in Japan.

In addition, the Rockefeller Foundation made donations to the Kyobashi Health Care Center in Kyobashi, Tokyo (opened in 1935) and the Tokorozawa Health Care Center in Tokorozawa, Saitama Prefecture (opened in 1938). The Kyobashi Health Care Center served as a model of an urban community health center, and the Tokorozawa Health Care Center for a rural community. Both also functioned as training centers for students from the Institute of Public Health.

[Emergence of Private Organization]

The Onshi Zaidan Boshi Aiiku-kai (Imperial Gift Foundation Aiiku Association, now the Nippon Aiiku Institute of Maternal-Child Health and Welfare), was established in 1934 as an Imperial household initiative. The association began a program of Aiiku groups (Married Women's Voluntary Groups for Mother-Child Health and Welfare) in 1936. The association conducted the first surveys of rural farming and fishing villages in Japan and discovered the seriously high infant mortality rate in those areas.

With the idea of involving the entire village in meeting this problem, the association designated "Model Aiiku Villages." In these villages Aiiku groups were set up involving the entire community, with female volunteers becoming Aiiku group members, conducting maternal and child health educational activities through home visits and study

groups. This program was expanded further in 1939, becoming a state subsidised program of the Ministry of Health and Welfare, at its peak increasing up by more than 1,200 villages nationwide in wartime.

An Imperial household initiative, the "Japan Anti-Tuberculosis Foundation" (Japan Anti-Tuberculosis Association, JATA) was similarly established in 1939. JATA remains today the leading player in tuberculosis control programs in Japan, conducting surveys, researching therapies, and formulating tuberculosis policies.

2-3 Phase III: Restructuring the Health Administration (1946~1960)

[Post-war Chaos and Reconstruction]

Immediately following the end of the Second World War, Japanese people's lives were in a state of chaos, with food shortages, typhus fever brought back by those returning from overseas, and epidemics of foreign infectious diseases such as smallpox and cholera. The health indicators for Japan in 1947 were similar to those seen in developing countries today, with the infant mortality rate at 76.7 per 1,000 live births, and tuberculosis the number one cause of death, with 187.2 deaths due to tuberculosis per 1,000 population. In the 10 year post-war period, however, an extraordinary improvement in the health indicators was seen, with the total mortality rate and infant mortality rate both halved, the mortality rate from tuberculosis reduced by twothirds (in 1952, cerebrovascular disease replaced tuberculosis as the number one cause of death), accompanied by a precipitate drop in the birth rate.

Behind these achievements were a combination of factors, including improvements in the socioeconomic situation, higher educational standards, and medical advances. Under the direction of the General Headquarters (GHQ) of the Allied Powers, administration of the public health system was overhauled, and public health

⁷ Now the National Institute of Public Health.

services based on the public health center network was expanded. Also important were the activities of public health nurses, and the spontaneous emergence and spread of community health activities.

[Reconstruction of Health Administration]

Democratization programs were instituted in all areas after the war. The new Japanese Constitution was promulgated on 3 November 1946, guaranteeing the right to life of all citizens, and stating that "In all spheres of life, the State shall use its endeavors for the promotion and extension of social welfare and security, and of public health" (Constitution of Japan, Article 25, Section 2). Reconstruction of the public health administration was also conducted in accordance with the new Constitution. Basic reforms of the administration of public health and medical services conducted under GHQ supervision began with the establishment of the three Health Bureaus (Public Health, Prevention, and Medical Services). That was followed by the establishment of independent Health Departments in each prefectural government in accordance with the 1947 revisions to the Local Government Law.

In the same year, the Public Health Center Law underwent a complete overhaul, expanding and strengthening the network of public health centers, aiming for one center for every 100,000 people. The systems of accreditation for medical services professionals were also extensively reformed, and "Iyaku-bungyou (the separation of dispensary from medical practice)" was introduced. A number of new public health regulations were enacted, including a Child Welfare Law, Preventative Vaccination Law, Eugenic Protection Law, and School Health Law. The Tuberculosis Control Law was also revised. At the same time, budgets were increased, as were the numbers of public health workers, and thus was laid the foundation for a new health services administration.

[Birth of a New Public Health Center]

Under GHQ direction, the "New Public Health

Center Law" was enacted in 1947, expanding the network of public health centers and strengthening their operations, and firmly establishing the position of the public health center as the first line of public health administration in the community. During the post-war period of confusion, the level of public health was extremely poor in Japan, with the spread of sexually transmitted and other infectious diseases, and food shortages. To improve the public health situation, public health centers were placed under the administration of the prefectures, or designated municipalities, and supervised almost all areas of public health measures.

Public health centers were involved in improving and spreading awareness of public health matters. They monitored collection of vital statistics, improvements in nutrition and food hygiene, water supplies and sanitation. In addition, they oversaw matters related to public health nurses, promotion and improvement of public medical programs, maternal and child health, dental health, hygiene tests and examinations, and the prevention of tuberculosis and sexually transmitted diseases. Public health centers were staffed by health professionals such as doctors and public health nurses, and equipped with diagnostic equipment such as X-ray machines.

[Outstanding Contribution of Public Health Nurses]

The position of public health nurse was first defined in the "Public Health Nurses Regulations" promulgated in 1941 during the war, and then reorganized as part of the post-war democratization of community-based public health administration. A new Public Health Center Law was enacted in 1947, markedly expanding the role of public health nurses. This was followed in 1949 by the issue of guidelines for the duties of public health nurses, placing them at the center of community-based public health services (see Chapter 8 Figure 8-1). Their activities were varied in nature, based on the initiative and dedication of the nurses themselves and their response to community needs. Responsibilities included local government duties, support for medical practitioners, direction of

parasite control programs, maternal and child health check-up, family planning promotion, and health education.

[Contributions of Practicing Midwives]

Practicing midwives made a significant contribution toward rapidly reducing the infant mortality rate from the pre-war to the post-war period. Until the 1960's, most births were delivered at home with support of a practicing midwife. It was not unusual for the same midwife to deliver children over two generations in the same family. Midwives were often acutely aware of the economic hardships faced by families in their care.

Midwife was considered a desireable career for girls with superior academic ability. They were in a position of respect and trusted to give advice on family planning and other sensitive matters. After the war, many practicing midwives earned qualifications as Family Planning Workers, and worked to spread the family planning message into the community. At that time, it was not uncommon for births to take place in a room with a dirt floor and no hygienic precautions. Educating the populace to improve this situation was the task of the practicing midwives.

There were also other hygiene-related problems with home births. To improve the quality of obstetric care, and resolve the situation where expectant mothers could not give birth with confidence, local governments built "Maternal and Child Health Centers." These were comfortable, hygienic birthing places staffed by midwives. In 1958, maternal and child health centers became a national program and facilitated the construction of new centers.

[Development of Local Community Organizations]

Although community-based public health groups as neighborhood community associations and neighborhood organizations, were active during World War II in Japan, all aspects of life were under governmental control under the "National Mobilization Law" enacted in 1938. After the war, all existing community organizations were abolished by GHQ.

However, as communities faced common problems of poverty and disease, once again groups like neighborhood community associations, housewives' associations and youth clubs came together on a volunteer basis to address the problems (e.g. the No Mosquitoes and Flies Program, the Aiiku-group movement, and the Women's Anti-Tuberculosis Association etc.) These community organizations, involving the entire local population, made important contributions in the control of infectious diseases improved maternal and child health, and improved nutrition for the community in general. Community activities at this time were conducted in close collaboration with public health centers, public health nurses, local government, and schools.

[Contributions from a Variety of Private Resources]

In the disruptions of the post-war era, on average parasitic infection rates were high at 73%, with a number fatalities. Before any major initiatives were commenced by the national government, private organizations offered user-paying services like stool sample examinations and antihelminthic treatments in primary and junior high schools and workplaces nationwide, achieving a marked decrease in the rate of infestation. Experts in parasitology and faculty members from regional universities collaborated in developing stool sample examination methods and antihelminthic treatments, and contributed to technical innovations.

In the field of family planning as well, after 1950, many non-governmental organizations were established. An umbrella organization, the "Family Planning Federation of Japan" was set up in 1954, and in 1955 hosted the "Fifth International Conference on Planned Parenthood," fostering an increased level of interest in family planning within Japan. The "Japan Family Planning Extension Association" (later the Japan Family Planning Association, JFPA), established in 1954, acted as a bridge between government, academic groups and private organizations, and had a major influence on policy decisions in this field. The JFPA has also played a

leading role in spreading the family planning message in Japan, through the training of Family Planning Workers, production of educational materials, advertising campaigns, and social marketing methods for condoms (see p. 99).

Major private companies also launched the "New Life Movement" in 1952. This movement promoted family planning and health education for employees and their families, making a significant contribution to reduced population growth and improved health of the Japanese people. The large companies also launched their own anti-tuberculosis campaign from the late 1940's, conducting regular health checks of their employees and setting up dedicated tuberculosis wards. These measures achieved a rapid drop in the number of cases of tuberculosis within these companies. These private campaigns greatly contributed to a nationwide reduction in the prevalence of tuberculosis, giving impetus to the economic development of Japan.

[Contributions of Livelihood Extension Workers]

During the post war occupation, GHQ also worked to democratize conservative rural Japanese villages. As part of this program, a Rural Life Improvement Movement (R-LIM) was developed to be "for women and run by women." Livelihood Extension Workers, with training in the Americanstyle participatory rural development method, worked with rural women to identify and solve problems with lifestyle, family, and themselves.

The R-LIM began as a program of the Ministry of Agriculture, Forestry and Fisheries, but the multiplicity of the problems faced by women led to linkages with programs of the Ministry of Health and Welfare, Ministry of Education, and local government bodies. It produced a multisectoral program covering public health, family planning, social education, sanitation and rural development. The R-LIM also contributed to improved status and self-image for women.

[The Public Health and Medical Insurance System]

As the living standards of the population rose,

the public health and medical services administration began to pay particular attention to programs for the poor and elderly. As one-third of the population at that time was not covered by medical insurance, a "National Health Insurance Law" was enacted in 1958 and a national health insurance program was introduced. The universal health insurance coverage was established by April 1961. During the same period, discussions on the public pension system were promoted and in 1959 the universal pension system was also realized. Thus the foundation of the Japanese Social Security System was put into place at this time.

2-4 Phase IV: Expanding Medical Services (1961~1979)

[Changes in the Social Structure]

From the late 1950's Japan entered a period of rapid economic growth, associated with changes in the industrial structure. Until the early 1970's, the numbers of workers in the primary industry fell steadily, moving into the secondary industry, and after this time the proportion of workers in the tertiary industry increased (see Figure 1-4). Within secondary industry, expansion of heavy industry and the introduction of mass production techniques in manufacturing led to an explosion in employment opportunities in the cities, and a large scale internal migration from rural villages to the cities. Worker's wages also rose considerably at this time. Agricultural productivity also increased, with the introduction of mechanization and chemical fertilizers, and farmer's household incomes also rose.

[Expansion of Medical Services]

With the introduction of universal health insurance coverage in 1961, all Japanese people were able to access medical services on an equal basis, leading to a rapid increase in demand. Expansion of medical services to meet the demand became a major challenge. The Medical Service Law was revised in 1950, introducing the medical corporation system. This resulted in a steady increase in the numbers of hospitals and hospital beds (see Figure 1-5).

(%) 100 90 80 70 60 50 40 Tertiary industry 30 Secondary industry 20 10 Primary industry 1955 1965

Figure 1-4 Change in Industrial Structure

NB: Industrial structure in terms of composition of GDP Source: Data from Economic Planning Department

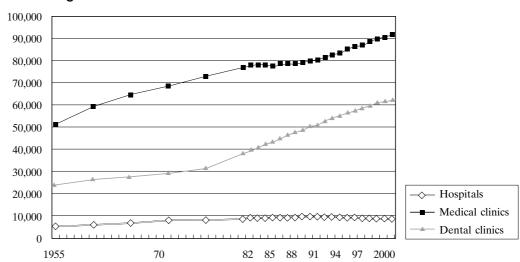


Figure 1-5 Trends in Numbers of Medical Institutions

Source: Ministry of Health, Labour and Welfare

Box 1-1 Initiatives for Doctorless Regions —Focusing on the Example of the Jichi Medical School—

Initiatives for doctorless regions in Japan began immediately after the war to improve the conditions in those regions. From 1956, a plan was initiated in private clinics in doctorless and difficult to access regions with populations between 300 and 2,000. Private clinics are generally difficult to run successfully in remote areas, however, and it is difficult to attract medical and other personnel, so rather than independent clinics they set up branch clinics of public medical institutions, and subsidized their operating expenses.

With the increase in demand for medical services from the late 1960's came a marked shortage of doctors even in large hospitals and metropolitan medical clinics, leading to nationwide increases in medical school enrollments. A plan was announced to set up a medical school in each prefecture, and new regional medical universities were established. Despite programs such as these, advanced economic development saw the younger generation gravitating to the cities, depopulating many rural areas. The average age in these areas also increased, and access to medical services became

increasingly difficult.

To combat the serious doctor shortage in these underpopulated areas, in 1972 a number of prefectural governments co-founded the Jichi Medical School (JMS). The basic philosophy of the JMS is to recruit promising students from affected areas, provide them with the skills required to practice medicine in remote areas, and assign them to underpopulated regions. The prefectures jointly bear JMS's running costs, including the educational expenses for their students, on the understanding that on graduation they will provide medical services in remote regions in their native prefectures. JMS selects 100 new students each year, two or three from each participating prefecture. All students stay in the school dormitory for the entire 6 year course in order to help foster a spirit of independence, cooperation and a strong sense of responsibility. All school expenses, including entry and tuition fees, are loaned to the students. They are exempt from repaying the loans if, after graduation, they work for a specified period at the public hospitals or clinics to which they are appointed^{NB}.

The system of education and training is essentially similar to other medical schools (see the chart below). After passing the national medical registration examination on completion of 6 years of study, new graduates undergo two years of residency prescribed in the Medical Services Law. Most JMS graduates do their residencies at a central hospital in their native prefecture. The ensuing process differs from other medical schools. On completion of their residency, JMS graduates commence their activities in earnest as doctors in remote regions. JMS recommends that, after several years of remote medicine, their graduates undergo a further one to two years of postgraduate education, to gain more advanced medical knowledge and clinical abilities suitable for even broader public health and welfare applications. After this second period of training, graduates are expected to take up a further posting in a remote community. Based on the system of not having to repay their educational loans if they work for a certain number of years in remote medicine in their home prefecture, JMS graduates are an important part of the medical workforce in remote areas where medical resources are scarce.

JMS has turned out 2,693 graduates (as of 2004). Of those still working in medicine, 44% (as of 1 July 2001) were working in remote areas. There is a limit to the number of graduates that JMS alone can produce, and the problem of doctorless regions remains a serious one.

The Education and Training System at the Jichi Medical School

Admission	Grad	uation			
	Medical school (6 years)	Residency (2 years)	Remote assignment (2~3 years)	 Further remote medical posting	

NB: Exemption from repaying the education loan is granted when the period a graduate works as a doctor, in public hospitals or clinics appointed to them by the governor of their home prefecture (one half of this working period to be in a remote hospital or clinic), exceeds one and a half times the period of the loan. If for example a student takes 6 years to complete their course, then they will need to work for 9 years. Usually, residencies and time in remote medicine are counted towards this work requirement, but some prefectures also count time spent in further education.

Source: Jichi Medical School Homepage (http://www.jichi.ac.jp/index.html), Ministry of Health and Welfare (1988) *Kosei Sho Goju-nen Shi (Kijutsu-hen)* [Fifty Years' History, Ministry of Health and Welfare (Descriptive Version)] Kosei Mondai Kenkyu Kai, and Jichi Medical School Hearing.

From 5,119 hospitals in Japan in 1955, there were 7,047 in 1965, rising to 8,294 in 1975, and reaching 10,096 in 1990. There were 51,349 medical clinics in 1955, increasing to 64,524 in 1965, 73,114 in 1975, and 80,852 in 1990. Several advanced medical institutions, such as the National Cancer Center and the National Cardiovascular Center, were set up to conduct research, provide advanced medical care and develop new therapeutic techniques for lifestyle-related diseases.

The rapid increase in the number of medical institutions caused a shortage of medical services personnel. The shortage of nursing staff was particularly serious. This led to the establishment of various education loan systems, and a subsidy was provided to nursing schools. There were also a number of measures introduced to utilize qualified, but unemployed nurses, These included retraining courses, starting in 1967, for nurses who had left the field, improvements in working conditions, increased wages, and provision of in-hospital child care facilities. As a result, the number of nurses and assistant nurses has steadily increased (see Chapter 2 Figure 2-4).

To deal with the serious problem of doctor shortages in remote regions and islands, the Ministry of Health and Welfare introduced a Remote Medical Services Program in 1956. Those prefectures that had regions with no medical doctors cooperated in establishing the Jichi Medical School in 1972, with the aim of fostering medical practitioners for remote regions (see Box 1-1).

In addition to the increase in the demand for medical services and the advances of medical techniques at this time, a number of new areas of paramedical professions were created. These included dental technicians, medical technologists, physiotherapists, radiographers, medical laboratory technologists, and orthoptists.

[Social Change and New Challenges]

During this period, the mortality rate from tuberculosis and its prevalence dropped markedly, due to the use of new medications and regular health checks available to much of the population. Public health centers combined improvements in sanitation such as the installation of small-scale water-supply systems, and the spread of the agricultural use of chemical fertilizers to drastically reduce the incidence of parasitic diseases, and infectious diseases such as dysentery and trachoma.

As the infant mortality rate fell, accompanied by a precipitate drop in the birth rate, the focus of the public health administration turned from infectious diseases and maternal and child health towards lifestyle-related diseases. Medical institutions accordingly took over from public health centers the function as the focus of community-based public health and contributed greatly to improvements in the health of the populace.

Continued economic growth after 1955 saw the flourishing of heavy chemical industries, population concentration in the cities, and the spread of automobiles. These brought in turn new public health and medical problems associated with traffic accidents, pollution, and destruction of the environment. Insufficient investment in social infrastructure, such as water supplies, sewage, and urine and waste treatment facilities, also became a serious problem. Programs were developed to face these problems.

2-5 Phase V: Challenge of an Aging Society (1980~present)

[Financial Crisis and Rising Medical Costs]

In 1973, the Japanese economy entered a stage of low economic growth as a consequence of the global depression and inflation following the "Oil Shock." As the national and regional financial situation deteriorated, administrative and financial reforms were initiated that included social security programs. Per capita medical costs rose during this period due to the aging population, changes in patterns of disease, advances in medical techniques, and longer periods of treatment.

Medical costs as a proportion of the national income rose sharply during the 80's and 90's, from 3.0% in 1960 to 8.5% in 2001 (see Chapter 2 Figure

2-5). In response to this situation, from 1985 the "Medical Service Law" has undergone a number of revisions. The system has been reformed with the aim of providing effective and efficient medical services through the correction of improperly distributed regional medical resources and better cooperation between medical institutions.

[Response to the Aging Population]

By 1955, the aging of the Japanese population had already begun. It has progressed since that time, with further decline in the birthrate and extension of life expectancy. Reforms to the social security system were needed. In 1982, the "Law for the Health and Medical Services for the Elderly" was passed, integrating disease prevention, treatment and rehabilitation. The law also introduced partial cost-sharing of medical cost for the elderly. Further adjustments to the medical cost structure followed. In 1986, revisions to the Law for the Health and Medical Services for the Aged introduced a new "Rojin Hoken Shisetsu" (Health Care Facilities for the Elderly)," that combines the best aspects of hospitals and nursing homes.

With the advent of a truly long-lived society, and changes within and outside Japan such as scientific advances, the information society and globalization, come demands for responses in new fields. In 1987, the national Health Services Policy Department in the Ministry of Health and Welfare published an interim report examining efficient

delivery of high standard medical services to the aging society of the 21st centry. This report suggested that the future of the Japanese medical system lies in the pursuit of quality rather than quantity, providing appropriate institutional and home-based care for the elderly, avoidance of long hospitalization, and improved patient services.

[Towards a New Era in Community-based Public Health]

Large scale changes in public health administration have been required due to varying demands, and different values, from local communities. Greater emphasis is now placed on the opinions of individual service recipients. In response to the needs of the day, the trend towards decentralization, the Public Health Center Law was renamed the "Community Health Law" in 1994 (taking full effect in 1997). The new law sets up a new system aimed at providing services appropriate to each member of the community, with the local municipality as the main public health service provider.

The "Long-term Care Insurance Law" was passed in 1994 (enacted in 2000), with the result that some services previously regarded as medical services now became care services.

Efforts continue to create a social security system that respects quality of life (QOL) until the very end, whereby all senior citizens can select the services based on their desires.

⁸ Long-term care insurance is principally under the aegis of the local municipality. It is the first example of decentralization in Japan with all administrative powers, such as finance, planning, and service delivery transferred from the central government to local governments. This system is rated highly by experts in public administration.

Appendix. Discussion of Classification of Phases in Public Health and Medical Services in Japan

In this study, we have divided Japanese history from the start of the Meiji Era (1868~1912) into 5 phases, from the two points of view of public health challenges and the main initiatives to combat them. There are, however, several schools of thought as to how these classifications should be made. Here we will introduce four of the main school of thoughts.

(1) Divisions According to Demographic Transitions

This system uses a demographic approach, making divisions according to changes in the birth and mortality rates. Ato (2000) divides Japanese history into three phases, high fertility-high mortality (~1870); high fertility-low mortality (1870~1960); and low fertility—low mortality (1960~present).

(2) Divisions According to Disease Prevalences⁹

This system uses the main causes of death to set the divisions. This gives us four phases: the early Meiji Era of "acute infectious diseases" (cholera, smallpox, dysentery, etc.); the phase from late Meiji until the end of the Second World War, of "chronic infectious diseases" (tuberculosis, leprosy, etc.); the phase of confusion immediately after the end of war of "acute infectious diseases"; and lastly the phase of malignant neoplasms and lifestyle-related diseases (formerly called "adult diseases").

(3) Divisions According to Public Health Administration

The book "Fifty Years History of the Ministry of Health and Welfare," published in 1988, divides Japanese history from the start of the Meiji Era into the following phases: ① pre-Ministry of Health and Welfare (1868~1937); ② establishment of Ministry of Health and Welfare and wartime public health administration (1938~1945); ③ public health administration during the post-war reconstruction (1945~1954); ④ public health administration during a period of high economic growth (1955~1973); ⑤ public health administration in the time of the aging society (1974~1987).

Table 1-2 Health Transitions and the Corresponding Systems

Health transition	Stage 1 Infectious diseases	Stage 2 Chronic conditions	Stage 3 Degenerative diseases of the elderly
Corresponding system	Public health policies (paid for by taxes)	Health insurance system	System integrated medical and social welfare services, maintaining the independence of elderly clients
Service providers	(mainly doctors in private practice)	Hospital centered/medical clinics and institutions	From medical clinics and institutions to nursing homes and home-based care

Source: Compiled by the author on the basis of data from Hiroi, Yoshinori (1999)

⁹ Produced as a synthesis of National Institute of Population and Social Security Research (2002), and Ministry of Health and Welfare Medical Services Division (1976), pre-war from Suzuki and Hisamichi ed. (2003) and Murakami (1996), post-war from Health and Welfare Statistics Association (2002, 2003).

(4) Divisions According to Health Transitions¹⁰

The concept of "health transitions" is one that has recently come into use in the fields of public health and international health. It refers to a holistic and dynamic approach to epidemiological transitions in concert with socioeconomic transitions in terms of demographic, employment and industrial structures. In essence, there are three stages as shown in Table 1-2.

28

¹⁰ Hiroi, Yoshinori (1999) "Jinko Koureika to Iryo · Fukushi Seisaku [Medical Services and Welfare for Aging]" Population Association of Japan ed. Jinkou Dai Jiten [Encyclopedia of Population], pp. 919-924, Baifukan Co., Ltd.

Year Table. History of Public Health and Medical Services in Japan

Decade	World events	Events in Japanese society	Nationwide changes in public health and medical services	Regional changes in public health and medical services
1850's	58 Signing of Japan- U.S. Commercial Treaty 59 Publishing of Darwin's "Origin of Species" and Nightingale's "Notes on Nursing"			
1860's	61 Outbreak of	68 Meiji Restoration	68 Introduction of Western medicine	
1870's		71 Abolition of fiefs and establishment of prefectures 72 Promulgation of the Education Ordinance 76 Collection of mortality statistics commenced by Ministry of Home Affairs Health Bureau 77 Seinan War	 70 Promulgation of Regulations Regarding Patent Medicines 72 Establishment of Health Bureau within Ministry of Education 74 Comprehensive Medical Code enacted 74 System of registration of practicing medical practitioners commenced 74 Under the Comprehensive Medical Code, midwifery qualifications regulated and licensing introduced 75 Establishment of Health Bureau within Ministry of Home Affairs (administration of public health transferred from Ministry of Education) 75 Establishment of Pharmaceutical Refinery at Tokyo Kaisei School 77 Introduction of Malthusian doctrine (based on Malthus' "Essay on Population" 1798) 	73 Establishment of Daiichi University Medical School (now Tokyo University) 78 Medical practitioners
			 79 Health Bureaus established in each prefecture 79 Provisional cholera prevention regulations 	forbidden to run pharmacies by Tokyo Prefecture 79 System of public elections for Municipal Public Health Committees commenced
1880's	 82 Koch identifies tuberculosis bacterium 82 Koch identifies cholera bacterium 	80 Enactment of Old Penal Code 84 Reliability of birth and death records improved by "Regulations regarding Gravestones and Burial"	 80 Enactment of Communicable Disease Prevention Regulations 81 Establishment of First private postnatal training school (Koansha) 82 Enactment of Penal Code (abortion made a crime) 83 Formation of Greater Japan Private Public Health Association 	80 Each prefecture ordered to submit annual reports on public health matters and statistics
		85 Cabinet System of government commenced 89 Promulgation of Greater Japan Constitution	 85 Enactment of Vaccination Regulations 86 Proclamation of the Japanese Pharmacopoeia 86 Issuance of Street Cleaning Ordinances 89 Enactment of Pharmaceutical Regulations 	87 Work commenced on water supply system in Yokohama (first piped water supply in Japan)

Decade	World events	Events in Japanese society	Nationwide changes in public health and medical services	Regional changes in public health and medical services
1890's	 90 Commencement of serotherapy 95 Roentgen discovers X-rays 98 Kiyoshi Shiga identifies the dysentery bacillus 99 Establishment of International Nursing Federation 	99 Commencement of collection of population dynamic statistics (Civil	 90 Enactment of Water works Law (obsolete law) 93 Establishment of Japan Pharmaceutical Association 95 Posts of School Health Advisors and Supervisors created 97 Enactment of Communicable Disease Prevention Law (Health and Sanitation Groups set up) 98 Introduction of School Doctor system 99 First Nationwide Survey of Pulmonary Tuberculosis Volunteers 	90 Establishment of Nisseki (Japanese Red Cross) Nursing Training School 92 Commencement of District Nursing based at the Doshisha Hospital 93 (~1945) Administration of regional public health transferred to Police Department 95 Laying of water supply system in city of Osaka 97 Commencement of protest movement by farmers adversely affected by Ashio copper mines
	reasing reactation	Registration Office, Health Bureau, and 3 types of statistics)		
1900's	01 Reed identifies the yellow fever virus 05 First Russian Revolution	00 Enactment of Industrial Association Law 04~05 Outbreak of the Russo-Japanese War	00 Enactment of Waste Management Law (obsolete law), Sewerage Law and Law for Custody of Mental Health 00 First Hansen's disease survey conducted 00 Introduction of School Nurse System 02 Foundation of Tokyo School of Pharmacy and Tokyo Women's Pharmacy College 04 Tuberculosis Control Law enacted 04 Production of first ampoules in Japan	00 Tokyo Nursing Regulations enacted
	05 Discovery of the syphilis pathogen		06 Enactment of the Medical Practitioners' Law and the Dental Practitioners' Law (establishment of modern system of accreditation) 07 Leprosy Prevention Law enacted 09 Formation of Greater Japan Nursing Association	06 Poor rice harvest in Tohoku Region 08 School nurses stationed in Gifu City
1910's	14 Outbreak of First World War	12~ Taisho Period 13~ Taisho Democracy 14~17 First World War	 11 Appearance of fee-for-service medical clinics in Tokyo 12 Establishment of Taisho Pharmaceutical Co. Ltd 13 Publication of "Female Mill Hands and Tuberculosis" by Osamu Ishihara 13 Establishment of Japan Anti-Tuberculosis Association (JATA) 14 Establishment of Temporary Pharmaceutical Sections in the Tokyo and Osaka Public Health Testing Laboratories 15 Enactment of Nursing Regulations 	15 Kyoto, Yokohama and
		18 Rice Riots18 Influenza pandemic	 16 Establishment of Health and Sanitation Research Council 16 Establishment of School Health Division of Ministry of Education 16 Enactment of Factory Law 18 Survey of Rural Health 19 Passage of Mental Health Law, Tuberculosis Control Law, and Trachoma Prevention Law 19 Enactment of School Infectious Disease Regulations 	Nagoya directed to establish tuberculosis sanitariums 18 Commencement of Osaka District Committee System 18 Appointment of District Nursing Association Visiting Midwives in Tokyo Prefecture

Decade	World events	Events in Japanese society	Nationwide changes in public health and medical services	Regional changes in public health and medical services
1920's		20 First National Census (commencement of collection of static population statistics) 20 Japan joins League of	20 Enactment of School Doctor Regulations, Student and Child Health Check Regulations	20 Enactment of Osaka Factory Regulations (Pollution Regulations)
		Nations	22 Margaret Sanger visits Japan →Impetus to family planning movement	
		23 Kanto Daishinsai (Great Kanto Earthquake)	22 Enactment of Health Insurance Law 23 Establishment of Yamanouchi Yakuhin Shoukai	23 Establishment of Child Health Centers in Tokyo, appointment of district nurses, commencement of home-based care activities 23 Saiseikai, commencement of nursing home visits to accident victims
			24 "Ogino Theory" (rhythm method of contraception) published 25 Enactment of Pharmacist Law 25 Establishment of Japan Public Health Association	24 Osaka City, appointment of district nurses
		26 Showa Period begins	26 Guidelines for Child Health published 27 Enactment of Venereal Disease Prevention Law 27 Formation of Japan Midwives Association	27 Establishment of Public Health Nursing Division at St Luke's Hospital, commencement of district nursing visits
	28 Establishment of the International Union for the Scientific Study of Population (IUSSP)	20 Weeld Davie		28 Commencement of social work nurse training at Nisseki (Japan Red Cross)
	29 Fleming discovers penicillin	29 World Panic	29 Formation of Japan Nursing Association	
1930's	33 Nazi Government takes power in Germany	30 Showa Crash 37 Manchurian Incident	 30 Ministry of Home Affairs recommends domestic manufacture of pharmaceuticals 34 Imperial Gift Foundation Aiiku Association formed 37 Health Center Law enacted (47 centers established) 	35 Establishment of Metropolitan Health Center (Kyohashi)
		38 Enactment of National Mobilization Law	 37 Tuberculosis Control Law revised 38 Enactment of Maternal and Child Protection Law 38 Enactment of National Health Insurance Law 38 Establishment Ministry of Health and Welfare 38 Establishment of Public Health Hospital 	38 Establishment of Rural Health Center (Tokorozawa)
	39 Outbreak of Second World War		36 Establishment of Fuolic Health Flospital	
1940's		40 Formation of Taisei Yokusankai (Imperial Rule Assistance Association) neighborhood community association system 41~ Commencement of War in the Pacific	 40 Enactment of National Physical Strength Law 40 Public Health Nurse Regulations announced 40~ The term "family planning" replaced "regulation of the numbers of children" 41 Enactment of Eugenic Protection Law 41 Enactment of Public Health Nurse Regulations 41 Japan Public Health Nurse Association formed 42 Commencement of Pregnant Mother's 	42 Transfer of public health
			Handbook system 42 Enactment of Medical Services Law 42 BCG vaccination commences for tuberculosis 43 National health insurance cover extended to 95% of municipalities. "First Universal Health Coverage Era"	administration from Police Department to Ministry of Home Affairs

Decade	World events	Events in Japanese society	Nationwide changes in public health and medical services	Regional changes in public health and medical services
1940's	45 United Nations formed 45 Establishment of International Monetary Fund (IMF) and World Bank 45 Clinical use of penicillin as an antimicrobial commenced	45 Second World War ends 45 Occupation under General Headquarters (GHQ) of the Allied Powers (~ April 52) 45 Women gain the vote 45 First Agrarian Reform	44 Domestic production of penicillin commences	
	46 United Nations Population Division established	46 Receipt of Licensed Agency for Relief in Asia (LARA) material (~52)	46 Establishment of Sanitation Committees in each municipality nationwide (mouse and insect eradication program) (10,000 community groups and eradication groups formed nationwide), use of DDT	
	47 US announces Marshall Plan	47 Local Government Law enacted 47~49 First Baby Boom	 47 Community Health Law passed 47 Establishment of Children's Bureau of Ministry of Health and Welfare 47 Maternal and Child Health Handbook replaces Pregnant Mother's Handbook 47 Law for Public Health Nurses, Midwives and Nurses passed 47 Revision of Community Health Law 47 Child Welfare Law passed 48 Enactment of Food Hygiene Law, Labour Standards Law, and Child Welfare Law 47 All administration of public health transferred to prefectural Public Health Bureaus 47 Enactment of Disease Notification Regulations 48 School Instruction renamed as Health Education 	47 Prefectures ordered to establish Public Health Bureaus (Jurisdiction over public health transferred from Police Departments to Public Health Centers)
	48 World Health Organization (WHO) established, Universal Declaration of Human Rights	48 New Civil Code promulgated	48 Enactment of Immunization Law 48 Enactment of Eugenic Protection Law 48 Enactment of Medical Practitioners Law, Dental Practitioners Law, and Law for Public Health Nurses, Midwives and Nurses simultaneously	48 Suginami Public Health Center established
	49 North Atlantic Treaty Organization (NATO) formed	49 Livelihood Improvement Program commenced	 49 Revision of Eugenic Protection Law (economic reasons for abortion recognized) 49 Representatives of American Pharmacists Association visit Japan. Decision to distribute imported streptomycin 49 First issue of "Maternal and Child Health Statistics of Japan" 	49~ Commencement of No Mosquitoes and Flies Program by regional public health organizations
1950's	50 Colombo Plan commenced 50 Commencement of Korean War	50 United Nations Children's Fund (UNICEF) provides material assistance (~64)	50 Release of domestically produced streptomycin 50 First National Examination for Class 1 Nursing Qualification held (8600 applicants), First National Examination for Public Health Nursing Qualification held, First National Examination for Nursing Midwifery Qualification held	50 Commencement of family planning model villages
	51 San Francisco Peace Treaty signed, US- Japan Security Treaty signed	51 Japan joins the World Health Organization (WHO) 51 Lifestyle-related diseases (stroke, cancer, heart disease) become the top causes of death	51 Complete reform of Japan Anti- Tuberculosis Association (JATA) 51 Enactment of Quarantine Law 51 Establishment of Japan Public Health Cooperative	

Decade	World events	Events in Japanese society	Nationwide changes in public health and medical services	Regional changes in public health and medical services
1950's	52 International Planned Parenthood Federation (IPPF) founded in Bombay 54 World Population Conference (specialist meeting jointly hosted by the United Nations (UN) and the International Union for the Scientific Study of Population (IUSSP)) held in Rome	52 Commencement of New Life Movement 52 Peace Treaty with Japan takes effect (April) 56 Japan joins the United Nations (UN) <extent 32.2%="" of="" reaches="" supply="" systems="" water=""> <number a="" abortions="" of="" peak="" reaches=""> 56 Economic White Paper "It's not post-war any more"</number></extent>	 52 Abolition of controlled distribution of pharmaceuticals 52 Commencement of Family Planning Worker System (commencement of recognized lectures) 52 Revision of Eugenic Protection Law (paperwork simplified) 52 Enactment of Nutrition Improvement Law 53 Enactment of New Leprosy Prevention Law 53 Establishment of Standing Committee on Population Problems within Ministry of Health and Welfare 53 Establishment of Pharmaceutical Exporters Association 54 Introduction of School Lunch Program 54 Formation of Japan Family Planning Association (JFPA) 54 Formation of Family Planning Federation of Japan 55 Family Planning Workers allowed to sell contraceptive devices 56 Enactment of Anti-prostitution Law 58 Establishment of Maternal and Child Health Centers 58 Establishment of School Health Law 58 Tokyo University Medical School Department of Pharmacology becomes independent Pharmacology Faculty 	54 "Reinforcement of guidance to pregnant women" directive issued 56 Mass onset of Minamata Disease in Kumamoto 56 Deaths from penicillin shock 59 Tokyo Municipal Government "Regulations for the Prevention of
1960's	60 Formation of the OECD 61 Formation of the DAC 61 Announcement of "United Nations Development Decade" 61 Commencement of the use of live polio vaccine in U.S. 65 World Population Conference (Scientific conference, Belgrade) 66 Establishment of the United Nations Development Programme (UNDP) 66 Establishment of Asian Development Bank	60 Ikeda Cabinet announces "National Income Doubling Program" <institutional all="" births="" exceed="" half="" of=""> <water 53.4%="" penetration="" rate="" reaches="" supply=""> 64 Japan joins OECD (joins ranks of developed nations) 64 Tokyo Olympics</water></institutional>	60 Promulgation of New Pharmaceutical Affairs Law and New Pharmacist Law 60 Classification of Public Health Centers into 5 types 61 Universal health insurance coverage achieved 61 Commencement of 3 year old health checks and neonatal home visits 61 Polio vaccine program (administered to 350,000 simultaneously) 64 Revision of Immunization Vaccination Law (change to live polio vaccine) 64 Introduction of system of designated emergency provider medical institution 65 Revision of Mental Health Law 65 Enactment of Environment Protection Association Law 65 Maternal and Child Health Law passed 65 Establishment of National Children's Medical Center	Factory Pollution" 61 Itai-itai Disease lawsuit launched 62 Thalidomide Incident 62 Voluntary withdrawal of thalidomide-type hypnotics 65 Thalidomide lawsuit launched 65 Farmer's disease recognized as a social problem 66 Toxic effects of agricultural chemical recognized as a problem

Decade	World events	Events in Japanese society	Nationwide changes in public health and medical services	Regional changes in public health and medical services
1960's	67 Formation of European Community (EC)	68 Japan becomes the second largest economy among the free nations	 67 Promulgation of Basic Law for Environmental Pollution Control 67 Establishment of Central Pollution Control Committee 67 Investment in pharmaceutical manufacturing industry liberalized by 50% 68 Introduction of Maternity and Child Health Promoter System 69 Revision of three Environmental Pollution Laws 	 67 Asahi Lawsuit, rejected by Supreme Court 68 Minamata Disease recognized as pollution-related disease 69 Free medical care for the elderly in Tokyo Municipality 69 Kanemi Oil Disease Lawsuit launched
1970's	70 Second United Nations (UN) Development Decade	70 Japanese population exceeds 100 million 70 Proportion of elderly exceeds 7% (heading for aging society) 70 Extent of water supply systems reaches 80.8% 70 Japan hosts World Expo	70 Establishment of Environmental Pollution Control Committee	70 Petrochemical smog detected in Tokyo
	71 "Nixon Shock"	o tapan nese wena 23.pe	71 DDT banned 71 Establishment of Ministry of the Environment	71 SMON (Subacute Myelo-Optico-Neuropathy) (clioquinol toxicity) lawsuit launched
		72 Okinawa reverts to Japanese control 72 Japan-China relations normalized 73 "First Year of Welfare"	 72 Jichi Medical School founded 72 Industrial Safety and Health Law 73 Free medical care for the elderly 	71 Formation of Tokyo Municipality Rubbish War Control Group
	74 World Food Conference75 Vietnam War ends	73 First Oil Shock	74 Establishment of Research Program for the Treatment of Specified Pediatric Chronic Diseases	
			 75 Introduction of Triple Antigen Vaccine 75 Investment in pharmaceutical manufacturing industry liberalized by 100% 	
	76 First Association of Southeast Asian Nations (ASEAN) Leaders' Summit		 76 Revision of Preventive Vaccination Law 76 Formation of Emergency Medicine Society 77 Intrauterine Devices (IUD) licensed 	
	78 International Conference on Primary Health Care hosted by World Health Organization (WHO) and United Nations Children's Fund (UNICEF) in Alma Ata (Alma Ata Declaration)	78 Second Oil Shock		78 National Public Health Nurses transferred to municipalities
1980's	80 UN Development Strategy announced for Third UN Development Decade	<80 Extent of water supply systems reaches 91.5%>		
	80 World Health Organization (WHO) announces eradication of smallpox 81 International Year of the Disabled		81 Commencement of Infectious Disease Surveillance Program	

Decade	World events	Events in Japanese society	Nationwide changes in public health and medical services	Regional changes in public health and medical services
1980's	86 WHO Ottawa Charter 88 WHO announces plan to eradicate polio 89 Tiananmin Square Incident 89 Berlin Wall comes	82 Cancer becomes the number one cause of death 84 Average life expectancy becomes highest in the world (males 74.2 years, females 79.8 years) 86 Equal Opportunity Law enacted	 82 Law for Health and Medical Services for the Elderly passed (enacted '83) (Health Bureau for the Elderly) 85 Establishment of Committee for Public Health and Medical Services in Remote Regions 86 Formation of AIDS Specialist Group 87 Comencement of Tuberculosis/Infectious Disease Surveillance Program 88 Establishment of Health and Welfare Section for the Elderly within Ministerial Secretariat 88 Complete overhaul of Drug Pricing Standards 89 Enactment of AIDS Prevention Law 89 Promotion of Health and Welfare of the Elderly 10 Year Plan announced 	85 Medical Services Law revised, directing prefectures to conduct Medical Services Planning, and establish Health Services Regions
1990's	down 90 UNDP publishes Human Development Report 90 World Summit for Children held in New York 91 Gulf Crisis ends 92 United Nations Conference on Environment and Development (UNCED) held in	92 Enactment of Maternity Leave Law	 90 Revision of 8 Welfare Laws 90 Commencement of Gold Plan 91 Introduction of Emergency paramedic system 92 Health and Welfare Section for the Elderly becomes Health and Welfare Bureau for the Elderly 92 Second revision to Medical Services Law, pharmacists clearly identified as providers 	
	Rio de Janeiro (June) 92 Environmental Summit 93 UN Human Rights Conference held in Vienna 93 World AIDS Conference		of medical services 93 Partial revision of Law concerning Public Health Nurses, Nurse Midwives and Nurses (birth of gender-neutral public health nurses)	93 Completion of elderly health and welfare planning by municipalities
	94 International Conference on Population and Development held in Cairo 95 Social Development Summit held in Copenhagen (March) 95 Fourth World Conference on Women held in Beijing (September) 96 Development Assistance Committee (DAC)	94 Announcement of 21st Century Welfare Vision 94 Proportion of elderly reaches 14% (towards aging society) 95 Great Hanshin-Awaji Earthquake	94 Enactment of Community Health Law 94 Formulation of Angel Plan 94 Formulation of New Golden Plan 94 Revision of Maternal and Child Health Law 95 Formulation of Plan for People with Disabilities 95 Rate of separation of prescribing and dispensing (rate of prescriptions filled by pharmacies) exceeds 20%) 96 Eugenic Protection Law revised, becomes Mother's Body Protection Law	94 Maternal and child health planning by municipalities made mandatory
	Committee (DAC) announces new development strategy (May)		96 Leprosy Prevention Law repealed	

^{*} After the Second Baby Boom peaked in 1973, the birth rate began to fall. In June 1990, it was announced that the 1989 population dynamic statistics showed the birth rate had declined to 1.57. The increased burden and decreased vitality associated with the aging society led to the coining of the term "1.57 Shock".

Decade		World events	Events in Japanese society	Nationwide changes in public health and medical services	Regional changes in public health and medical services
1990's]	Asia-Pacific Economic Co- operation (APEC) Jakarta Meeting → human resource development			
	97 .	Lyon Summit (Proposal for Global Welfare Initiatives) Asian Currency and Economic	97 Long-term Care Insurance Law passed	97 Community Health Law fully implemented (administration of public	
	97 I	Crisis Number infected with HIV/AIDS estimated at 30,600,000	(enacted in '00)	health services handed over to municipalities)	
	: :	Birmingham Summit (Global Parasitic Disease Control Initiative announced)	98 Non-Profit Organization (NPO) Law passed		
] (2 (Second Tokyo International Conference on African Development (TICADII, October)			
	99 1	World Summit for Children World population exceeds 6 billion	99 Regionalization Law passed <99 Extent of sewage systems reaches 60%>	 99 Infectious Disease Law implemented 99 Low-dose oral contraceptive (Pill), copper- impregnated IUD, and female condom licensed 	
2000's	00 1	21st Century Summit Kyushu & Okinawa Summit (Okinawa Infectious Diseases Initiative announced)	<00 Extent of water supply systems reaches 96.6%>	00 "Kenko Nihon 21" (Healthy Japan 21) Campaign announced 00 "Sukoyaka Oyako 21" (Healthy Family) Campaign launched	00 Long-term Care Insurance Law enacted
	01 N 02 N 11	United Nations (UN) Special Session on HIV/AIDS (April) World Summit on Sustainable Development (WSSD)			