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2019 Taiwan Health and Welfare Report

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Ministry of Health and Welfare, R.O.C. (Taiwan)

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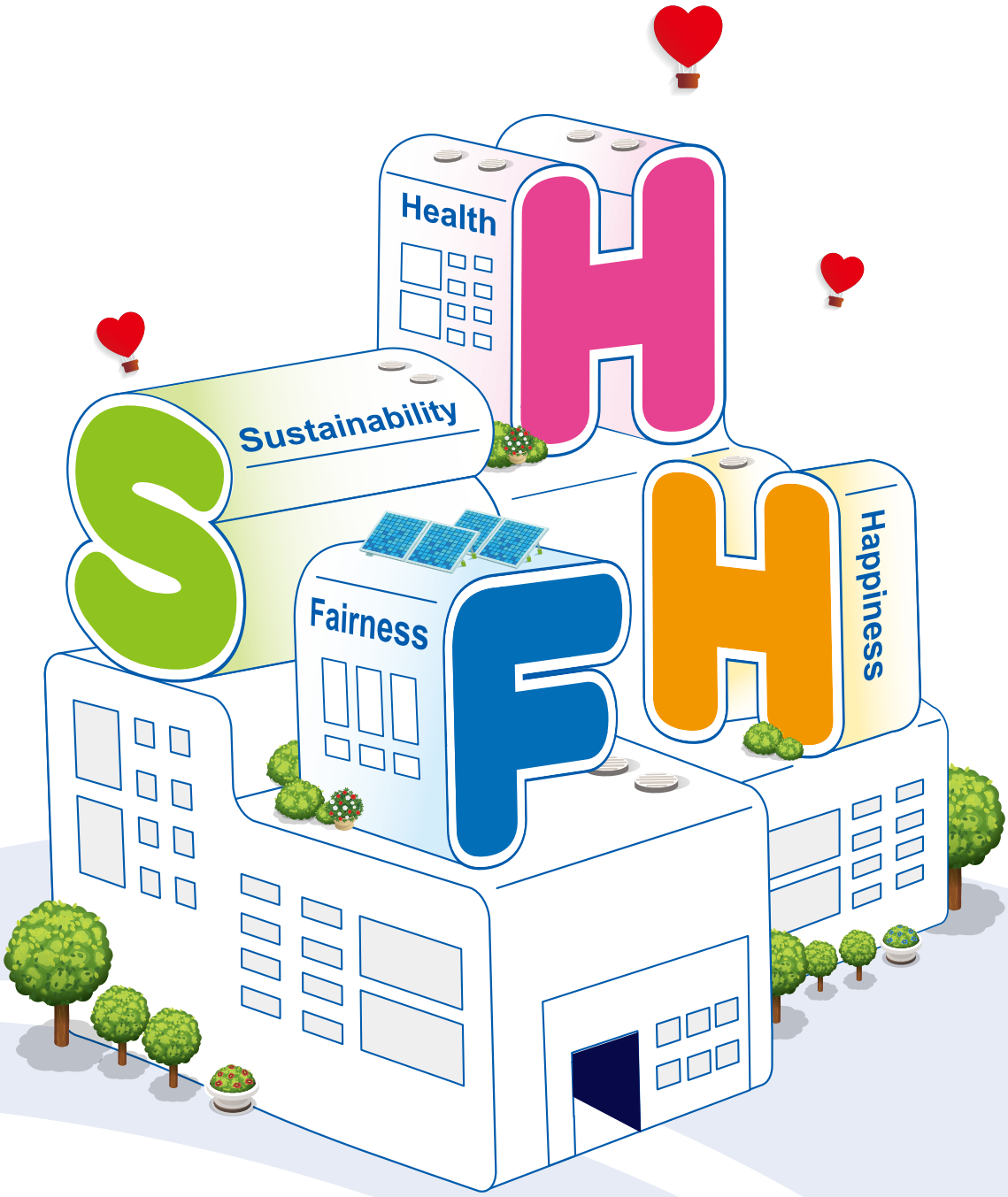

Ministry of Health and Welfare, R.O.C. (Taiwan)

Foreword

In the face of challenges from rapid changes that took place in 2018, the Ministry of Health and Welfare stayed true to its administrative philosophy of “promoting the health and well-being of all citizens” by improving health care quality and services, increasing long-term care capacity, and strengthening social welfare programs to better match resources with needs.

The United Nations 2030 Agenda for Sustainable Development includes Sustainable Development Goal 3: “Ensuring healthy lives and promoting well-being for all at all ages” by achieving universal health coverage. Taiwan has long pursued that goal by ever more effectively targeting health resources to provide fair and comprehensive services for all residents.

Seeking to improve health services for offshore islands and remote townships, the Ministry established new rules for medical diagnosis and treatment using telecommunications in May 2018. With more residents eligible for tele-medicine services, access is enhanced in mountainous areas and other remote regions. Tele-medicine also helps long-term care patients in such areas receive better follow-up and home care after discharge.

With the issue of population aging and its inevitable impacts looming, more long-term care resources are needed as soon as possible. Thus the Department of Long-Term Care was established in 2018, and a long-term care hotline service was launched a year earlier. Even with users paying for this service after the first five minutes of free consultation, daily volume has increased substantially.

As health professionals grew in number, the pool of skilled long-term care workers has also increased. In January 2018, the Long-term Care Benefit and Reimbursement System was changed to a service-based model for more convenient care that aligns better with client needs.

To protect patients’ dignity, the Ministry published management procedures for medical institutions offering advance care planning and advance decision in April 2018. The Patient Right to Autonomy Act promulgated in January 2019 is the first such law in Asia safeguarding patients’ right to a good death.

The Ministry and other agencies are jointly implementing a Social Safety Net Enhancement Project approved by the Executive Yuan in early 2018. Focusing on family-centered and community-based services, fragile and high-risk families and those in crisis can receive services; other programs target at-risk children and teenagers.

As a sufficient number of well-trained social workers is essential to successfully administer such policies, the Ministry seeks to improve their working conditions as well as collaborate with law enforcement and prosecutors to ensure social workers’ safety. Continuing and advanced professional education and examinations following training courses will help these front-line workers and those appointing them serve clients with best practices.

As Taiwan’s workforce, economic development and social stability all face major challenges from declining birthrates, we are seeking policy solutions to issues such as the high costs of raising children,

(See Table of Contents)
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parents struggling to balance work and family duties, and child care quality and access. Subsidies for such care have extended services to children under the age of 2 since 2018. Our policy to develop public and private services seeks to extend child care to all who need it.

Drug abuse and food safety issues are two other essential health policy areas. Our Ministry has established Drug Abuse Prevention Centers as well as Substance Treatment and Research Centers since 2018. These facilities assist clients in finding treatments and occupational training as well as offering job placement and other services.

Regarding food safety, our new Five-Ring Policy will gradually integrate source and production management,market inspections, vendor accountability and more complete supervision to ensure purity and freshness.

Challenges to public health will continue to arise, and we will meet each by seeking viewpoints from the people and all interested parties. By integrating local and central government resources, we can provide services that optimally address social needs. The Ministry of Health and Welfare will continue to build a public health policy environment that equally empowers all citizens to lead healthy, joyful, fair and sustainable lives.

Minister of Health and Welfare Shih-Chung Chen

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Organization and Policy

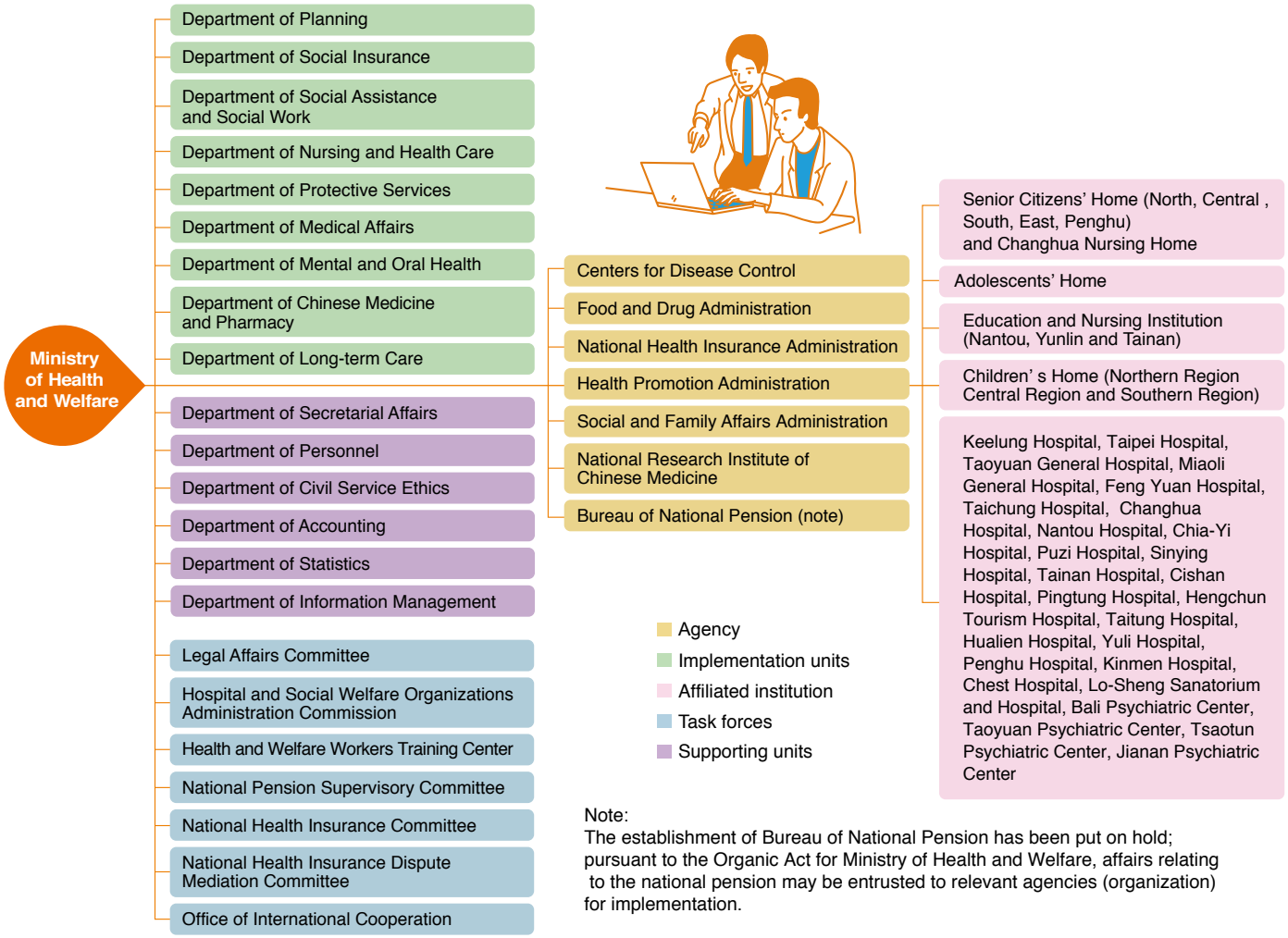
In accordance with the organizational restructuring of the Executive Yuan, the Ministry of Health and Welfare (hereinafter referred to as the "MOHW") was established in 2013, by integrating 21 divisions and task forces of the former Department of Health, five subordinate authorities, the Ministry of the Interior's Department of Social Affairs, Child Welfare Bureau, Domestic Violence and Sexual Assault Prevention Committee, National Pension Supervisory Committee, and the Ministry of Education's National Research Institute of Chinese Medicine. A human-centric health and welfare network was thus formed to improve the people's health and well-being.

Guided by our mission of "promoting the health and well-being for all citizens" and our vision of "becoming the most trusted government agency", the Ministry will adhere to global and innovative thinking with localized strategies to integrate social welfare and healthcare resources as we diligently plan administrative measures and integrated, consistent public policies so that we can deliver comprehensive, one-stop services that will enable all citizens to lead more joyful and healthier lives.

Chapter 1 Organizational Structure

The minister oversees ministry affairs and is aided by two deputy ministers, one vice minister, and one secretary-general. The MOHW consists of nine departments, six administrative departments, seven mission-oriented units, and six affiliated third-level agencies (institutes). It oversees 26 hospitals and 13 social welfare institutions, as shown in Figure 1-1.The MOHW is responsible for health promotion, disease control, food safety and drug management, medical care, social insurance, social welfare, social assistance, and protective services.

Figure 1-1 Organization of the Ministry of Health and Welfare (MOHW)



Note:
The establishment of Bureau of National Pension has been put on hold; pursuant to the Organic Act for Ministry of Health and Welfare, affairs relating to the national pension may be entrusted to relevant agencies (organization) for implementation.

Chapter 2 Expenditure

The Ministry's financial statement for 2018 came to 216.192598 billion NTD, with various expenses and their percentages shown in Figure 1-2.

Chapter 3 Administrative Goals

Section 1 Annual Objectives

The Ministry has prepared its administrative plans and objectives for 2018 as shown in Figure 1-3 in accordance with the Executive Yuan's administrative policies and approved budgets. The excerpt of key strategies is as follows:

1. Reinforcing the welfare delivery system and giving priority to care for vulnerable groups

(1) Protecting children and youths' welfare and rights; constructing diverse nursery models of consistent quality.

(2) Implementing "Convention on the Rights of Persons with Disabilities", and improving the service capacities and quality.

(3) Reinforcing the empowerment of women and constructing a friendly environment of empowerment.

(4) Integrating current networks for child/youth protection and high-risk family services to strengthen social safety network.

2. Setting up a high-quality long-term care system and preparing holistic long-term care service resources

(1) Improving long-term care quality and expanding upon diverse supply capacities.

(2) Building up comprehensive ABC tier resources to improve the accessibility of community care services.

(3) Promoting care for solitary seniors and integrated outpatient services; bolstering community care services for seniors with dementia.

3. Creating a mutual assistance society and improving the protective services system

(1) Safeguarding economic means for the disadvantaged minorities and promoting the "Savings Account for Future Education and Development of Children and Youth".

(2) Constructing a community mutual care network and expanding capacities for volunteer services.

(3) Constructing a vocational system for social work and fleshing out social worker human resources for local governments.

(4) Strengthening the three-level sexual violence preventive services system.

(5) Creating interconnected networks for children and youth protection and implementing early intervention to provide supportive services.

4. Expanding current systems of healthcare and safeguarding people's rights to seek medical assistance

(1) Constructing community-based healthcare network; promoting hospice care for patients in homes and communities.

(2) Fortifing current systems for emergency medical care and continuing to inject resources to medical services in remote areas.

(3) Promoting the legalization of working rights for physicians and improving the working environment for medical personnel; fortifing existing handling mechanisms for medical disputes.

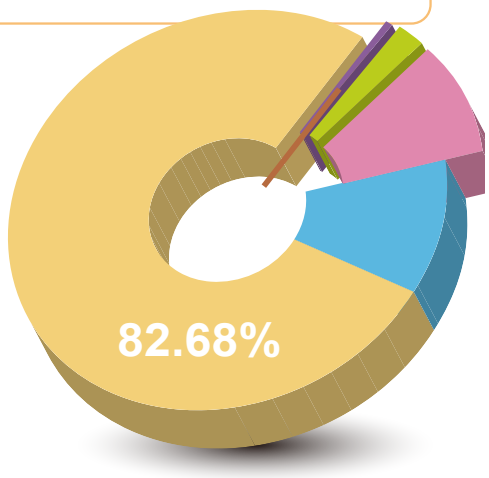
(4) Promoting premium nursing work environment to attract more nursing personnel return; strengthening nursing talent cultivation and institutional management.

(5) Constructing a healthcare environment for TCM and improving the quality of services provided by Chinese Traditional Folk Therapy personnel.

Figure 1-2 Distribution of 2018 Health and Welfare Final Accounts

Units:NT$1,000, %

Education	143,499	0.07%
Social Assistance	1,291,454	0.60%
Science	4,737,962	2.19%
Medical and Health Care	17,392,494	8.04%
Welfare Services	13,886,598	6.42%
Social Insurance	178,740,591	82.68%



(6) Strengthening talent cultivation and technological researches in health and welfare; promoting the development for biotechnology industries.

(7) Promoting international and cross-strait collaboration and exchanges in the areas of health and welfare.

5. Establishing a high-quality communicable disease prevention preparedness system and advancing toward a new era in epidemic disease prevention

(1) Constructing a comprehensive epidemic prevention system by strengthening capacities for infectious disease monitoring, early warning, risk control and prevention responses.

(2) Implementing relevant vaccination operations and ensuring adequate financial resources for vaccinations.

(3) Expanding upon existing screening and providing thorough care to achieve further reduction of TB and challenging the target of zero growth for AIDS.

(4) Expanding upon international epidemic prevention collaborations and promoting emerging epidemic network integrations to prevent the entry of infectious diseasesin to the country.

6. Constructing a safe environment for food and medicine to protect all citizens with food and medicine safety

(1) Implementing adequate food, medicine and cosmetics management to protect and uphold the reputation of MIT food and medicine.

(2) Strengthening multi-agency collaborations and incorporating big data analysis to bolster the existing networks of early warning for food and medicine safety.

(3) Promoting information transparency and ensuring consumers' rights to know.

(4) Strengthening TCM ingredient border management to improve TCM (material) quality and safety.

7. Constructing a healthy and supportive environment to facilitate holistic health promotion

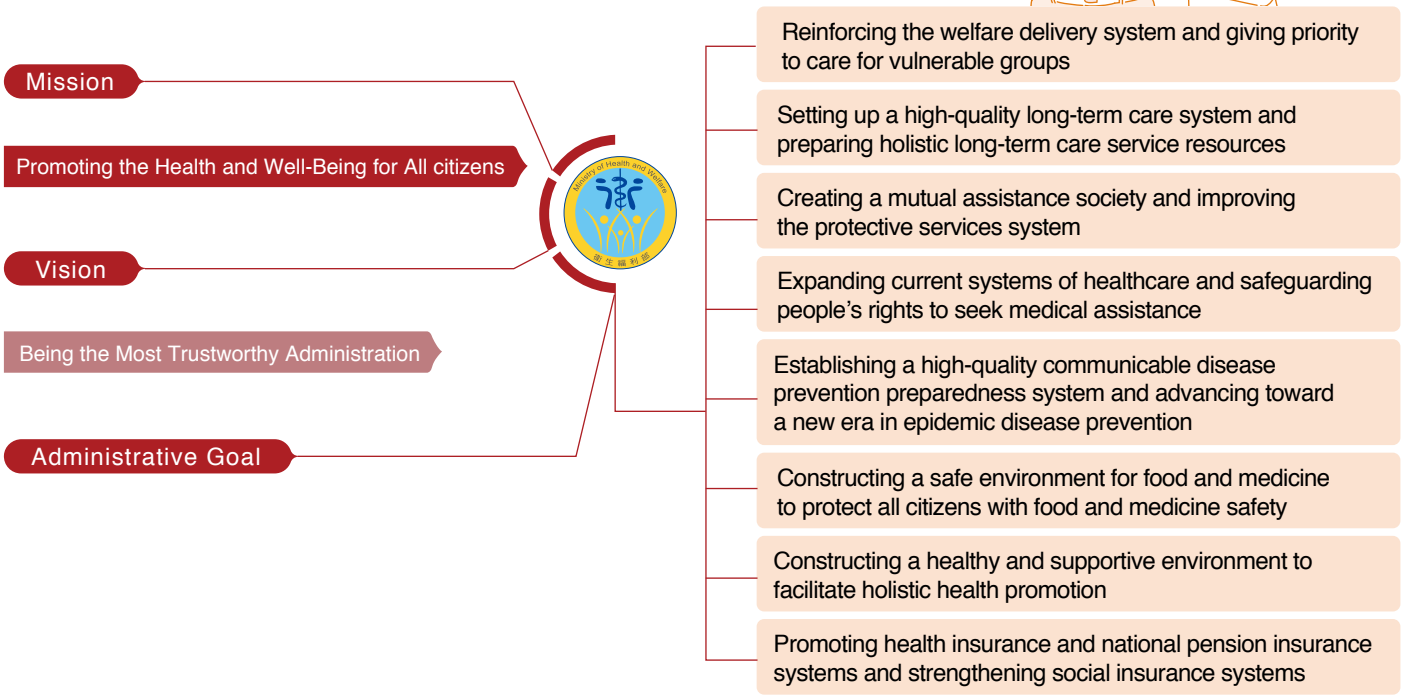
(1) Strengthening the prevention and management for chronic diseases; nurturing healthy lifestyles by creating a smoke and betel-nut free supportive environment.

(2) Improving the environment for maternal and child healthcare services, fostering better health for aboriginal people and new residents promoting aging-friendly city.

(3) Strengthening cancer prevention and promoting cancer navigation plans.

(4) Strengthening citizen health indicator monitoring; developing database for seniors and nutrition.

Figure 1-3 Administrative Goals of the MOHW, 2018



(5) Promoting eHealth and facilitating smart healthcare services.

(6) Promoting holistic mental health services and "New Generation Anti-drug Strategy".

(7) Fostering greater capacity for dental care services and educating children to cultivate proper habits for dental hygiene.

8. Promoting health insurance and national pension insurance systems and strengthening social insurance systems

(1) Accelerating national health insurance reform, optimizing classification for medical treatment services so as to create a sustainable system for healthcare.

(2) Promoting the National Pension System to provide economic security for the elderly.

Section 2 Promoting Gender Equality

In response to the international trend of higher awareness for gender equality, the Ministry has been working with the Gender Equality Committee of the Executive Yuan to actively promote relevant gender equality policies by actively incorporating gender perspectives in the formulation, planning and implementation process while adhering to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW in short) in the hopes of facilitating gender equality in various aspects of health, medical care and social benefits.

In accordance with the official letter titled "Notes on the Editing, Review and Promotion of Gender Equality Promotion Plan for Ministries and Agencies under the Executive Yuan for 2019 through 2022" issued by the Secretary-General of the Executive Yuan, the Ministry has formulated its Gender Equality Promotion Plan for 2019 through 2022. This plan covers four major topics of gender equality as laid out by the Executive Yuan (including the promotion of three-in-one policy for public nursery, overcoming gender stereotypes and biases, strengthening public support for aging society and the promotion of gender equality in the decision-making process for public and private departments) and five ministry-level issues (including the promotion of gender equality in healthcare, construction of gender-friendly environment for medical assistance, improvement in the analysis and services for the needs of new resident victims of domestic violence, bolstering mental health and suicide prevention for LGBTI community, care and protection of rights for pregnant teenagers), with the integration of gender mainstreaming tools for the formulation and promotion of gender equality related policies and measures.

In an effort to facilitate greater public awareness for domestic violence, the Ministry implemented "Domestic Violence Prevention 20th Anniversary Events" and Domestic Violence Prevention 20th Anniversary Seminar" in 2018. For these events, we have created the "ZERO Panther Mascot" Facebook fan page as a channel for interaction and exchanges with the general public. In addition, we also collaborated with YouBike by organizing the Anti-Domestic Violence/ Child Abuse Cycling Day in the hopes of promoting the concepts of domestic violence prevention by integrating online communities with physical events. In light of the HeForShe Women Solidarity Movement for Gender Equality promoted by UN in recent years, the Ministry also hosted the Formosan Day of the Girl Child "Never underestimate the young power of SHE" event in 2018, featuring the "She Power Promotional Press Conference and Celebrity Gender Equality Consulting Room Seminar" to discuss issues of gender equality, physical autonomy and so forth so as to encourage women and girls to bravely speak up for their own rights and safeguard gender equality.

In the celebration of the Formosan Day of the Girl Child 2018, girls (SHE) and boys (HE) are cordially invited to celebrate this special event and advocate for gender equality! (Photograph provided by: Social and Family Affairs Administration)

Section 3 New Southbound Policy

President Tsai Ing-Wen launched the New Southbound Policy in 2016. The New Southbound Medical Cooperation and Industrial Chain Development program was chosen to be one of the five flagship projects in 2017.

2018 Milestones:

1. Initiated the "One Country, One Center Project" on June 1, 2018. Each Center, managed by 6 different Taiwanese hospitals, is responsible of coordinating six Asian countries: India, Indonesia, Philippines, Malaysia, Thailand and Vietnam. The project trained a total of 336 medical professionals and introduced 71 enterprises to the regions.
2. Taiwan Food and Drug Administration (TFDA) and the National Pharmaceutical Regulatory Agency (NPRA) of Maylaysia signed the Collaboration document over pharmaceutical regulations.
3. Initiated the Taiwan Medical and Healthcare Regional Partnership website, integrating and providing information about medical cooperation and industrial development in the New Southbound Policy partner countries.

4. The 2018 Taiwan Medical Travel Statistics reported approximately 414,000 international patients served. Among those, 157,000 patients were from the New Southbound Policy partner countries, roughly 38.08% of the entire international patients in Taiwan.
5. Assisted Taiwan manufacturers better understand relevant local regulations and permit applications for dental products in the New Southbound Policy partner countries. In 2018, one company successfully received permit for dental products issued by the Malaysian authority. Assisted Taiwan manufacturers promote dental products with professional dental value-added services.
6. Published the ***Guideline on Traditional Chinese Medicine (TCM) regulation in Malaysia and Singapore***. Organized and invited government officials and experts from India, Vietnam, Malaysia and Indonesia to attend the three TCM related international conferences/ workshops in Taiwan and to facilitate exchanges/ collaborations opportunities
7. The NPRA of Malaysia has accepted the export certification for traditional medicine and dietary supplements issued by TFDA. Currently, 8 businesses have received the certification and submitted registration applications to the NPRA.
8. Collaborated with representatives from Vietnam and Indonesia in the exchange and collaboration for TB and Dengue fever prevention. Activities include training workshops and disease prevention efforts. Set up the “New Southbound Health Center” to provide infectious disease prevention education, consultation, healthcare referrals and so forth.

New Southbound Medical Cooperation and Industrial Chain Development program press briefing at the MOHW on June 1, 2018

2018 New Southbound Indonesia-Taiwan Dengue Workshop - Ovitrap Deployment Tutorial on October 30, 2018

2018 Tuberculosis Control and Prevention Workshop under New Southbound Policy on June 11, 2018

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2 Health and Welfare Indicators

Rising incomes, improved living environment and nutrition, advances in medicine and health care, and greater health awareness have led to an gradual increase in Taiwan's life expectancy. As baby boomers become older, and the birth rate declines, one must pay greater attention to the health needs of an aging population. The changing demographics may affect not only national health expenditure (NHE) and resource distributions, but also the rate of economic growth. In this section, we address these topics by examining important health and welfare indicators, including population indicators, vital indicators, NHE, social welfare indicators, and international comparisons.

Chapter 1 Population Indicators

At the end of 2018, Taiwan had a registered population of 23.59 million, an increase of 0.75‰ from 2017. There were 11.71 million males, a decrease of 0.57‰, and 11.88 million females, an increase of 2.06‰. The sex ratio (the ratio of males to females in a population) was 98.62%.

At the end of 2018, there were 652 people per square kilometer, similar to the previous year. The densest city was Taipei, at 9,818 people. The least dense area was Taitung, at 62 people, followed by Hualien, at 71 people.

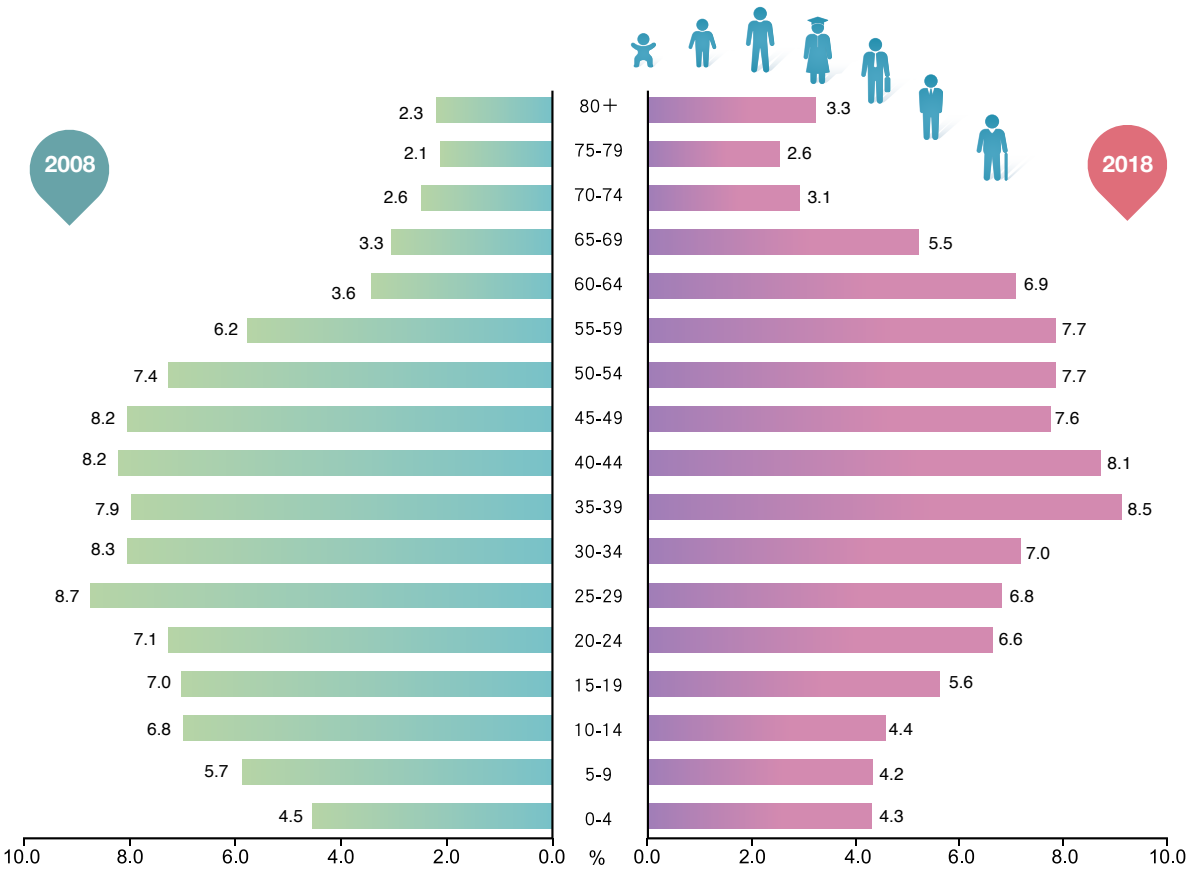
Section 1 Population Age Structure

The declining birth rate and the rising life expectancy at birth have reduced the proportion of young population, and conversely increased the proportion of the elderlies. Between 2008 and 2018, the proportion of the population aged 0-14 dropped from 16.95% to 12.92%, while the proportion of the population at 65 years old or over has exceeded 7.0% as of 1993. Today, Taiwan has already reached the stage of being an aging society as the proportion of elderly continues to rise and in 2018, the number has risen to 14.56% as shown in Figure 2-1.

Regarding gender differences, females accounted for a greater proportion of aging population than the males. In 2018, females accounted for higher proportion 15.67% of elderlies than males which accounted for 13.43%. On the other hand, females accounted for lower proportion 12.32% of young population than males which accounted for 13.53%. (Figure 2-2).

Figure 2-1 Population Age Structure

Source: Ministry of the Interior, R.O.C. (Taiwan)



The dependency ratio [(population aged 0-14 + population aged 65 and above)/population aged 15-64* 100] fell from 56.3% in 1981 to 37.9% in 2018. This was primarily due to the rapid decrease in the young-age dependency ratio [population aged 0-14/ population aged 15-64* 100] from 49.4% to 17.8%, and the steady increase in the old-age dependency ratio [population aged 65 and above/population aged 15-64* 100] from 6.9% to 20.1% (Figure 2-3)

Figure 2-2 2018 Population Age Structure, by Gender

Source: Ministry of the Interior, R.O.C. (Taiwan)

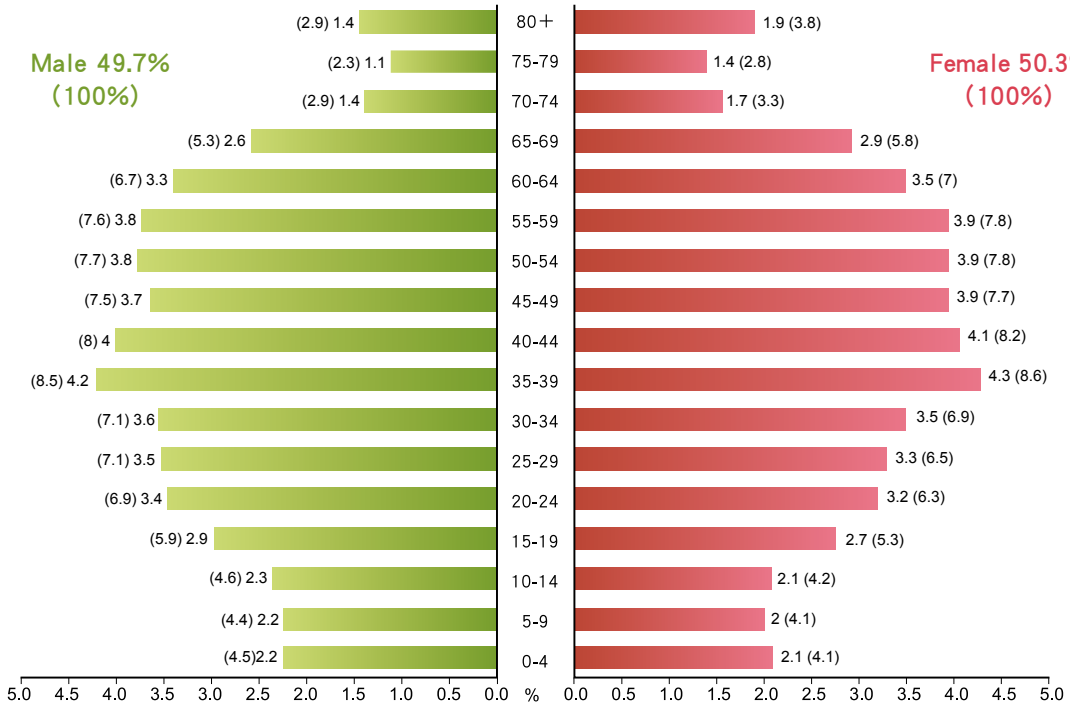
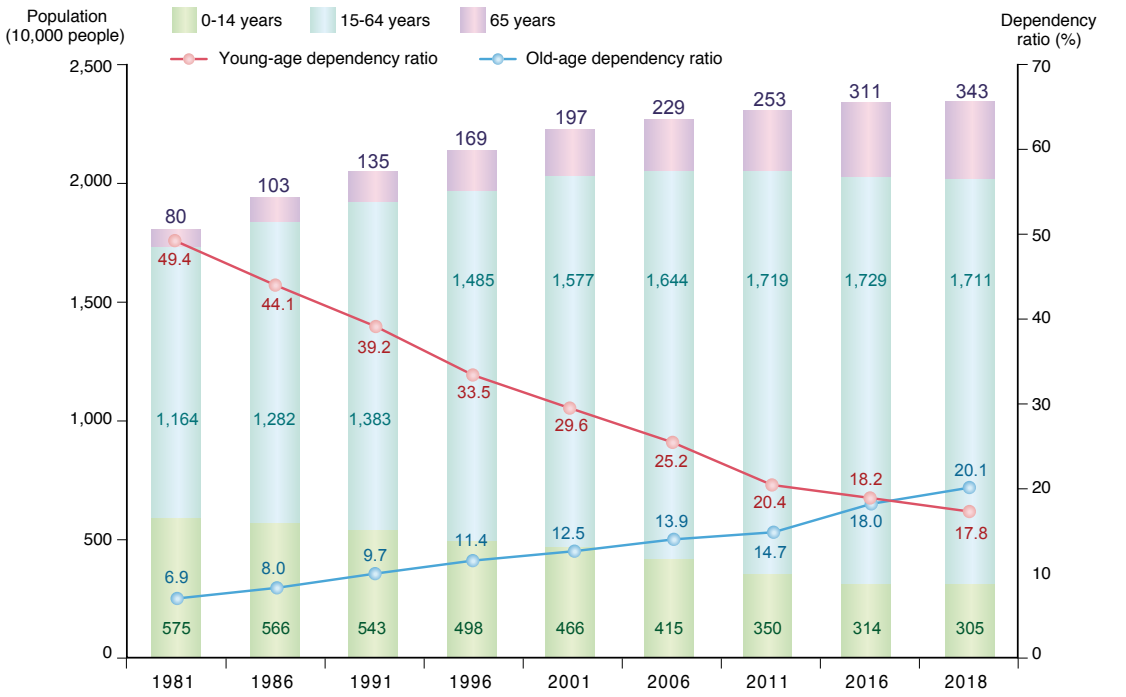


Figure 2-3 Population Age Structure and Dependency Ratio, by Year

Source: Ministry of the Interior, R.O.C. (Taiwan)

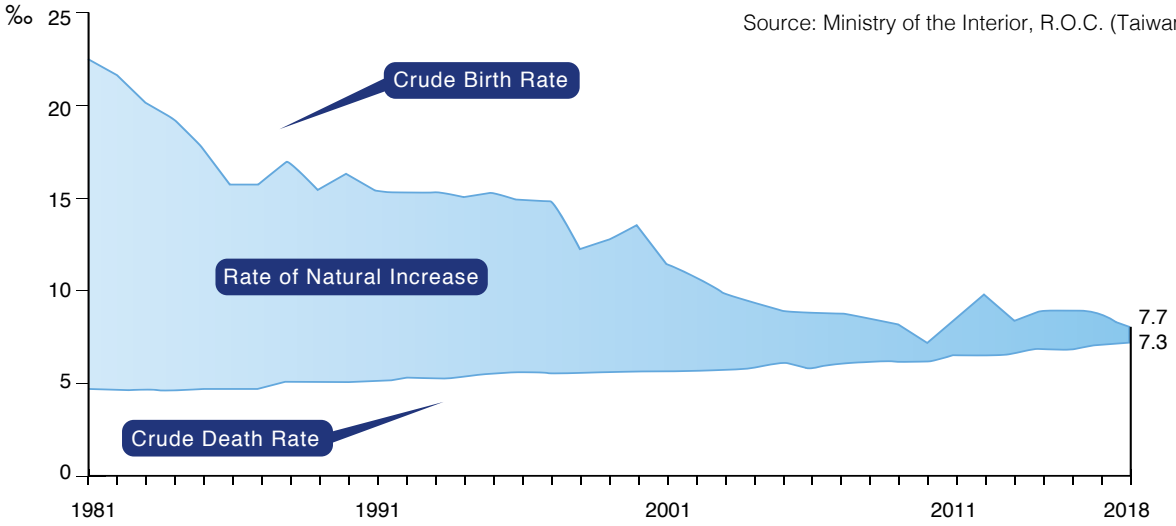


Section 2 Birth and Death

Taiwan's changing socioeconomic structure has led to a steady decline in the fertility rate. The crude birth rate (births/mid-year population* 1,000) fell from 20‰ in the early 1980s to below 10‰ in 2000s, and to 7.7‰ in 2018. The crude death rate (deaths/mid-year population* 1,000) rose from 5‰ in the 1980s to 7.3‰ in 2018, because the proportion of the elderly population was increasing. The overall impact has been a decline in the rate of natural increase (crude birth rate minus crude death rate), from over 10‰ in the 1980s to about 0.4‰ in 2018 (Figure 2-4).

Figure 2-4 Crude Birth Rate, Crude Death Rate, and Rate of Natural Increase, by Year

Source: Ministry of the Interior, R.O.C. (Taiwan)

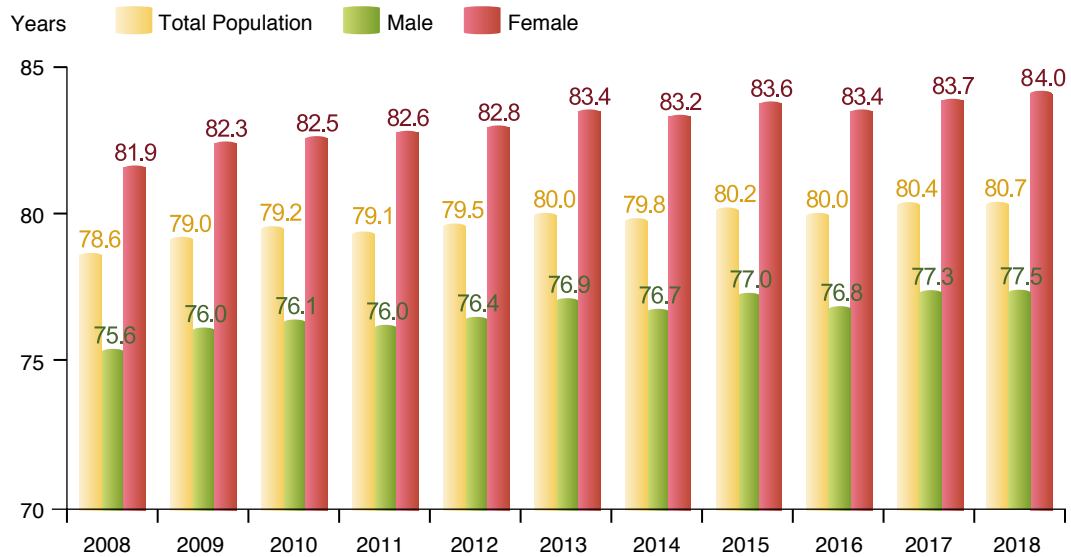


Section 3 Life Expectancy

Life expectancy at birth was 80.7 in 2018, representing an increase of 2.1 years over the past decade. Life expectancy at birth increased by 1.9 years to 77.5 for males, and by 2.1 years to 84.0 for females during the same period, showing that women live longer than men and the gap has been widening (Figure 2-5 and Table 2, Appendix 1).

Figure 2-5 Life Expectancy at Birth, by Year

Source: Ministry of the Interior, R.O.C. (Taiwan)



Chapter 2 Vital Indicators

Section 1 Ten Leading Causes of Death

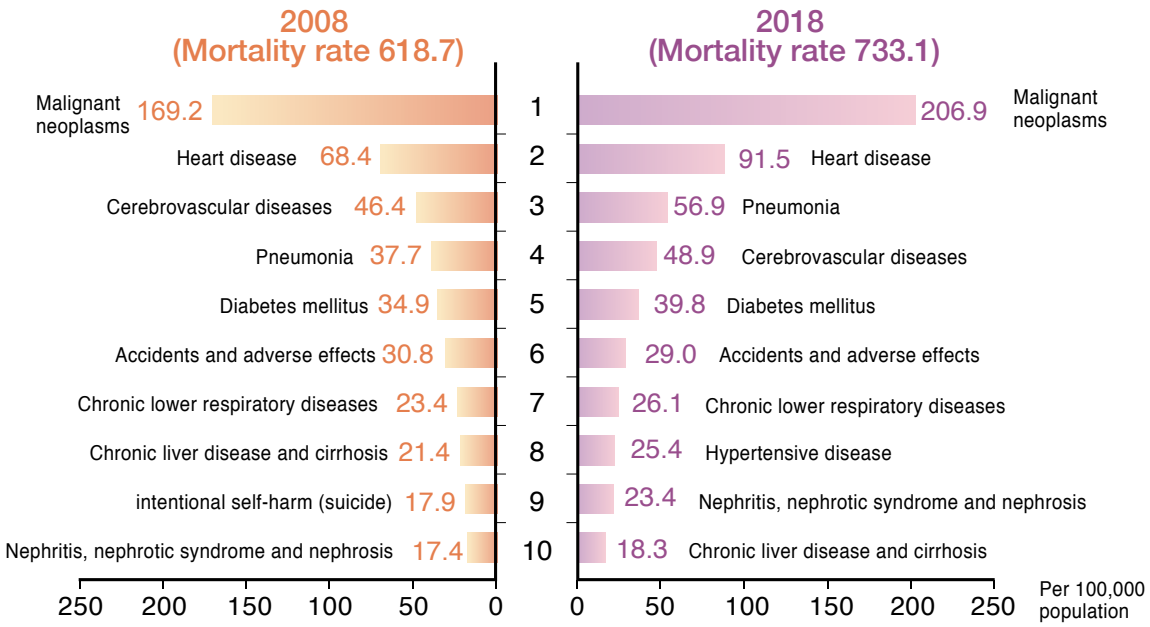
Economic transformation, better quality of life, and improved health care have led to changes in the leading causes of death. In 1952, acute and communicable diseases took the most lives in Taiwan; today, malignant neoplasms (cancer), accidents, and chronic diseases such as cardiovascular diseases represent the main causes.

In 2018, there were 172,859 deaths and the crude mortality rate was 733.1 per 100,000 population, an increase of 0.5% compared to 2017 and an increase of 18.5% compared to 2008. The standardized mortality rate [based on the WHO standard world population age structure for 2000] was 415.0 per 100,000 population, a decrease of 2.2% compared to 2017 and a decrease of 14.3% compared to 2008.

In 2018, the ten leading causes of death accounted for 77.2% of all deaths, and were primarily chronic diseases. In descending order by mortality rate they were (1) malignant neoplasms (cancer), (2) heart disease, (3) pneumonia, (4) cerebrovascular diseases, (5) diabetes mellitus, (6) accidents and adverse effects, (7) chronic lower respiratory diseases, (8) hypertensive diseases, (9) nephritis, nephrotic syndrome and nephrosis, and (10) chronic liver disease and cirrhosis. Compared to 2008, the leading causes of death that increased in ranking included pneumonia, hypertensive disease, nephritis, nephrotic syndrome and nephrosis; causes that fell in ranking included cerebrovascular diseases, intentional self-harm (suicide), chronic liver disease and cirrhosis as shown in Figure 2-6.

Figure 2-6 Changes in the Ten Leading Causes of Death

Source: Department of Statistics, MOHW, R.O.C. (Taiwan)



Section 2 Cancer Incidence and Causes of Cancer Death

1. Cancer Incidence

According to 2016 cancer registry data, the incidence rates of cancer for males and females were 485.1 and 414.4 per 100,000 population respectively. If adjustments were made based on the WHO constructed standard world population age structure from 2000, the age-standardized incidence rates for males and females became 330.0 and 269.1 people per 100,000 population, respectively (Table 2-1).

Table 2-1 Incidence of Ten Leading Cancers, 2016

Source: Ministry of Health and Welfare, R.O.C. (Taiwan)

Male				Female			
Rank	Cancer Site	No. of Cases	Age-Standardized Incidence Rate (Per 100,000 Population)	Rank	Cancer Site	No. of Cases	Age-Standardized Incidence Rate (Per 100,000 Population)
1	Colon	8,706	49.3	1	Female Breast	12,672	73.0
2	Liver and Intrahepatic Bile Ducts	7,680	44.0	2	Colon	6,668	34.1
3	Lungs, Bronchus, and Trachea	7,661	43.2	3	Lungs, Bronchus, and Trachea	5,827	29.9
4	Oral Cavity, Opharynx, and Hypopharynx	7,144	42.4	4	Thyroid	2,780	18.1
5	Prostate	5,359	30.1	5	Liver and Intrahepatic Bile Ducts	3,395	16.8
6	Esophagus	2,431	14.1	6	Uterus	2,462	14.0
7	Stomach	2,306	12.6	7	Ovary, Fallopian Tube, and Broad Ligament	1,507	9.2
8	Skin	1,982	10.9	8	Cervix	1,432	8.1
9	Bladder	1,600	8.8	9	Skin	1,645	7.8
10	Leukemia	1,252	8.5	10	Stomach	1,352	6.7
	Total	**56,854**	**330.0**		**Total**	**48,978**	**269.1**

Notes: 1. Cancer registry data excludes carcinoma in situ.
2. Ranked from highest to lowest by age-standardized incidence rate (per 100,000 population).
3. The age-standardized incidence rate is based on the standard world population age structure in 2000.
Formula: Σ (Age-Specific Incidence Rate x Standard Age-Specific Population)/Standard Total Population.

2. Causes of Cancer Death

In 2018, there were 48,784 deaths due to malignant neoplasms accounting for 28.2% of total deaths and a crude mortality rate of 206.9 per 100,000 population. This represented an increase of 1.4% compared to the previous year and an increase of 22.3% compared to 2008. The standardized cancer mortality rate in 2018 was 121.8 per 100,000 population, a decrease of 1.3% compared to 2017 and a decrease of 8.9% compared to 2008.

The ten leading causes of cancer death in 2018 were cancers of the (1) trachea, bronchus and lung; (2) liver and intrahepatic bile ducts; (3) colon, rectum and anus; (4) breast (female);(5) oral cavity; (6) prostate; (7) stomach; (8)pancreas; (9) oesophagus; (10) cervix and uterus (with exact cancer position not identified). Compared to 2008, cancers of the oral cavity, prostate, and pancreas rose in the rankings, while cancers of the stomach and uterus fell (Figure 2-7).

Section 3 Infant and Neonatal Mortality Rates

Other than a slight increase in 1995 due to a new birth reporting system, advances in public health have led to general declines in both the infant mortality rate (deaths before age one per 1,000 live births) and the neonatal mortality rate (deaths in the first four weeks of life per 1,000 live births). In 2018, the infant mortality rate declined to 4.2‰,compared to 8.9‰ in 1981. Over the same period, the neonatal mortality rate dropped from 3.1‰ to 2.6‰ (Figure 2-8).

Figure 2-7 Changes in the Ten Leading Causes of Cancer Death

Source: Department of Statistics, MOHW, R.O.C. (Taiwan)

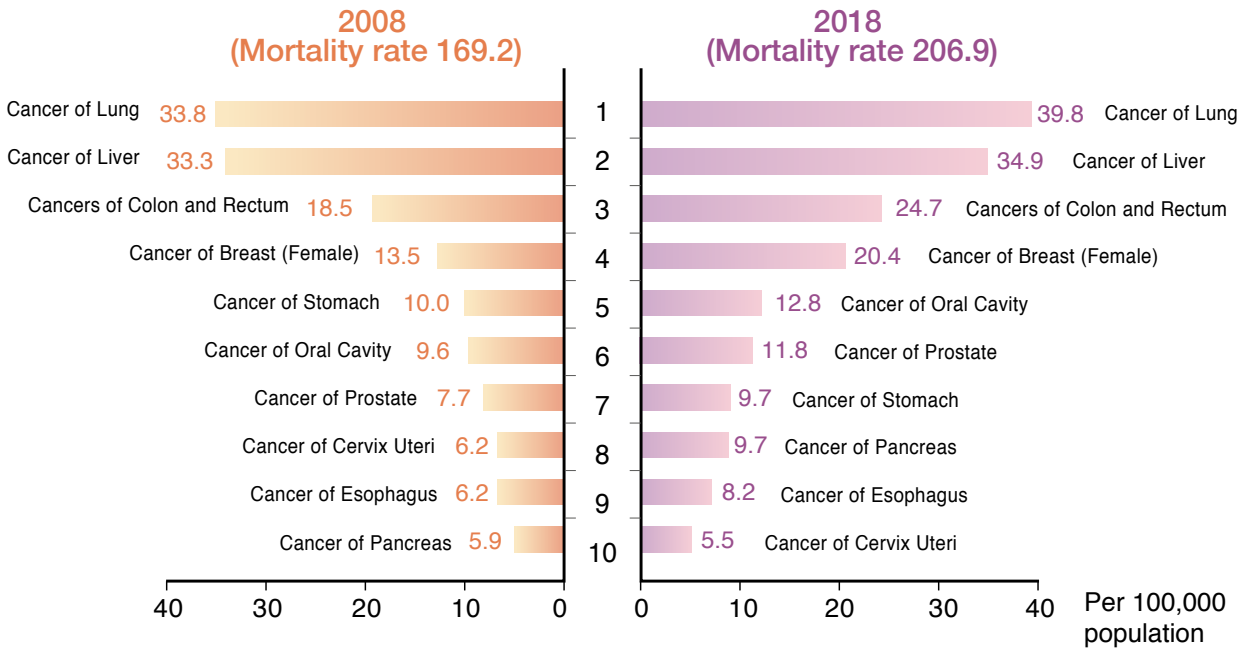
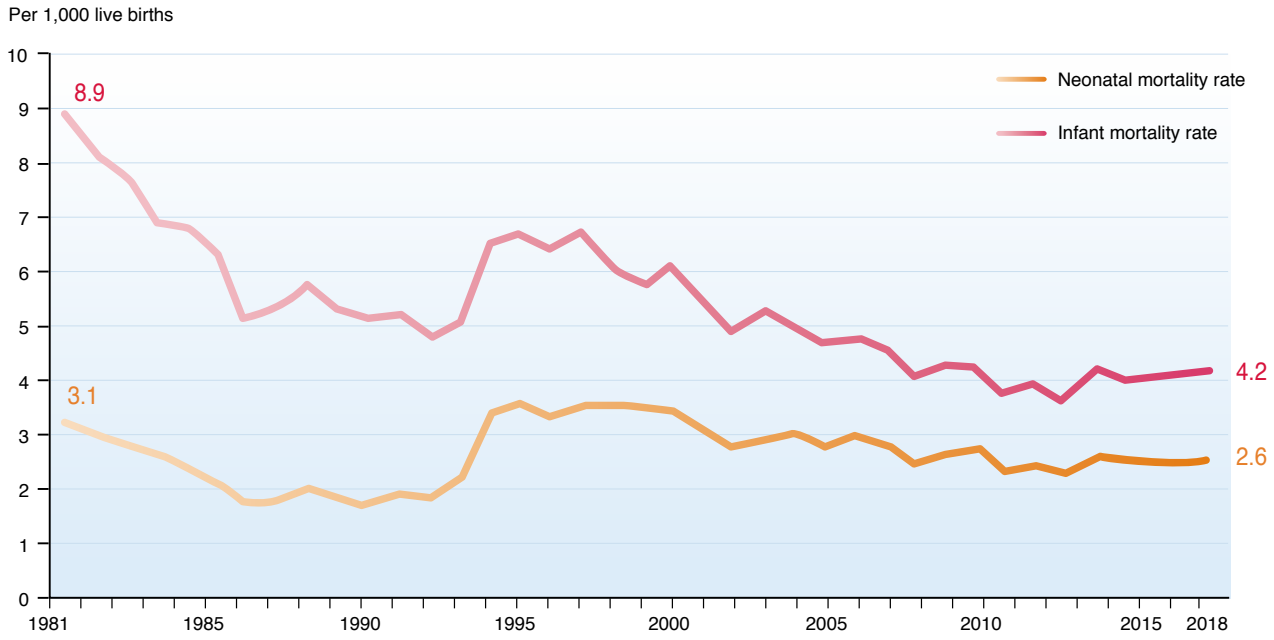


Figure 2-8 Infant and Neonatal Mortality Rates, by Year

Source: Department of Statistics, MOHW, R.O.C. (Taiwan)



Notes: The birth reporting system was launched on Mar. 1995.

Chapter 3 National Health Expenditure (NHE)

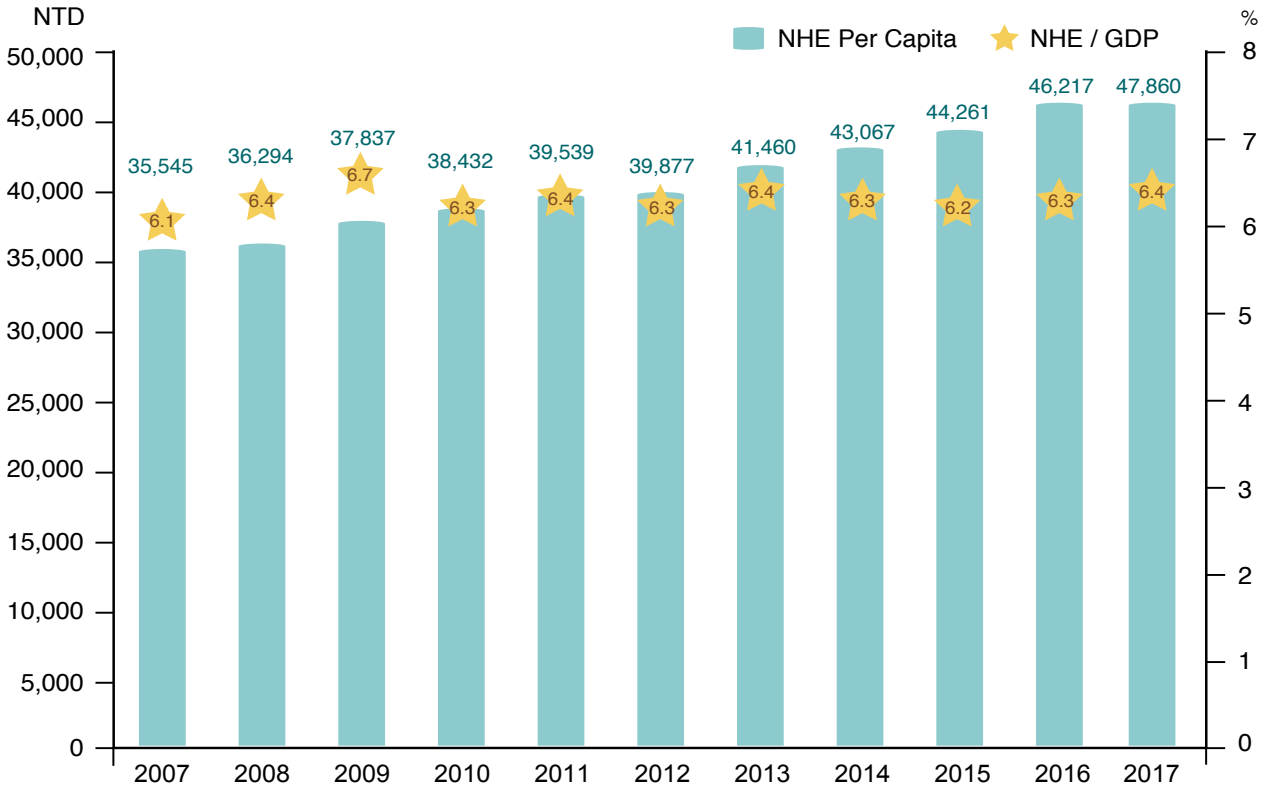
Good health care is a basic need in modern society and a major indicator of a country's advancement.

After steadily rising since 1991, NHE surpassed NT$1127.4 billion in 2017. The expansion of international medicine, development of biomedicine and technology, and a rapidly aging population are expected to contribute to continued increases in NHE.

NHE as a share of GDP increased from 6.1% in 2007 to 6.4% in 2017. Per capita NHE increased from NTD35,545 in 2007 to NTD47,860 in 2017, for an average annual increase of 3.0% (Figure 2-9).

Figure 2-9 NHE/ GDP Ratios and NHE Per Capita, by Year

Source: Department of Statistics, MOHW, R.O.C. (Taiwan)



Chapter 4 Social Welfare Indicators

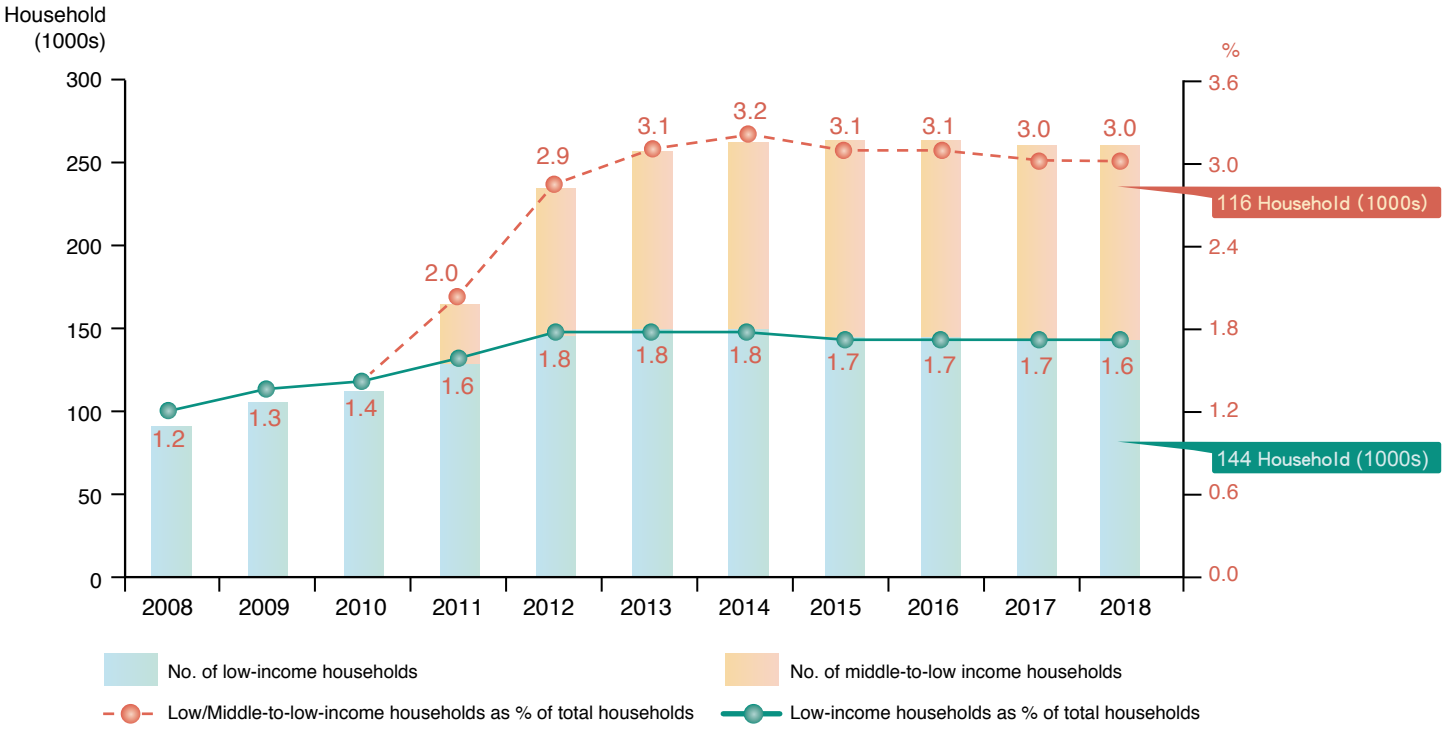
Section 1 Low-Income and Middle-to-Low-Income Households

The government offers various social assistance measures to guarantee a basic standard of care for the poor, the ill, and those in urgent need. In 2008 and 2011, the government increased basic living subsidies for low-income households and lowered the qualification threshold to expand care for more financially vulnerable people. At the end of 2018, there were 259,511 low-income and middle-to-low-income households (143,941 and 115,570 households, respectively), with a total of 649,994 members (311,526 and 338,468 respectively). They accounted for 3.0% of all households and 2.8% of the total population.

Among all members of low-income and middle-to-low-income households, there were 333,482 males and 316,512 females, for a male to female ratio of 1.05, compared to a national average of 0.99 (Figures 2-10, 2-11).

Figure 2-9 Low-Income and Middle-to-Low-Income Households,by Year

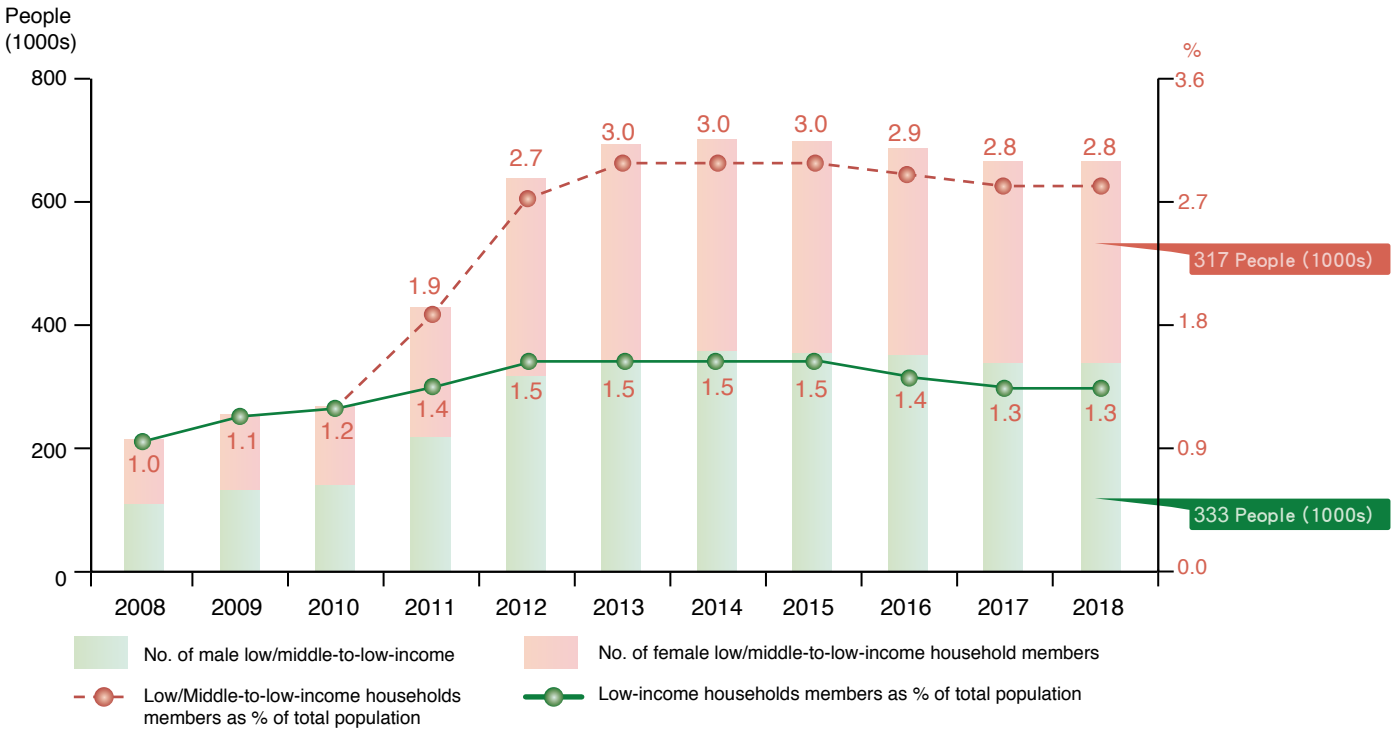
Source: Department of Statistics, MOHW, R.O.C. (Taiwan)



Notes: Since July 2011, middle-to-low-income households have qualified for basic living subsidies.The standard minimum cost of living was changed from 60% of average expenditures per person during the previous year to 60% of the median disposable income per person. Siblings are excluded from household calculations.

Figure 2-11 Low-Income and Middle-to-Low-Income Household Members, by Year

Source: Department of Statistics, MOHW, R.O.C. (Taiwan)



Notes: Since July 2011, middle-to-low-income households have qualified for basic living subsidies.The standard minimum cost of living was changed from 60% of average expenditures per person during the previous year to 60% of the median disposable income per person. Siblings are excluded from household calculations.

Section 2 Disabilities

At the end of 2018, 1,173,978 people were identified as disabled, accounting for 5.0% of the total population and consisting of 658,673 males (56.1%) and 515,305 females (43.9%).

From 2008 to 2018, the number of disabled persons increased by 133,393, or 12.8%, primarily attributed to an aging population and a higher risk of disability facing the elderlies. In terms of age, the percentage of disabled persons 0 - 17 years old fell by 17.9%. On the other hand, disabled persons aged 18 to 64, and 65 and older increased by 5.4%, and 29.6%, respectively (Table 2-2).

In terms of disability types, internal organ loss function and related disabilities, multiple disabilities and chronic mental health conditions had seen the most increase in incidence; in the most recent decade, the number of people suffering from these disabilities increased by 126,360. In contrast, the number of people with moving functional limitation decreased by 34,630.

Table 2-2 Annual Disability Statistics Compendium, by Gender and Age

Source: Department of Statistics, MOHW, R.O.C. (Taiwan)

Year (End)	Gender (Persons)			Age group (Persons)			As % of total population
	Total	Male	Female	0-17 Years	18-64 Years	65 Years & Above	
2008	1,040,585	599,664	440,921	63,509	597,090	379,986	4.5
2009	1,071,073	615,621	455,452	63,440	611,154	396,479	4.6
2010	1,076,293	616,675	459,618	62,705	619,809	393,779	4.7
2011	1,100,436	629,179	471,257	61,833	631,413	407,190	4.7
2012	1,117,518	636,287	481,231	62,051	644,023	411,444	4.8
2013	1,125,113	639,969	485,144	59,570	643,185	422,358	4.8
2014	1,141,677	648,807	492,870	58,737	646,992	435,948	4.9
2015	1,155,650	655,444	500,206	56,885	648,486	450,279	4.9
2016	1,170,199	662,800	507,399	55,702	645,588	468,909	5.0
2017	1,167,450	658,682	508,768	54,051	637,568	475,831	5.0
2018	1,173,978	658,673	515,305	52,119	629,460	492,399	5.0

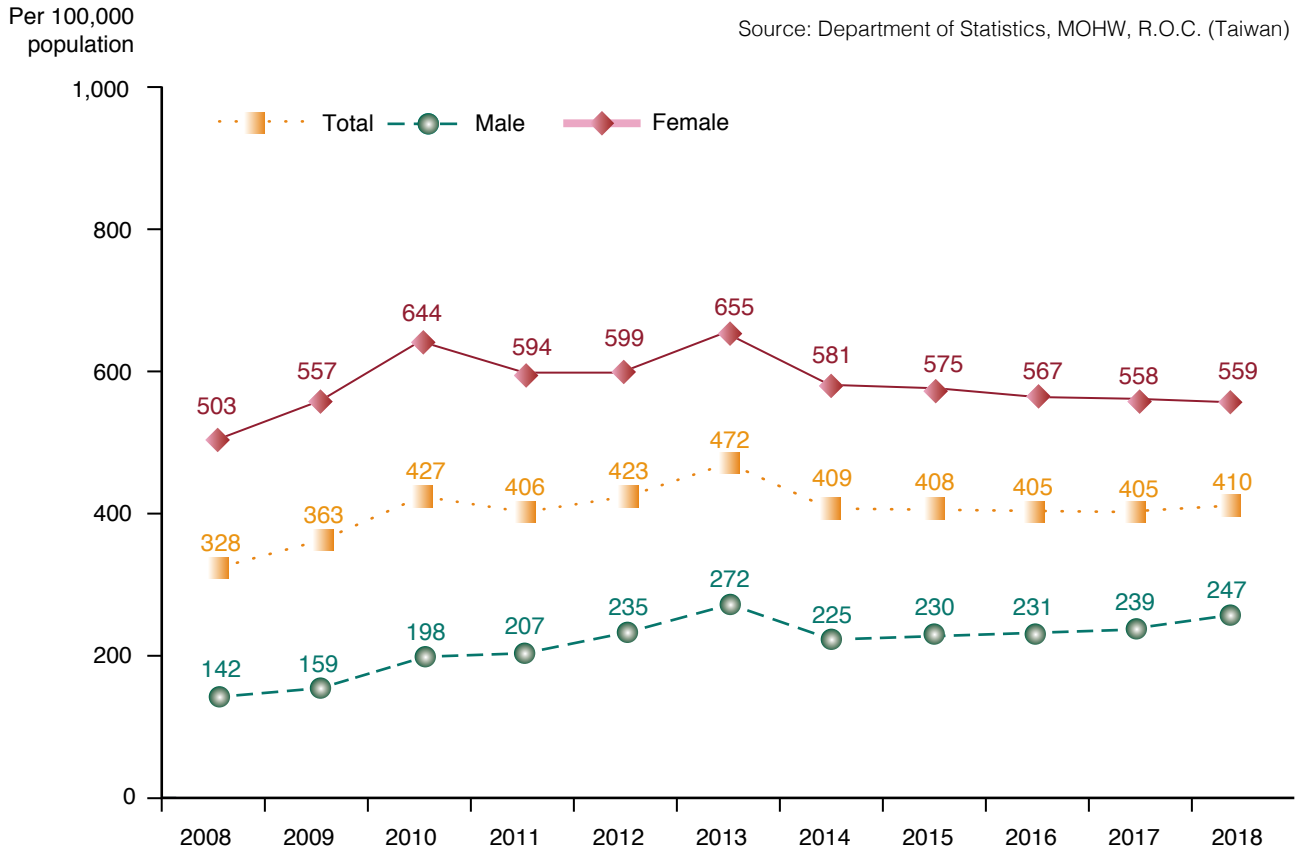
Section 3 Domestic Violence

In light of the government's stronger push to increase public awareness of domestic violence and promote primary prevention at the community level by strengthening the reporting network and support measures, the number of reported cases of victims in domestic violence increased from 75,000 in 2008 to 97,000 in 2018. In terms of victims per 100,000 population, there were 410 reported victims in 2018, consisting of 247 male victims and 559 female victims respectively. Female victims outnumbered male counterparts by a factor of 2.3 (Figure 2-12).

As for type of cases, there had been a total of 120,002 cases of domestic violence reported in 2018, with "spouse, former spouse, or cohabitating partner" being the type in majority at 54.2%, while "children and youths protection" came to 12.7%. (Figure 2-13).

Figure 2-12 Victims of Domestic Violence Rate, by Year

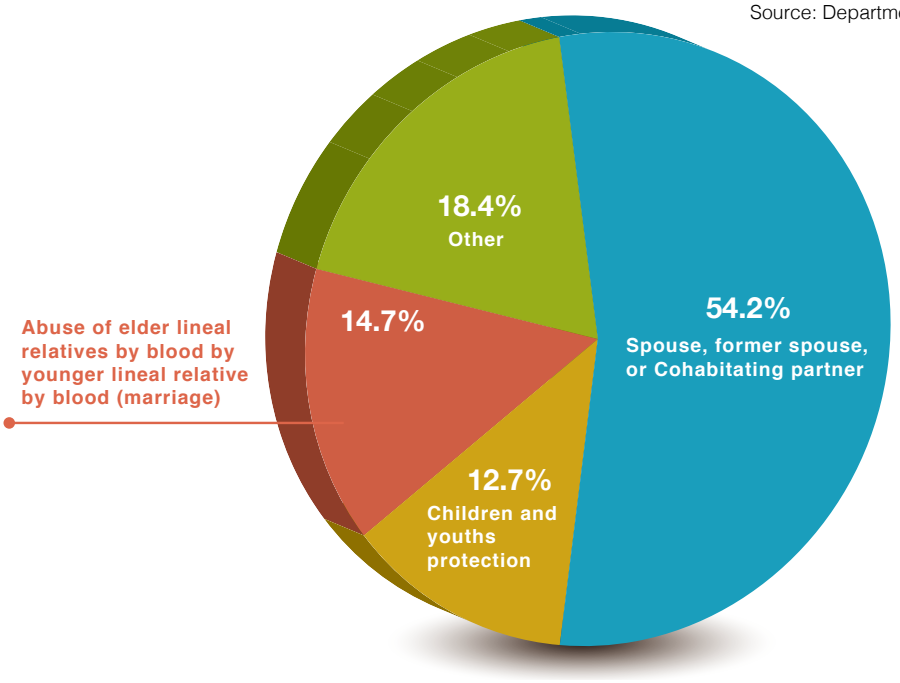
Source: Department of Statistics, MOHW, R.O.C. (Taiwan)



Notes: Victims of Domestic Violence Rate=Reported victims/mid-year population x 100,000.

Figure 2-13 Domestic Violence Reported Cases by Type, 2018

Source: Department of Statistics, MOHW



Section 4 Childcare subsidy

Beginning from August 2018, the Ministry officially expanded eligible targets for childcare subsidy for families with children under the age of 2 and along with the quasi-public nursery policy. This extended the eligibility of recipients to parents in unemployment and to relatives taking care of the children. Statistics revealed that the number of subsidy beneficiaries and amount of subsidy increased by 394,000 recipients and 6.44 billion NTD respectively. The number of childcare subsidy recipients with children under the age of 2 also increased to 96,000. As shown in Table. 2-3.

Table 2-3 Childcare subsidy

Source: Department of Statistics, MOHW, R.O.C. (Taiwan)

Year (End)	Total number of children under the age of 2 in Taiwan (in 10,000)	Total number of beneficiaries for the subsidy		Number of beneficiaries for the nursery subsidy for children under the age of 2 (i.e. by babysitter, community nursery centers, daycare centers) (in 10,000)
		Intended for families with children under the age of 2 (in 10,000)	Amount of subsidy (in 100 million NTD)	
2014	39.7	25.8	51.1	6.3
2015	41.6	25.6	50.5	7.8
2016	41.3	26.3	51.9	8.4
2017	39.4	25.8	50.7	9.0
2018	36.8	39.4	64.4	9.6

Notes: The number of beneficiaries for the subsidy for families with children under the age of 2 is the cumulative total of eligible applicants for the year, which included those whose children reached the age of 2 and changed their application for nursery care. This explains why the number of subsidy applicants for 2018 is greater than the number of applicants for the childcare subsidy intended for children below the age of 2.

Section 5 Economic Security of Children and Youths

Due to the low birth rate, the population of children and youths has been decreasing. At the end of 2018, the number of people aged younger than 18 years old was 3,779,000 which was 122,000 less than in 2017 and 1,090,000 less than in 2008, indicating a 22.4% decrease over the 10-year period. With regard to gender, the male and female young population decreased by 3.2% and 3.1%, respectively, since 2017 and by 22.6% and 22.2%, respectively, since 2008.

To improve economic security of children and youths, county and city governments provide living subsidies (livelihood assistance) to children from low-income families and livelihood assistance to children and youths from vulnerable families. At the end of 2018, living subsidies provided to children from low-income families and children and youths from vulnerable families amounted to NTD3.01 billion and NTD2.64 billion, respectively, which was 5.3% and 2.7% less than in 2017, respectively. The decrease is mainly due to the reduced population of children and youths (Figures 2-14, 2-15).

Figure 2-14 Population of Children and Youths under 18 Years Old

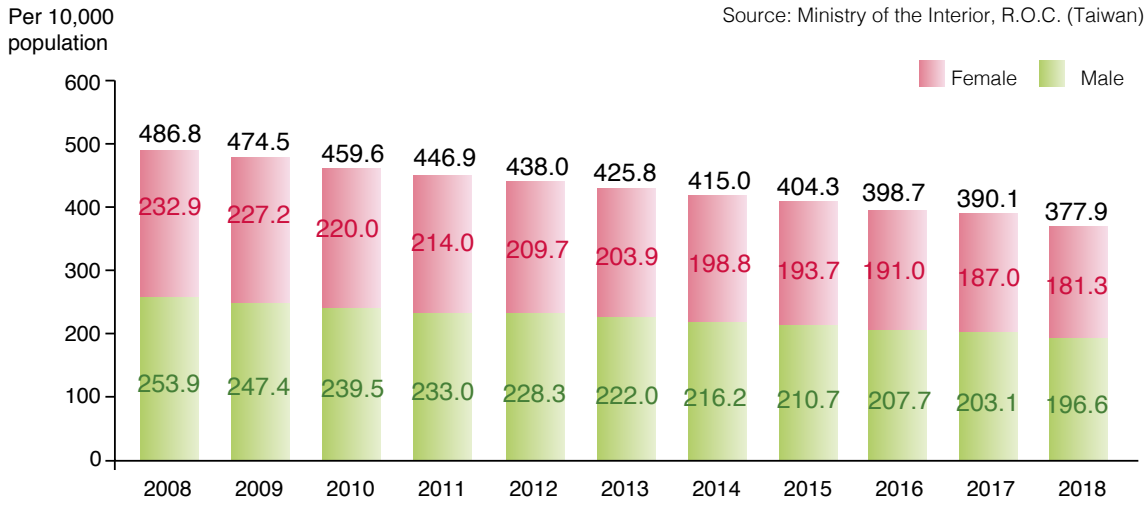
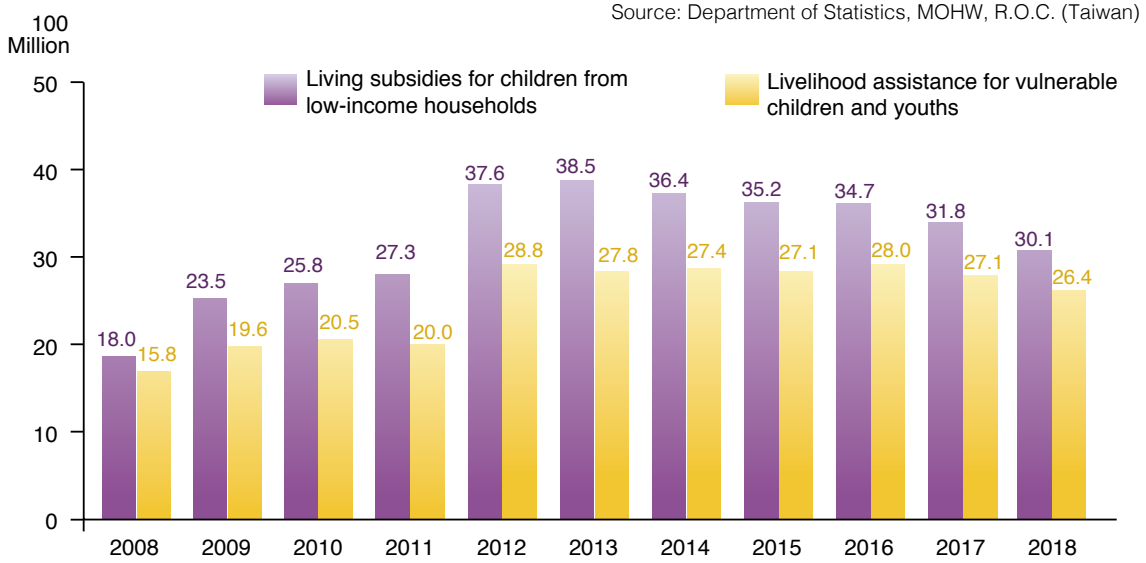


Figure 2-15 Amount of Living Subsidies (Livelihood Assistance) for Children and Youths



Notes: Since July 2011, middle-to-low-income households have qualified for basic living subsidies. The standard minimum cost of living was changed from 60% of average expenditures per person during the previous year to 60% of the median disposable income per person. Siblings are excluded from household calculations.

Chapter 5 International Comparisons

Section 1 Life Expectancy

In Taiwan, life expectancy at birth in 2017 was 80.4 years. If ranked among the Organization for Economic Cooperation and Development (OECD) member states, Taiwan would have been 26th. Taiwan's life expectancy was lower than the OECD median of 81.7 years. Male life expectancy at birth in OECD member states was highest in Switzerland at 81.6 years; in Taiwan, male life expectancy was 77.3 years. Female life expectancy at birth was highest in Japan at 87.3 years; in Taiwan, female life expectancy was 83.7 years (Table 2-4).

Section 2 Rate of Natural Increase

The rate of natural increase in Taiwan in 2018 was 0.4‰, ranking 22th among OECD member states and lower than the OECD median of 2‰. Due to the recent tendency toward late marriage and delayed childbearing, Taiwan's total fertility rate (the average number of live births for a woman over her lifetime) has been decreasing and reached 1.06 in 2018, which was lower than in OECD member states. This rate in all OECD member states, excluding Israel and Mexico, was lower than the replacement level of 2.1. For the same period, Taiwan's crude birth rate was 8‰ and the death rate was 7‰, ranking 35st and 26th among OECD member states, respectively and lower than the respective OECD medians of 11‰ and 9‰. Generally, demographic structures in OECD member states were trending toward low birth rates (Table 2-5).

Section 3 Dependency Ratio

In terms of dependency ratio among the OECD member countries, Japan and Israel ranked top at 66% in 2018, followed by France and Sweden at 60%. Taiwan's dependency ratio was at 37% and ranked last compared to other OECD member countries.

In 2018, the old-age dependency ratio (population aged 65 and above/population aged 15-64 × 100) in Taiwan was 19%. If ranked among OECD member states, Taiwan would have been 32nd. Taiwan's old-age dependency ratio was higher than that in Israel, Chile, Turkey, and Mexico. There was 1 elderly person per 5.3 young and mid-year population in Taiwan. The aging index (population aged 65 and above/population aged 0-14 × 100) of Taiwan was 106%. If ranked among OECD member states, Taiwan would have been 20nd. In comparison to OECD member states, the ratio of elderly people in Taiwan was not high, whereas its ratio of population aged 0-14 years old was slightly lower. As a result, the aging index of Taiwan was higher than that of approximately half of OECD member states (Table 2-6).

Table 2-4 Life Expectancy at Birth in Taiwan and OECD member states, 2017

Source: Ministry of the Interior, R.O.C. (Taiwan); OECD Health Data

Ranking	Country - Ranked by Life expectancy at birth	Total (years)	Male (years)	Female (years)
OECD Median		81.7	79.4	84.0
1	Japan	84.2	81.1	87.3
2	Switzerland	83.6	81.6	85.6
3	Spain	83.4	80.6	86.1
4	Italy	83.0	80.8	85.2
5	Iceland	82.7	81.1	84.3
5	Norway	82.7	81.0	84.3
5	Repulic of Korea	82.7	79.7	85.7
8	Israel	82.6	80.6	84.6
8	Australia	82.6	80.5	84.6
8	France	82.6	79.6	85.6
11	Sweden	82.5	80.8	84.1
12	Ireland	82.2	80.4	84.0
12	Luxembourg	82.2	79.9	84.4
14	Canada	82.0	79.9	84.0
15	New Zealand	81.9	80.2	83.6
16	Netherlands	81.8	80.2	83.4
17	Austria	81.7	79.4	84.0
17	Finland	81.7	78.9	84.5
19	Belgium	81.6	79.2	83.9
20	Portugal	81.5	78.4	84.6
21	Greece	81.4	78.8	83.9
22	United Kingdom	81.3	79.5	83.1
23	Denmark	81.2	79.2	83.1
24	Germany	81.1	78.7	83.4
24	Slovenia	81.1	78.2	84.0
26	**R.O.C. (Taiwan)**	**80.4**	**77.3**	**83.7**
27	Chile	80.2	77.4	83.1
28	Czech Republic	79.1	76.1	82.0
29	United States	78.6	76.1	81.1
30	Estonia	78.2	73.8	82.6
31	Turkey	78.1	75.3	80.8
32	Poland	77.9	73.9	81.8
33	Slovakia	77.3	73.8	80.7
34	Hungary	75.9	72.5	79.3
35	Mexico	75.4	72.9	77.9
36	Latvia	74.8	69.8	79.7

Table 2-5 Population Status of Taiwan and OECD Member States,2018

Source: Ministry of the Interior, R.O.C. (Taiwan); 2018 World Population Data Sheet, Population Reference Bureau

Ranking	Country – Ranked by rate of natural increase	Mid-year population (Millions)	Population (Millions)		Multiple ratio of population	Total fertility rate(Per Woman)	Crude birth rate (‰)	Crude death rate (‰)	Rate of natural increase (‰)
		2018	2030	2050	2050 vs 2018	2018	2018	2018	2018
Global		7,621	8,571	9,852	1.3	2.4	19	7	12
OECD Median		10.6	10.8	12.0	1.1	1.6	11	9	2.0
1	Israel	8.5	10.8	14.4	1.7	3.1	21	5	16.0
2	Mexico	130.8	147.5	164.3	1.3	2.2	19	6	13.0
3	Turkey	81.3	93.3	104.7	1.3	2.1	16	5	11.0
4	Chile	18.6	19.6	20.2	1.1	1.8	14	6	8.0
5	Ireland	4.9	5.5	6.8	1.4	1.9	13	6	7.0
6	Australia	24.1	30.1	37.6	1.6	1.7	13	7	6.0
7	Iceland	0.4	0.4	0.4	1.0	1.7	12	7	5.0
7	New Zealand	4.9	5.6	6.1	1.2	1.8	12	7	5.0
9	Canada	37.2	41.0	46.9	1.3	1.5	11	8	3.0
9	Luxembourg	0.6	0.7	0.8	1.3	1.4	10	7	3.0
9	Norway	5.3	5.9	6.7	1.3	1.6	11	8	3.0
9	United Kingdom	66.4	70.4	74.7	1.1	1.8	12	9	3.0
9	United States	328.0	254.7	289.6	0.9	1.8	12	9	3.0
14	Denmark	5.8	6.1	6.4	1.1	1.8	11	9	2.0
14	France	65.1	68.5	72.3	1.1	1.9	11	9	2.0
14	Sweden	10.2	11.2	12.0	1.2	1.8	11	9	2.0
14	Switzerland	8.5	9.5	10.3	1.2	1.5	10	8	2.0
18	Austria	8.8	9.3	9.7	1.1	1.5	10	9	1.0
18	Repulic of Korea	51.8	52.9	49.4	1.0	1.1	7	6	1.0
18	Netherlands	17.2	17.9	18.4	1.1	1.6	10	9	1.0
18	Slovakia	5.4	5.4	5.0	0.9	1.5	11	10	1.0
22	**R.O.C. (Taiwan)**	**23.6**	**24.0**	**22.7**	**1.0**	**1.1**	**8**	**7**	**0.4**
23	Belgium	11.4	12.0	12.7	1.1	1.6	10	10	0.0
23	Czech Republic	10.6	10.7	10.5	1.0	1.7	11	11	0.0
23	Poland	38.4	36.9	32.6	0.8	1.4	10	10	0.0
23	Slovenia	2.1	2.1	1.9	0.9	1.6	10	10	0.0
27	Finland	5.5	5.8	5.9	1.1	1.5	9	10	-1.0
27	Spain	46.7	45.9	44.3	0.9	1.3	8	9	-1.0
29	Estonia	1.3	1.2	1.1	0.8	1.6	10	12	-2.0
29	Germany	82.8	82.9	79.1	1.0	1.6	9	11	-2.0
29	Greece	10.6	10.8	10.0	0.9	1.3	9	11	-2.0
32	Italy	60.6	60.1	57.6	1.0	1.3	8	11	-3.0
32	Japan	126.5	119.1	101.8	0.8	1.4	8	11	-3.0
32	Portugal	10.3	10.0	9.2	0.9	1.4	8	11	-3.0
35	Latvia	1.9	1.7	1.5	0.8	1.7	11	15	-4.0
36	Hungary	9.8	9.6	9.2	0.9	1.5	9	14	-5.0

Notes: Rate of natural increase=Crude birth rate-Crude death rate

Table 2-6 Dependency Ratio in Taiwan and OECD Member States, 2018

Source: Ministry of the Interior, R.O.C. (Taiwan); 2018 World Population Data Sheet, Population Reference Bureau

Ranking	Country-ranked by dependency ratio	Population structure			Dependency ratio (%)	Young-age dependency ratio (%)	Old-age dependency ratio (%)	Aging index
		0-14 years (%)	15-64 years (%)	65 years and above (%)				
OECD Median		16	66	18	53	25	28	110
1	Japan	12	60	27	66	21	45	219
1	Israel	28	60	11	66	47	19	40
3	France	18	62	19	60	29	31	105
3	Sweden	18	63	20	60	28	32	112
5	Finland	16	63	21	59	26	33	129
6	Greece	14	64	22	56	23	34	149
6	United Kingdom	18	64	18	56	28	28	101
6	Italy	14	64	22	56	21	35	165
6	Denmark	17	64	19	56	26	30	114
10	Estonia	16	64	19	55	25	30	119
10	Latvia	16	65	20	55	24	31	128
10	Belgium	17	65	18	55	26	29	109
10	Portugal	14	65	21	54	22	33	151
13	Netherlands	16	65	18	53	25	28	114
13	Germany	13	65	21	53	20	32	158
13	Ireland	21	65	14	53	32	21	64
13	New Zealand	20	65	15	53	30	23	76
13	Norway	18	66	17	53	27	25	93
19	Czech Republic	16	66	19	52	24	29	121
19	Mexico	27	66	7	52	41	11	27
19	United States	19	66	15	52	29	23	81
19	Australia	19	66	15	52	29	23	81
19	Spain	15	66	19	52	23	29	126
24	Slovenia	15	66	19	51	23	29	127
24	Iceland	20	66	14	51	30	21	71
26	Hungary	15	67	19	50	22	28	128
27	Switzerland	15	67	18	49	22	27	121
27	Austria	14	67	19	49	21	28	129
29	Canada	16	67	17	48	24	24	103
30	Turkey	24	68	8	47	35	12	35
31	Poland	15	68	17	46	22	24	110
32	Chile	20	69	11	45	29	16	54
33	Luxembourg	16	70	14	44	23	20	88
33	Slovenia	15	70	15	44	22	22	97
35	Repulic of Korea	13	73	14	38	18	19	105
36	**R.O.C. (Taiwan)**	**13**	**76**	**15**	**37**	**18**	**19**	**106**

Notes: 1. Dependency ratio = (Population aged 0-14+ Population aged 65 and above) / Population aged 15-64X100
2. Young-age dependency ratio= (Population aged 0-14)/ Population aged 15-64X100
3. Old-age dependency ratio= (Population aged 65 and above) / Population aged 15-64X100
4. Aging index = (Population aged 65 and above) / Population aged 0-14X100

Section 4 Mortality Rates

According to the latest OECD data, in 2016, among developed countries Repulic of Korea had the lowest standardized mortality rate for malignant neoplasms at 165.2 deaths per 100,000 population, compared to a rate of 213.9 deaths in Taiwan. For transport accidents the United Kingdom was the lowest at 2.8 deaths per 100,000 population, compared to a rate of 14.0 deaths in Taiwan. The United Kingdom also had the lowest suicide rate, at 7.3 deaths per 100,000 population, compared to a rate of 15.3 deaths in Taiwan. Japan led in neonatal mortality rate, with 0.9 deaths per 1,000 live births, compared to a rate of 2.4 deaths in Taiwan. Since 2006, the suicide rates decreased in all countries apart from the United States, Canada, the United Kingdom, and Australia (Table 2-7).

Table 2-7 Standardized Mortality Rates of Major Countries

Source: Department of Statistics, MOHW, R.O.C. (Taiwan) OECD Health Data

	Malignant neoplasms (per 100,000 population)		Transport accidents (per 100,000 population)		Suicide (per 100,000 population)		Neonatal mortality (per 1,000 live births)	
	2006	2016	2006	2016	2006	2016	2006	2016
R.O.C. (Taiwan)	230.8	213.9	22.7	14.0	20.5	15.3	2.7	2.4
Japan	193.5	171.5	6.3	3.3	21.6	15.2	1.3	0.9
Repulic of Korea	204.1	165.2	19.9	10.1	26.2	24.6	2.5	1.6
United States	209.5	180.6	16.4	13.3	11.3	13.9	4.5	3.9
Canada	222.2	196.8	10.0	6.2	10.8	11.8	3.7	3.4
United Kingdom	236.2	216.4	5.8	2.8	6.7	7.3	3.5	2.8
Germany	213.5	200.3	6.4	4.0	10.7	10.2	2.6	2.4
France	219.1	197.7	7.8	4.7	16.5	13.1	2.3	2.6
Australia	211.1	185.0	8.9	6.1	10.5	11.9	3.2	2.3
New Zealand	224.3	210.2	11.5	8.4	12.7	11.5	2.7	2.8

Notes:1. If the data for a specific year are not available, the latest available data are used instead.
2. The standardized mortality rates for malignant neoplasms, transport accidents, and suicide were calculated based on the 2010 OECD standards for calculating population.

Section 5 Health Expenditure

In 2017, Taiwan's current health expenditure (CHE) per capita at purchasing power parity (PPP) basis was USD3,047, which was lower than the OECD median of USD3,683. If ranked among OECD member states, Taiwan would have been 22nd. GDP per capita on a PPP basis in Taiwan was USD49,948, which was higher than the OECD median of USD42,785 and ranked 12th when compared to OECD member states. CHE accounted for a 6.1% share of Taiwan's GDP, a relatively low amount that was 2.7 percentage points below the OECD median (8.8%) (Table 2-8).

In comparison to 2007, the share of CHE in GDP increased in most OECD member states of 2017, with the highest increase of 2.9 percentage points in Japan, followed by 2.8 percentage points in Sweden. A decrease was observed in nine countries, including Iceland and Greece. The share of CHE in Taiwan's GDP increased by 0.4 percentage points, which was lower than the OECD mean of 0.8 percentage point and higher than the increase in nine countries, including Hungary, Portugal, and Luxembourg (Figure 2-16).

Figure 2-16 CHE/GDP Proportion

Source: Department of Statistics, MOHW, R.O.C (Taiwan) ; OECD Health Data

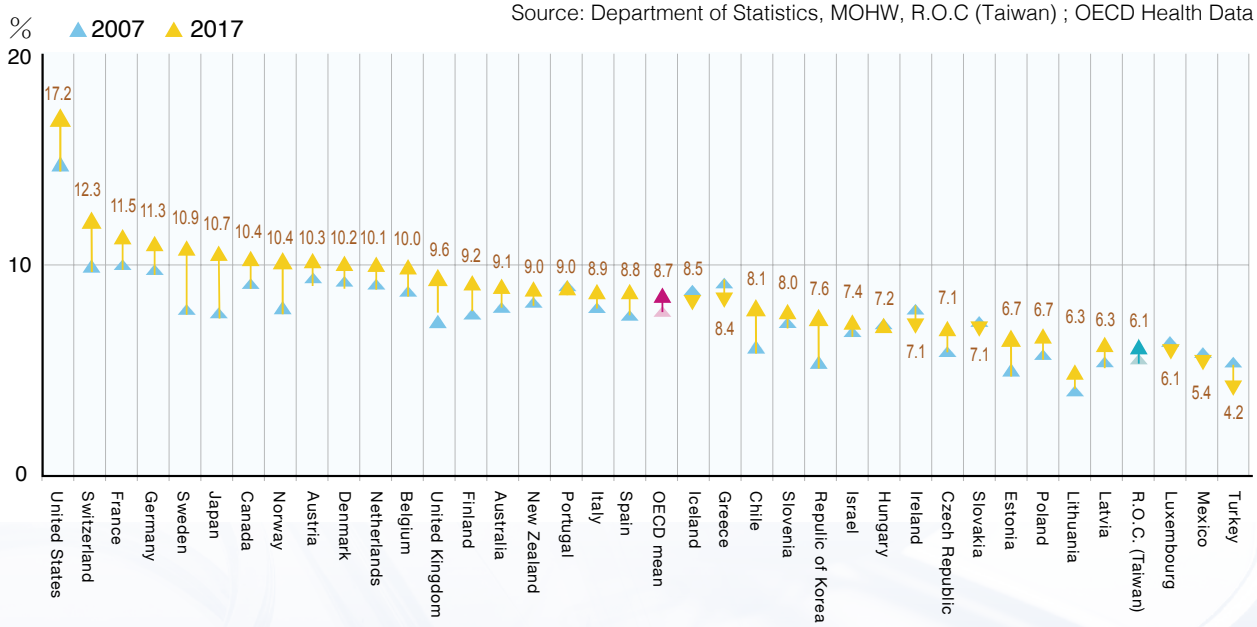


Table 2-8 Comparisons of CHE Per Capita and GDP Per Capita Between R.O.C. (Taiwan) and OECD Member States, 2017

Source: Department of Statistics, MOHW, Directorate General of Budget, Accounting and Statistics, R.O.C. (Taiwan)

Country	Order	CHE Per Capita (USD PPPs)	Order	GDP per capital (USD PPPs)	Order	CHE/GDP (%)
OECD Median		**3,683**		**42,785**		**8.8**
United States	1	10,209	5	59,532	1	17.2
Switzerland	2	8,009	3	65,332	2	12.3
Luxembourg	3	6,475	1	104,203	34	6.1
Norway	4	6,351	4	61,256	7	10.4
Germany	5	5,728	9	50,822	4	11.3
Sweden	6	5,511	11	50,483	5	10.9
Ireland	7	5,449	2	76,771	27	7.1
Austria	8	5,440	8	52,708	9	10.3
Netherlands	9	5,386	7	53,100	11	10.1
Denmark	10	5,183	10	50,724	10	10.2
France	11	4,902	19	42,785	3	11.5
Canada	12	4,826	15	46,360	7	10.4
Belgium	13	4,774	14	47,646	12	10.0
Japan	14	4,717	18	43,903	6	10.7
Iceland	15	4,581	6	53,982	20	8.5
Australia	16	4,543	13	49,744	15	9.1
United Kingdom	17	4,246	17	44,019	13	9.6
Finland	18	4,173	16	45,257	14	9.2
New Zealand	19	3,683	20	40,917	16	9.0
Italy	20	3,542	21	39,792	18	8.9
Spain	21	3,371	24	38,127	19	8.8
R.O.C. (Taiwan)	**22**	**3,047**	**12**	**49,948**	**34**	**6.1**
Korea	23	2,897	23	38,275	24	7.6
Portugal	24	2,888	27	32,145	16	9.0
Israel	25	2,834	22	38,435	25	7.4
Slovenia	26	2,775	26	34,816	23	8.0
Czech Republic	27	2,616	25	36,960	27	7.1
Greece	28	2,325	34	27,789	21	8.4
Slovakia	29	2,269	28	32,137	27	7.1
Estonia	30	2,125	30	31,634	30	6.7
Hungary	31	2,045	32	28,328	26	7.2
Poland	32	1,955	31	29,291	30	6.7
Chile	33	1,915	36	23,667	22	8.1
Latvia	34	1,722	35	27,475	32	6.3
Turkey	35	1,194	33	28,242	37	4.2
Mexico	36	1,034	37	19,140	36	5.4

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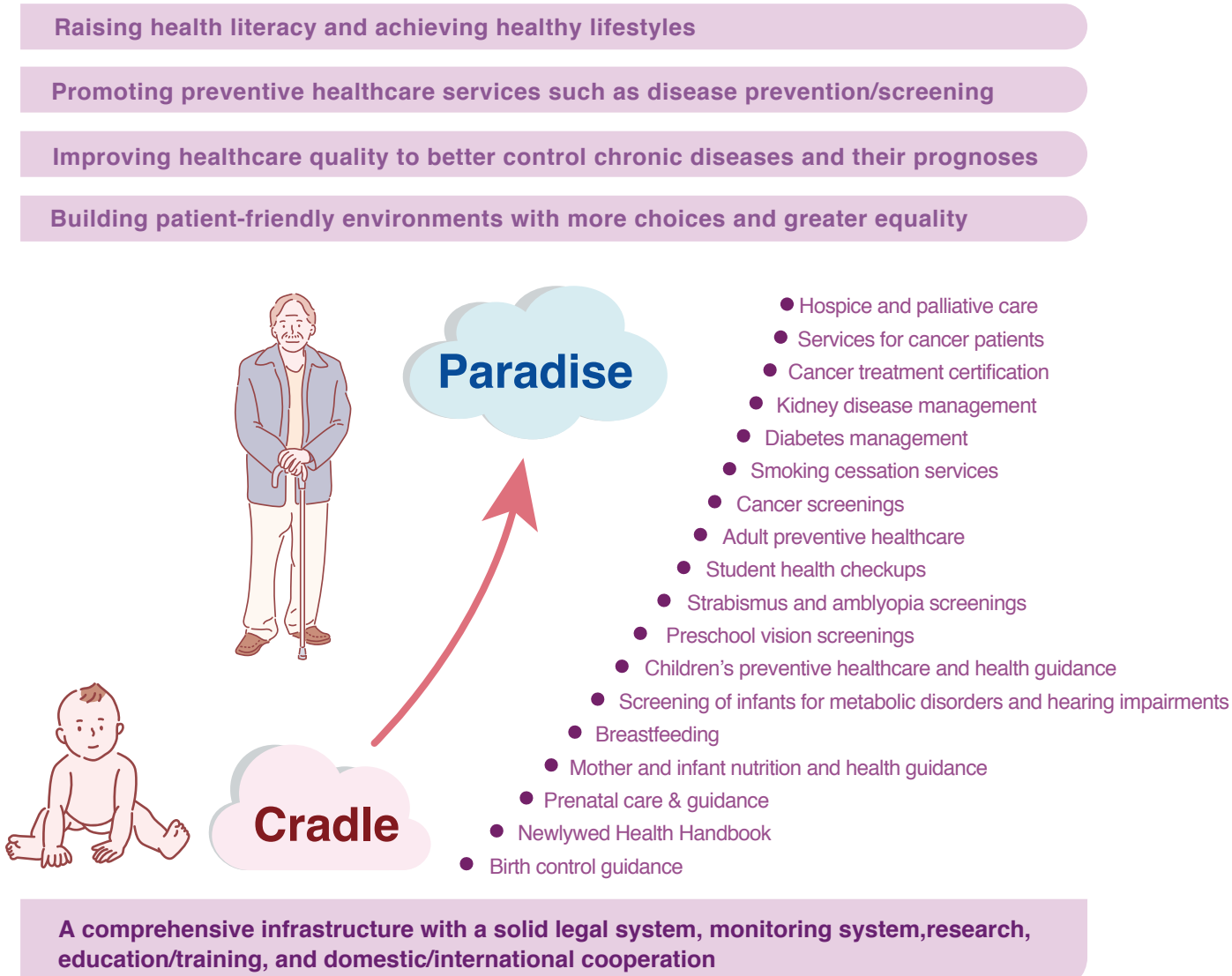
3 An Environment Conducive to Health

To realize "Health for All" advocated by the WHO, the MOHW has planned health promotion policies to benefit people at different stages of life (Figure 3-1). As outlined in the UN "Health in All Policies" initiative, health-promoting policies are systematically incorporated into cross-departmental decisions in order to effect synergies. Policy makers hope to improve health by considering all aspects of decisionmaking.

The UN's objective of sustainable development has become a common direction of administration in all countries. In coordination with the National Council for Sustainable Development, our ministry formulated sustainable development goals for Taiwan and established an environment conducive to health in pursue of a healthy sustainable society. Furthermore, in accordance with the 2012 World Health Assembly (WHA) "25 by 25" objective [to reduce preventable deaths due to noncommunicable diseases (cardiovascular diseases, cancer, diabetes, and chronic respiratory disease) by 25% by 2025], the MOHW incorporated the 9 global targets and 25 indicators contained in the objective into its policies. Taking a whole-of-government, a whole-of-society and a life course approach, policies are formulated to improve health at the individual, societal, national, and global levels.

Figure 3-1 A Cradle-to-Paradise, Community-Based Approach to Promote Health for All



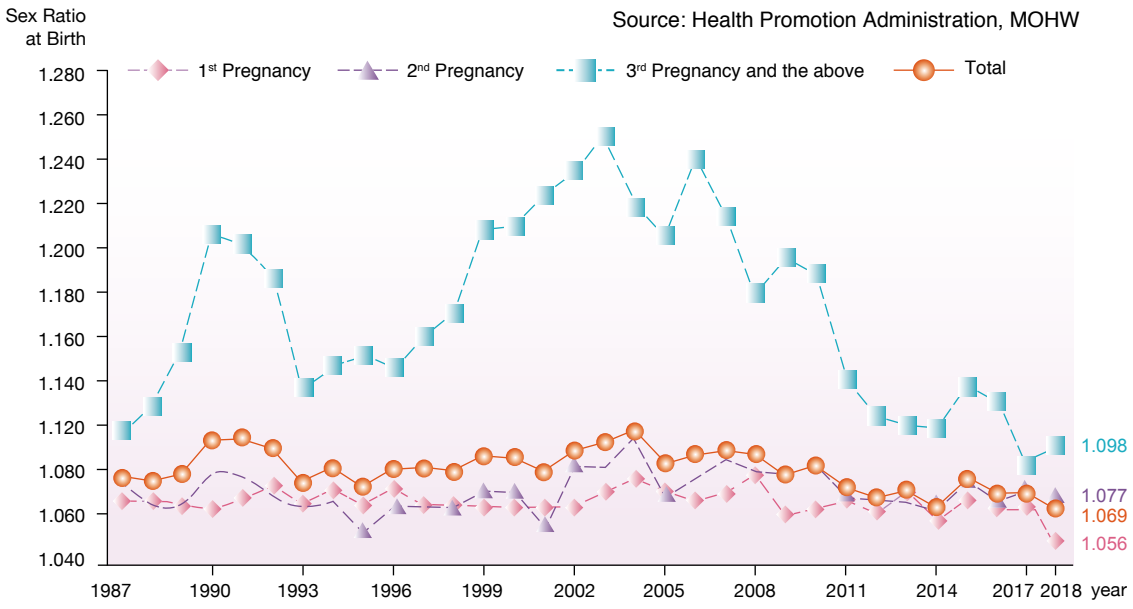
Chapter 1 Healthy Childbirth and Growth

In order to promote health among pediatric populations, the MOHW actively promote health among pregnant women, children, and adolescents.

Section 1 Maternal Health

1. Prenatal Care
   (1) The average utilization rate of the 10 prenatal examinations and one ultrasound examination offered to pregnant women was estimated to be 94.5% in 2018, there were 1,638,361 prenatal checks performed, and expectant mothers qualified for two prenatal health education guidance.
   (2) Subsidized Group B Streptococcus Screenings. In 2018, there were 158,572 GBS screenings,with a coverage rate of 87.2% and a positive rate of 20.66%.
   (3) Subsidized prenatal genetic testing is provided for high-risk pregnancies. In 2018, 1,387 abnormalities were found in 42,593 cases. Referral for further genetic counseling were provided.
2. A free hotline (0800-870-870), an app, and a website (http://mammy.hpa.gov.tw) were established to provide obstetric care information to expectant mothers. In 2018, there were 19,141 calls to the hotline, 2,116,388 visits to the website, and the app had 55,000 downloads.
3. In accordance with the "Public Breastfeeding Act,"a total of 2,235 public breastfeeding rooms had been established, and another 1,186 breastfeeding rooms had been established by the end of 2018.
4. In line with WHO policy on breastfeeding, the MOHW has promoted Baby-Friendly Medical Institution accreditation. In 2018, there were 162 hospitals accredited, with total coverage rate of all births reaching 74.6% of all births in Taiwan. The exclusive breastfeeding rate under 6 months of age was 46.2%, beating the world average of 36% and getting closer to the WHO global target of 50% by 2025.
5. The sex ratio naturally ranges between 1.04-1.06 (for new born male and female infants). The government has implemented care-related regulations to protect fetuses' right to life, eliminate gender discrimination and prevent relevant social issues caused by male-female imbalance. A task force was established to reduce the incidence of inappropriate abortions. The task force collaborated with local health departments, checked local SRB data and provided guidance to institutions offering birth and prenatal checkup services while continuing to promote relevant affairs and initiatives. As a result of the aforementioned efforts, the sex ratio in Taiwan has decreased from 1.090 in 2010 to 1.069 in 2018 (Figure. 3-20).

Figure 3-2 Sex Ratio of Live Births in Taiwan, by Year

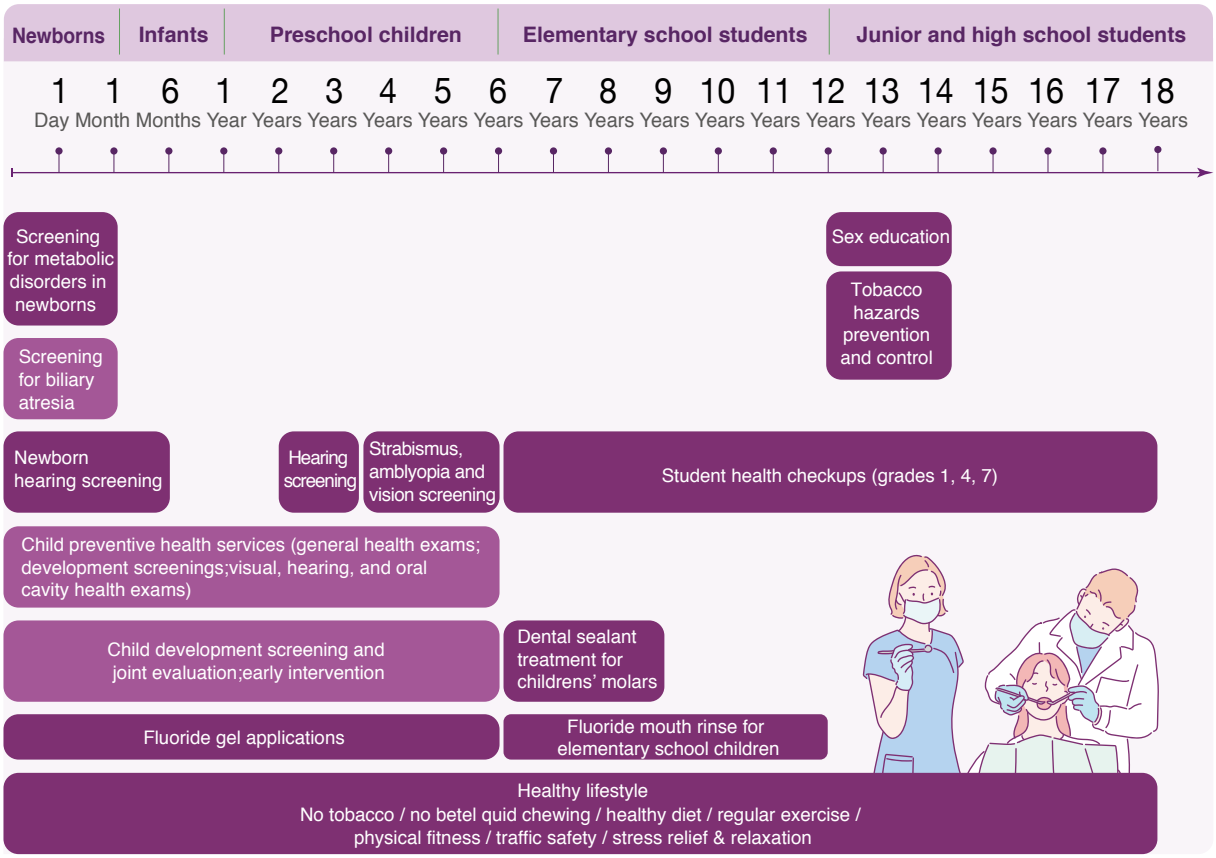


Section 2 Health for Infants, Children, and Adolescents

In addition to screenings for newborns, early assessment and intervention is provided to children suspected of developmental delays. Other measures include seven rounds of pediatric preventive healthcare and health education guidance; oral, visual and auditory health exams for children; and a program to promote sexual health among adolescents (Figure 3-3). Achievements include the following:

1. At 48 hours after birth, newborns in Taiwan are screened for 11 genetic metabolic disorders, with follow-up referrals, diagnosis, and treatment provided in all atypical cases. In 2018, there were 180,488 newborns screened, with a coverage rate of over 99%.
2. Fully subsidized newborn hearing screening is provided within the first three months of birth. In 2018, 176,345 (98.1%) newborns were screened. 744 cases were found to have hearing impairments, and were referred for follow-up care.
3. In 2018, 1.07 million preventive healthcare services was provided to children 7 years of age and below. By the end of December 2018, a total of 3,132 doctors participated in the child health education guidance program providing 923,448 services to parents with children 7 years of age and below.
4. Every city and county established one to five Child Development Assessment Center (s). In 2018, 51 centers in 22 cities and counties diagnosed and confirmed developmental delays in 16,246 children.
5. Continued to encourage strabismus, amblyopia, and vision screenings for preschool children 4 and 5 years of age. In 2018, the screening rate was 100%, with 99.59% of diagnosed abnormalities referred for treatment.
6. In 2018, a total of 10,434 people participated in 37 sexual health school lectures and parent education lectures. Also, 51,534 people visited the website which provides adolescents, parents and teachers with correct sexual health information and teaching materials.

Figure 3-3 Health Policies of Infants, Children, and Adolescents



Chapter 2 Unhealthy Habits

Major unhealthy habits include smoking/chewing betel quid, poor diet, sedentary life styles, and accidents. Tobaccos and betel quid are both group 1 carcinogens. The accidents is the one of 10 leading causes of death. It is therefore imperative that we continue to work toward rejecting tobaccos and betel quid, and to build a safe, healthy society.

Section 1 Nutrition and Obesity Control

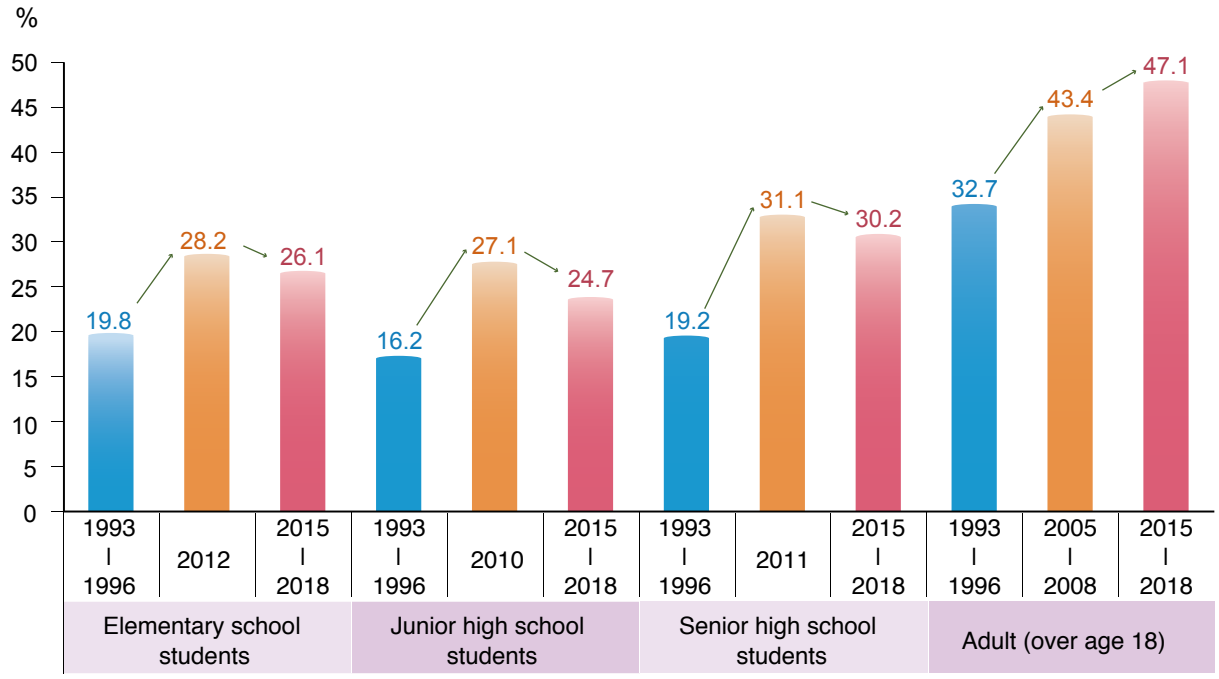
To promote active lifestyles, the MOHW educates people about calories and nutrition literacy, maintaining a healthy body weight, improving physical/mental and social health to prevent chronic diseases.

Key strategies and achievements in 2018 were as follows:

1. The MOHW has promoted "Nutrition and Healthy Diet Promotion Act" legislation to enhance people's nutrition and nutrition literacy and build a healthy eating supportive environment.
2. Push for all counties and cities to establish their "Community Nutrition Promotion Center", which will focus on the elderly residents in communities as the target group by connecting to the ABC model of community care system to provide services such as "nutritional status analyzation for local residents", "training courses for community medical personnel and volunteers", "community nutrition education", "healthy diet counseling" and so forth.
3. Publish new and updated versions of "Daily Dietary Guidelines", "Daily Food Guides" and recommended nutritional intake for people of different age groups. In addition, the Ministry has also published the illustration of "My Plate" as an example of a nutritionally balanced meal with visual representation of different macronutrients, complete with a mnemonic phrase and gesture to help the general public cultivate and maintain healthy dietary habits.

Figure 3-4 Overweight and Obese Rate in Taiwan

Source: The Nutrition and Health Survey in Taiwan, MOHW



Notes:
1. Overweight/obese indicators for elementary, junior high, and senior high school students were based on the MOHW's 2013 BMI recommendations.
2. Adults 18 years and older with a BMI ≥ 24 kg/m^2 were designated as overweight or obese.
3. Data from 2005-2008 have been obtained from adults over the age of 19.

4. Utilize "Taiwan's Obesity Prevention and Management Strategy" and "Evidence-based Guideline on Children and Adult Obesity Prevention and Management" in pilot programs by means of integrating into the certification standard for 15 health promoting hospitals in conjunction with existing campaigns on obesity prevention at different settings by the various health bureaus and offices.

5. The Nutrition and Health Survey in Taiwan (NAHSIT) included the following data on the prevalence of overweight and obesity (Figure 3-4):

   (1) The rate of overweight/obese elementary school students decreased from 28.2% in 2012 to 26.1% in 2015-2018; the rate among junior high school students decreased from 27.1% in 2010 to 24.7% in 2015-2018; and the rate among senior high school students decreased from 31.1% in 2011 to 30.2% in 2015-2018. These figures showed a general decrease in the overweight/obsesity prevalence among children and youths.

   (2) The rate of overweight/obese adults increased from 32.7% between 1993-1996 to 43.4% between 2005-2008 (increase rate of 10.7%). On the other hand, the report of 2015-2018 was 47.1% (increase rate of 3.7%), indicating the rise in overweight/obesity rate had slowed significantly.

6. According to the NAHSIT carried out between 2013-2016, assuming the daily caloric need of a normal adult to be 2000 calories, the survey found that the average citizens' daily food intake had strayed from what is recommended in the dietary guide (i.e. with more than 50% of the population having excessive protein intake from soy, fish and meat; more than 90% of the population having less than the recommended amount of fruits, vegetables and dairy products). This reflects the fact that there is still room for improvement before the general public reaches the ideal rate for compliance. In light of this, the Ministry will continue to monitor the nutrition status for the general public, establish relevant public policies, construct a supportive environment to encourage better nutritional intake, revise relevant nutritional standards and construct diverse channels to disseminate important nutritional information and knowledge to advocate for the importance of healthy diet and balanced nutritional intake so as to improve the general public's nutritional status and awareness.

Section 2 Tobaccos and Betel Quid

1. Tobacco Control

A decade has past since the enactment of the Tobacco Hazards Prevention Act, the adult smoking rate fell from 21.9% in 2008 to 13.0% in 2018 (Figure 3-5). Smoking rate of junior high school students fell from 7.8% in 2008 to 2.8% in 2018, a decline of 63.8%; smoking rate of senior high school and vocational school students fell from 14.8% in 2007 to 8.0% in 2018, indicating a decline of 45.7% (Figure 3-6). Taiwan is gradually moving toward the WHO's noncommunicable disease target by 2025 to achieve a 30% reduction in the prevalence of tobacco use. Moreover, the secondhand smoke exposure rate in public places where prohibit smoking fell from 23.7% in 2008 to 5.4% in 2018.

Taiwan implemented the Framework Convention on Tobacco Control and the MPOWER measures: Monitor; Protect; Offer; Warning; Enforce; Raise. Taiwan's achievements are as follows:

(1) Building a Tobacco-Free Environment through the "Tobacco Hazards Prevention Act".

A. In 2018, local health departments conducted more than 1,945 million inspections of over 680,000 businesses and recorded 7,469 violations totaling fines of 112.66 million NTD.

B. Since 2012, the MOHW has promoted tobacco-free sidewalks around campus. By December 2018, local communities announced that smoking was prohibited on sidewalks, the areas near campus entrances and parent pick-up/dropoff zones at approximately 2,867 senior high and lower level schools across 22 cities and counties. The rules covered 78.7% of campuses at the senior high, vocational school levels and lower level schools.

C. As of the end of 2018, 213 hospitals in Taiwan have received "International Certification for Tobacco Free Hospital". Not only becoming the first and the largest network of tobacco free hospitals in Asia-Pacific region, our network is also the largest in the world. Presently, 18 hospitals in Taiwan have received the prestigious International Gold Award, placing both Taiwan and Spain at the top of the list for having the most hospitals with this award.

(2) Comprehensive Smoking Cessation Programs.

A. Taiwan offers "Comprehensive Smoking Cessation Programs." They include secondgeneration cessation services, a smoking cessation helpline, "Quit and Win" campaign, cessation classes offered by local health departments, and pharmacist consultations. In 2018, smokers used these services 962,483 times. Second generation smoking cessation services were utilized 191,514 times(705,953

person-times), which helped over 51,000 smokers quit smoking. In the short-term, the reduction in the number of smokers would likely lower health expenditures by more than NT$270 million. Long-term economic benefits could surpass NT$21.2 billion.

B. In 2018, there were 80,723 calls made to the Toll-free Smokers' helpline (0800-636363).

(3) Effectiveness of smoking prevention in adolescents

A. The MOHW cooperates with local governments to regulate tobacco sellers. In 2018, over 350,000 inspections uncovered 440 cases of tobacco being sold to minors, leading to total fines exceeding NT$4.21 million. Another 370,000 inspections uncovered 2,294 cases of minors smoking, with smoking cessation classes completed in 1,833 of these cases.

B. The administrative penalty for violating the "Tobacco Hazards Prevention Act" article 13 "not selling tobacco to minors" has been included into the performance evaluation of local health department and the effectiveness assessment of the Youth protection Projects since 2014.

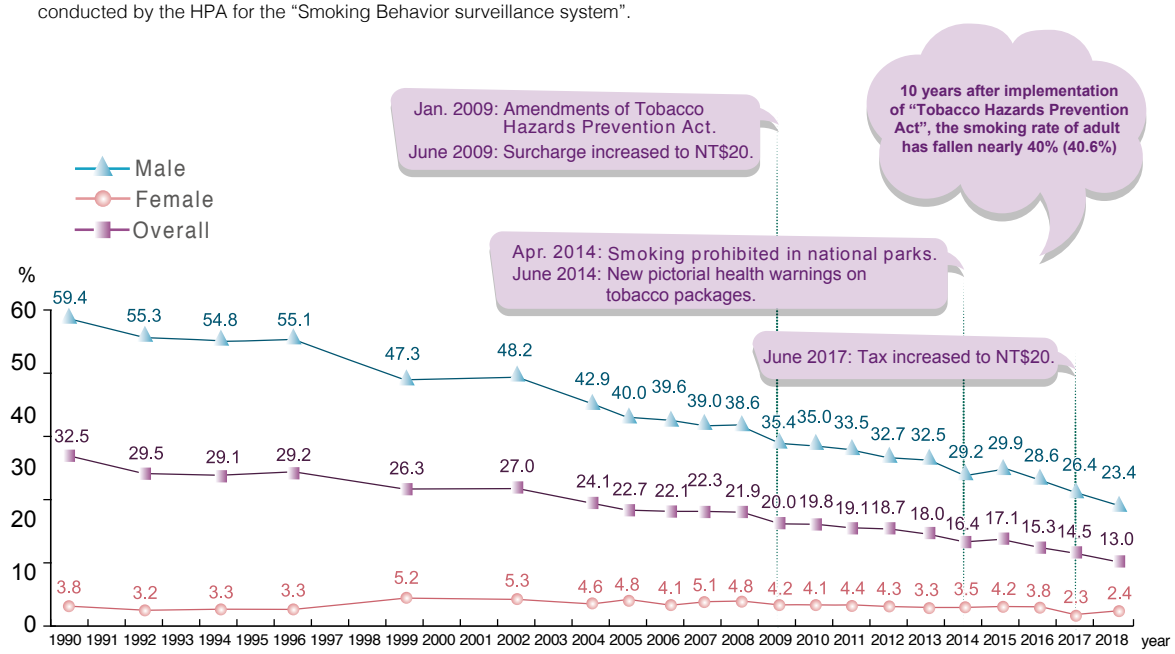
According to 2018 inspection results, 42.7% of tobacco sellers didn't refuse to sell tobacco to minors. Among these targeted shops, the violation rate of convenience store is 28.0%; the violation rates in betel nut stands and traditional grocery stores are 59.7% and 47.4%. Compared to 2017, the violation rate came to 31.8% and this translated to an increase of 10%. The Ministry has asked municipal governments to step up with relevant supervisions and inspections as there is still room for improvement.

3. An interactive experience technology was created for the purpose of tobacco education in Taiwan. The Ministry along with Ministry of Education and local Departments of Health collaborated in the organization of the "Island Trotting Around Taiwan" as the featured event for special festive celebrations. The event reaches out to students of elementary, junior high, senior high and vocational high schools in an effort to call on everyone to say no to the hazards of 3rd-hand smoke.

Figure 3-5 Smoking Rates of Adults over 18 Years Old in Taiwan, by Year

Source: Health Promotion Administration, Ministry of Health and Welfare, R.O.C. (Taiwan)

1. Data from 1990 to 1996 were derived from household interviews conducted by the Taiwan Tobacco & Liquor Corporation.
2. Data for 1999 carried out by Professor Lee-Lan Yen.
3. Data for 2002 was based upon health-related information collected using household interviews conducted by the HPA for the "2002 National Survey on Knowledge, Attitude, and Practice of Health Promotion for the Taiwan Region".
4. Data from 2004 to 2018 was based upon smoking-related information of the general public collected via telephone interviews conducted by the HPA for the "Smoking Behavior surveillance system".

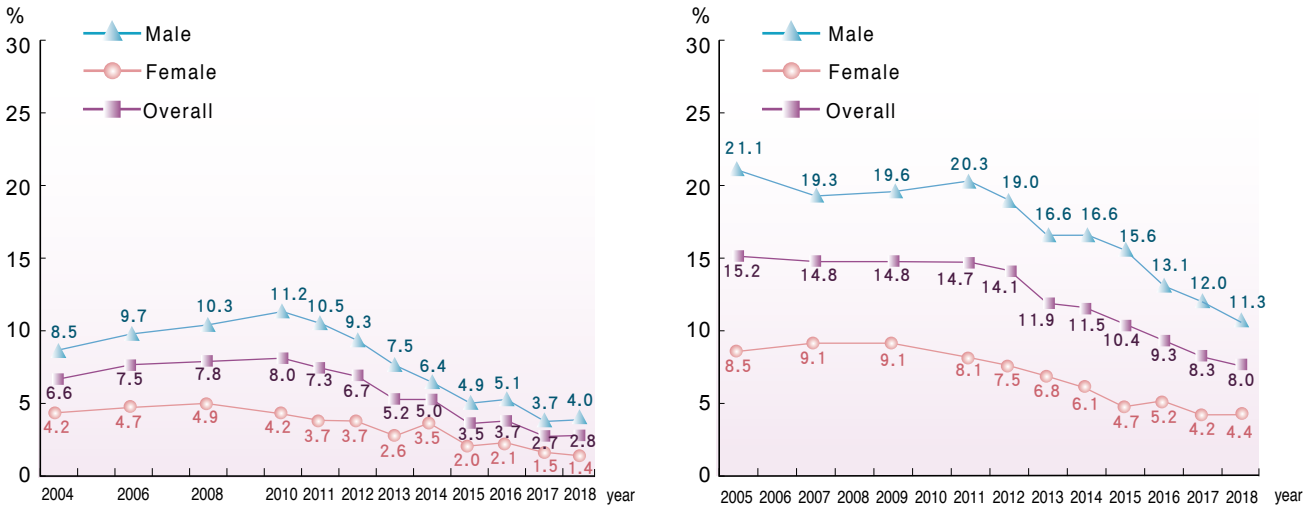


Notes:

1. From 1999 to 2018, the definition for smokers refer to anyone who had smoked more than 100 sticks (5 packs) of cigarettes, and had smoked in the last 30 days.
2. Annual averages from 2004 to 2018 were based upon the Taiwan region household census of 2000 carried out by the Directorate-General of Budget, Accounting, and Statistics (DGBAS). Weight adjustments were carried out according to gender, age, education background, and characteristics of the area of residence.

Figure 3-6 Taiwan Adolescent Smoking Rate over the past years

Source: HPA's 2004-2018 Global Youth Tobacco Survey



Notes: An adolescent smoker was defined as someone who had attempted to smoke in the last 30 days.

2. Betel Quid Hazards Prevention Program

(1) The MOHW worked with various agencies, and NGOs to build betel quid-free environments. In 2018, cessation services were provided to more than 7,000 people, helping approximately 3,000 of them quit.

(2) Oral cancer screenings are offered to betel quid chewers and smokers aged 30 and older, and to indigenous people aged 18 and older who chew betel quid. Over the same time period, the percentage of betel quid users among males over the age of 18 fell by more than half, from 17.2% to 6.2%.

(3) In order to determine whether the total area used for growing betel quid continues to decline as desired, the MOHW monitored the conversion of abandoned betel quid farms into other crops. In 2014-2017, subsidies were provided to assist converting 720 hectares of land.

Section 3 Healthy Environments

In accordance with the WHO's 1997 Jakarta Declaration, our ministry uses public and private resources to help cultivate greater health awareness among the general public. It intends to build friendly, supportive environments to better societal health and wellbeing.

1. Healthy Cities, Communities, Schools, and Workplaces

(1) Healthy Cities and Communities

In 2018, community health building plans were implemented by organizations in 20 counties and cities and 100 communities (83 public health center and 17 community units). Established 100 Cross-Department promoting platforms. Inventory and utilization were conducted using community assets as the basis. "Age-Friendly Communities" were built in accordance with eight aspects of the WHO's guide "Age-Friendly Cities." In the "Age-friendly Environment Assessment" implemented by the Ministry, results revealed that between 2016 and 2018, Taiwan has made continual improvement in overall, physical and social environment performance; most of the municipalities have made improvements in the areas of "transportation", "residential environment", "citizen participation and employment" and "communication and information". In terms of 2018, improvements in outdoor space and architectures, respect and social inclusion, community support and healthcare services have been relatively slower.

(2) Health-Promoting Schools

A. Since 2002, the MOHW and Ministry of Education have jointly promoted health promoting school program. Until 2018, 4,030 schools from primary schools to universities had implemented health promoting school.

B. In 2018, the 4th Health Promoting School International Accreditation was held. Schools were evaluated in six major dimensions such as school health policy, school physical environment, school social environment, skill-based health curriculum, community relations and school health services along with specialty topics (i.e. healthy body composition, injuries from accident and etc.) The total of 24 assessment criteria for the accreditation involves six major criteria and 12 sub-items. 618 schools submitted applications and 374 schools received the accreditation (18 schools received the Gold Award; 85 schools received the Silver Award, 198 schools received the Bronze Award and 73 schools received honorable mention for their efforts in the promotion).

(3) Workplace Health Promotion

Since 2007, the MOHW has offered "healthy workplace certification". This accreditation includes three certifications of tobacco hazard prevention (suspended in 2015 in conjunction with the new implementation rules spelled out in the Tobacco Hazards Prevention Act), Health Initiation and Health Promotion. Taking the Health Promotion Badge as an example, all relevant assessments are performed based on WHO's healthy workplace model (consisting of four dimensions of physical work environment, psychosocial work environment, personal health resources and enterprise community involvement), SOP for health promotion work (leadership and strategic planning, resource and manpower utilization, establishment of health promotion items based on the needs of the workplace, formulation of annual plan, education and dissemination, procedure management, promotional outcome, improvement and so forth) along with various health promotion related activities, with 20,415 workplaces qualified by the end of 2018. In 2018, there were 32 workplaces awarded for excellence in health promotion and three individuals gained recognition for outstanding contributions.

2. Healthy Hospitals

(1) In 2017, the Health-Promoting Hospitals, promoted since 2006, integrated the concepts of age-frinedly, smoke-free and environment-friendly hospital concepts. The Ministry has worked to create a concise assessment standard by transforming the four accreditation items into modules for the establishment of the accreditation mechanism for "Healthy Hospitals". This frame-work is also the first time that health literacy, shared medical decision-making and patient-family engagement were incorporated along with the Patient Focused Method (PFM) for implementation. Ever since the accreditation mechanism for "Healthy Hospitals" was established, a total of 184 hospitals have been accredited as of the end of 2018.

(2) In 2018, subsidies were provided to 17 local health departments and 81 healthcare institutions (63 hospitals and 14 long-term care facilities) to implement the "Plan to Encourage Healthcare Institution Participation in Health-Promotion Work." The Ministry has also been promoting issues such as age-friendly care and healthy workplace, including helping 56 hospitals to adopt the Shared Decision-Making (SDM) model in an effort to expand the capacity for health promotional service.

(3) Promotion of Low Carbon Hospitals

In order to assist the healthcare and medical industries to alleviate their impact on the environment, the Ministry has advocated topics relating to "Healthy Promoting Hospitals and environmental friendliness" in Taiwan since 2010 so as to help medical institutions transform from themselves from polluters to protectors of the environment. In 2018, the Ministry called on 174 hospitals to respond and participate in actions to conserve energy and reduce carbon emission, by organizing three information sessions on climate smart hospitals, and helping 15 hospitals through onsite consultation. In addition, we also held a "Climate Smart Hospital Press Conference" to unveil our plans to promote low-carbon hospitals for the promotion of climate change adaptation policies and strategies for low-carbon diets, energy conservation and water conservation with onsite demonstrations and visits, presentation of power-saving measures in hospitals and low-carbon diets. In the future, the Ministry will plan and formulate advanced indicators and guidelines to guide hospitals to implement self-inspection and adaptation, in order to transform from low-carbon hospitals into environmental education centers.

3. Advocating Physical Activity

According to the WHO, walking is the most recommended and practical method of physical activity. Since 2002, the MOHW has promoted the "Walking 10,000 Steps per day for health" slogan. Key achievements in 2018 were as follows:

(1) The MOHW collaborated with the Sports Administration of the Ministry of Education by drafting together the "Blueprint of Collaboration between the Sports Administration and Health Promotion Administration" to prepare for WHO's "Global Action Plan on Physical Activity 2018-2030" by establishing four strategic objectives and 12 promotional strategies. These will serve as the basis for relevant collaborations with the Sports Administration in the future.

(2) The MOHW worked together with the Sports Administration of the Ministry of Education by jointly organizing the "Level up health by creating a sports city - physical exercises and health for all citizens" conference. The event started with a round-table conference featuring representatives from central and local governments and the event gathered approximately 300 participants from the government, academia and industries.

(3) Targeting medical and professional sports personnel, the MOHW hosted the "Community Preventive and Disability/Dementia Delaying Personnel Training", which involves 15 batches of basic training. A total of 1,472 participants completed the training. In addition, 2 batches of specialty trainings were held for 875 participants that finished the training. With these personnel who took part in these trainings as lecturers, we targeted frail, sub-health and healthy seniors as service recipients by subsidizing 14 municipalities to host 291 sessions of promotional programs, 508 sessions of outreach service trainings to serve more than 35,000 people. Initial analysis of data taken from the pre-/post-training tests for the participating seniors revealed that the 12-week intervention offers significant help to seniors in terms of maintaining and offering them social interactions, emotional functions while reducing the incidence of falls.

(4) According to a survey by the Sports Administration, Ministry of Education, the percentage of persons 13 years old and above who engaged in regular exercise rose from 20.2% in 2007 to 33.5% in 2018.

4. Prevention of Accidents and Injuries

(1) In conjunction with existing schedules for pediatric preventive healthcare, the Ministry has designed 7 rounds of 1-on-1 health education sessions offered by physicians for children under the age of 7. Contents of the session will cover the prevention of sudden infant death syndrome (SIDS) and injuries from accidents. In addition, self-assessment checklist for "Injury from Accident" along with relevant contents have been included in the Health Education Handbook for Children as a way to bolster the competence of parents/primary caretakers. The Ministry also advocates that parents choose illustration books featuring health related topics such as accident injury prevention for family reading time. By reading such stories to children and infants, they will be exposed to knowledge and information that will facilitate their health and self-protection at early stages in their lives. Not only that, both parents and their children will benefit from learning and improving their health related knowledge through the illustrated books.

(2) Through a variety of channels, the Ministry has been promoting "Fall Prevention Education for Seniors" as a movement to heighten people's awareness for protecting the elderly people from falls. Coupled with the frailty assessment conducted by hospitals and health departments, the Ministry strives to identify the high-risk groups for fall hazards, in order to take further intervention to reduce the incidence and risks of falls.

(3) In 2018, the aboriginal community health promotion pilot program was held in Guangfu Township in Hualien County and Haiduan Township in Taitung County. The program features an Asset Based Community Development (ABCD) model to implement an inventory on community safety and health resources with promotion of accident injury prevention (i.e. DUI, fall prevention, drowning prevention) and health risk factor prevention (i.e. tobacco, alcohol and betel nuts).

Chapter 3 Active Aging and Prevention of Noncommunicable Diseases

Taiwan has become an aged society by 2018. An aging population, a sedentary lifestyle and Western diets have increased the number of people suffering from chronic illness. To raise the quality of life of elderlies, the MOHW promotes health awareness among elderly persons, age-friendly cities, and the prevention of major chronic diseases and cancer.

Section 1 Health Promotion for Middle-Aged and Older People

1. To diagnose and treat diseases early, the Ministry offers free preventive health screenings for adults once every three years for people aged 40-64, and annually for people aged 65 and above. The screenings are available at 6,800 health institutions and via community screening services. In 2018, 1.9 million people have utilized the screening services.

2. In an effort to encourage seniors to increase their level of physical activity through day-to-day routines, the Ministry organized the "Active Life Counseling Project" that is based on typical daily activities for the elderly people and incorporating various function promoting activities that have been proven by domestic/foreign empirical evidence for the compilation of the "Active Life Handbook". In addition, the Ministry also developed community intervention models and

established evidence-based innovative solutions for the facilitation of health for seniors.

3. The Ministry has been promoting its "Dementia Friendly Community Program" with administrative areas of townships, boroughs, cities and districts as units of division to create living spheres that are centered on dementia patients and their family members. In 2018, the Ministry subsidized 4 municipalities to construct 4 dementia friendly communities. In addition, we have also been involved in the recruiting of dementia friendly guardian angels through our "Dementia Prevention and Promotional Project" for relevant recruitment and dementia-friendly marketing activities. In 2018, we have recruited 32,000 guardian angels for dementia patients, connected more than 1,800 dementia-friendly organizations and held 315 dementia-friendly marketing events. Also, our "Dementia Friendly Community Empowerment & Resource Integration Center Project" has led to the establishment of resource integration centers in 2018, with teaching materials compiled and prepared for 8 different target groups in 3 digital learning courses.
4. The MOHW sponsored team competitions to raise health awareness among seniors. In 2018, 34,000 people participated in the competitions within senior teams (representing villages and towns). Local health departments appointed 59 county and citylevel teams. The average age of the participants was 70 years, with their total age reaching 170,000 years. Over 500,000 seniors participated in the competitions over the period of eight years.
5. In 2013, all 22 cities and counties became agefriendly cities. Consequently, Taiwan achieved the highest coverage rate of age-friendly cities in the world. In order to encourage local governments to promote the concepts of healthy and age-friendly cities, the Ministry has implemented voting and selection as a way to promote issues and results of healthy and age-friendly city issues to highlight examples for other local governments to follow. Drawing on this foundation, there were 405 entries to the 2018 Healthy City and Age-Friendly City Awards; 58 of the entries won awards.
6. The Ministry has referred to the 22 indicators in EU's Active Aging Index in order to create the framework for our localized version of active aging index with 33 indicators. Comparing Taiwan's data (taken from 2017) with data from 28 EU nations (for 2014), Taiwan would have ranked 7th in the 2014 rankings, with 6th and 8th placement for male and female seniors respectively.
7. In 2014, the MOHW launched the Project for Universal Age-Friendly Healthcare Organizations. By the end of 2018, there were 608 healthcare institutions certified as age-friendly (including 200 hospitals, 330 health centers, one health clinic and 77 long-term care facilities).
8. In 2018, the Ministry prompted local departments of health to organize a total of 969 sessions of mental health promotion for the elderly, drawing a total of 52,234 participants. The Ministry also asked local departments of health to implement dementia screening and referral for seniors in high-risk groups by establishing the referral standards and provide post-screening follow-up services for seniors in high-risk groups. In 2018, a total of 181,452 seniors were screened, with 221 referred to receive psychiatric treatment, 751 were referred to receive psychological counseling and 746 were referred to other relevant resources.

Section 2 Control of Major Chronic Diseases

1. Control of Major Chronic Diseases

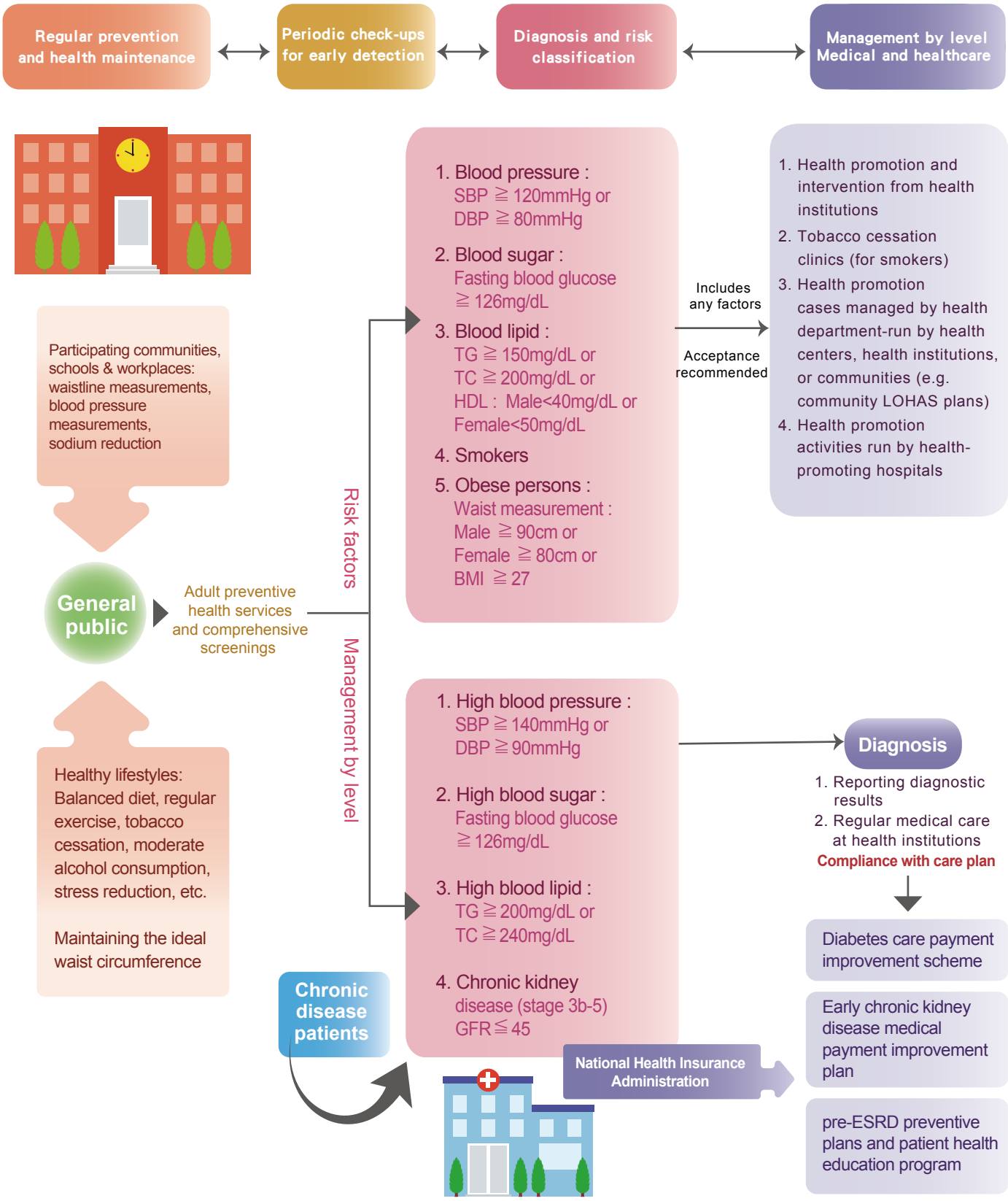
(1) Due to education for the general public on controlling metabolic syndrome, the rate of public recognition of ideal waist measurement rose from 28.7% in 2006 to 53.1% in 2018. Campaigns were held to increase the awareness and prevention of the "Three Highs" (high blood pressure, high blood sugar, high blood fat/lipids) and other chronic diseases. Also, the establishment of a chronic disease control framework (Figure 3-7) inspired cities and counties to work with local health institutions to provide integrated screenings.

(2) The MOHW promoted a diabetes shared care network comprising 255 diabetes health promotion institutions. It also established 540 diabetes support groups.

(3) Kidney disease prevention and education was promoted. 191 kidney disease health promotion institutions were established to provide better disease control through case management.

(4) In an effort to raise the general public's awareness for measuring their blood pressures and increase the convenience of the process, the Ministry has integrated relevant resources for blood pressure measurement available at municipal health departments (and health stations) and service locations, operated by organizations such as the Taiwan Pharmacist Association and Taiwan Millennium Health Foundation. A total of over 3,200 locations were established by the end of 2018 to construct a nation-wide community blood pressure measurement network. This will enable the general public to find their nearest blood pressure station or community pharmacy to take their readings. Coupled with the assistance and advice provided by community pharmacists, this solution will help citizens to achieve proper blood pressure management.

Figure 3-7 Chronic Disease Control Framework



2. Menopause Health

Established the toll-free "0800-00-5107 Menopause Health Consultation Hotline". In 2018, counseling services were provided to more than 6,402 individuals and held 84 menopause health care, including menopause growth camps, lectures/ consultations, and educational training, with a total of 5,165 participants attended. Due to the hormonal changes in menopause, menopausal women may experience weight gain, build up in body fat, increas risks of cardiovascular diseases, change in skin conditions, and bone loss. And as such, in the latest version of the "Nutrition for Menopause" leaflet and booklet published on October 26, 2018, we focused on the dissemination of ways to alleviate potential discomforts that one might encounter due to menopause, tips on preventing cardiovascular disease, bone density loss and suggestions on diet and lifestyles that would help one to slow down the process of skin aging.

Section 3 Cancer Prevention

The MOHW has been implementing the 3rd Phase National Cancer Prevention and Control Program. The program features three key points: lowering cancer risk, performing cancer screenings, and implementing the Cancer Navigation Plan.

1. Reducing Cancer Risk Factors

Four major risk factors are associated with cancer: smoking, insufficient physical activity, unhealthy eating habits, and excessive alcohol use. The MOHW has been encouraging people to quit smoking, to cut down on alcohol, and to stop chewing betel nuts. It urges everyone to maintain a healthy body weight, improve their eating habits, and adopt a healthy lifestyle.

2. Cancer Screening

(1) Since 2010, the MOHW has offered fully subsidized screenings for cancers of the cervix, oral cavity, colon, and breast. In 2018, 5.097 million screenings detected precancerous lesions in close to 51,000 patients and malignant tumors in over 10,000 patients. Table 3-1 outlines significant milestones in cancer screening, while Table 3-2 and Table 3-3 summarizes the cancer detection rates and five-year survival rates for four major types of cancer.

(2) In 2018, there were 217 health institutions that implemented the Plan to Enhance the Quality of Cancer Screenings, Diagnosis, and Treatment in Hospitals. A notification system in clinics alerted patients to the screenings and there was a single referral pathway for positive results.

(3) In order to ensure the quality of cancer screenings, officials conduct periodic reviews of health institutions that offer such screenings. In 2018, accreditations were given to 121 institutions that conduct cervical cancer screenings, 213 that conduct mammograms, and 158 that conduct fecal occult blood tests. Finally, the Plan to Improve the Quality of Oral Mucosa Exams trained doctor to screening patients for oral cancer.

Table 3-1 Screening Volume and Rate, Precancerous Lesions, Follow-up Rate for Positive Screenings, Cancer Cases, and Follow-up Rates for Positive Screenings for the Four Major Types of Cancer, 2018

Cancer Type	Screening Volume (Thousands)	Screening Rate (%)	Precancerous Lesions	Cancer Cases	Follow-up Rate for Positive Screenings (%)
Cervical Cancer	2,719	70	12,933 (including carcinoma in situ)	1,131	93.9
Breast Cancer	861	39.9	-	4,380	92.2
Colon Cancer	1,313	40.8	34,052	2,463	75.2
Oral Cavity Cancer	744		3,654	1,312	82.7
Total	5,097	-	50,639	9,286	86

Notes: Basis for Screening Rates

1. Cervical cancer: the rate of women aged 30-69 who have received a screening for cervical cancer within the past three years (telephone survey).
2. Breast cancer: the rate of women aged 45-69 who have received a screening for breast cancer within the past two years.
3. Colon cancer: the rate of people aged 50-69 who have received a screening for colon cancer within the past two years.
4. Precancerous lesions: A type of benign (non-malignant) morphological changes in the tissue, which are, however, characterized by a high risk of malignant transformation.
5 Follow-up rate for positive screenings: (the number of cases screened as positive that completed a follow-up)÷ (the number of cases screened as positive).

Table 3-2 Cancer Detection Rates for the Four Major Types of Cancer, 2018

Cancer Type	Cancer detection rate (Estimates based on 100% follow-up of positive cases)		
	Precancerous Lesions	Cancer	Total
Cervical Cancer	1/96	1/358	1/76
Breast Cancer	-	1/177	1/177
Colon Cancer	1/30	1/376	1/27
Oral Cavity Cancer	1/162	1/450	1/119

Notes: Basis for Detection Rates
1. Precancerous Lesion Detection Rate (Based on 100% follow up): defined as precancerous lesion cases/number ofscreenings
2. Cancer Detection Rate (based on 100% follow up): cancer cases/number of screenings
3. Overall Detection Rate (based on 100% Follow up): (precancerous lesions + cancer cases)/number of screenings
4. 1/Detection Rate = number of people who must be screened on average to detect one positive case

Table 3-3 Five-Year Survival Rates for Four Major Types of Cancer, 2018, by Stage

Source: Taiwan Cancer Registry database (includes carcinoma in situ)

Stage	Breast Cancer	Cervical Cance	Colon Cancer	Oral Cavity Cancer (including oropharynx and hypopharynx)
Stage 0	97.4	97.1	86.4	76.2
Stage 1	96.6	87.8	82.7	79.9
Stage 2	90.0	67.3	71.7	71.0
Stage 3	74.5	57.3	60.2	56.5
Stage 4	30.5	21.1	11.0	35.6

Notes:
1. Analyzed hospital-reported data on the five-year survival rate for four major types of cancer by stage, from 2012 to 2016 (patient tracking through 2017)
2. According to the screening data and five-year survival rates for patients diagnosed with stages 0 and 1 oral cavity cancer by the Agency, approximately 65% of the stage 0 cases have been classified under “precancerous lesions” in actual practice. Consequently, the number of stage 0 cases (246 entries) has significantly less compared to that of stage 1 cases (7,930 entries). This in turn has caused significant fluctuations in the data for survival rate.

3. Improving the Quality of Cancer Care

(1) Accreditation for cancer hospitals began in 2008. By the end of 2018, 58 hospitals had been certified; over 80% of all cancer patients in Taiwan were covered by the service.

(2) The MOHW subsidized and private organizations and hospitals to establish the cancer resource centers provide comprehensive support and care for cancer patients and their families.

(3) The MOHW commissioned 94 hospitals nationwide to conduct a cancer patient navigation program. Oncology nurse managers specializing in tumor cases actively contact patients to encourage them to receive treatment within three months. More than 90,000 newly diagnosed cancer patients participate in the program each year, and 90% of participants receive their first course of treatment within three months.

Chapter 4 Health Communication, Information, and Surveillance

Section 1 Health Communication

The media, professional associations and civic organizations are utilized to transmit accurate health information. It also involves the provision of websites and reference materials focused on specific healthrelated matters for the use of all citizens. Furthermore, the effective integration of cloud-based services has enhanced health literacy among Taiwan's inhabitants.

1. Health Communication

(1) To promote development and quality of health education materials, "Health Literacy and Communication Index" were established and developed with reference to domestic and international evaluation criteria applied to educational materials and included 21 indicators in 6 aspects.

(2) "Learning from the past and inheriting the finest — A new generation of improved health literacy" activity was held in July 2018 to select materials for dissemination of health information. 662 entries were received, among which 307 complied with the "Health Literacy and Communication Index" and had been uploaded to the Health 99 Education Resource website.

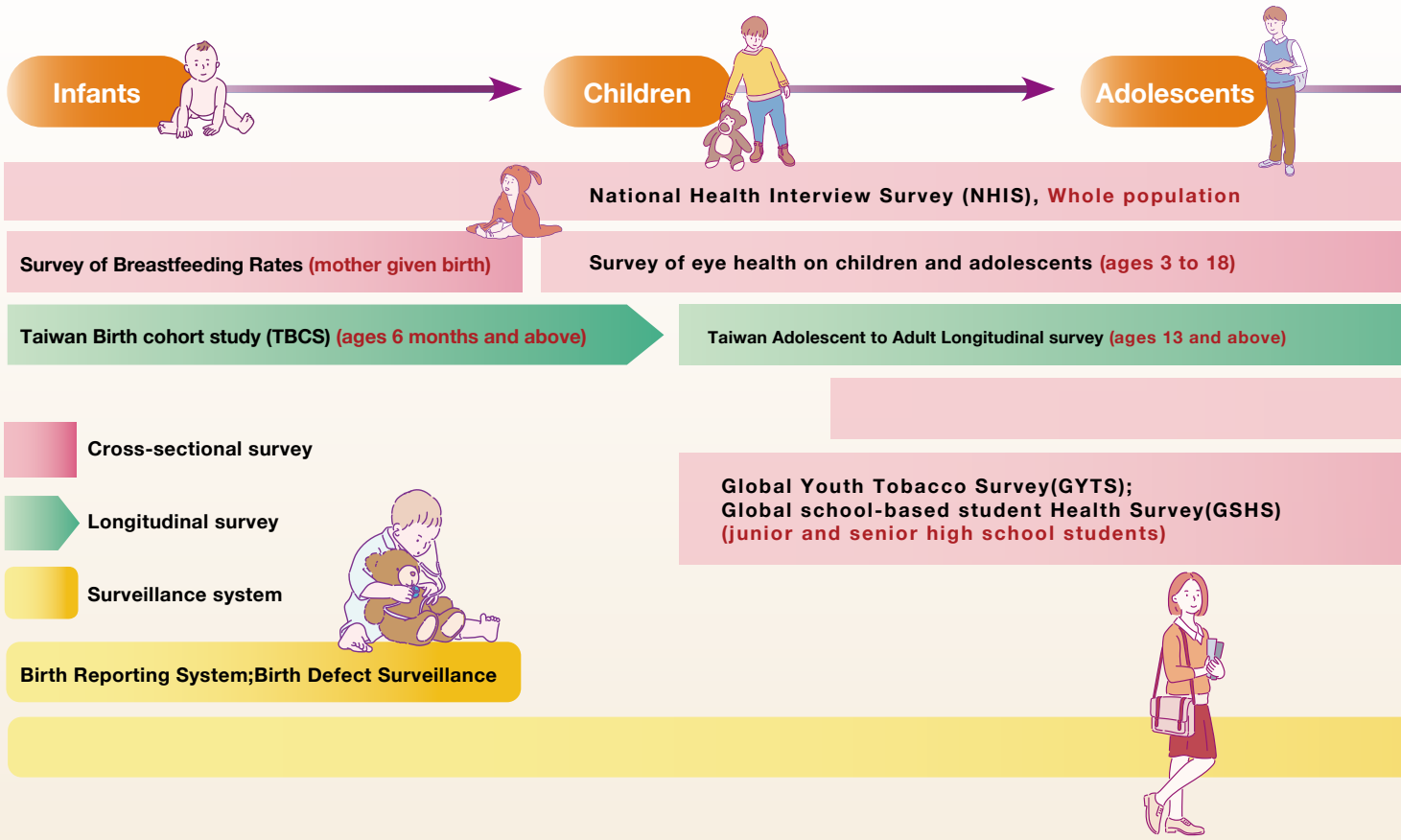
(3) The Health 99 website is visited 350,000 times on average each month. In total, 5,702 materials have been uploaded to the website, including leaflets, manuals, posters, and multimedia.

(4) We use social media such as Facebook and LINE@ to disseminate accurate health information, and take the initiative to promote health information and issues.

2. e-Health Promotion and Application Services

The MOHW continued to implement the "Wellness Cloud" project, a step-by-step establishment of a new

Figure 3-8 Major Health Surveillance and Surveys



health promotion and chronic disease selfmanagement in Taiwan:

(1) The website "Wellness Cloud-National PHR Platform" and its APP now enable login through Facebook and Google accounts. In addition, we have also launched the trial run of customer service bot on the "Wellness Cloud-National PHR Platform" website to offer smart AI customer experimental services.

(2) Field testing in 2018: The MOHW established one smart blood pressure measurement site for field testing. Users of the pilot setting reported a satisfaction rate over 87%.

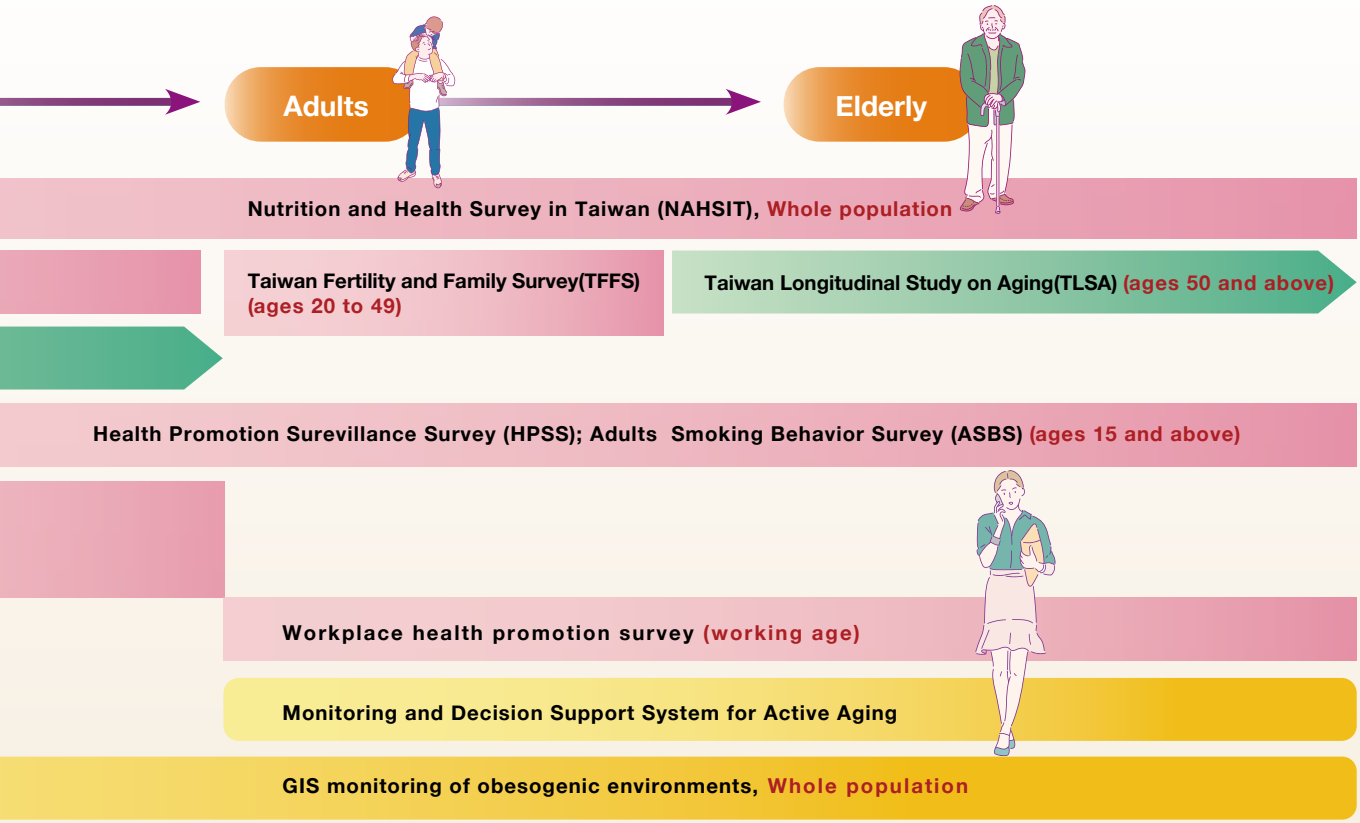
(3) In 2018, the "Wellness Cloud 2.0" platform was used 2.66 million times. Over 23,400 people became its registered members. Presently, more than 19,000 users have downloaded the APP, which received an average rating of 4.5 points (out of 5; the ratings have been calculated based on the average ratings from both IOS and Android APP platforms).

(4) The MOHW has continued to implement the government's data transparency policy; by the end of 2018, 227 sets of data became accessible.

Section 2 Health Surveillance

The MOHW conducts health surveillance and surveys to collect data that can be used to formulate policies:

1. The MOHW has established the noncommunicable disease surveillance system and continuously conducts health surveillance and surveys on the whole population and people of different age groups (Figure 3-8).
2. The MOHW makes efforts to improve framework and capacity of reporting, registration and monitoring system, and provides convenient and user-friendly online query for health indicators from the surveillance and survey data.
3. The MOHW convened and organized events including the "Forum on Active Aging and Health" and "Future of Our Nation-Children/Youth Health Status and Policy Forum" to disseminate relevant results from monitoring and researches as a way to draw attention from the public on relevant topics while facilitating the translation of research findings into policies and discussions on action strategies.



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Please fill-in the questionnaire to give us your advice.

4 Health Care

Following the enactment of the Medical Care Act in 1985, the government implemented a medical facilities network project, whereby Taiwan was divided into healthcare regions. Planning was undertaken for the equitable allocation of medical human resources and facilities to each region to ensure the quality of medical care in each region. The "8th Medical Network Plan" is implemented in 2017-2020 to develop an integrated, sustainable public health and medical service network that is rooted in the local community.

Chapter 1 Healthcare Systems

Section 1 Medical Care Resources

Aiming to promote balanced distribution of medical care resources, the Ministry of Health and Welfare (MOHW) has established a regional medical care system in accordance with the Medical Care Act and the Medical Care Network Project. Using regional guidance and the operation of related organizations,the MOHW assessed the health needs of each area,and implemented various projects to ensure the equitable allocation of healthcare resources between regions and to ensure the quality of care everywhere. The main results achieved in 2018 are shown below:

1. Current status of medical institutions: Table 4-1

Table 4-1 Status of Medical Institutions, 2018

Source: Department of Statistics, Ministry of Health and Welfare

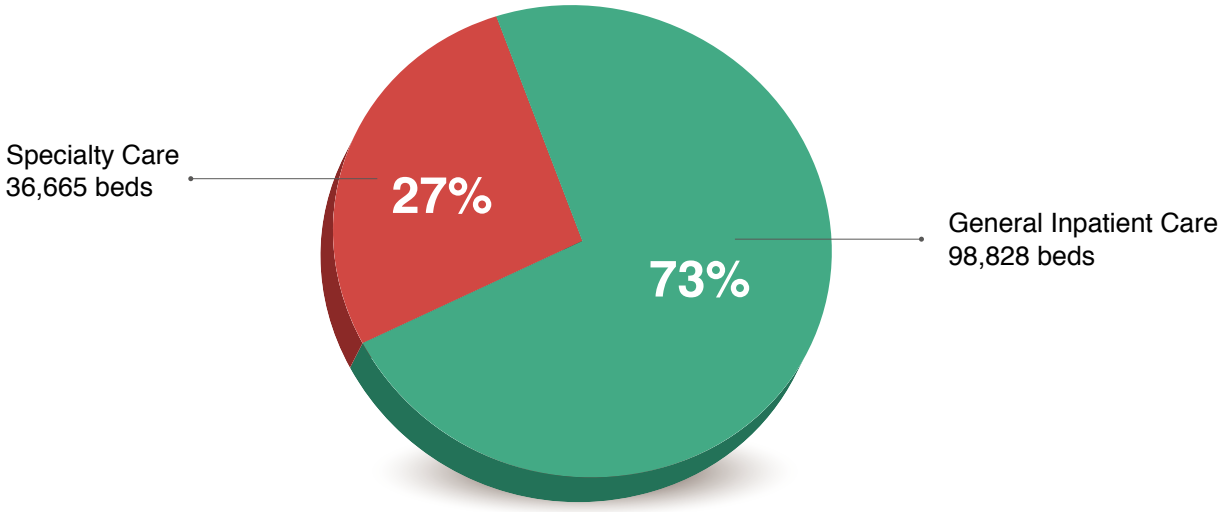
Type of Medical Institution		No. of Institutions
Medical Care Institutions	Hospital	483
	Clinics	22,333
Pharmacies		8048
Nursing Institutios	General Nursing Homes	542
	Psychiatric Nursing Homes	44
	Home Care Practices	618
	Post-Natal Nursing Institutions	267
Blood Donation Institutions	Blood Donation Centers	5
	Blood Donation Stations	13
Pathology Institutions		11
Other Medical Institutions	Midwifery Practices	23
	Medical Laboratories	376
	Medical Radiological Institutions	53
	Physical Therapy Practices	228
	Occupational Therapy Practices	76
	Denture Clinics	33
	Mental Counseling Clinics	80
	Psychotherapy Clinics	54
	Speech Therapy Centers	36
	Dental Technology Centers	901
	Hearing Centers	21
	Home Respiratory Care Practices	3
	Optometry Practices	28
	Nutrition Advisory Organizations	28

2. Current Status of Hospital Beds

There were 167,521 beds in medical care institutions (including general beds, special beds, and beds in clinics), with general beds for acute care, general beds for chronic care, beds for psychiatric acute care, and beds for psychiatric chronic care included among general beds in hospitals, TB and Hansen's Disease Care In descending order of availability, there are 74,195 beds for acute inpatient care; 3,349 beds for long-term care; 7,438 beds for psychiatric care; 13,676 beds for chronic psychiatric care, 2 beds for tuberculosis care and 168 beds for Hansen's Disease care. There were an average of 41.9 beds for every 10,000 people in Taiwan (Figure 4-1).

Figure 4-1 Status of Hospital Beds in Medical Care Institutions

Source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)



Notes: Special beds includes intensive care beds, general beds for burn patients, intensive care beds for burn patients, infant sickbeds, emergency observation beds, hospice beds, chronic respiratory care beds, subacute respiratory care beds,acute TB beds, intensive care beds for psychiatric patients, isolation beds, positive pressure isolation room negative pressure isolation room, beds for bone marrow transplant patients, Sex offender compulsory treatment beds, Acute late care beds, integrated post-acute care hospital beds, surgery recovery beds, infant beds, hemodialysis beds, peritoneal dialysis beds, etc.

Section 2 Emergency Health Care and Rescue

The MOHW continued to reinforce development of the emergency health care and rescue network while extending integrated response mechanisms.

1. Table 4-2 depicts the number of hospitals designated to provide emergency care at the end of 2018.Taiwan currently has 52 medical sub-regions; each of which has at least one hospital designated for moderate grade emergencies or above.
2. The MOHW has been assisting districts with inadequate emergency care resources. These efforts focus on three areas: emergency care stations in places that receive many tourists; first-aid stations that are open at night, on weekends and on public holidays; and strengthening the emergency care capabilities of hospitals in districts with limited resources. In 2018, special incentives were offered in 18 locations to effect these objectives.
3. Incentives remain in place to encourage academic medical centers and hospitals designated for severe grade emergencies to provide emergency care on outlying islands and in underserved areas.27 medical centers have been participating in this program, providing a combined total of 111 acute and critical care doctors to assist in 26 outlying islands and underserved areas. This program has been instrumental in making needed medical resources more accessible to underserved communities.
4. As of the end of 2018, there were approximately 9,474 automated external defibrillators (AEDs) in Taiwan, equivalent to 40.2 AEDs for every 100,000 people. 5,288 locations have already been certified as "safe locations" (meaning that the location has an AED, and that at least 70% of employees there have completed CPR and AED training).

Table 4-2 Number of Hospitals Designated for Emergency Treatment in 2018, by Grade

Source: Department of Medical Affairs, MOHW

Emergency Treatment Grade	Severe	Moderate	Ordinary	Total
No. of Institutions	41	79	80	200

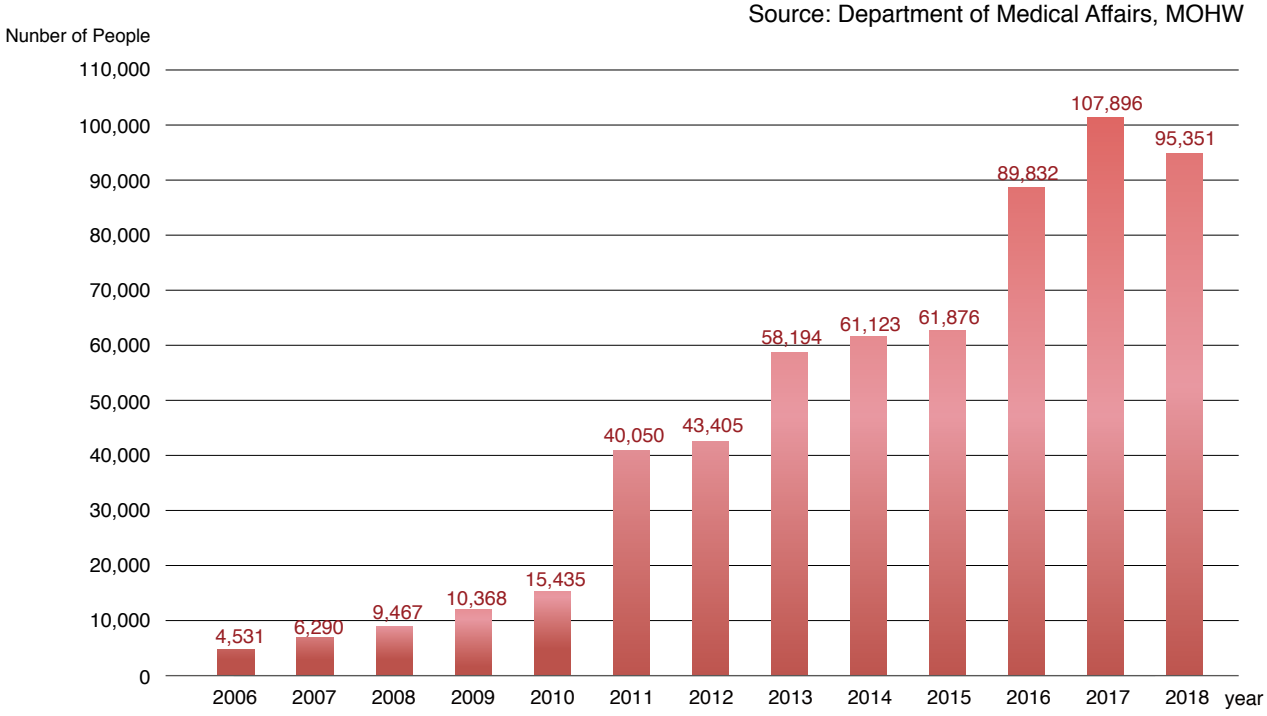
5. In 2018, the MOHW continued to raise the quality of emergency pediatric care. Under the plan, remote hospitals designated for moderate grade emergencies or above qualify for subsidies if they offer 24-hour pediatric emergency. The government desires to have at least one hospital in every city/county offering this vital service. By the end of 2018, 15 hospitals in 15 cities/counties were participating.

Section 3 Hospice and Palliative Care

1. Implementation of the Hospice Palliative Care Act on June 7, 2000 paved the way for doctors (patients' informed consent) to focus on eliminating suffering, and offering support to terminally ill patients, in lieu of curative- and rescue-oriented care.
2. Beginning in 2006, a special project has been urging medical care institutions and the general public to participate in hospice and palliative care, while encouraging NHI enrolled persons to record consent on their NHI IC cards. As of the end of 2018, a total of 584,328 people, accounting for 2.54% of the total population, documented their willingness to receive hospice and palliative care, along with their wishes concerning life-sustaining treatment. Each person's choice was recorded on his/her NHI IC card (Figure 4-2).
3. According to the Ministry's statistics, as of 2018, 75 Taiwanese hospitals provided hospice services to inpatients, 154 hospitals participated in a collaborative hospice care provision program, 118 institutions provided home hospice care, and 330 facilities were involved in community-based hospice care services. Medical teams provide an interconnected network of hospice and palliative care services for inpatient care, outpatient care and home care. The number of patients receiving hospice care has been gradually growing over the years and in 2018, approximately 15,000 patients received hospice care, with roughly 42,000 patients receiving collaborative hospice care. These figures reflect that the promotion of hospice and palliative care in the past has brought actual results.

Figure 4-2 Number of People Who Have Had Their Hospice and Palliative Care Wishes Recorded on Their NHI IC Cards

Source: Department of Medical Affairs, MOHW



Section 4 Oral Health Care

1. Better Dental Care for the Disabled

(1) The MOHW has been implementing "Dental Care Services for People with Special Requirements."In 2018, the "Coordinated Dental Care Plan for People with Special Requirements" was implemented with subsidies for seven model centers (National Taiwan University Hospital, Shuang Ho Hospital,Chung Shan Medical University Hospital, National Cheng Kung University Hospital, Kaohsiung Medical University Hospital, National Yang-Ming University Hospital, and Mennonite Christian Hospital) and 22 other hospitals. 28,317 patients received services under this Plan in 2018.

(2) 103 county and city hospitals throughout Taiwan have been designated as providing special dental outpatient services for the disabled in accordance with the provisions of the "Management of Specialist Outpatient Services for the Disabled" act.

2. Continuing to Provide Dental Health Services to Young Children

(1) The MOHW has continued to provide topical fluoride treatments for children. In 2018, topical fluoride treatment was provided to 1.24 million people, with 85.2% of children aged 3-6 receiving this service at least once that year.

(2) Starting from September 2014, the MOHW has been providing dental fillings of permanent molars for all first-grade and second-grade elementary school students. In 2018, 430,000 people benefited from this service.

(3) The MOHW has also continued to promote the administration of anti-plaque fluoride mouthwash for Taiwan's elementary school students. In 2018, a coverage rate of around 90% of 1.15 million children obtained this service.

3. The Ministry launched its "Denture Subsidies for Mid or Low-income Elders" on January 1 2009 and as of the end of 2018, a total of 61,426 senior citizens have benefitted from the subsidy.

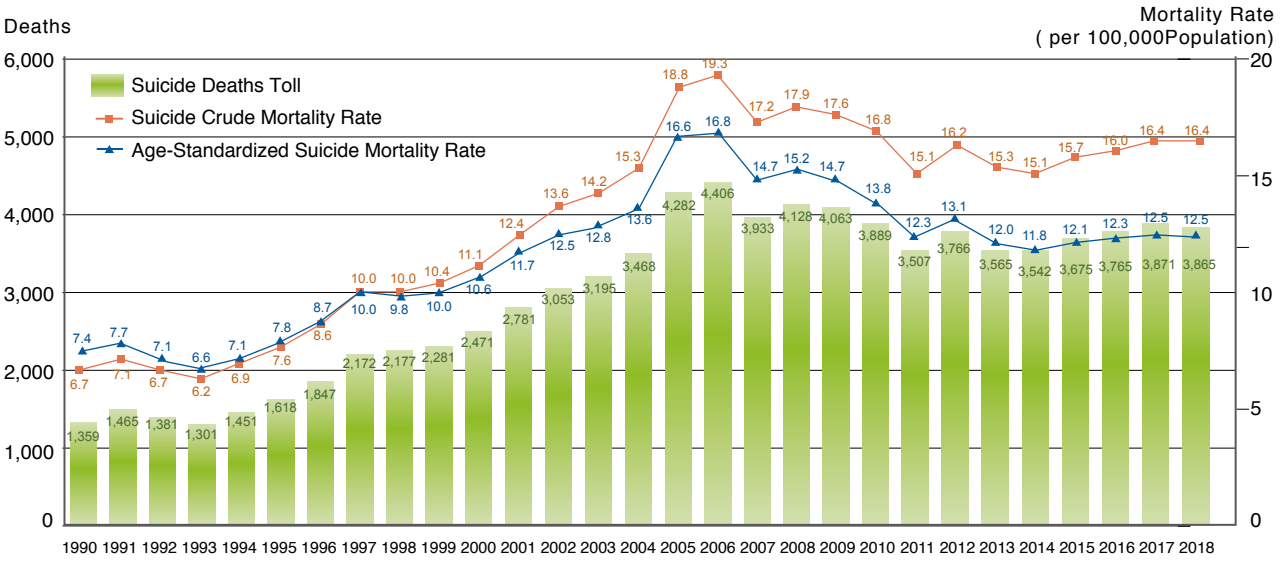
Chapter 2 Mental Health and Psychiatric Care

Section 1 Mental Health Promotion

1. The MOHW has been promoting mental health education resources for pregnant women. In 2018,185 guidance activities were held to promote mental health of women (including pregnant women).
2. To enhance the wellbeing and mental health for the public, the MOHW commissioned 22 county/city governments, department of health, to effect the "Mental Health Network Promotion Project" in 2018. Provided psychological counseling for 20,177 callers. October is the Mental Health Awareness Month in Taiwan and in 2018, the Department held 22 press conferences across the island, attracting a total of 6,722 participants.
3. The MOHW has set up a toll-free, 24-hour suicide prevention hotline (0800-788995). In 2018 it provided expert counseling to 78,108 people, assisted 12,912 potential suicide victims, and directly prevented 480 suicide attempts.

Figure 4-3 Taiwan's Suicide Deaths and Suicide Mortality Rate, 1990-2018

Source: Department of Mental and Oral Health, MOHW



4. The MOHW continued to implement reporting of all suicide-related cases, arranged outreach visits, helped people with risk of suicide. In 2018,Taiwan had 33,207 reported suicide attempts, and authorities made 215,267 outreach visits.
5. In 2018, there were 3,865 suicides in Taiwan,representing a standardized suicide rate of 12.5 people per 100,000 people (Figure 4-3). The longterm trend has been falling for the suicide rate, which peaked in 2006. Since then, the standardized suicide rate has fallen by 26%, and for nine years since 2010,suicide has not been one of the top ten leading causes of death in Taiwan. Taiwan nevertheless still has a medium high suicide rates compared to international peers. Henceforth, the MOHW will continue to strengthen the social safety net, to promote outreach visits, to provide suicide prevention gatekeepers, and other prevention strategies.
6. In 2018, the MOHW promoted the "Mental Health Promotion Plan for Aborigines," aiming to improve the cultural sensitivity of mental care experts working in remote villages, compile mental health educational materials suitable for aboriginal culture and provide psychological counseling services in accordance with the needs of aborigines.

Section 2 Psychiatric Health Services

1. The MOHW continued to utilize the seven regional psychiatric care networks. Within these networks, designated core hospitals promote mental health within the region, develop the regional psychiatric care network, improve service quality for regional mental health and arrange education/ training programs.
2. In 2018, Taiwan had 499 psychiatric care institutions. They possess 21,114 beds including 7,438 beds for emergency psychiatric patients and 13,676 beds for chronic psychiatric patients. These figures equate to approximately 8.95 beds for every 10,000 people. There were also 68 daytime psychiatric rehabilitation institutionscapable of serving 3,208 persons, 149 psychiatric rehabilitation institutions that offered accommodation (with 6,299 beds), psychiatric day care centers (capable of serving 6,241 persons),and 44 psychiatric nursing homes (with 4,104 beds).
3. The MOHW subsidized county and city governments to recruit 96 outreach community care visitors. In 2018, 801,374 outreach visits were made to 141,385 psychiatric patients.
4. Mandatory hospitalizations and mandatory community care for severe patients are carried out in accordance with the "Mental Health Act." In 2018, there were 690 applications (including 642 applications for mandatory hospitalization and 48 applications for mandatory community care). (Table 4-3)
5. In 2018, the MOHW carried out evaluation inspections of 13 psychiatric medical care institutions (including psychiatric teaching hospitals), 87 psychiatric rehabilitation institutions, and 21 psychiatric nursing homes. Furthermore, occasional follow-up guidance was conducted for 22 institutions. (Table 4-4)

Table 4-3 Statistics of Cases reviewed by the Mandatory Hospitalizations and Mandatory Community Care Committee between 2008 and 2018

Source: Department of Mental and Oral Health, MOHW

Date	Case review	Mandatory hospitalization			Mandatory community treatment		
		Mandatory hospitalization cases reviewed	Mandatory hospitalization cases approved	Mandatory hospitalization approval rate	Mandatory community treatment cases	Mandatory community treatment cases approved	Mandatory community treatment approval rate
2008 Jan-Dec	669	669	576	86.10%	--	--	--
2009 Jan-Dec	1679	1679	1555	92.61%	--	--	--
2010 Jan-Dec	1696	1670	1585	94.91%	26	26	100.00%
2011 Jan-Dec	1251	1211	1164	96.12%	40	39	97.50%
2012 Jan-Dec	1277	1221	1181	96.72%	56	52	92.86%
2013 Jan-Dec	835	772	735	95.21%	63	62	98.41%
2014 Jan-Dec	766	718	680	93.41%	48	40	83.33%
2015 Jan-Dec	747	677	634	93.65%	70	68	97.14%
2016 Jan-Dec	791	725	686	94.62%	66	64	96.97%
2017 Jan-Dec	876	818	752	91.93%	58	58	100.00%
2018 Jan-Dec	690	642	592	92.21%	48	46	95.83%

Table 4-4 The Number of Psychiatric Care Institutions in Taiwan in 2018, and Evaluation Results

Source: Department of Mental and Oral Health, MOHW

Psychiatric Care Institution Category		No. of Institutions	No. of beds/ registered (patiens) Total	2018 No. of Evaluated Institutions	Evaluation Results		
					Outstanding	Passed	Failed
Psychiatric hospitals	Non-teaching hospitals	35	21,114	12	0	12	0
	Teaching hospitals	10		1	–	1	0
General hospitals with a psychiatric care department		201		–			
Clinics with a psychiatric care department		298		–			
Psychiatric rehabilitation institutions	Daytime only	68	3,208	35	–	35	0
	With residential accommodation	149	6,299	52	–	50	2
Psychiatric nursing homes		44	4,104	21	–	20	1

Section 3 Control of Drug Addiction

1. Subsidized alternative therapy for drug addiction was introduced in 2006. As of the end of 2018, a total of 181 institutions throughout Taiwan were providing alternative therapy, with a cumulative total of 44,720 patients treated. In 2018, on average 8,182 patients received treatment daily. The number of new HIV cases among drug addicts per year has fallen from 2,425 in 2005 to 44 in 2018.
2. Taiwan had 169 designated drug addiction treatment institutions. The Department of Health and regional psychiatric care networks' core hospitals were responsible for providing continuing education and training to medical personnel, with 37 training activities arranged in 2018.
3. The MOHW continued to implement the "Subsidy Program for the Treatment of Non-Opiate Addicts"launched in July 2014. In 2018, 16 institutions were established and 2,069 people benefited from the program.
4. The MOHW's Tsaotun Psychiatric Center received funding to develop the "Community Treatment and Rehabilitation Model for Users of Schedule III and Schedule IV Drugs." In 2018, 55 drug users received treatment under this program, and 51 staffs completed the necessary training. The MOHW also subsidized twenty-three NGOs to carry out the "Drug Addict Psychological Counseling and Social Rehabilitation Work Plan." Under this program, 268 people obtained assistance in settlement; 7,113 people received transition counseling; 3,551 people received group counseling; 12,793 people received vocational skills training, employment counseling, and job matching services.
5. The MOHW incentivized to health institutions that provided drug and alcohol addiction treatment in correctional facilities. In 2018, four health institutions offered services at seven correctional facilities. They provided 244 addiction treatment clinics that served 2,558 patients, health education for 6,662 inmates, group therapy for 4,985 inmates, 967 prisoner release referrals, and 3,193 follow-ups.
6. The MOHW continued to implement the "Alcohol Addiction Treatment Plan." In 2018, subsidies were provided to help 2,171 people. Moreover, since September 2015, the MOHW has been implementing the "Pilot Project for the Establishment of a Treatment and Social Rehabilitation Service Model for Problem Drinkers and Alcohol Addicts." Between 2017 and 2018, the Ministry expanded the subsidies to eight institutions to create an inter-network mechanism of referral. 644 referrals were made and alcohol addition treatment was provided to 514 people.
7. In conjunction with the Next-Generation Anti-Drug Strategic Action Guidelines formulated by the Executive Yuan in 2018, the Ministry was chosen as the responsible authority to supervise all Drug Abuse Prevention Centers operated by local governments. In addition, the Ministry also sought to improve the quality of follow-up and counseling for communities involved in cases of drug use by subsidizing management manpower for 399 cases. In October 2018, The Ministry also subsidized Taipei City Hospital (Songde Branch), MOHW's Taoyuan Psychiatric Center, MOHW's Tsaotun Psychiatric Center and MOHW's Jianan Psychiatric Center to establish 4 Substance Treatment and Research Centers in the hopes of developing diverse treatment models and intervention solutions that are empirically proven to be effective.
8. Internet addiction prevention has been included in the "Integrated Mental Health Work Plan" for 2018 and the Ministry has requested all local departments of health to inventory and flesh out resources necessary to curb the trend of internet addiction within their jurisdiction while announcing websites of such resources for the general public to access.

Chapter 3 Medical Manpower

Section 1 Current Status of Medical Manpower

1. Taiwan has 15 laws and regulations governing the licensing requirements of medical personnel: the “Physicians Act,” the “Pharmacists Act,” the “Midwives Act,” the “Dietitian Act,” the “Nursing Personnel Act,” the “Physical Therapists Act,” the “Occupational Therapist Act,” the “Medical Technologists Act,” the “Medical Radiological Technologists Act,” the “Psychologists Act,” the “Respiratory Therapists Act,” the “Hearing Specialists Act,” the “Speech Therapists Act,” the “Dental Technicians Act,” and the “Optometric Personnel Act.”
2. As of 2018, Taiwan had 312,887 practicing health professionals including 69,069 physicians (both Western and traditional Chinese medicine doctors and dentists), 34,838 pharmacists, 9,698 medical technologists, 6,624 radiologic technologists, 167,803 registered nurses, 179 midwives, and 3,061 dietitians.
3. Current Status of Dentist Manpower

   The revised “Dentist Specialization and Examination Regulations” was promulgated on October 5 2018 and the revision added 7 new specializations to the current 3 for dentists, to a total of 10 specializations. As of the end of 2018, there are 1,066 certified dentists (628 orthodontists, oral and 369 maxillofacial surgeons, and 69 oral pathologists).

Section 2 Training Health Professionals

In order to ensure an excellent medical workforce, every year the MOHW conducts training programs, personnel development programs, and workplace training. The results are as follows:

1. Regarding the training of health professionals, 1,300 students matriculate at Taiwanese medical schools each year; as for other categories of healthcare practitioners (training programs must be approved by the Ministry of Education). Taiwan's planning of the physician workforce will focus on a balanced distribution of resources, and a periodic evaluation of its effectiveness.
2. According to Taiwan's “Diplomate Specialization and Examination Regulations,” there are 23 medical specialties. Through the end of 2018, 52,627 people received their medical licenses in Taiwan.
3. Post-graduate general medical training is offered to strengthen holistic care. In 2018, Taiwan approved 36 teaching hospitals and 91 collaborating hospitals to provide postgraduate year (PGY) training programs. 1,376 medical graduates received training under this scheme.
4. A system of postgraduate clinical training for dentists has been put in place to ensure quality oral health care. As of 2018, Taiwan certified 507 institutions (90 hospitals and 416 clinics) offer this training. 803 dentists received training under this project.
5. Taiwan has been providing the nurse practitioner training since since 2006 to enhance the quality of nursing. The number of applicants in the certification examination for nurse practitioners and those who have received the certification as of 2018 are shown in Table 4-5
6. To ensure that newly minted health practitioners can receive superior clinical training, in 2007 the MOHW launched the “Clinical Practitioner Training Program.” As of 2018, 2,035 individual training programs at 146 participating hospitals trained 28,548 health workers; 85.53% of medical workers received this training within two years of gaining a license.
7. To create an effective clinical training system for doctors of traditional Chinese medicine, the MOHW has launched the program for the Training of Responsible Physicians in Chinese Medical Care Institutions. In 2018, this scheme assisted 65 training hospitals in providing a two year physician training to 403 new Chinese medicine physicians. The Ministry also promulgated the “Chinese Medicine Specialist Physician Training Guidelines” as a way to reach a consensus on the specialist physician training of Chinese Medicine. The Chinese Medical Association of Acupuncture and the Society of Traditional Chinese Internal Medicine of Formosa R.O.C were selected to develop criteria for qualification, basis for training and certification standards for accreditation bodies and so forth. The Ministry subsidized five teaching hospitals to develop objective structure clinical examination in traditional Chinese medicine doctors for competence, and prepare for the oral exams of the specialist physician training of Chinese medicine in the future.

Table 4-5 **Number of applicants in nurse practitioner certification and those who have received the certification between 2006-2018**

Source: Department of Nursing and Health Care, MOHW

Group	Specialization	No. of people
Internal medicine	General medicine	3,610
	Pediatrics	205
	Psychiatrics	161
Surgery	General surgery	3,578
	Obstetrics and gynecology	131
Total		7,685

Section 3 Creating Employ-Friendly Work Environments

1. In an effort to safeguard physicians' rights and patient safety, the Ministry of Labor has announced on March 12 2019 that effective from September 1 2019, resident physicians hired by the medical, healthcare and care-giving industries shall be applicable to the Labor Standards Act. Due to considerations such as the degree of autonomy, diversity of work and responsibilities, complicated definition of work hours, high degree of professionalism and irreplaceability, physicians employed by public medical institutions have been excluded from this announcement on the grounds that their inclusion could impact doctor-patient relationships, patient safety and medical services at rural townships. The responsibility of promoting specific amendments to the Medical Care Act has been entrusted to MOHW to see that special clauses on the labor rights of physicians are added to the Act by incorporating aspects such as physicians' work contract, compensations for occupational illnesses/hazards and retirement benefits into the clauses. To mitigate the potential impact of applying the Labor Standards Law to physicians, the Ministry has been actively promoting a series of supporting measures, including the increase of medical care manpower in hospitals, increase in the number of clinical nurse specialists, adjusting the training program for specialist physicians, adopting measures to facilitate flexible human resource utilization and established specific levels of care and referrals on top of implementing the "Guidelines for Labor Rights Protection and Work Hours of Resident Physicians" in order to improve the work hours of resident physicians.
2. To reduce malpractice risks and to foster harmonious doctor-patient relationships, the MOHW has been implementing the "Plan for Encouraging Medical Facilities to Implement Birth-related Dispute Management Pilot Projects" since 2012. The MOHW has also promoted the enactment of a "The Childbirth Accident Emergency Relief Act." Their results are outlined below.

   (1) By the end of June 29,2017, 294 OB/ GYN clinics and hospitals participated in the "Plan for Encouraging Medical Facilities to Implement Birth-related Dispute Management Pilot Projects." 506 birth injury claims were received, of which 494 were processed; approved 427 applications for subsidy; around 417 families received compensation totaling NT$ 401.511 million. Consequently, the number of birth-related medical malpractice lawsuits has fallen 70%. This drastic reduction in malpractice risk in turn has helped to boost OB/GYN resident physician recruitment. During the past three years, 99.7% of OB/ GYN resident physician vacancies were successfully filled.

   (2) Ever since the promulgation of "The Childbirth Accident Emergency Relief Act" on June 30 2016, the Ministry has reviewed a total of 533 applications as of the end of 2018 and resolved 514 applications. A total of 260.7 million NTD in relief funding has been paid. Hospitals and clinics have established internal risk management mechanisms and implemented reporting of major birth injuries to enable the analysis of root cause of malpractice so that rectifications can be made accordingly.

   (3) Actively promoting alternative dispute resolution mechanisms:

   A. The MOHW has guided medical facilities to establish care groups, strengthen internal mechanisms, and implement timely explanations, communication and assistance to enhance the physician-patient relationship.

   B. The MOHW has worked to strengthen local government authorities' in alternative dispute resolution in medical malpractice. Taiwan aims to foster effective doctor-patient communication.

   C. The MOHW has been training forensic physicians to undertake medical appraisal. As of the end of 2018, the number of medical dispute appraisal cases commissioned by the judicial authorities fell by 37%, the number of dispute cases handled by local Public Health Bureaus fell by 21.5%, the average length of time to complete the appraisal process decreased by 29.4%, and the average time to resolve a dispute stood at 6 months.

3. In an effort to improve the workplace environment for nursing personnel, the Department has been actively promoting relevant reforms starting from 2012 to facilitate the retention and encourage nurses who left the professional field to return. The following outcomes have been achieved in 2018:

   (1) Increasing the number of nurses and reducing their turnover/vacancy rates:

   At of the end of 2018, 169,454 registered nurses worked in Taiwan, an increase of over 33,000 compared to before nursing reforms were enacted. The turnover rate fell from 13.14% in 2012 to 10.04% in 2018. The total vacancy rate fell from 7.2% in 2012 to 4.48% in 2018.

   (2) Reducing Workloads and Improving Nurse-Patient Ratios and Work Conditions

   A. In 2015, nurse-patient ratios were officially added to the criteria for hospital evaluations. The standard for evaluation is the "average whole-day nurse-patient ratio" for emergency and general beds in hospitals; the ratio for medical centers is ≦ 9, including ≦ 7 for daytime nurses; the ratio for regional hospitals is ≦ 12; the ratio for local hospitals is ≦ 15. Between 2015 and 2018, a total of 451 hospitals applied for evaluation and 449 hospitals have passed the evaluation.

   B. Tie-in of nurse-patient ratio to hospitalization insurance bonus: starting from 2018 onward, the bonus bracket has been expanded once more to 2-20% as a way to encourage hospitals to achieve the necessary threshold for nurse-patient ratio.

   C. Promotion for the legislation of nurse-patient ratio: In 2018, the Ministry has proposed the addition of "average whole-day nurse-patient ratio" article in the Establishment Standards for Medical Institutions. The proposal was discussed in formal conferences held on February 9 and October 19 2018, reaching a consensus with medical and nursing organizations.

   D. Ensuring compliance with the Labor Standards Act and establishing the nurse rostering guidelines and a simple cheat sheet:

   In conjunction with the promulgation of amendments to the Labor Standards Acts in March 2018, the Ministry has prepared the cheat sheet for nursing rostering guidelines along with more aggressive dissemination and communications for the Labor Standards Act. In addition, the Ministry has once again revised the "Nursing rostering under Labor Standards Act FAQ, guidance and examples of reasonable nursing rostering" handbook to strengthen nursing supervisors and nursing personnel's awareness for their labor rights.

   E. The "Nursing Workplace Dispute Reporting Platform" was launched on February 1 2018 as a channel for nursing personnel to report disputes in the workplace. By the end of 2018, a total of 150 reports were made. Among the reports, 113 (75%) were related to the Labor Standards Act, and the remaining 37 (25%) were made due to other disputes (i.e. argument over the use of resting area, reporting personnel without a practice license and so forth). The Ministry had reached out to local health and labor organizations to investigate the incidents as reported and violations were penalized accordingly (approximately 20% of the cases were penalized). It is the Ministry's wish to create a positive working environment for nursing personnel through information transparency and adequate supervision of their working environments.

   (3) Raising Salaries and Benefits

   Ministry of Labor surveys have shown that nurse salaries rose by approximately 16% since 2011.

Chapter 4 Health Care Quality

Section 1 Patient Safety and Quality of Medical Care

The MOHW has aimed to improve the quality of patient-centered services and establish a hospital evaluation/accreditation system, annual objectives for healthcare quality and patient safety, and a patient safety reporting system. Significant achievements in 2018 are as follows:

1. The MOHW drew up the "2018-2019 Taiwan Patient Safety Goals for Hospitals" (Table 4-6).
2. The Taiwan Patient Safety Reporting System (TPR) has been used to effect a patient safety culture. In 2018, 10,634 healthcare organizations participated in the TPR, and preliminary statistics indicate that around 78,391 cases were reported.
3. The Shared Medical Decision Making Platform has been established. As of the end of 2018, 71 decision support tools (including decision support tables, films, and other materials) were uploaded.260 hospitals participated in the promotion of shared medical decision making.
4. The Hospital Accreditation Standards include regulations about a safe hospital environment, safe equipment, patient orientation services, healthcare quality, drug safety, anesthesia and operations, and infection control. These measures are hopefully tantamount to creating a safe hospital environment.

Table 4-6 2018-2019 Taiwan Patient Safety Goals for Hospitals and Clinics

Source: Taiwan Patient Safety Net, Department of Medical Affairs, MOHW

No.	Taiwan Patient Safety Goals for Hospitals
1	Improving effective communication among healthcare workers
2	Implementing adverse event management
3	Improving surgical safety
4	Falls prevention and reducing patient harm resulting from falls
5	Improving medication safety
6	Implementing infection control
7	Enhancing the safety of medical catheters/ tubing use
8	Encouraging patients and families engagement in healthcare safety
No.	**Taiwan Patient Safety Goals for Clinics**
1	Improving effective communication
2	Improving medication safety
3	Improving surgical safety
4	Falls prevention
5	Implementing infection control

Section 2 Reforming the Hospital Accreditation System

The MOHW is reforming the hospital accreditation system with patient safety and quality of medical care as its core concerns. Taiwan intend to foster tangible reform, reduce the undue pressure that the accreditation process puts on hospitals, simplify/clarify the Hospital Accreditation Standards, and ensure that Taiwan keeps pace with current international standards in hospital accreditation.

1. As of 2018, accreditation had been granted 425 hospitals and 133 teaching hospitals (Tables 4-7 and 4-8).
2. The Ministry has been promoting the reform of existing hospital accreditation system in order to facilitate hospital quality monitoring and routine management. Critical issues of current affairs and aspects on creating a friendly environment for patients to receive medical care have been included in the articles, which have been increased from 122 to 125. In addition, the accreditation process is now performed electronically (hospital administrators can now apply/declare online) with continual monitoring of relevant indicators. This is also a way for the Ministry to respond to the growing concern from the general public on medical personnel's labor rights in recent years.
3. The Ministry has been conducting joint on-site survey of supervision for health and medical care operations. This includes the accreditation certification survey for agencies under MOHW and its affiliated organizations. In principle, only one accreditation/visit will be made to each hospital in a given year with the objective of integrating relevant items, simplifying articles and combining itineraries to simplify relevant accreditation/visit/certification. In addition, such visits would be carried out in specific weeks of accreditation/visit in accordance with the nature of the visit.

Table 4-7 2015-2018 Hospital Accreditation Results

Source: Department of Medical Affairs, MOHW

Accreditation Results	Hospital Accreditation - Qualified			
	Medical Centers	Regional Hospitals – Would-be Academic Medical Centers	Regional Hospitals	District Hospitals
No. of Institutions	19	3	76	327

Table 4-8 2015-2018 Hospital Accreditation Results

Source: Department of Medical Affairs, MOHW

Accreditation Results	Physicians and Medical Personnel Teaching Hospitals Accredited	Medical Personnel (Non-Physicians) Teaching Hospitals Accredited
No. of Institutions	113	20

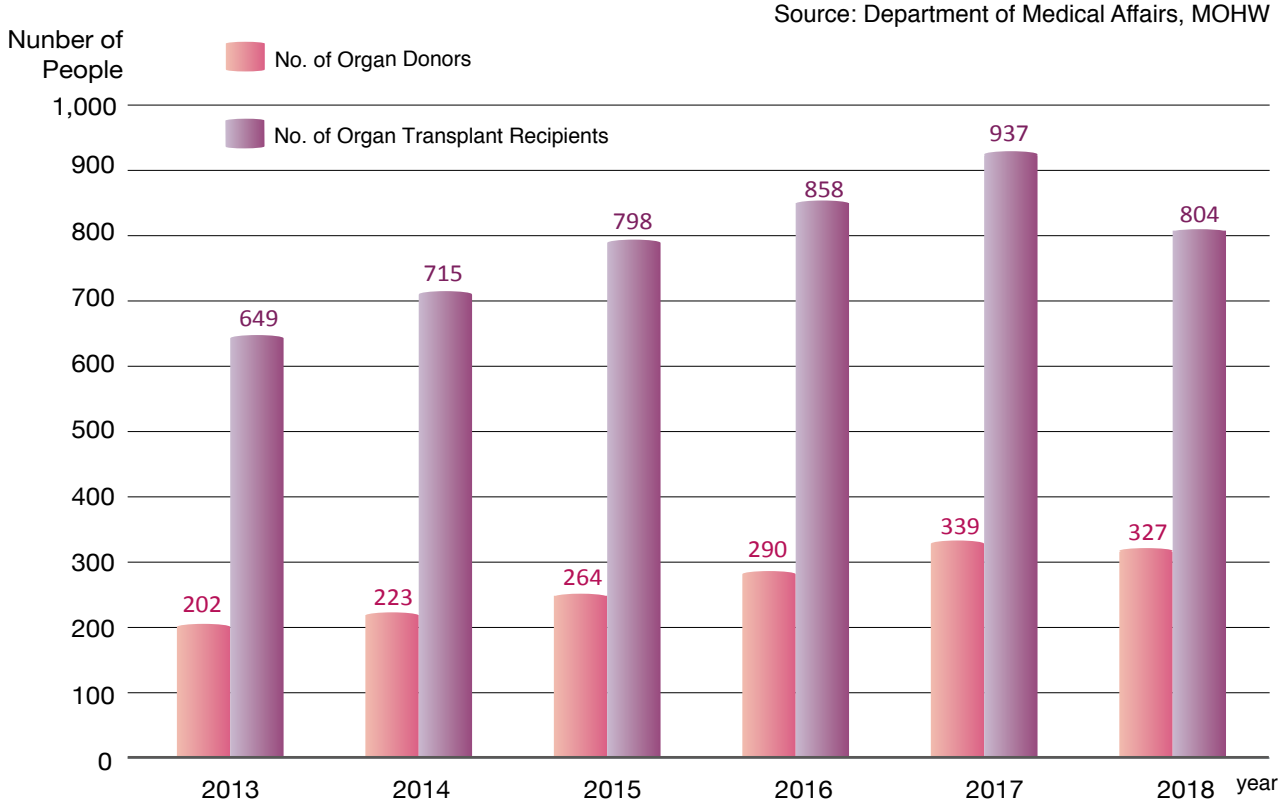
Section 3 Organ Donations and Transplantations

The world is facing a shortage of available organs for transplantation. As of the end of 2018, over 9,000 patients in Taiwan awaited organ transplantation; however, only about 800 patients annually are able to receive an organ transplant (Figure 4-4). The Ministry has continued to promote the measure to encourage people to sign the consent for organ donation. A total of 47,508 organ donation consents were obtained till the end of 2018, bringing the cumulative total to 413,255 entries over the past years.

To encourage organ donation, in 2002 the MOHW established the Taiwan Organ Repository and Sharing Center. This measure such has given Taiwan the second highest organ donation rate in Asia, and post-transplant survival rates comparable with those of developed countries — a testament to the quality of Taiwan's healthcare system. In 2017, the MOHW published the "Regulations for Implementing Approval and Administration of Human Organ Transplantation" as well as the "Regulations for Organization and Operational Management of the Ethics Review Board for Human Organ Transplantation," to improve the quality of organ donations and transplantations. Furthermore, the Ministry also published the "Guidelines for Donation of Organs after Cardiac Death" as a reference for medical institutions. It is a milestone in the development of organ donations in Taiwan.

Figure 4-4 Organ Transplant Donors and Recipients in Taiwan, 2013-2018

Source: Department of Medical Affairs, MOHW



Section 4 Promoting Electronic Medical Records (EMR) Adoption

The expansion of electronic medical record (EMR) standard was major construction project in 2018, that the relevant work was to establish and announce the "Guidelines governing proposals for addition of ERM exchange field and format, annulment of proposals and review". This documentation has been seconded via correspondence from Kaohsiung Medical University Chung-Ho Memorial Hospital, Kaohsiung Veterans General Hospital, Chang Gung Memorial Hospital, Linkou, Chi Mei Medical Center, China Medical University Hospital, Tri-Service General Hospital and Hualien Tzu Chi Hospital. The Ministry has thus far completed open consultation on the draft of EMR standards including operation record, pathology report, discharge summary, outpatient record, medical image and report and annulled the outpatient medication record. A total of 404 hospitals across Taiwan are connected to the EMR Exchange Center (EEC). In 2018, a total of 223,630,914 EMR indexes were uploaded and completed as many as 1,896,158 EMR exchanges were requested through the EEC.

Chapter 5 Healthcare in Remote Regions

Section 1 Health Care Tailored to Local Needs

To safeguard the health of people living on outlying islands and remote regions, the MOHW has taken the following measures:

1. The MOHW Penghu Hospital's Cardiovascular Care Center has been officially operating since December 4 2013. By December 2018, the Center had provided treatment to 730 people. The Center helps to improve the quality of treatment for patients with cardiovascular diseases and tailor care to local needs.
2. The MOHW Penghu Hospital's Chemotherapy Center was established in October 2015. By December 2018, the Center had completed treatment of 1,970 people to provide convenient, timely and appropriate treatment and care for cancer patients, relieve Penghu residents from the necessity to travel to Taiwan and increase localization and accessibility of medical care.
3. The Ministry acquired a unit of 1.5 Tesla Magnetic Resonance Imaging Scanner for both the Penghu and Taitung Hospital in order to assist physicians to provide more accurate diagnosis and decision within shorter period of time. By verifying the conditions sooner, we are able to improve the quality of medical care in Penghu by relieving local residents from having to commute and travel.
4. The MOHW Kinmen Hospital's Cardiovascular Care Center was established in October 2015 and by December 2018, the Center had provided treatment to 283 people. The Center has improved local emergency care capacities and reduced the frequency of emergency evacuation by the means of air transport. The Center offers first-line treatment for acute myocardial infarction and acute coronary syndrome, providing Kinmen residents with safe comprehensive medical care.
5. In an effort to improve the accessibility of services and meet various medical needs of people living in remote regions and regions with insufficient medical resources, the Plan for Strengthening Efficacy of Hospitals in Remote Regions and Regions with Insufficient Medical Resources was implemented since 2016. In 2018, the Ministry subsidized Fengbin Branch of Hua-Lien Hospital, Chenggong Branch of Taitung Hospital and Hengchun Tourism Hospital to hire more specialist physicians to offer relevant medical care services.
6. The "Telemedicine Video-conferencing and Consultation Project" implemented by the Ministry subsidized four health stations in Taitung, Kinmen, Lianjiang and Penghu to provide consultation by telemedicine. This makes the provision of health consultation and referral suggestions available for local residents and in turn improves the accessibility of medical services. (Department of Nursing and Health Care)
7. The Medical Human Resource Replenishment Plan for Remote Regions and Outlying Islands has been implemented in order to achieve the mission of public health service and fulfil the responsibility before remote regions and vulnerable groups by improving the efficacy of medical services in remote regions and ensuring provision of appropriate services. Drawing from the actual demand for specialists, physicians and other medical personnel have been asked to provide diagnosis and treatment services. In 2018, the 2,142 outpatient services were provided for 43,937 patients; 1,351 emergency medical services were provided for 2,467 patients.
8. In an effort to promote telemedicine treatment so as to effectively provide non-urgent but much needed outpatient services in remote areas, Chenggong Branch of Taitung Hospital has utilized cutting-edge ICT technologies to construct its "Telemedicine Outpatient System" by collaborating with Kaohsiung Chang Gung Memorial Hospital to engage specialist physicians to provide diagnosis and treatment. Hopefully this system will enable remote areas to benefit from diagnosis and treatment resources at medical center level so that relevant resources are put to optimal use. The branch has arranged for fixed telemedicine outpatient services by beginning with dermatology, otorhinolaryngology and ophthalmology; outpatient services for other specialization will be offered in the future. This will enable us to achieve local medical services whereby patients can stay put to save the residents from the hassle of traveling back and forth.

9. In an effort to construct a network of smart medicine and healthcare at aboriginal communities and offshore islands, the Ministry has constructed the Health Information System (HIS) at 72 health stations at aboriginal communities and offshore islands. In 2018, the total number of HIS outpatient services offered came to 10,887,145. Not only that, the Picture Archiving and Communication System (PACS) has also been constructed at 28 health stations so that the image files can be sent to Taoyuan Hospital for image reading to improve the efficacy and quality of medical services. In 2018, a total of 18,990 images were sent through PACS for reading.
10. Through the "Forward-Looking Infrastructure Project", the Ministry was able to increase the speed of broadband connection for all 403 health stations (rooms) at aboriginal communities and offshore islands along with mobile healthcare stations to reach 100M (or the highest possible speed available at the location). In addition, medical IT equipment at 64 health stations have been upgraded to improve the medical resources and image transfer quality and speed. As of the end of 2018, broadband connection speed upgrade were completed for 212 locations, with equipment upgrades performed at 32 health stations.
11. In an effort to improve the equipment and resources available at aboriginal communities and offshore island health stations(rooms), the Ministry has subsidized the replacement of 51 medical equipment, 64 IT equipment and the replacement of 23 medical transports. In addition, funding has also been provided for the (re) construction of 5 health stations (rooms), renovation of 2 health stations and repair of 8 health stations. (A total of 370 words have been deleted from items 6, 9-11 for the Department of Nursing and Health Care)
12. Since 2005, the Improvement Plan for Areas with Insufficient Resources has been implemented to enhance medical care services in areas with insufficient emergency care resources. Local medical institutions have cooperated and established three improvement models, namely, Nighttime and Holiday First-Aid Stations, Emergency Care Stations in Touristic Areas, and Improving Emergency Care Efficacy in Areas with Insufficient Emergency Care Resources. In 2018, rewards were provided for 18 locations (including Qingjing Farm, Sun Moon Lake, and Dawu and Chenggong townships in Taitung County). Emergency treatment services were provided to over 9,200 patients in areas with insufficient resources. The areas have benefited from 24-hour emergency treatment services. (3rd Section, Department of Medical Affairs)
13. Implementing the Plan for the Training of Medical Personnel for Aboriginal Communities and Offshore Islands

    (1) To ensure a more equitable allocation of medical resources in remote districts by actively cultivating local medical talents, since 1969 the MOHW has trained health workers through the "Plan for the Training of Medical Personnel for Aboriginal Communities and Offshore Islands":

    A. As of the end of 2018, 1024 health workers (including 549 doctors, 82 dentists, 263 nursing personnel and 130 other medical personnel) received training under this program. Approximately 70% of these personnel have chosen to remain in the aboriginal communities and offshore islands to serve upon the completion of their training.

    B. Expand the cultivation of local health workers: In light of factors such as the amendments to the Labor Standards Act, the Ministry's mid-long term health worker manpower objective, transition in the aboriginal community/remote township nursing elite program, aging population, the demand for long-term care manpower in the future and manpower shortage faced by five major specializations, the Ministry has adhered to "Revision of Aboriginal Community and Offshore Island Health Worker Cultivation Project - Stage IV (2017-2021)" by increasing the number of local health worker trainees by 356, bringing the total to 580.

    C. Promote cultivation through vocational schools: for disciplines such as general medicine, dentistry and nursing, the Ministry will gradually promote a system for cultivation through vocational schools to mitigate potential cultural shock and increase graduation and certification rate.

    D. Amend assignment service management guidelines: as a response to demands for local manpower, the Ministry has announced the amendment to the publicly funded nursing student training assignment and service management guidelines in the Aboriginal Community and Offshore Island Health Worker Cultivation Program on November 2, 2018 by adjusting the sequence of assignment application and actual assignment for graduating publicly funded nursing students. More specifically, their assignment would now prioritize the local health stations in the district of their registered address with improved management of these publicly funded students from the local governments.

    E. In accordance with the "Elite Nurses Program for Remote/Rural Regions" as approved by the Executive Yuan, the Ministry has trained a total of 195 publicly funded nursing students between 2015 and 2018. Upon the completion of their training, these students would be assigned to hospitals in various rural areas to serve for at least 4 years.

14. In an effort to strengthen local medical services in rural areas and encourage health workers to establish health institutions in aboriginal communities and offshore islands so that local residents would have easy access to medical services, the Ministry has offered subsidies for those intending to set up health institutions in aboriginal communities and offshore islands, up to no more than 500,000 NTD per institution in principle. In 2018, the Ministry has subsidized 7 new health institutions. (Department of Nursing and Health Care)

Section 2 Emergency Medical Evacuations

Taiwan desires to ensure that residents of outlying islands requiring emergency medical treatment can receive proper care. As such, the MOHW has followed the principles of "doctors move, patients stay put" and "seamless medical care." The agency has strengthened the provision of medical care to underserved regions with support from aeromedical services whenever necessary. Implementations are summarized as follows:

1. In an effort to effectively establish a review system for aeromedical evacuation and improve the quality of referral treatments, the Ministry has established the "Aeromedical Evacuation Review Mechanism" by enlisting qualified physicians to provide emergency medical consultations on an around the clock basis to evaluate the necessity of providing aeromedical evacuation. Prior to the establishment of the mechanism, the average number of aeromedical service provision per month was 43.18. With the mechanism in place, the number fell significantly to 20.8 per month, representing a decline of 51.82%.
2. The Ministry implemented the "Kinmen, Lianjiang and Penghu Offshore Island Aircraft on Local Standby Program" to outsource the deployment of private aircrafts on these three offshore islands for standby services. The aircrafts were deployed for service and operation on July 27 2018 in Kinmen and August 1 2018 in Lianjiang and Penghu.
3. In an effort to enhance medical personnel's competence in aeromedical evacuation, the local airlines and governments have organized aeromedical evacuation trainings, including overview of aerospace and operational physiology, risk management for aeromedical evacuation and so forth in conjunction with simulations and drills carried out in an aircraft.
4. As a follow-up to the multi-party electronic consultation platform that was designed by Government Zero Team in the 2018 Presidential Hackathon, the Ministry has constructed the "Aeromedical Evacuation Distance Consultation Platform" as a channel for different parties to provide relevant medical information to the Aeromedical Approval Center for assessments such as destination hospital, offshore-island physician decision-making for diagnosis and treatment, necessity for an aeromedical evacuation and so forth to alleviate the stress on frontline physicians by lowering the risks of unnecessary evacuations.

5. In an effort to lighten the financial burden on the general public seeking medical assistance, the Ministry has been offering subsidies in accordance to "Directions Governing Transportation Expense Subsidy for Offshore Island Residents Requiring Immediate Medical Attention due to Urgent or Serious Injuries/Illnesses" by covering half of the transportation expenses (by plane or boat) for patients who have to make the trip on their own. The subsidy is limited to four trips per year per patient and a patient may take up to 6 trips if deemed necessary by a physician. In 2018, a total of 16.33 million NTD has been paid in subsidy for 21,827 patients.

Section 3 Training and Retaining Staffs

In order to replenish grassroots personnel and human resources in remote regions, the training system for government-supported physicians has been implemented since 1975. During four decades, 6,557 government-supported physicians received training and were assigned to regions with insufficient human resources or difficulties in provision of specialized care services. The program was suspended in 2009 as the goal of balanced human resources was achieved and step-by-step tasks had been fulfilled.

In view of the increased demand for physicians in future, the MOHW resumed the Plan for Training of Government-Supported Physicians in Key Subjects in 2016, planning to train 500 government-supported physicians in 2016-2020. Through the means of "additional capacity", the Ministry has been training approximately 100 government-supported physicians per year. The training has been restricted to key specializations such as general medicine, surgery, obstetrics and gynecology, pediatrics, emergency medicine or other specializations with manpower shortage. Upon completing the training in full, these government-supported physicians are required to complete a service of 6 years in duration at hospitals on offshore islands, remote areas or rudimentary health stations. In conjunction with the support programs for medical centers to assist hospitals in remote regions, government-supported physicians may also choose to fulfill their obligations in different stages in order to retain their opportunities at returning to specific medical center for further education so that they can maintain their competence for the purpose of career planning. On top of that, the Ministry has also implemented incentive measures to encourage government-supported physicians to extend their services in remote areas in the form of salary adjustment or additional benefits in order to retain their services at hospitals or health stations in remote regions.

Chapter 6 Healthcare for Specially Targeted Groups

Section 1 Healthcare for Indigenous People

According to the Council of Indigenous People, as of December 2018, there were 565,561 indigenous people

in Taiwan, accounting for 2.4% of its total population. According to relevant statistics from the Ministry of Interior, the average life expectancy for indigenous people in 2017 came to 72.2 years, which was 8.2 years shorter compared to that for the entire population (at 80.4 years). To safeguard all citizens' rights to receive fair and equal healthcare, the Ministry has endeavored to improve the accessibility of health and medical care for people in aboriginal communities with the following promotional strategies:

1. Implementing the Plan for the Training of Medical Personnel for Aboriginal Communities and Offshore Islands

Since 1969, the Ministry has trained health workers through the "Plan for the Training of Medical Personnel for Aboriginal Communities and Offshore Islands". As of 2018, a total of 550 indigenous people (270 physicians and 280 other medical personnel) have received relevant medical training. Approximately 70% of these indigenous medical personnel have fulfilled their service obligations and chose to stay in their location of assignment to continue their services.

2. Increasing Investments into Medical Equipment and Improving Service Quality in Indigenous Communities

(1) In 2018, the Ministry has subsidized the replacement of 34 medical equipment, 32 workstations, the replacement of 18 medical transports and the (re)construction of 2 health stations (rooms) and renovation of 2 health stations and repair of 8 health stations in aboriginal communities.

(2) Through the "Forward-Looking Digital Infrastructure Project", the Ministry was able to increase the speed of broadband connection for all health stations (rooms) at aboriginal communities and mobile healthcare stations to reach 100M (or the highest possible speed available at the location). By the end of 2018, broadband connection speed upgrade were completed for 212 locations, with HIS/PACS equipment upgrades performed at 32 health stations to improve the quality and efficacy of medical image transfer.

(3) The Ministry subsidized transportation fees for indigenous people involved in referrals, major or urgent illnesses/diseases so that they can receive medical assistance or access relevant welfare resources as a way to lighten their financial burden. In 2018, a total of 13.63 million NTD was paid in subsidy for a total of 17,268 members of the indigenous population.

(4) The Ministry has established Tribal Health Promotion Center at various aboriginal communities so as to integrate local resources to bring health literacy into the communities and construct a model of local health service for local people. As of 2018, a total of 53 Tribal Health Promotion Centers have been established.

3. Improving Health Equality among Indigenous Communities

(1) 9 sessions of inter-departmental meetings on the discussion of care for aboriginal communities chaired by the Minister have been held, with the 10 Action Plan to Eradicate Health Disparity for Aboriginal Communities proposed in April 2018. The plan included specific aspects on the cultivation of local health workers, promotion of tribal health, improvement in medical resources in aboriginal communities and so forth and was officially launched for implementation in May 2018.

(2) The following three strategies have been proposed to eradiate health disparity for aboriginal communities:

A. Identifying targets through data - examining the 10 leading causes of death and 10 leading cancers for indigenous people, the Ministry found that liver/stomach/cancers of the digestive system and newborn/infant mortality rates were both higher than the national average.

B. Searching for talents locally - to cultivate and train health workers who are native speakers of the mother tongue to provide the healthcare and medical services.

C. Looking for solutions through culture - to incorporate and encourage positive and healthy changes in behavior by introducing elements of local cultural implications and promote horizontal integration of local resources.

Section 2 Healthcare for New Immigrants

According to the National Immigration Agency of the Ministry of the Interior, the number of foreign and Chinese spouses in Taiwan in 1987-2018 amounted to 543,807, of which 184,346 spouses had foreign nationality (20,497 male; 163,849 female) and 359,461 spouses came from Mainland China, Hong Kong, and Macao (24,881 male; 334,580 female). According to the Department of Household Registration of the Ministry of the Interior, in 2018, 135,322 Taiwanese couples (270,644 residents) registered marriage. With regard to spouse nationality, 250,081 spouses were Taiwanese, 20,563 spouses had foreign nationality (5,405 male; 15,158 female) and 8,088 spouses (1,416 male; 6,672 female) came from Mainland China (including Hong Kong and Macao). Our ministry has promoted the following policies to improve prenatal health of new immigrants and reduce life and treatment difficulties caused by language barriers:

1. Recent immigrants in Taiwan, who have not yet joined the NHI system, receive subsidies for 10 prenatal examinations, one Group B streptococcus screening,

one ultrasound screening, and two prenatal health education guidance. New immigrants and their children are provided with health management cards, which offer services and health guidance in the areas of family planning, breastfeeding, prenatal health, prenatal examinations, and prenatal nutrition. In 2018, the utilization rate for the health management card was 92.11%.

2. To protect the reproductive health of new immigrants who have not yet joined the NHI system, subsidies for prenatal examinations have been provided to foreign spouses of Taiwanese citizens, since 2011. In 2018, a total of 10,370 cases have been subsidized.
3. To reduce new immigrants' treatment difficulties caused by the language barriers, local health departments applied for the Training Program for Interpreters Among New Residents with the Ministry of the Interior's "New Resident Development Fund" in 2011. Local health departments have promoted training of interpreters among new immigrants who have lived in Taiwan for many years, so that they can assist the departments' personnel in visiting new immigrants and providing them with outpatient service and prenatal health guidance. In 2018, 17 counties and cities applied for the program.
4. To provide reproductive health information more effectively to people from diverse backgrounds, in 2017, the MOHW commissioned the publication of the "Children's Health Booklet" and "Maternal Health Booklet" in five languages: English, Vietnamese, Indonesian, Khmer, and Thai. Taiwan distributes the booklets to medical institutions, and their PDF versions are available for downloading from the publications section of the Health Promotion Administration website, so that new immigrants and their family members can be well informed.
5. Operation Consent Form, Anesthesia Consent Form and documents related to hospitalization are available in 8 languages including Simplified Chinese, English, Japanese, Vietnamese, Indonesian, Thai, Korean and Malay; other documents for hospital discharge procedure and emergency treatment procedures are available in 6 languages, including Simplified Chinese, English, Vietnamese, Indonesian, Thai and Korean.

Section 3 Healthcare for Rare Disease Patients

1. As of 2018, Taiwan has officially identified 220 rare diseases, along with 105 drugs for treating them and 103 nutritional supplements for use in relation to them. Rare diseases have also been included in the categories of major illnesses and injuries under National Health Insurance program, thereby increasing assistance for these unfortunate patients.
2. A logisties center for special nutrition foods and emergency orphan drugs for treating patients with rare diseases has been established; in 2018, the center supplied drugs and special nutrition foods to rare disease on 1,398 occasions. The MOHW also provides subsidies to cover rare disease related expenses not covered by the NHI. They include rare disease diagnosis, treatment, examinations (both in Taiwan and overseas), and home medical care equipment, subsidy for nutritional consultation fee for low-protein rice/noodle and rare metabolic diseases. In 2018, subsidies were provided on 1,532 occasions.
3. Taiwan has established 14 genetic counseling centersin medical centers, providing hereditary and rare diseases, medical services.
4. Strengthening Rare Disease Prevention Education: 12 advocacy activities were held for patients, patient groups, businesses, and healthcare institutions. Produced short promotional videos to be viewed by users on the Internet.
5. The Ministry has held open solicitation for entries for rare disease control subsidy programs in accordance with the Regulations governing the Incentives and Subsidies for Rare Disease Prevention and Treatment. A total of 8 programs were subsidized in 2018.
6. The Program for Rare Disease Care Services was implemented in accordance with Regulations Governing Healthcare Services for Rare Diseases and Rare Genetic Defects. This program involved specialists to conduct inform patients about the effects of related diseases, offered psychological support, maternity attentiveness and care counseling services for patients and their families. Through open solicitation, 9 institutions (operating under 8 medical centers) have been commissioned for this program, which served a total of 5,060 patients and their families in 2018.

Section 4 Groups with Special Health Needs

1. Healthcare for Patients Affected by Polychlorinated Biphenyl (PCB) Poisoning

(1) In 1979, while a food manufacturer in Taichung was processing rice bran oil, PCB that was

being used as a heat transfer fluid along with PCB heat denatured byproducts leaked into the edible oil via cracked plastic pipes. More than 2,000 victims in Taichung and Changhua consumed the contaminated oil. Subsequent investigation has shown, early symptoms of PCB poisoning include acne, skin hyperpigmentation, and excessive eye discharge.Problems that develop later include damages to the liver, the immune system, and the nervous system. In April 1979, the former Department of Health, under the then-Taiwan Provincial Government, registered Yu Cheng patients so they could get blood tests, and receive needed healthcare services. People responsible for the contamination disposed of their properties, and died in prison; therefore, the government and the general public stepped in to care for these victims.

(2) To protect the rights of patients affected by PCB contamination, the "Yu Cheng Patients Health Care Services Act" was promulgated by presidential order on February 4, 2015. Benefits include making both first-generation and secondgeneration Yu Cheng patients exempt from NHI copayments for outpatient (and emergency) services, making first-generation patients exempt from NHI co-payments for inpatient expenses, and entitling them to free annual health checkups at special clinics. The act expands the definition of first-generation victims to include all victims born in 1980 or earlier. It further guarantees the rights of victims, establishes a health care promotion group, and ensures a solatium payment for surviving family members of victims who died before implementation. On November 16, 2016, an amendment was made to revise articles 4 and 12 to ease criteria for confirming victims, expanded family members who qualify for the solatium payment to include surviving parents, and extended the deadline to collect payment until August 9, 2020.

(3) As of the end of 2018, there were a total of 1,888 registered Yu Cheng patients, including 1,257 firstgeneration patients and 631 second-generation patients. In 2018, there were a total of 20,750 instances of subsidies being provided to cover Yu Cheng patient outpatient (and emergency) service co-payments, and 105 instances of subsides being provided to cover inpatient copayments. There were also 681instances of free health checkups being provided to Yu Cheng patients, and 238 applications for the payment of solatiums to the family members of deceased Yu Cheng patients were approved.

2. Human Rights Protection and Care for Hansen's Disease Patients

(1) The MOHW has been implementing the Directly Observed Treatment Short-Course (DOTS) program to provide high-quality care for Hansen's disease patients.

(2) As of 2018, five hospitals have been providing the diagnosis and treatment of Hansen's disease: National Taiwan University Hospital, MacKay Memorial Hospital, Taichung Veterans General Hospital, National Cheng Kung University Hospital, and Lo-Sheng Sanitarium. Hansen's patients could thus seek treatment more conveniently.

3. Human Rights Protection and Care for HIV Patients

Taiwan imported Zidovudine (ZDV/AZT) drugs in 1988. In 1997, the country also offered highly active antiretroviral therapy (HAART) for free to patients. Highlights of the MOHW's efforts in 2018 are as follows:

(1) Human Rights Protection: following the promulgation of the "Regulations Governing the Protection of the Rights of HIV Patients" in 2007, a system was established for HIV patients to file complaints. In 2018, the MOHW assisted with the handling of eight complaints.

(2) Health and Care

A. In 2018, there were a total of 78 hospitals in Taiwan designated for the treatment of HIV/AIDS, along with 29 community pharmacies that provide relevant care services for those infected with AIDS. 88% of HIV patients received medication and 94% of HIV patients had an undetectable viral load.

B. Local health bureaus and centers have been tracking patients and urging them to seek regular treatment. Consultation and testing services are also provided to partners of HIV/AIDS patients.

C. In order to strengthen health self-management among HIV/AIDS patients, in 2018 the MOHW implemented the Plan for the Improving of Service Quality in Hospitals Designated for the Treatment of HIV/AIDS. Relevant health education and consultation services are provided to the patients.

D. In 2018, placement was offered in 891 cases, and case management services were provided to 345 patients. Subsidies are provided to NGOs that assist with HIV patient care as halfway shelters by offering treatment arrangements, emergency accommodation, and case management services.

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Scan this page to view Long-term Care 2.0 - ABC.

5 Long-Term Care Services

Taiwan's population structure is affected by low birth rate and an increase in life expectancy. The population aged 65 years and older has been growing rapidly. As of the end of March 2018, seniors aged 65 years and older accounted for 14.05% of Taiwan's population making it as aged society. This percentage is expected to reach 20.6% by 2026, which will make Taiwan a "super-aged" society with every fifth person being 65 years old or older. This has increased the urgency to establish a sound long-term care system, to develop human capital and institutional resources, and to ensure service quality. The MOHW's National Ten-year Long-Term Care Plan 2.0 (hereafter referred to as "Long-Term Care Plan 2.0") was ratified by Executive Yuan in November 2016 and implemented in January 2017. The plan aims to promote an Integrated Community Care Service Network to meet the long-term care needs of Taiwan's aging population.

Improving upon Long-Term Care 1.0, Long-Term Care Plan 2.0 has increased the number of care recipients and service items. The plan has been extended to prevent disability and delay its onset. It also has integrated home hospice care and home-based medical care. It also desires to achieve the ideal of "aging in place" to meet the growing demand for elders' services. As such, the plan has called for establishing a community-based care service system that would support diversified services in family-based, home-based, community-based and residential cares. The goals of the Long-Term Care Plan 2.0 are outlined in Table 5-1.

The Long-Term Care Plan 2.0 takes into account demographic factors regarding long-term care needs. Notably, the plan has increased the number of service categories from 4 to 8, enhanced the flexibility of existing Long-Term Care Plan 1.0 services, and expanded the number of service items from 8 to 17. Table 5-2 lists more detailed information.

Table 5-1 Goals of the Long-Term Care Plan 2.0

Source: Long-Term Care Plan 2.0 (approved edition)

Goals	To establish a quality, reasonably priced, universal long-term care service system to accomplish communitarian ideals; to provide citizens needing long-term care with basic services and opportunity to enjoy old age in a familiar environment, and to relieve burdens on their families.
	To achieve aging in place, provide diversified services: family-based, home-based, community-based and residential cares; to popularize the care service system and to establish community-based care to improve the quality of life for care recipients and their caregivers.
	To expand primary prevention efforts, to advocate preventive healthcare and active aging, to delay the onset of disabilities, to promote health and welfare of seniors and to improve their quality of life.
	To provide multi-purpose community-based support services, to streamline home-based hospice care, to relieve stress on family members and to ease burdens related to long-term care.

Table 5-2 Comparison of Target Service Groups and Service Items under Long-Term Care Plan 1.0 and Long-Term Care Plan 2.0

Source: Long-Term Care Plan 2.0 (approved edition)

	Long-Term Care Plan 1.0	Long-Term Care Plan 2.0
Target Service Recipients	1. Senior citizens aged over 65 with physical or mental incapacity 2. Mountain indigenous people aged over 55 with physical or mental incapacity 3. Citizens aged over 50 with mental or physical disability and physical or mental incapacity 4. Solitary elderlies aged over 65 who only require assistance with Instrumental Activities of Daily Living (IADLs)	In addition to the target service recipient categories covered by Long-Term Care Plan 1.0, the following 4 additional target groups have been added: 5. People with dementia (aged 50 and over) 6. Plain indigenous people with physical or mental incapacity(aged 55-64) 7. Citizens aged under 49 with mental or physical disability and physical or mental incapacity 8. Frail senior citizens aged over 65 who only require assistance with Instrumental Activities of Daily Living (IADLs)
Service Items	1. Care services (including home care, day care, and family care) 2. Transportation services 3. Nutritional food delivery services 4. The purchase and rental of the assisting instruments and the improvement of household barrierfree environments 5. Home nursing care 6. Home-based/community-based rehabilitation 7. Respite care services 8. Long-term care institution services	In addition to the service items covered by Long-Term Care Plan 1.0, the following additional service items (Items 9 – 17) have been added: 9. Dementia care services 10. Integrated services for communities in indigenous districts 11. Small-size multi-function services 12. Support service centers for family caregivers 13. Integrated community care service networks (with the establishment of community integrated service centers, combined service centers and LTC stations around the blocks) 14. Community-based preventive care 15. Programs to prevent or delay disability and dementia 16. Integration of discharge planning services 17. Integration of home-based medical care

Chapter 1 The Long-Term Care Service System

Section 1 The Long-Term Care Services Act

1. Revision of the Long-Term Care Services Act: A partial revision of the Long-Term Care Services Act was promulgated by the President on June 19, 2019. Focus of the amendments centers on the implementation of long-term care for the indigenous people with the revision of Articles 14 and 24 that relate to the plan of long-term care service at aboriginal communities, long-term care service network and promotion of relevant human resource development and the establishment of long-term care facilities in aboriginal communities, personnel development and so forth by placing the authority of establishment in the central government agency and the Council of the Indigenous Peoples. In addition, Article 34 has also been revised to include the clause that requires proprietors of long-term care facilities with institutional accommodation services to be covered for public liability, with relevant penalties outlined in Article 47 as a way to protect the rights of residents at these facilities. Furthermore, Article 39 has also been revised to state that the central authority shall be responsible for the classification of long-term care facilities by type and the establishment of specific items for the assessment of long-term care facilities such as personnel qualification, selection, employment, training and so forth in order to ensure the quality of long-term care and efficacy of the evaluation system.
2. Statutes authorized by the Long-Term Care Services Act: From the Long-Term Care Services Act, a corresponding statute with 8 sub-statutes have been established, including: (1) Institutional Long-Term Care Juridical Entities Act, (2) Implementation Rules for Long-Term Care Services Act, (3) Evaluation Procedure for Long-Term Care Institutions, (4) Procedure for Training Certification, Continuing Education and Registration for Long-Term Care Personnel, (5) Regulations Governing Long-Term Care Service Resource Development, (6) Establishment Standards of Long-Term Care Institutions, (7) Regulations Governing Long-Term Care Institution Establishment Standards and Management, (8) Review Procedure for the Lease of National Non-public Use Real Estate by Long-Term Care Institutions and (9) Regulations Governing Supplementary Training for Foreign Family Nurses. Pursuant to the Presidential Order issued on January 31 2018, 5 additional sub-statutes and 3 announcements have been established under the Institutional Long-Term Care Juridical Entities Act, including (1) Implementation Rules for Institutional Long-Term Care Juridical Entities Act, (2)Regulations for Procedures for Appointment and Removal of Public Auditor for Institutional Long-Term Care Foundations, (3) Regulations for Merger of Institutional Long-Term Care Juridical Entities, (4) Regulations for Appointment of New Directors of Institutional Long-Term Care Juridical Entities, (5) Regulations Governing the Preparation of Financial Reports by Institutional Long-Term Care Juridical Entities, (6) Establishment of Long-term Care Service Institutions for Institutional Long-term Care Juridical Entities by Location, Category, Number, and Scale Limit, (7) Necessary Assets of Establishment of Institutional Long-Term Care Juridical Entities and (8) Institutional long-term care juridical entities shall report the donations thereof to the competent authority for approval in advance if the amount of the donations equals or exceeds a certain amount as determined by the central competent authority or a certain percentage of the assets thereof.

Section 2 Care Management System

To facilitate the implementation of Long-Term Care Plan 2.0, and to coordinate the operation of different long-term services and resources, the Long-Term Care Management Centers in individual counties and cities will be recruiting care managers to provide an integrated “one-stop” contact window for applications, evaluations, care plans, and coordinating and delivering long-term care services. At the same time, subsidies are also given to local governments to set up long-term care management center branch offices in rural areas announced by the Ministry (i.e. indigenous communities, offshore islands and other areas with inadequate resources).

Distribution of Long-term Care Management Center (Branch)

In order to improve the availability of care managers at Long-Term Care Management Centers, the MOHW is implementing the following measures:

1. Qualification of appointment for Long-term Care Management Center personnel: The Ministry has launched the new long-term care payments and benefits standards in January 2018. And also adjusted the qualification requirements for appointment and wages in order to attract talents and raise the pay for care management personnel.

(1) Qualification requirements for appointment:

A. Care manager: In addition to the original qualification requirements (a) holder of degree in long-term care related universities or vocational schools with at least two years of experience in relevant work；(b) holder of masters degree in public health, with at least a year of experience in relevant work；(c) holder of specialist certificate with at least three years of experience in relevant work. New addition: candidates are required to have completed qualification training for senior social worker or elderly-care related departments with specific years of experience in relevant work in order to eligible for the position of care manager.

B. For rural areas, apart from the aforementioned qualification requirements, the duration of work experience required has been reduced by 1 year compared to normal areas; for administrative personnel, the requirements for appointment have been adjusted from undergraduate degree to senior high school diploma with two years of work experience compared to normal regions.

(2) Wage standard: the contracted salary for care managers and supervisors will be raise by 2 job grades.

A. Care manager: for care managers deployed in normal regions, their wage has been adjusted from 33,908 NTD - 45,534 NTD per month to 38,906 NTD - 50,878 NTD per month; for care managers in rural regions, their starting salary has been increased to 44,892 NTD. At the same time, in an effort to encourage existing care managers at long-term care management center branch offices in rural regions to remain in their position, they will receive a starting salary of 46,887 NTD if they become care managers under the new system through transfer.

B. Care supervisor: for care supervisors deployed in normal regions, their wage has been adjusted from 39,721 NTD - 51,346 NTD per month to 44,892 NTD - 56,863 NTD per month; for care supervisors in rural regions, their starting salary has been increased to 50,878 NTD.

2. Care management personnel deployment

(1) Normal regions: Standard of caseload for care manager is 200 service recipients for each care manager, and 1 care supervisor for every 7 care managers. An administrative assistant is assigned to every 10 care managers and supervisors.

(2) Rural regions: In 2018, each care manager is assigned to 100 service recipients, and 1 care supervisor for every 7 care managers. For every 3 branch offices, the Ministry has assigned one additional supervisor. In addition, an administrative assistant is also assigned at each branch office to help with relevant administrative affairs so as to strengthen the development of local resources in rural regions for care management personnel and connections while increasing the density of care management personnel allocation at Long-term Care Management Center Branch Offices in rural regions.

Through the establishment of Long-term Care Management Centers and Branch Offices and the replenishment and retention of care management personnel, the applications for long-term care services were 136,058 in 2018. Compared to the 79,275 applicants in 2017, the figure translates to a growth of 71.63%. In 2018, there were 241,549 personel who completed the assessment for long-term care, which is an 80.51% increased compared to the 133,815 personnel in 2017.

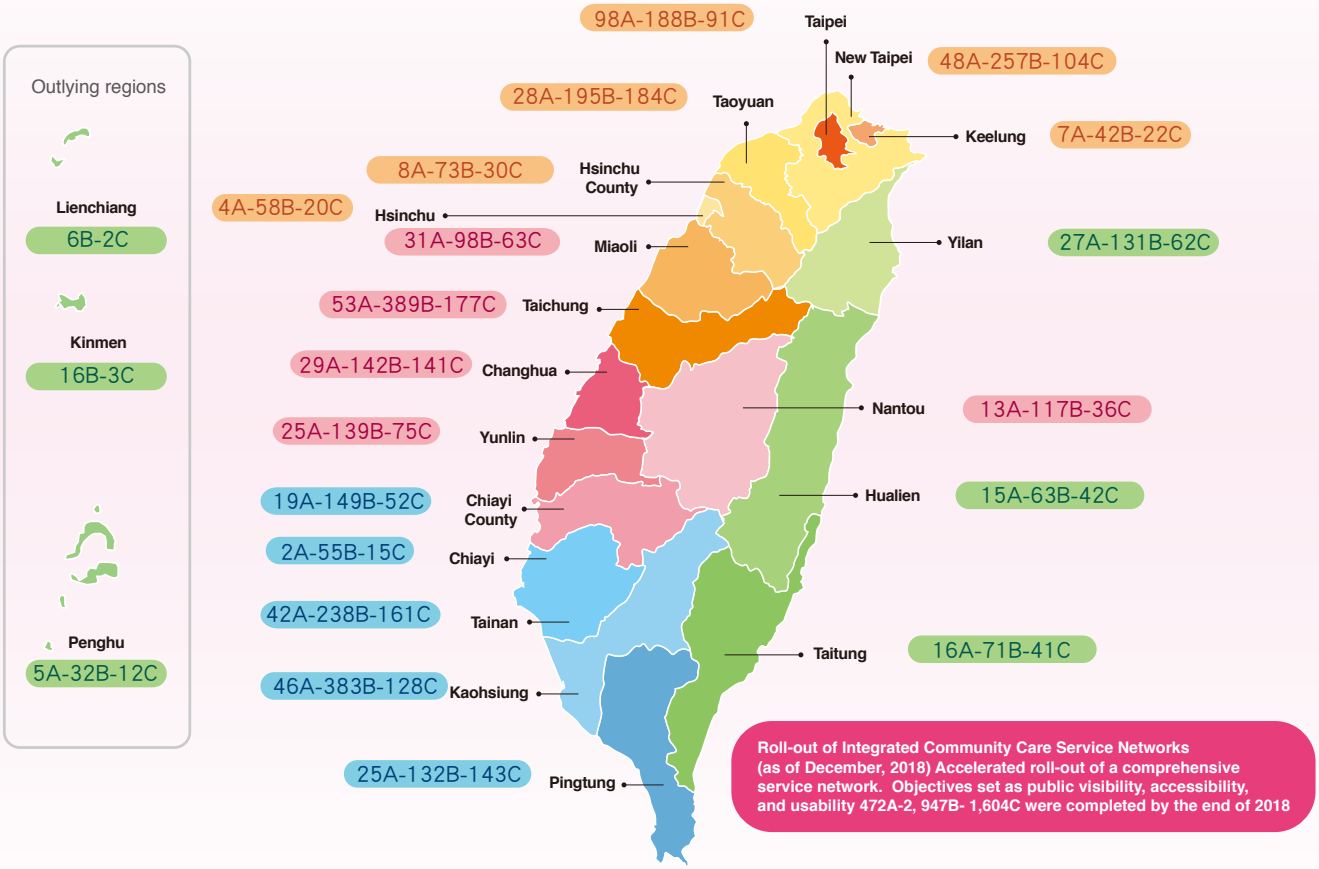
Section 3 Service System and Resource Development

1. Constructing the integrated community care service networks

While prioritizing the expansion of home care provision and making day-care more widely available, the MOHW has been working to integrate different services into community-based integrated care service networks. The basic principle involves the cultivation of community integrated service center (“A”), combined service center (“B”), and LTC stations around the blocks (“C”) throughout Taiwan; individual county and city governments are being encouraged to work with long-term care service providers, medical institutions, nursing homes and community organizations to realize this vision. Citizens needing long-term care services should contact the local long-term care management center. The necessary long-term care services are evaluated and connected by care managers or community integrated service center. The Ministry plans to establish 469 integrated service centers, 829 combined service centers and 2,529 LTC stations around the blocks in four years (between 2017-2020)(469A-829B-2,529C). As of the end of 2018, a total of 5,050 units have been established, comprising 472 integrated service centers, 2,974 combined service centers and 1,604 LTC stations around the blocks (472A-2,974B-1,604C), with the following deployment in various municipalities as shown in Figure. 5-1.

Figure 5-1 Integrated community care service networks in counties and cities of Taiwan

Source: Department of Long-Term Care



2. Development and Deployment of Service Resources:

(1) Improving Service Utilization of Long- Term Care: in 2018 long-term care services (listed in Table 5-3), with transportation service having the most significant growth at 542% compared to 2017. Secondly, in terms of purchase and rental of assisting instrument and improvement of household barrier-free environments and respite care, the number of service recipients have increased significantly compared to 2017. In addition, starting from 2017, the Ministry has been calculating the number of people served based on the Care Management Information System at the end of the year using recipients' personal ID. number as carriers to adjust and exclude the repeated counts. As a result, some statistics have shown significant differences.

(2) Hasten Resource Provisioning

A. Overall, transportation services stood out with the most growth out of all items of resources at 133% growth in 2018 compared to the previous year; respite services also grew in excess of 90% (Table 5-4).

B. As of the end of December 2018, the number of institutional care facilities for Taiwanese elderlies rose to 1,098, and the total number of beds available nationwide reached 62,724 (Table 5-5).

C. As of the end of December 2018, the number of Taiwan's nursing homes rose to 539, and the total number of beds available in nursing homes nationwide reached 43,241 (Table 5-6).

Table 5-3 Number of Persons Receiving Long-Term Care Services from 2009 to 2018

Source: Department of Long-Term Care

Item	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Home Care	22,017	27,800	33,188	37,985	40,677	43,331	45,173	47,134	79,137	117,911
Day Care (including day care centers for people with dementia)	618	785	1,213	1,483	1,832	2,344	3,002	3,663	7,029	11,622
Family care	11	35	62	110	131	146	200	210	390	681
The purchase and rental of the assisting instruments and the mprovement of household barrier-free environments (number of times)	4,184	6,112	6,845	6,240	6,817	6,773	7,016	9,663	8,008	20,841
Nutritional food delivery services	4,695	5,267	6,048	5,824	5,714	5,074	5,520	5,516	9,090	16,834
Transportation services	18,685	21,916	37,436	46,171	51,137	54,284	57,618	59,588	10,351	66,440
Home nursing care	5,249	9,443	15,194	18,707	21,249	23,933	23,975	22,359	9,970	49,234
Home-based/ community -based rehabilitation	5,523	9,511	15,439	15,317	21,209	25,583	25,090	27,237	12,013	
Respite care	6,351	9,267	12,296	18,598	32,629	33,356	37,346	46,339	21,270	49,053
Total number of people served (adjusted)						-	84,295	90,603	113,706	180,660

Notes:

1. Before 2016:
   (1) The figures for the purchase and rental of the assisting instruments and the improvement of household barrier-free environments and transportation services refer to the number of times served; for other items, the figures refer to the number of people served by the end of December.
   (2) Home nursing care, home-based/community-based rehabilitation, and respite services refer to the cumulative number of people served in a year.
   (3) For the purchase and rental of the assisting instruments and the improvement of household barrier-free environments, nutritional food delivery services, and long-term care institutions, the budgets were primarily handled by the respective municipal governments.
2. After 2017:
   (1) The dividing line is used to indicate that different methods and standards were used to calculate the number of people served.
   (2) For 2017, and with respect to home care, day care, family care, nutritional food delivery services, transportation services, home nursing care, home-based/community-based rehabilitation, and respite care, the number of people served refers to the number of people served by the end of the year based on the Care Management Information System, which adjusts the data to exclude repeated counts.
   (3) Total number of people served: Excluding the people served in the nutritional food delivery services and long-term care institutions.
   (4) For 2017, the numbers of people served in the nutritional food delivery services were 9,090, included 6,293 low-income or medium-and-low-income people.
   (5) Purchase and rental of the assisting instruments and the improvement of household barrier-free environments: data has been reported by municipal governments.
3. After 2018: (1) In conjunction with the implementation of the new long-term care payments and benefits standards in 2018, home nursing care and home-based rehabilitation have been integrated as professional services. (2) For home care, day care, family care, purchase and rental of the assisting instruments and the improvement of household barrier-free environments, nutritional food delivery services, transportation services, professional services, respite services, the number of people served is calculated based on the Care Management Information System at the end of the year using recipients' personal ID. number as carriers to adjust and exclude the repeated counts.

Table 5-4 Number of Institutions Providing Long-Term Care Services from 2009 to 2018

Source: Department of Long-Term Care

Item	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Home care	127	133	144	149	160	168	173	200	238	420
Day care (including day care centers for people with dementia)	39	66	78	90	120	150	178	205	259	355
Family care	16	23	16	17	20	22	21	25	85	104
Nutritional food delivery services	204	201	159	169	190	209	197	197	249	265
Transportation services	42	43	39	43	42	41	41	40	48	112
Home nursing care	495	489	451	478	483	486	493	518	505	1,255
Home-based/ communitybased rehabilitation	88	122	112	111	125	143	143	129	211	
Respite care	1,439	1,444	1,052	1,510	1,509	1,549	1,565	1,760	872	1,673

Note: Figures for home nursing care, home-based/community-based rehabilitation, and respite care before 2016 refer to the number of institutions established in Taiwan over the year; figure for 2017 indicates the number of contracted institutions in Taiwan. In conjunction with the implementation of the new long-term care payments and benefits standards in 2018, home nursing care and home-based rehabilitation have been integrated as professional services.

Table 5-5 Number of Senior Citizens' Social Welfare Organizations and Residents from 2009 to 2018

Source: Department of Statistics

Year	No. of institutions	Occupancy rate (%)					Actual number of residents (persons)	Occupancy rate (%)
		Long-term care beds	Nursing care beds	Beds for patients with dementia	Aged home beds	Total (Number of beds)		
2009	1,066	4,419	43,180	0	6,968	54,576	40,183	73.6%
2010	1,053	4,796	43,586	0	6,684	55,066	41,515	75.4%
2011	1,051	4,660	44,794	90	6,545	56,089	42,824	76.4%
2012	1,034	5,748	45,642	144	5,303	56,837	42,769	75.2%
2013	1,035	5,959	46,652	220	4,844	57,675	43,496	75.4%
2014	1,063	4,447	48,935	280	5,618	59,280	45,298	76.4%
2015	1,067	4,340	49,565	406	5,558	59,869	46,264	77.3%
2016	1,082	4,544	50,756	453	5,329	61,082	47,192	77.3%
2017	1,100	4,470	52,481	459	5,050	62,460	48,315	77.4%
2018	1,098	4,676	52,695	471	4,882	62,724	49,575	79.0%

Table 5-6 Number of Nursing Homes and Residents from 2009 to 2018

Source: Data for 2009–2012 is from the Department of Statistics;
data for 2013 – 2018 is from the Department of Nursing and Health Care.

Year	Number of nursing homes	Number of beds	Actual number of residents (persons)	Occupancy rate (%)
2009	367	23,077	19,785	85.7%
2010	390	25,849	20,774	80.4%
2011	423	28,476	21,151	74.3%
2012	447	30,447	22,471	73.8%
2013	470	33,302	27,605	82.9%
2014	486	35,383	29,933	84.6%
2015	499	37,161	31,772	85.5%
2016	508	39,002	33,271	85.3%
2017	528	41,316	34,698	84.0%
2018	539	43,241	36,365	84.1%

3. Improving Long-Term Care Service Evaluation Tools and Informatization

The MOHW is improving upon Long-Term Care Plan 1.0 to build a better long-term care assessment tools and informatization for Long-Term Care Plan 2.0.

(1) Implementing the care management assessment scale: in line with the increasing number of service recipients and service items under Long-Term Care Plan 2.0, the MOHW implemented an updated care management assessment scale that could evaluate the long-term care needs of distinct demographic groups in April 2017; it could also rate the severity of long-term disability and the payment amount. The assessment scale covers six domains: (1) Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs); (2) Communication skills; (3) Special and complex care needs; (4) Short-term memory evaluation, emotional and behavioral states; (5) Home environment, family support and social support; (6) Care burden in primary caregivers.

(2) Device standardization: to ensure that assessment is standardized and consistent, the scale was embedded in mobile devices (tablet computers) to perform assessment. Based on the assessment results, devices automatically use compound factors to determine the level of clients' long-term care needs. This standardized procedure has enhanced the objectivity of care managers, who previously utilized their professional experience of care managers, which was highly susceptible to bias and confounding factors. As such, device standardization will help ameliorate consistency and efficiency. Hopefully, care recipients would receive appropriate care services resulting in a fairer resource distribution.

4. Care Services for People with Dementia

(1) Strengthening community-based service capacity for people with dementia: to ease access to care for people with dementia, and to reduce the burden on their families, Long- Term Care Plan 2.0 makes it possible for people with dementia aged 50 or over and their caregivers to obtain appropriate care close by, and to strengthen community-based service capacity for such clients. The MOHW has expanded the establishment of Support Center for People with Dementia and their Families (SPDF). Additionally, to meet the caregivers' needs at different stages of people with dementia, the MOHW has implemented an innovative project that involves the establishment of Integrated Dementia Care Center (IDCC) in counties and cities throughout Taiwan. In this way, the ministry

hopes to provide proper guidance/ assistance to caregivers, as well as information services, referrals and other supporting services. These centers will help to coordinate medical resources, and arrange the provision of relevant care services. In the end, the MOHW wishes to promote dementia health literacy, and contribute to a safer environment for people with dementia.

(2) Achievements: as of 2018, a total of 350 SPDFs were established; 14,494 people with dementia or high clinical suspicion of dementia (along with their families) benefitted from their services. SPDFs conducted cognitive promotion and dementia alleviation activities for 8,393 participants, hosted family care training for 5,880 participants, provided family support group services for 5,064 participants and performed safety evaluations with 4,613 participants. As of the end of December 2018, 73 Integrated Dementia Care Centers were established to care for a total of 29,532 people with dementia or suspected to have dementia. In addition, these centers also implemented community dementia literacy public education services for 120,691 participants and sponsored talent training sessions for professionals (attended by 33,414 participants).

5. Establishment of Long-Term Care Management Center Branch Offices in Indigenous Communities, Offshore Islands and Other Areas with Inadequate Resources

Recognizing the relative lack of long-term care resources in indigenous communities, offshore islands and other areas with inadequate resources, in 2010 the MOHW began to promote the establishment of Long-Term Care Management Center Branch Offices, so as to develop a localized, diversified comprehensive service model. As of the end of 2017, funding support had been provided for the establishment of 46 Branch Offices, of which 20 were located in indigenous communities.

In conjunction with the launch of Long-Term Care 2.0, the Ministry has encouraged municipal governments to establish Long-Term Care Management Center Branch Offices in indigenous communities, offshore islands and other regions of inadequate resources in 2018 to integrate social and welfare long-term care service resources through an integrated “one-stop” contact window for the assessment of supply/demand, coordination and delivery of long-term care services.

In order to construct an integrated care service delivery system for aboriginal tribes so as to strengthen tribal care functions and create a local environment that is aging-friendly, the Ministry has prioritized incentivizing long-term care service resources for the indigenous people. Starting from 2018, the Ministry has been assisting long-term care service locations in indigenous communities in their transition and established a total of 55 Long-Term Care Management Center Branch Offices for indigenous communities to stabilize manpower for local long-term care and facilitate a supportive environment for tribal caregivers. By establishing systems of resource connection, the Ministry will be able to raise the prevalence of long-term care services while actively cultivating local manpower for long-term care by incorporating diverse trainings featuring aboriginal cultures to facilitate diverse and balance development of long-term care resources. This will in turn ensure that aboriginal people can receive appropriate care.

6. Support services for family caregivers

(1) Principles of support services for family caregivers

In an effort to develop diverse support measures for family caregivers, improve their care service quality and lighten their workload, Article 13 of the Long-Term Care Services Act has identified family caregivers as service recipients entitled to the following services, including: 1. provision and referral of relevant information; 2. Long-term care knowledge and technical training; 3. Respite care services; 4. Emotional support and referral of group services; 5. Other services that help promote the capability of family caregivers and the life quality thereof. The application, assessment, provision and other matters of compliance in relation to the supportive services shall be determined by the central competent authority.

The Ministry has also published the principles of support services for family care givers on August 22, 2018. The contents of the announcement covered methods of implementation, service application, qualification requirements for service providers, work principles, auditing methods and so forth as a basis for municipal governments and service providers to refer to.

(2) Respite services for family caregivers

In order to help caregivers by alleviating stress, respite services currently available from the long-term care system include home respite, community respite and institutional respite and so forth. By assigning care service personnel to the homes of care receivers or arranging caregivers to providers of respite services, family caregivers will be able to briefly leave their role as primary caregivers and enjoy a moment of respite and space to alleviate the stress they have accumulated through caregiving. For family caregivers taking care of recipients at disability severity levels 2 - 6, the annual payment

quota for respite services is currently at 32,340 NTD (roughly equivalent to 14 days of respite service at an institutional service provider); for disability severity levels 7 - 8, the quota is 48,510 NTD (roughly equivalent to 21 days of respite service at an institutional service provider). The expenses are subsidized by the government and average households are required to cover 16% of the costs; 5% households of medium-and-low-income and completely waived for low-income households.

(3) Provision of support services and relevant information for family caregivers

In an effort to address the needs of long-term care and lighten the workload for caregivers, the Ministry has been working with professional organizations to setup consultation hotlines since 2008 to provide counseling services for caregivers as a channel for them to release their stress and negative emotions. In addition, the Ministry has also connected relevant community resources to provide support services as a way to heighten community residents' sensitivity to family caregivers.

Through the consultation and reporting hotline, the Ministry has connected various support service locations for family caregivers, nurtured local community groups to provide accessible support services to alleviate the psychological stress and emotional discomfort that family caregivers may be facing by providing them with 8 major support services, including case management, care technique instruction, care technique training, psychological counseling, support groups, and stress-relieving activities. As of the end of 2018, the Ministry has established 30 support service locations for family caregivers.

In an effort to expand the service capacities for domestic family caregivers and improvement accessibility and coverage of services, the Ministry held an open solicitation for entries in the "Family Caregiver Supportive Service Innovation Project" in June 2018 as a way to encourage municipal governments to develop their local services that are suited to local conditions in order to lighten the caseload for family caregivers while achieving the objectives of improving their service agreements and knowledge in relevant financial management. The trial project was held in 11 municipalities in 2018 and is scheduled for implementation on a larger scale in 2019.

(4) Extending respite services to foreign workers to render home care

Pursuant to the regulations on payments and benefits standards for long-term care 2.0, eligible care receivers hiring foreign workers to render home care may apply for relevant services such as professional services, transportation services, purchase and rental of the assisting instruments and the improvement of household barrier-free environments and bathing service delivery van visits. If their foreign workers are unable to provide their services for 30 days or longer for any reason, they may also apply for respite service subsidy. In addition, in order to prevent and delay potential disability or dementia caused by the aging process, care receivers may choose to participate in community prevention and delay of disability and dementia services. Similarly, seniors suffering from dementia or suspected to have dementia may also receive long-term care services from Integrated Dementia Care Centers and Support Centers for People with Dementia.

To alleviate caregiving strain arising from the temporary absence of foreign workers that last no more than 30 days while safeguarding the safety and care quality for the care receiver, the Ministry has made special exceptions to remove the 30-day window period for foreign workers if care receivers meet specific requirements since December 2018.

7. Programs to prevent or delay disability and dementia

The programs to prevent or delay disability and dementia are intended to target senior citizens across Taiwan while encouraging frail seniors and those suffering from light to medium disability (dementia) to take part in such programs. Through the involvement of healthcare and relevant professional organizations, the programs provide single or compound care solutions to be implemented at designated service locations for the program. As of December 31 2018, there are a total of 2,213 service locations, which have helped 35,562 people thus far.

8. Incentive program for long-term care 2.0 integration of discharge planning service friendly hospitals

In order to shorten the waiting time for patients with the need for long-term care service after their discharge from the hospital, the Ministry has established the "Incentive program for long-term care 2.0 integration of discharge planning service friendly hospitals" to integrate relevant tools of evaluation, personnel training, information system and evaluation processes so that patients can now have their long-term care need evaluation (which could only be conducted after the hospital receives the application upon their discharge) completed 3 days prior to their discharge and begin receiving their long-term care services as soon as within 7 days after their discharge. By the end of 2017, a total of 184 hospitals participated in this program.

Chapter 2 Workforce Development

Section 1 Care Worker Workforce

1. Improving pay levels: The Ministry has continued to promote the new payments and benefits standards for long-term care and according to the results of a commissioned survey, the average salary for a full-time home care personnel has reached 38,498 NTD per month; for part-time personnel, the average hourly rates is now at 223 NTD. In addition, the Ministry has also been working with local governments in the implementation of audits, supervision and appraisal of long-term care facilities in order to ensure that care personnel receive fair wages and treatment.
2. Diverse channels of training: In order to increase the human resources of care personnel, the Ministry has been working with relevant agencies and organizations to actively promote specific human resource development measures. According to the Care Personnel Training Implementation Plan published by the Ministry, any applicant over the age of 16 in good physical health with a passion for care services may enroll in training programs hosted by the Ministry of Labor, local governments, Council of Indigenous Peoples or Veteran Affairs Council; by completing no less than 90 hours of training on basic care techniques and passing the assessment, the applicant will receive his/her qualification as a care personnel. To eliminate the restrictions of physical space for training, the core courses for care personnel training have been made available as online courses starting from March 2018 in order to make the trainings more accessible. Alternatively, applicants may also sign up to take the National Technician Skills Test organized by the Ministry of Labor as a way to earn their certificate as a qualified care personnel. On top of that, the Ministry also encourages long-term care service facilities to apply for the "Train and Apply" Program (which is subsidized by the Ministry of Labor to help applicants become employed right after they complete their training. In terms of school education, Through the Ministry of Education's involvement MOHW has been actively encouraging universities to develop more practical curricular for long-term care and off-campus internships while continuing to assist senior and vocational high schools to develop long-term care curriculum so as to increase the supply of manpower and facilitate collaboration between industry and academia.

3. Attracting talent involvement and ensuring retention: In order to create a friendly environment, the Ministry has offered various incentives to attract talents to delve into the fields of long-term care services. Apart from offering better wages, the Ministry has already facilitated the inclusion of clauses in relevant regulations and policies by enabling care personnel reaching required service seniority to become eligible candidates for promotion as a home service supervisor, case manager at relevant units or even proprietors of long-term care institutions. This is to ensure paths of promotion and career advancement for relevant personnel and encourage them to start their own healthcare businesses. Meanwhile, the Ministry has also been using various promotional channels such as Facebook and microfilms to promote better understanding of care givers in the eyes of the general public and thereby promoting their professional image.
4. Results of relevant policies: By the Ministry's estimation, the demand for care personnel in 2018 came to roughly 35,000 and as of the end of December 2018, the actual number of native Taiwan citizens who involved themselves in the field of long-term care services came to 35,081 - an increase of 6,664 people (roughly 23%) compared to the 28,417 people at the end of 2017. Based on the Ministry's survey, among the newly employed care service personnel with less than a year of work seniority, a fifth of them have undergraduate degree or higher educational backgrounds. This reflects the fact that the trend of younger generation and people of higher levels of education seeking employment in care giving industry is gradually growing.

Section 2 Social Workers and Medical Professional Workforce

In an effort to boost the quantity and quality of professional long-term care workers while addressing the need for long-term care service personnel training, the Ministry has planned and promoted long-term care training courses of various categories that are consistent, continuous and complete. These courses are classified into three levels: Level I (basic courses), Level II (advanced courses) and Level III (integrated courses). In order to accomplish the training targets, the Ministry has officially launched a digital learning platform for professional long-term care workers in March 2017 for the promotional of Level I courses in the digital format. The platform provides trainees with convenient access to training courses and learning materials. To further boost the service capacities of professional long-term care service personnel, the Ministry has also subsidized healthcare and long-term related organizations to host professional and integrated training programs. With these measures in place, between 2010 and the end of 2018, the Ministry has trained a cumulative total of 93,000 health workers, social workers and care management personnel.

Chapter 3 Propaganda and Service Quality

Section 1 Propaganda

Long-Term Care Plan 2.0 aims to establish a high quality, affordable and universal long-term care service that will reduce the burden on family caregivers and enhance the quality of life for both care recipients and caregivers. To enhance the general public's understanding of, and support for, the Long-Term Care Plan 2.0 policy, the MOHW has undertaken the following propaganda activities:

1. Focus of communication: Starting from 2018 on ward, the long-term care payments and benefits standards promoted by the MOHW will integrate existing service items into four main categories of long-term care services, namely: Care and professional services; Transportation services, Purchase and rental of the assisting instruments and the improvement of household barrier-free environments and Respite services. In addition, the "Dementia Prevention and Care Policy and Action Plan 2.0" was also also announced in December 2017. And as such, the Ministry's communication strategies for this year will still focus on the promotion of the "1966 Long-term Care Hotline", with emphasis on the introduction of relevant payments, benefits and the services available for dementia care.
2. Promotional strategy: The "1966 Long-term Care Hotline", the payment and benefit standards for long-term care 2.0 and services available for dementia care have been chosen as the three major topics of communication to present key policies in a simple manner that is easy to understand. Relevant promotional materials will also be prepared for exposure through diverse media and channels by focusing on the media consumption behavior for the target audience.
3. Status of implementation:

   (1) Production of promotional materials: various promotional materials including TV commercials, teasers, microfilms, animation, radio broadcast, pamphlet, cheat sheets, leaflet, posters featuring contents on payments and benefits of long-term care services, focus of dementia service policies, preparation of the 1966 Long-term Care Hotline, dementia care services, reablement services, professional services, payment and benefits standards and so forth have been produced as shown in Figure. 5-2.

   A. Medium of choice - print media x new media marketing: for specific issues, ad planning has been implemented from the perspective that would pique the interests of the general public and be broadcasted through various print media and new media channels. In addition to planning suitable topics and contents in accordance with the

characteristics of the media carriers, promotional contents would also be projected through other new online media channels based on the general public's media preferences to achieve cross-media marketing. This would enable the Ministry to effectively disseminate correct information on long-term care services that the people truly need to help bolster the general public's understanding of various long-term care services, thereby better appreciating the options that makes care giving smarter and more effective.

B. TV, radio and outdoor media promotion: the Ministry has enlisted the help of outdoor media channels that people are more likely to be exposed to based on their consumption preferences for TV and radio media in order to achieve greater exposure of promotional materials.

C. Online media promotion: through diverse network media (i.e. news net, portal net, MOHW's FB page, Line@ and "Long-Term Care Area" website and so forth) by adopting a method of conversation that is closer to the vernacular of the general public to promote various communication materials and promotional videos on Long-Term Care 2.0 policies to draw the attention of the general public.

D. Media interview promotion: Through TV interviews, radio interviews and print media interviews, MOHW's supervisors have stepped forward to present and explain the contents of long-term care policies, status of implementation and clarify relevant concepts to strengthen the effectiveness of policy communication.

E. Physical channels: The Ministry has printed significant quantities of leaflets and posters on long-term care services along with short messages and requested 22 municipal governments to distribute these materials to their district medical institutions, health stations, long-term care management centers, village/borough chief offices, district offices, household registration offices, land offices and other venues where the general public would visit for official businesses in addition to posting relevant information on websites, public e-signages, chaser lights and so forth.

Figure 5-2 Promotional Materials for Long-Term Care in 2018

Source: Department of Long-Term Care

Website：https://1966.gov.tw/LTC/np-3639-201.html

(2) Implement promotional activities:

A. Dementia friendly public literacy event: The Ministry organized the "Friendly Community in Your Neighborhood - Let's Work Together to Care People with Dementia" online learning campaign between October and November of 2018. In addition to pushing for total media marketing on the subject, the campaign was designed to inspire the general public to take the initiative to be aware of the issue and take part in the activity to learn about existing resources for dementia care and cultivate dementia-friendly concepts. Not only that, the Ministry also collected big data through the Internet to compile a list of common misconceptions that people have on the symptoms of dementia.

B. Press conferences on key aspects of Long-Term Care 2.0: The Ministry held a number of press conferences on the key aspects of Long-Term Care Services and relevant policies as a way to disclose the Ministry's guideline in policy implementation and significant milestones. Examples of such events include the "10-year Long-Term Care Plan 2.0: Activating Long-Term Care for Happiness Taiwan!" held on July 24 2018 and the "Friendly Community in Your Neighborhood - Let's Work Together to Care People with Dementia" press conference to launch the online learning program held on October 16 2018.

(3) 1966 Long-Term Care Hotline: The Long-Term Care Hotline (1966) became operational on November 24, 2017. It functions as a quick and convenient way for the general public to apply for long-term care services and calls are taken by responsible care management personnel at the corresponding municipalities. Not only that, fees for the first 5 minutes of the call have been waived to encourage the general public to take advantage of this measure. By the end of 2018, the cumulative total of received came to 144,036, which translates to a daily average of 357 calls, with the average duration per call at 4.10 minutes. On weekdays, the daily average number of calls was 472 and on weekend, the number falls to 107 calls per day. The using of Long-Term Care Hotline as shown in Figure 5-3.

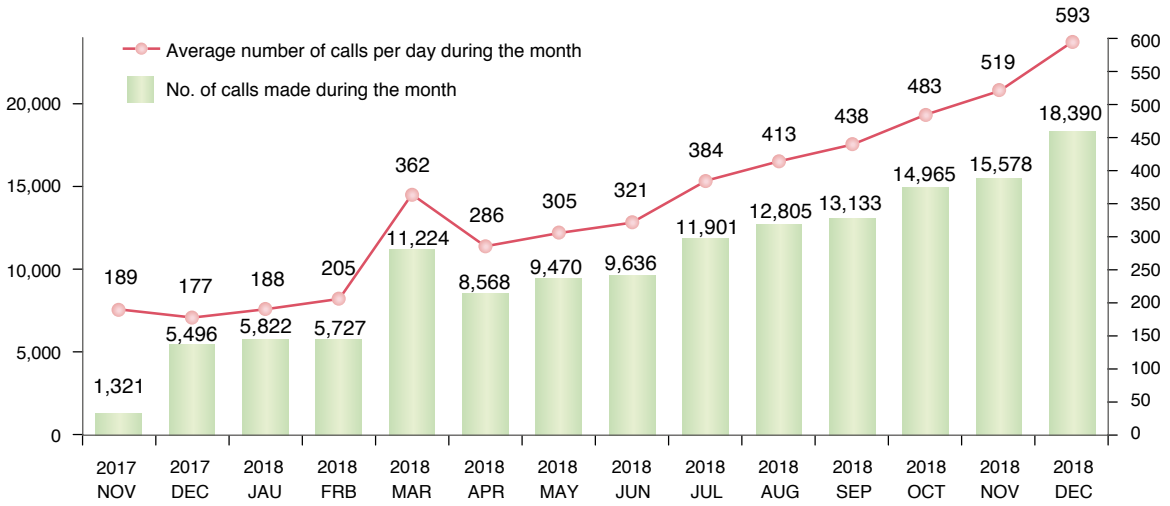
Launch press conference for "Friendly Neighborhood to Watch Over People with Dementia" online learning event

Section 2 Service Quality

1. Accreditation evaluations for senior citizens' social welfare organizations are performed once every 4 years. In 2016, 134 senior citizens' social welfare organizations underwent accreditation evaluation; these included institutions directly run by or supervised by the MOHW, as well as public institutions run by municipal, county or city governments, public institutions the operation of which has been outsourced to privatesector organizations, and non-profit senior welfare institutions. As regards the accreditation evaluation results, 16 institutions (11.9% of the total) were rated as Excellent, 75 (56%) were rated A, 35 (26.1%) were rated B, 7 (5.2%) were rated C, and 1 (0.8%) was rated D (Table 5-7).

Figure 5-3 The Using of Long-Term Care Hotline

Source:Department of Long-Term Care



2. In an effort to improve care quality available at nursing homes, the Ministry has been implementing nursing home accreditation in accordance with Nursing Personnel Act and Regulations for Accreditation of Nursing Institutions. As of December 2018, the number of standard nursing homes came to 539 and between 2015 and 2018, 536 nursing homes have reviewed for the accreditation; 487 institutions have passed the accreditation while 49 did not. In 2018, a total of 305 nursing homes underwent accreditation process, of which 260 were successful, and 45 were unsuccessful denoting an overall pass rate of 85.25%. Table 5-8 details the accreditation results.

3. To improve service quality of senior citizens' social welfare organizations and in accordance with the Regulations for Evaluating and Rewarding Enforcement for Senior Citizens' Social Welfare Organizations, institutions that received an A or higher grade were commended for their performance; institutions that received C or D grades were required to make the necessary rectifications within a given time before being re-evaluated again. Nursing homes that fail the evaluation as outlined in the Regulations Governing Accreditation of Nursing Homes would be required to make relevant rectifications within a given time as stipulated in Paragraph 2, Article 31 of the Nursing Personnel Act to maintain the quality standard for service provided by such institutions.

Source: Department of Long-Term Care

4. In order to appraise the efficacy of long-term care institutions so as to improve long-term care service quality and provide better long-term care options for the general public, both the Long-Term Care Services Act and Evaluation Procedure for Long-Term Care Institutions stipulated that the competent authority is responsible for appraising long-term care institutions, which can either pass or fail the appraisal. Pursuant to Paragraph 3 and subsequent paragraphs in Article 53 of the Long-Term Care Services Act, when a long-term care institution fails to pass appraisal, the institution

shall be ordered to remedy the failure.If the failure is not remedied by the deadline, a fine will be imposed; if the failure is not remedied by the deadline, cumulative penalties may be imposed. In serious cases, the business may be suspended for not less than one month and not more than one year. If the failure is still not remedied upon expiry of the suspension period, the permit for the establishment may be revoked. Depending on the types of long-term care institutions, the appraisal of institutions is classified into home services, community-based services and institutional services. The appraisal of home services and community based services shall be implemented by local competent authorities while institutional services, including integrated services, shall be appraised by the central competent authority. In response to the establishment of new long-term care service institutions and to integrate the different appraisal standards for different types of institutional services, the Ministry has commissioned the implementation of "Home services and Community-based Long-Term Care Institution Appraisal Standards and Pilot Program" and "Institutional Long-Term Service Care Facilities, Nursing Homes and Senior Citziens' Social Welfare Organization Appraisal Standards Integration and Pilot Program" in 2018 to formulate the templates of appraisal standards for home services and community-based long-term care institution as a working reference for municipal governments to ensure the consistency in long-term care service quality across Taiwan. With regards to institutional services, the Ministry has planned to implement appraisal of institutional services in 2020 after announcing the appraisal standards at the end of 2019.

Table 5-7 2016 Senior Citizens' Social Welfare Organization Accreditation Results

Source: Social and Family Affairs Administration

Level	The number of senior citizens' social welfare organizations	Percentage (%)	Passing rate (%)
Excellent	16	11.9	94.0
A	75	56.0	
B	35	26.1	
C	7	5.2	
D	1	0.8	
Total	134	100.0	

Note: Senior Citziens' Social Welfare Organizations are to be appraised once every 4 years and the next appraisal is due in 2020.

Table 5-8 2018 Nursing Home Accreditation Results

Source: Department of Nursing and Health Care

Level	The number of the nursing homes	Percentage (%)	Passing rate (%)
Passed	260	85.25	85.25
Failed	45	14.75	
Total	305	100	

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6 Communicable Disease Control

Managing communicable diseases requires disease surveillance, outbreak investigation, preparedness, research, and proper immunization. Additionally, relevant regulations must keep pace with global trends and changing health needs to construct a solid framework that can ensure the health and wellbeing of the people.

Chapter 1 Overview of the Communicable Disease Control System

In order to prevent the incidence and prevalence of communicable diseases, Taiwan has enacted the Communicable Disease Control Act and related regulations. The Act specifies the obligations and rights associated with the control of communicable diseases among government agencies, medical institutions, healthcare workers, and the general public. It also formalizes the roles of healthcare workers in dealing with an epidemic.

Section 1 Regulations and Framework for Communicable Disease Control

1. Laws and Regulations Governing Communicable Disease Prevention

The Communicable Disease Control Act and the HIV Infection Control and Patient Rights Protection Act serve as the two main regulations governing infectious disease prevention and control. Revised regulations in relation to communicable diseases issued in 2018 are shown in Table 6-1.

2. Administrative Framework for Communicable Disease Control

Taiwan Centers for Disease Control (Taiwan CDC), Ministry of Health and Welfare is responsible for the formulation and review of communicable disease control policy and supervises six regional control centers that provide local authorities with guidance regarding disease control and quarantine operations. Local authorities are responsible for formulating and implementing disease control plans.

3. Laboratory Testing Framework

Taiwan Centers for Disease Control is responsible for laboratory testing and research relating to communicable diseases in Taiwan and has established a comprehensive service network for the inspection of communicable diseases. Besides the 12 CDC laboratories, there are 268 certified institutions, 9 contracted laboratories for novel influenza A virus infections, 1 controlled high-risk pathogen and toxin testing, 8 contracted laboratories for enterovirus/ influenza testing and 8 contracted laboratories for tuberculosis testing. Meanwhile, the "Manual for Infections Specimen Collection" and the "Quality Management Plan of Infections Specimen Collection and Transportation" for local health bureaus have been formulated to ensure the quality and safety of specimen collection and transportation.

4. National Response Framework for Communicable Disease Control

The National Health Command Center, established in 2005, is responsible for compiling health-related

Table 6-1 List of Revised Regulations Issued in Relation to Communicable Diseases, 2018

Source: Taiwan Centers for Disease Control

Date of Amendment	Name of Regulation / Legal Order	Objective of Revision
June 13	Communicable Disease Control Act	To prevent public health nursing personnel from inadvertently violating the Pharmaceutical Affairs Act and the Pharmacist Act; in conjunction with the amendments of the Pharmaceutical Affairs Act on the lot release for biologics such as vaccines, corresponding amendments need to be made to facilitate the collection of vaccine injury compensation fund.
June 13	HIV Infection Control and Patient Rights Protection Act	Relevant restrictions on the donation and use of organs by those infected with HIV have been changed so that those infected with HIV meeting the clinical requirements and in good physical health may donate their organs to other HIV infected patients.
November 16	Regulations Governing Collection and Review of Vaccine Injury Compensation Fund	The statement of comment is now included to enhance the scope of litigant's participation and to safeguard people's rights; factors of discretion for the compensation have also been clearly defined to establish the scope of adverse effect and its correlation to the vaccination.
December 24	Regulations Governing Management of the Health Examination of Employed Aliens	Due to the shortage of vaccines around the world in recent years, a portion of aliens in Taiwan were unable to receive vaccination despite having tested negative for antibodies. Consequently, this has rendered them unable to apply for work permit and ARC in Taiwan. As such, rules of exception have been established accordingly.

information from central and local government agencies and other institutions. The collected information is then analyzed and converted into real-time data to support overall disease prevention and serve as a reference for the commander to make decisions. Taiwan has also established an International Health Regulation Focal Point (IHR Focal Point) to liaise with other countries to help coordinate responses to major outbreaks and public health emergencies of international concern.

Our national response framework for infectious disease outbreaks operates through a three-tiered hierarchy comprising of national, regional and local authorities that implement strategic efforts to prevent diseases from spreading. When an outbreak occurs, the health authorities at each level work to evaluate the nature of the disease, and then submit a report to the city or county magistrate (at the local level) and to the Executive Yuan (at the central government level), to determine whether the Central Epidemic Command Center (CECC) needs to be activated. If the CECC activation is deemed necessary, then a commander will be appointed to oversee the operations of the CECC. Taiwan is divided into six regional communicable disease medical networks and each is headed by a director and a deputy director. When the CECC is activated, the six regional communicable disease medical networks will help coordinate the allocation of medical resources and manage the outbreak in their region. The organization of the national response framework is shown in Figure 6-1.

Section 2 Disease Surveillance and Investigation Mechanisms

Disease surveillance aims to quickly detect the incidence of diseases and to establish a pattern of progression so policymakers can arrive at a sound decision. The number of notifiable disease cases in 2018 is shown in Appendix II. The status of disease surveillance and outbreak investigation is as follows:

1. Diversified Surveillance Systems for Communicable Diseases: the various communicable disease reporting and surveillance systems that have been established including the School-based Disease Surveillance System, Surveillance System for Populous Institutions, Real-time Outbreak and Disease Surveillance System, and automated reporting of infectious diseases from laboratories. Data is also collected from NHI databases and death records reported to MOHW. Varied media channels are used to gather and analyze information relating to domestic and international outbreak situations to better monitor outbreaks.

Figure 6-1 National Response Framework for Communicable Disease Control

Source: Taiwan Centers for Disease Control

Central	National Health Command Center (Established at Taiwan CDC) Command	1. A platform for prompt consolidation and analysis of epidemic information. 2. A diversified communication system for real-time information on the epidemic situation. 3. IHR Focal Point facilitates exchanges epidemic information. 4. Depending on the local and international epidemic situations, the Central Epidemic Command Center (three levels: department, ministry, and Executive Yuan) is activated to consolidate cross-departmental resources. As the epidemic subsides, command officials may recommend disbanding the command center to the Executive Yuan, which makes the final decision.
Regional	Taipei: Regional Center / Communicable Disease Control Network Northern: Regional Center / Communicable Disease Control Network Central: Regional Center / Communicable Disease Control Network Souther: Regional Center / Communicable Disease Control Network Kaohsiung and Pingtung: Regional Center / Communicable Disease Control Network Eastern: Regional Center / Communicable Disease Control Network	1. Taiwan CDC established six regional centers which oversee communicable disease control efforts conducted at the local government level. 2. Six Communicable Disease Control Medical Network (CDCMN) were established throughout the nation. Each has a head commander, deputy commanders, designated isolation hospitals, and response hospitals. When the Central Epidemic Command Center is activated, each CDCMN helps distribute medical resources in its jurisdiction, and isolate/treat patients if necessary.
Local	Upward Reporting of Epidemic Information Local health bureau	1. Conducting local communicable disease control efforts. 2. Local officials shall establish local epidemic command centers depending on the epidemic situation.

2. Integration of Disease Reporting Systems: In 2018, cross-ministerial exchange of data continued to integrate disease information from three organizations - the Council of Agriculture (Executive Yuan), the Ministry of Health and Welfare's Food and Drug Administration, National Health Insurance Administration, and Centers for Disease Control. The integration has enhanced the overall effectiveness of disease surveillance.

3. Investigation of Outbreaks: Authorities must examine a sudden unexplained rise in the incidence of a disease cluster. In 2018, the MOHW investigated 1,281 suspected disease clusters.

Chapter 2 Control of Major/ Emerging Communicable Diseases

Section 1 Tuberculosis

The MOHW has continued to introduce new diagnostic techniques and drugs, with the aim of shortening the tuberculosis diagnosis and treatment period and raising the coverage rate for latent tuberculosis infection treatments. Outcomes achieved in 2018 are as follows:

1. In 2018, the number of confirmed cases of tuberculosis was 9,179, with a national TB incidence rate of 39 cases per 100,000 population. Since 2005, the incidence rate has fallen by 47% (Figure 6-2), indicating that Taiwan has an effective TB control strategy.
2. More than 98% of bacteriologically positive TB patients have participated in the Directly Observed Treatment, Short-course (DOTS) program.
3. Implemented the “DR-TB Consortium”, patients in the 2016 cohort treated under a dedicated medical treatment and care system had a 24-month treatment success rate of 75%.
4. Improved contact investigation to an average of 13 contacts for each index TB case to lower the risks of further transmission.
5. A Latent TB Infection Treatment (LTBI) Program has been implemented in conjunction with the Directly Observed Preventive Therapy (DOPT) program. In 2018, the number of people undergoing LTBI testing was 68,481, 11,210 people tested positive in the screening and 80% had agreed to receive the treatment. In 2018, 9,423 people underwent LTBI treatment. Compared to 2017, the number of people under LTBI treatment increased by almost 1,000, effectively reducing the possibility of disease onset among high-risk groups.
6. For active case finding, the MOHW has been conducting a nationwide TB screening program for the target population and identified 364 TB cases in 2018.

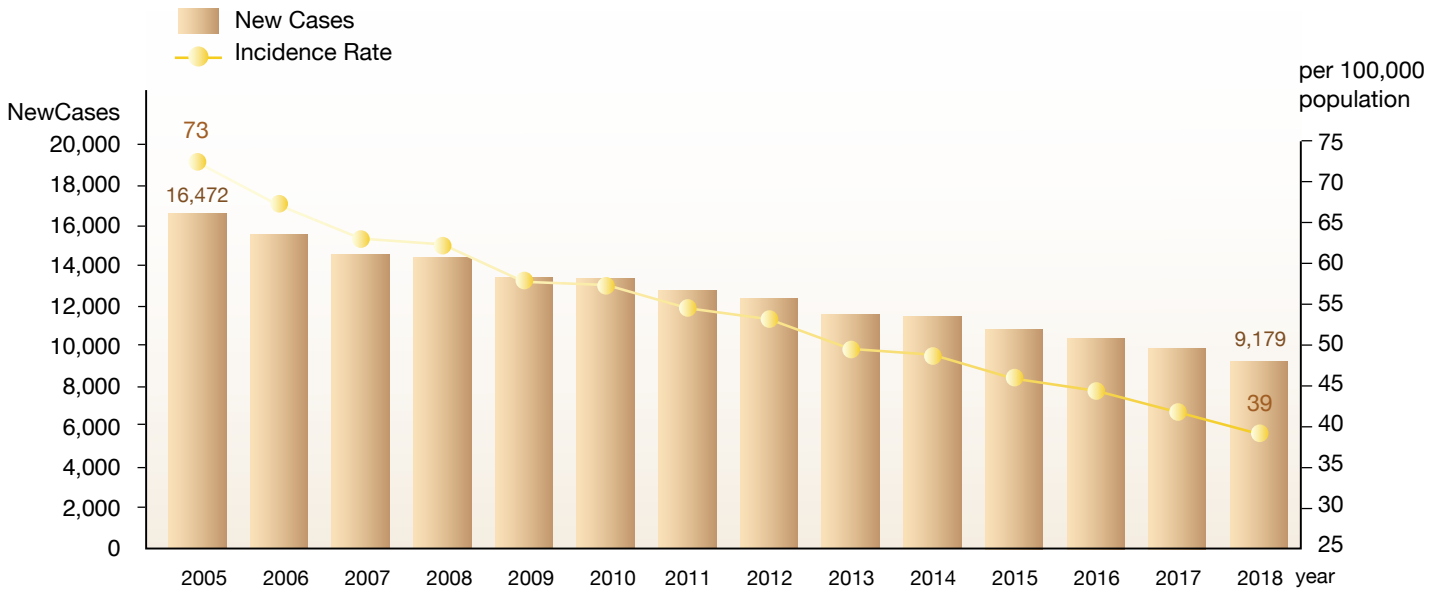
Section 2 Communicable Disease of the Enteric Tract

1. Enterovirus

There were 36 cases of severe enterovirus infections in 2018, including 8 deaths, who were all newborns.

Figure 6-2 Reported TB Cases, 2005 - 2018

Source: Taiwan Centers for Disease Control



Beginning in mid-May 2018, some communities reported outbreaks of echo 11 infection. This particular type of enterovirus has not only caused critical neonatal illnesses but also led to cluster infections in hospitals, post-partum facilities, and other neonatal care units. In order to control the epidemic of enterovirus and reduce its threat to newborns, the Ministry has set up a response taskforce at the height of the epidemic to work closely with local governments and the medical community to bolster health education for women in pregnancy and nursery personnel. In addition, surprise checks have also been implemented to supervise and ensure that medical institutions and post-partum care facilities would step up their infection control while improving the quality for critical care and ensuring unhindered referral mechanism to mitigate the potential impacts the disease may cause on the health of the general public and the society as a whole.

2. Acute Hepatitis A

There were 88 confirmed cases of Hepatitis A in 2018, including 33 imported cases and 55 indigenous cases. In order to prevent the disease from erupting into an epidemic outbreak, starting from 2018 onward, the Ministry has been providing 1 free dose of vaccine for those in contact with acute hepatitis A confirmed cases as post-exposure immunization. In addition, the Ministry has also continued to promote the "Pilot Program for Expanded Hepatitis A Free Vaccine Immunization", which helped to reduce the incidence rate of acute hepatitis A to 0.37 per 100,000 population in 2018. (As shown in Figure 6-3)

Section 3 Vector-borne Communicable Diseases

In 2018, there were 533 confirmed cases of dengue fever, including 350 imported cases and 183 indigenous cases. The male to female ratio for the confirmed cases was 1.27:1. The majority of the indigenous cases were mostly concentrated in Taichung City and New Taipei City, with the remaining 6 municipalities having only a few cases. The local governments were able to contain the disease from spreading further with no fatal cases, reflecting a successful outcome in terms of prevention and control. Figure 6-4 shows the Incidence of Dengue Fever by Year (indigenous cases), and Figure 6-5 illustrates the Incidence of Dengue Fever by Year (imported cases). New strategies for dengue prevention and control implemented are as follows:

1. With the number of imported cases growing gradually over the years, the MOHW has continued to conduct body temperature checks for passengers at ports of entry, as well as NS1 rapid screening and testing for suspected cases. Furthermore, the Ministry has also promoted the use of NS1 antigen rapid test kit in primary care clinics to reduce the incubation period.
2. Every month, the Ministers of the MOHW and the Environmental Protection Administration (EPA) attend the Executive Yuan Coordination Meeting Regarding the Prevention of Major Mosquito-borne Communicable Diseases. This meeting intends to strengthen communication between

Figure 6-3 Number and Incidence Rate of Confirmed Acute Hepatitis A Cases

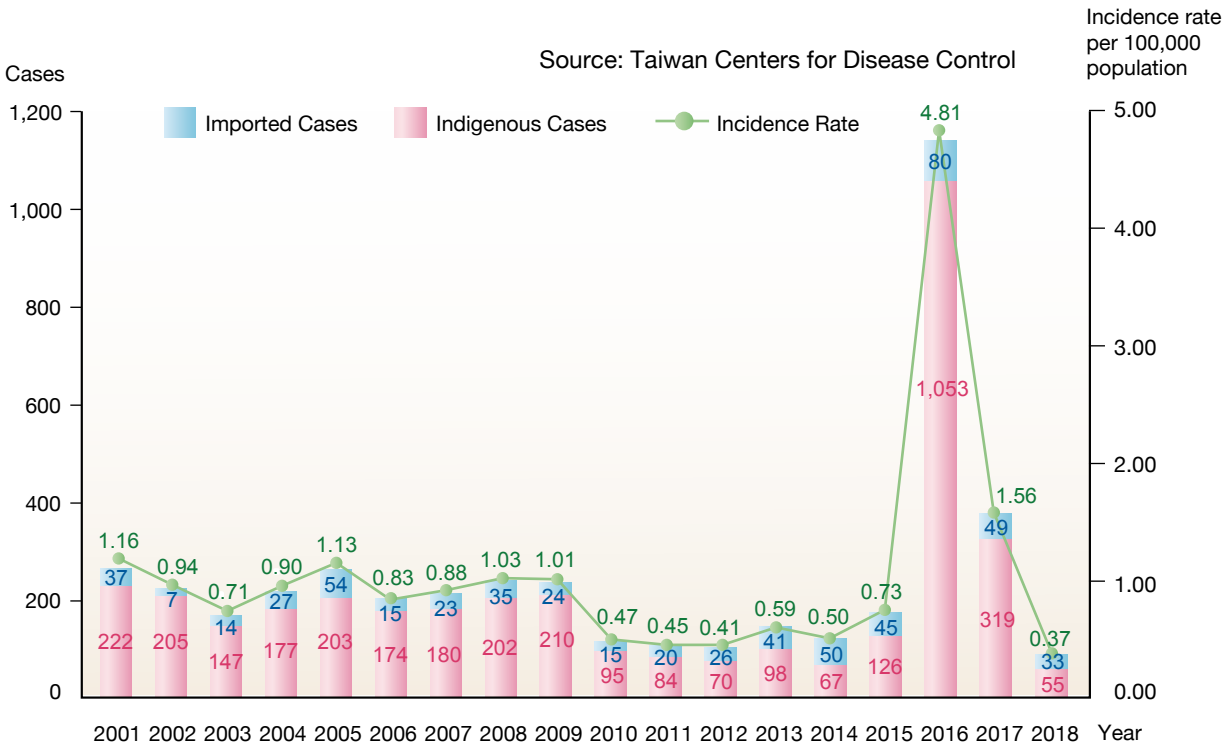


Figure 6-4 Incidence of Dengue Fever, by Year (Indigenous cases)

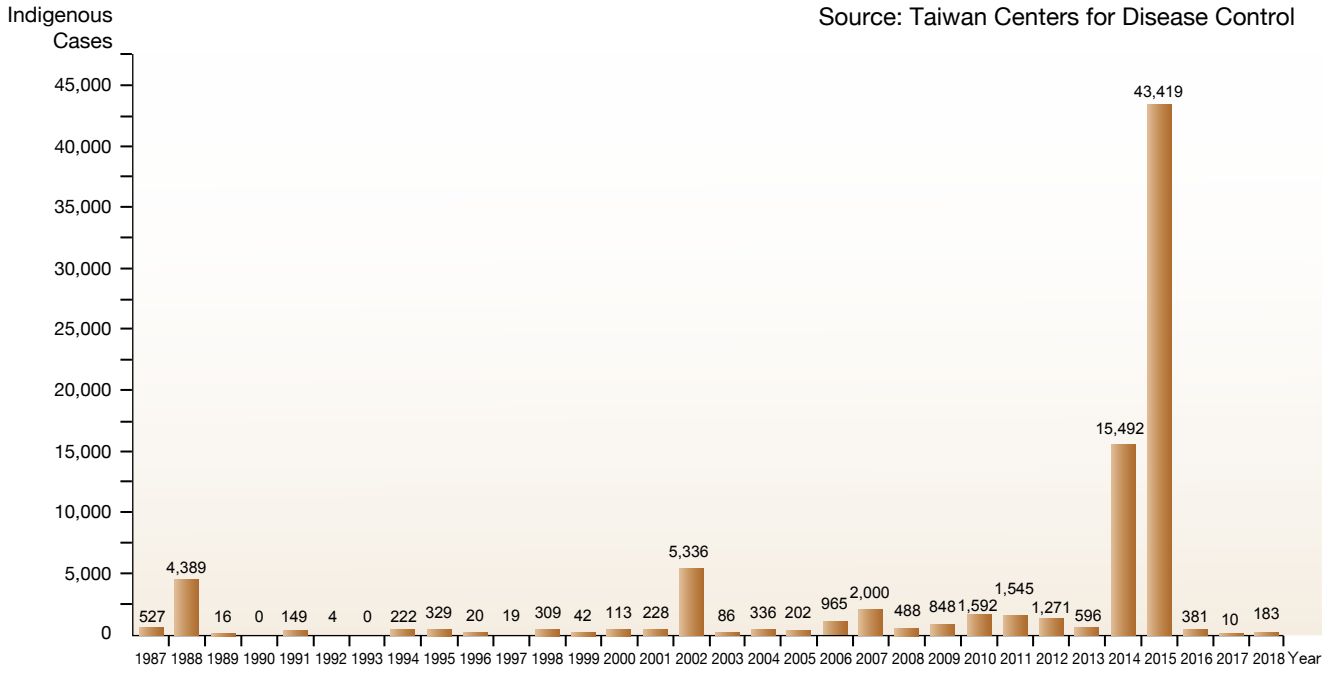
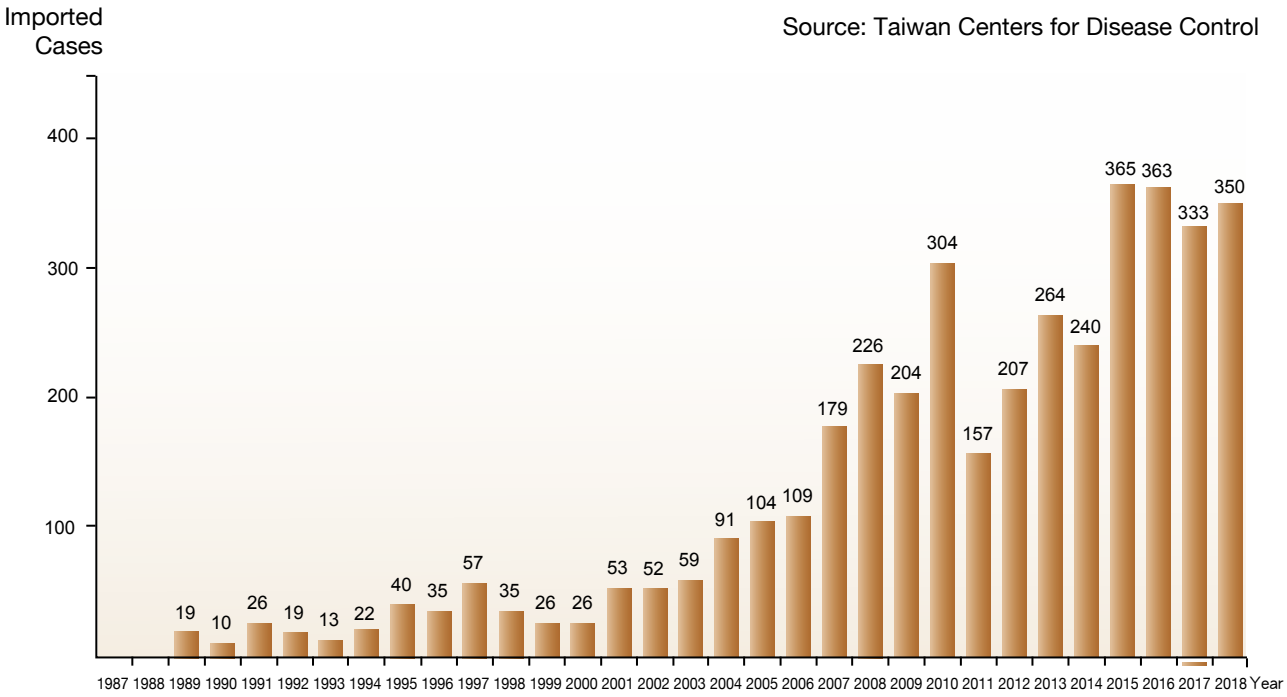


Figure 6-5 Incidence of Dengue Fever, by Year (Imported cases)



the central government and local government agencies concerning the prevention of vector-borne communicable diseases.

3. The National Mosquito-borne Diseases Control Research Center has continued to work with high-risk county and city governments to train professional workers and apply scientific evidence to carry out preventive efforts.

Section 4 Communicable Diseases Transmitted by Blood or Body Fluids

1. HIV infection

Between 1984 and the end of 2018, there were a cumulative total of 37,917 reported cases of HIV among Taiwanese nationals. Of those infected, 17,902 developed full-blown AIDS, which led to 6,466 deaths. In 2018, there were 1,992 new reported cases. Compared to 2017, there had been 2,511 new reported cases, which translates to a decline of 21%; the male-to-female ratio for those infected is 45.3:1. Among the newly infected, 96% of them had contracted the disease through unsafe sex, particularly unsafe homosexual sex. These constituted 86% of all contracted cases for the year. The outcome of disease prevention in 2018 is as follows:

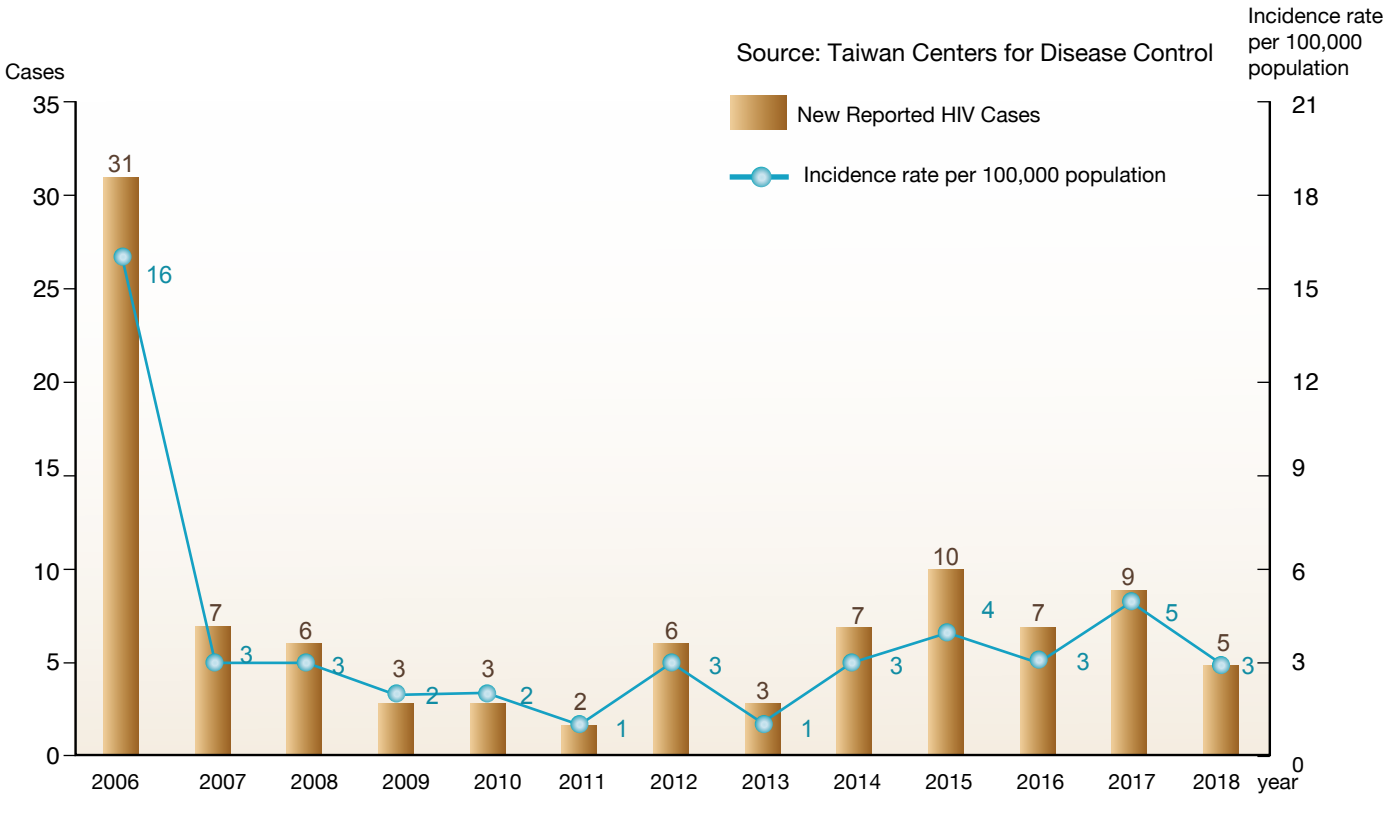
(1) Cooperated with NGOs and established five LGBT-friendly centers to provide men who have sex with men (MSM) group with consultations and testing services. Additionally, education and health services were also provided via social media. In 2018, 11,155 people received screening services.

(2) Continued to implement the "Harm Reduction Program". Newly reported cases of substance abuse had fallen from 72% in 2005 to 2% in 2018.

(3) For privacy concerns and convenience purposes, the Ministry has offered HIV screening consultation and referral services through its "Free HIV Anonymous Screening and Consultation Project". In 2018, the screening service was provided to 42,837 people, with a positive rate of 1.4%. In addition, the Ministry has referred to the experience of a John Hopkins University professor performing practical community work and starting from July 2018, the MOHW has been working with local health bureaus and private organizations to mobilize peers and mentors to promote the importance of safe sex and routine screening. 17,784 people received the screening service, with a positive rate of 0.7%.

(4) Starting from September 2018, the Ministry has been promoting the "HIV Screening and Pre-Exposure Prophylaxis (PrEP) Project for 2018-

Figure 6-6 New HIV Cases and Positive Incidence Rate under the Universal Screening Program for Pregnant Women, by Year



2019" by working with departments of health and 38 other institutions to provide holistic, integrated care services.

(5) To prevent vertical transmission of HIV, the MOHW implemented a universal HIV screening for pregnant women and provided ART for prevention. In 2018, 5 new cases were found through the screening of pregnant women, as shown in Figure 6-6.

2. Acute viral hepatitis B and C

The numbers of confirmed cases of acute viral hepatitis B and C in 2018 were 143 and 515, respectively. The continued screening of pregnant women for hepatitis B during prenatal care visits and the immunization of newborns against hepatitis B have caused the carrier rate in children at age 6 to approximately fall from 10.5% to 0.8%.

Section 5 Seasonal influenza

1. In 2018 there were 1,196 confirmed cases of influenza-related complications, resulting in 202 deaths and a fatality rate of 16.9%, as shown in Figure 6-7.
2. The MOHW launched the "Influenza Vaccine Immunization Program" in October 2018, targets nine groups, including children aged above 6 months and before entering elementary school. The Ministry also subsidized the immunization treatment fee for all the other eligible targets who did not receive the immunization collectively in schools. Due to the incidence of influenza vaccine supply quality anomaly in 2018, in order to ensure the safety of immunization for the general public, specific batches of the vaccine have been chosen with requests for replacement made to the supplier. As a result, the total number of immunizations administered for the year reduced slightly to 5.36 million doses.
3. In accordance with the "Strategic Plan for Influenza Peak Period," the MOHW implemented rigorous monitoring of the infection rate, strengthed the quality of medical care available for acute cases, and ensured that resources can be deployed effectively. The agency has increased the number of locations at which subsidized immunization is available to over 4,300, and has increased the number of people eligible for subsidized influenza antivirals.

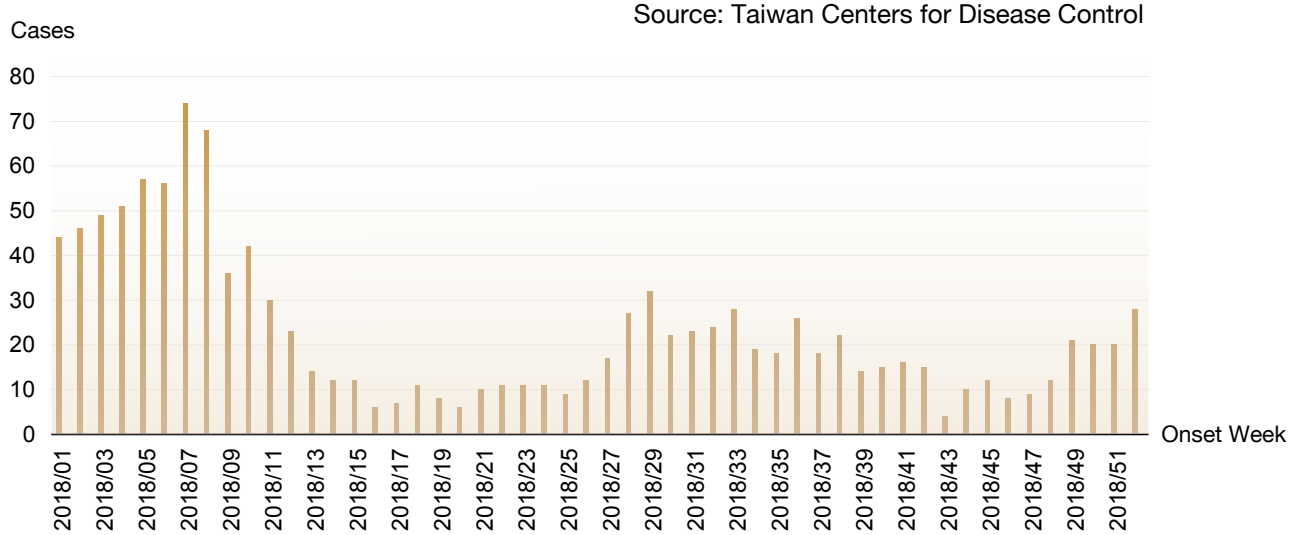
Section 6 Control of Emerging Infectious Diseases

1. Implemented a total of six military simulations for severe biological incidents or terrorist attacks in six municipalities, including Taoyuan City, Taichung City, Tainan City, Kaohsiung City, Yilan County, and Taitung County. The simulation exercises involved relevant response personnel to perform designated duties and mobilization of laboratory biosafety contingency teams as designed in standard operating procedures. The simulations were highly acknowledged by the Executive Yuan.
2. Established a rapid screening program for biosafety and expanded the existing detection capacity of biological pathogens.
3. Established an international exchange network to expand Taiwan's international presence:

   (1) Visited Israel and Australia's competent health authorities in May and December of 2018 respectively to exchange experiences in disease control.

Figure 6-7 Confirmed Cases of Severe influenza-related complications in 2018

Source: Taiwan Centers for Disease Control



(2) Visited Austria and the U.S. in July, August and November in 2018 to attend "The 4th International Conference on Influenza and Zoonotic Diseases", "The 7th International Meeting on Emerging Disease and Surveillance" and "International Conference on Emerging Infectious Diseases" respectively.

(3) The Ministry hosted the "2018 Symposium of Preparedness and Response to Emerging Infectious Diseases of Medical Institutions" and invited experts in infectious disease response from Singapore, Hong Kong, Italy, and the U.S. as speakers.

4. Implemented the infectious disease contingency plan exercise at hospitals responsible for pandemic response in the Communicable Disease Control Medical Network, with the Middle East respiratory syndrome coronavirus as the simulation scenario. The exercise was a semi-noticed drill in which the participating hospitals were informed of only the scheduled time of the exercise to test 6 participating response hospitals for their response capacity and degree of response preparedness.

Section 7 Control of Imported Communicable Diseases

Taiwan implements all necessary quarantine measures for ships, aircraft, and people. Seaport and airport authorities are required to establish health and safety work teams to prevent the importation and exportation of communicable diseases.

1. Quarantine at international ports

In 2018, 27,623,223 people entered Taiwan. Of these, 26,401 were identified as symptomatic by the infrared thermometer diagnostic stations at Taiwan's airports and seaports. Of those, 158 people were confirmed to be infected with notifiable communicable diseases, of which 151cases were diagnosed with dengue fever, 7 cases with chikungunya fever.

2. Prevention of Travel-Related Communicable Diseases

Travel clinics were set up to provide counseling to travelers regarding appropriate vaccines and preventive medication. In 2018, travel clinics at 30 contracted hospitals provided services to 31,540 patients.

Chapter 3 Communicable Disease Preparedness and Response, and Infection Control

The MOHW continues to maintain the"Communicable Disease Control Medical Network"(Figure 6-8) and implements periodic inspections of isolation beds at hospitals responsible for pandemic response. Regular training and drills are also conducted to enhance preparedness.

Section 1 Pandemic Influenza Preparedness and Response

1. To innovate the management of anti-epidemic materials and enhance stockpile efficiency, the MOHW has:

   (1) Established an e-commerce procurement platform, ensured the circulation and exchange mechanism for protective equipment as well as a Level III Inventory Management System for anti-epidemic supplies: protective clothing, N95 masks, surgical masks, etc.

   (2) Maintained a stockpile of influenza antivirals that covers 10-15% of the population, and the scope of application for these antivirals is expanded during the influenza peak season.

2. Established an inter-ministerial emergency response mechanism to better respond to avian influenza outbreaks in Taiwan.

   (1) Through an inter-ministerial platform and relevant meetings, the agricultural institutes encouraged livestock farmers, and animal disease prevention personnel to receive influenza vaccination. The inoculation rate was 95.9%.

   (2) Monitored possible mutations in the avian influenza virus and the risk of poultry-to-human transmission and supervises the health surveillance of poultry farm workers conducted by the local health authorities. No instances of new human infection were reported.

3. Monitored influenza virus antigenicity, drug resistance, genetic mutation and the emergence of new strains. Virus strains from Taiwan were sent to the WHO reference laboratories in Japan and the US. as a reference for vaccine strain selection.

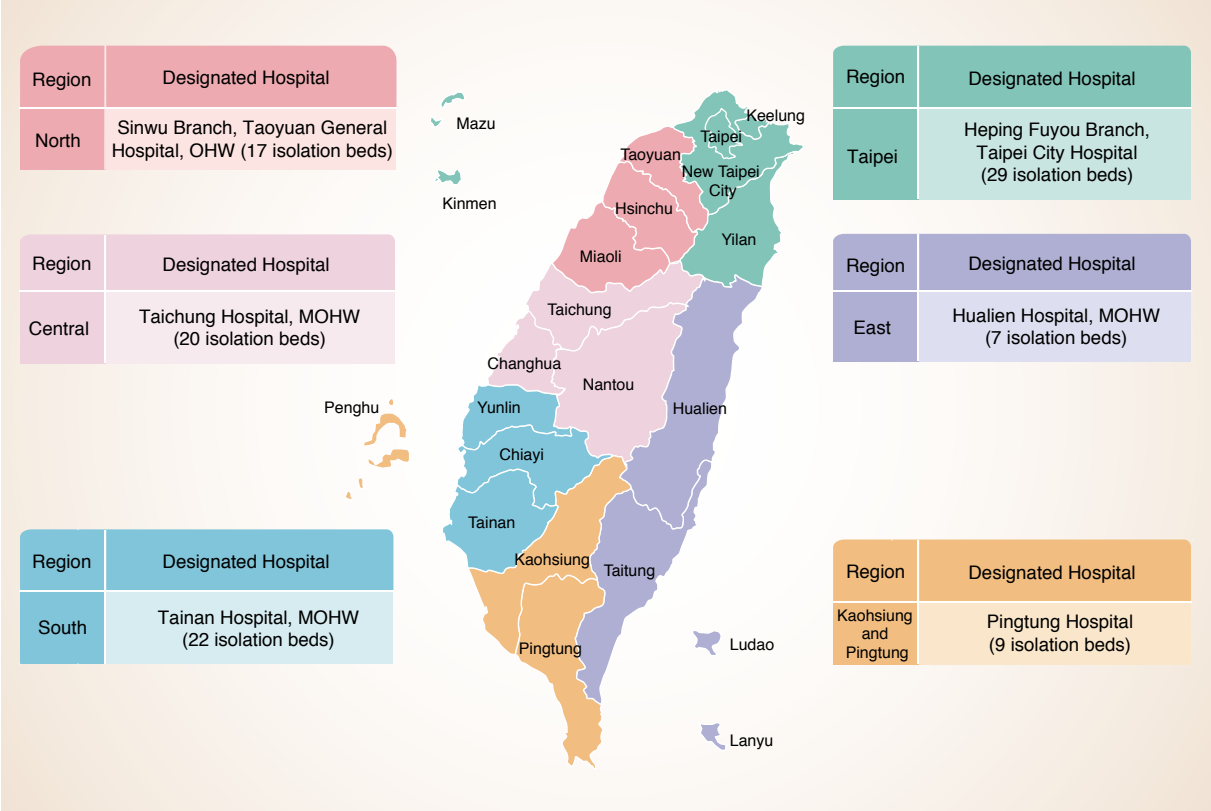
Section 2 Healthcare-associated Infection Control and Laboratory Biosafety Management

1. Since 2017, the frequency of hospital infection control inspection has been changed from at least once per year to at least once every two years. In 2018, a total of 254 hospitals were inspected by local health bureaus. The initial pass rate was 97.8%, and all of the hospitals that failed the initial inspection passed the re-inspection.

2. The infection control inspection for correctional institutions and infant centers was implemented for the first time in 2018, with inspectors visiting 51 correctional institutions and 353 infant centers to perform the inspection. The initial pass rate came to 100% and 99.7%; all the infant centers that failed the initial inspection passed the re-inspection.

Figure 6-8 The Communicable Disease Control Medical Network

Source: Taiwan Centers for Disease Control



Note: In 2018, the total number of isolation hospitals was 132. In each region, there is one designated hospital and one supporting hospital.

3. Established an infection control inspection information system for hospitals and long-term care institutions. The system became operational in 2018 and facilitated the analysis and management of information, streamlined the administrative process and reduced manpower load of the inspection operation.
4. Strengthened multi-channel surveillance on multidrug-resistant organisms (MDROs).
   (1) The Antimicrobial Resistance Management and Surveillance System were launched in March of 2017, providing two reporting mechanisms, including the Electronic Data Interchange mechanism and a manual uploading mechanism. The system collects the results of antimicrobial susceptibility tests and related data of the important bacteria in the WHO Priority Pathogens List. More than 100 hospitals were enrolled in 2018.
   (2) Established a surveillance plan for antimicrobial resistance to collect the strains of key pathogens as listed by the WHO to monitor their antibiotic resistance and key resistance genes.
5. At the 71st World Health Assembly (WHA), the Ministry hosted the “Forum on Antimicrobial Resistance (AMR) - A Threat to Global Health Security” by inviting a panel of experts and councilors of the Swiss Federal Assembly to discuss the topic of antibiotic resistance.
6. The Ministry hosted the “APEC International Conference on Antibiotic Resistance” and invited local and foreign experts in antibiotic management or infectious disease control to share their strategies and results in the promotion of antibiotic resistance prevention.
7. In response to WHO’s emphasis on antibiotic resistance issues, activities to celebrate World Hand Hygiene Day and World Antibiotic Awareness Week activities were held.

8. Laboratory biosafety management

(1) Implemented laboratory biosafety inspections at domestic high-containment laboratories and installation units with highly dangerous pathogens and toxin use/storage by conducting on-site inspections to ensure these highly sensitive premises are secured:

A. 15 storage installations and 24 high-containment laboratories/ installation units with highly dangerous pathogens and toxin use/storage were chosen for inspection. All inspected units were able to rectify identified oversights within the specified period to achieve a 100% correction rate.

B. 7 domestic laboratories/storage facilities for controlled pathogens and toxins were inspected, with a 100% inspection completion rate. All inspected units were able to rectify identified oversights within the specified period to achieve a 100% correction rate.

(2) Assisted 17 domestic biotechnology-related laboratories in completing their "Laboratory Biological Risk Management System". As of the end of 2018, there were 60 such laboratories that have introduced this system as demonstration units that would help the government in the promotion and improvement of self-management capacities for laboratories.

(3) There were 502 installation units that possess and use risk group 2 or above pathogens and biotoxins, with their categories and numbers shown in Table 6-2.

Table 6-2 Numbers of Entity Types by Laboratory Biosafety Management in 2018

Source: Taiwan Centers for Disease Control

Category / Types note	Government Agency	Medical Institution	Academic Research Institution	Other	Subtotal	Total
Institutional Biosafety Committees	20	153	54	269	496	502
Biosafety Specialist	0	0	0	6	6	

Notes: If the number of employees in installation units keeping or using risk group 2 or above pathogens and biotoxins is more than 5, the installation unit shall be set up as an "Institutional Biosafety Committees (IBCs)." If the number is less than 5, a biosafety specialist shall be assigned. Both IBCs and biosafety specialists shall be reported to the Taiwan Centers for Disease Control of the Ministry of Health and Welfare.

Section 3 Research and Laboratory Testing

1. A total of 122,376 specimens were tested, of those, 20,928 were found to contain a pathogen or tested positive for a related antibody, yielding a positive rate of 17.1%.
2. A total of 4,597 specimens from suspected cases with arbovirus infections were tested. Among them, there were 3 imported cases with Zika virus infection and 7 cases of Chikungunya virus infection. No indigenous cases of either virus was identified in Taiwan.
3. Provided molecular diagnoses for seven antituberculosis drugs that reduce discordances between phenotypic and genotypic drug susceptibility testing results and shorten diagnosis to treatment time to improve the treatment success rate.
4. Continued the operation of PulseNet Taiwan to detect food-borne disease clusters, which has successfully identified a salmonellosis and traced its origin to pigs and poultries. Used the whole genome sequence-based genotyping method to generate genetic profiles of bacterial isolates, which are comparable among laboratories of PulseNet International.
5. Implemented community-based surveillance of enterovirus and respiratory viruses and provided a systematic reference for infectious disease early warning indicators, public health prevention actions, laboratory diagnostic technique and vaccine developments.
6. Completed technology transfer for Dengue NS1 Antigen Rapid Test Kit, and helped participating companies complete the registration of in vitro diagnostic device licensing.

7. Sent influenza virus isolates to the WHO Influenza Collaborating Centers to participate in global influenza surveillance.
8. Applied the "Automatic nucleic acid detection platform" for pathogen detection in diarrhea clusters, which can shorten the test time and assist in the detection of emerging pathogens.
9. Continued to collect and diversify the Taiwan Pathogenic Microorganism Genome Database (TPMGD) and biomaterial inventory. Presently, the database contains more than 33,000 entries of genetic sequencing, with 1,734 strains of influenza virus, 1,304 strains of enterovirus and 5,048 strains bacteria in the inventory. The inventory has provided the resources needed in biomaterial applications submitted by 21 academic units and 9 enterprises in the sector, thereby proven its value in aiding academic researches and test kit development.
10. Under the Global Cooperation and Training Framework (GCTF), the MOHW collaborated with the Ministry of Foreign Affairs and AIT to jointly host the "International Workshop on Laboratory Diagnosis for Enterovirus". Representatives from 15 New Southbound Policy nations were invited to participate in the technical exchanges and thereby helping the participating nations to bolster their capacity for enterovirus molecular diagnostics, which will in turn enhance the Asia-Pacific region's capacity for relevant inspection and diagnosis.
11. Assisted Taiwan Blood Services Foundation to analyze the nature of correlation in alleged cases of hepatic viral infection transmitted through blood transfusion to clarify the correlation of the pathogen to the blood donor and receiver so that relevant aid can be administered. In 2018, there were a total of 7 cases of contention but none of the blood donors and receivers in these cases were found to be correlated with regards to the infection.
12. Evaluated existing standard inspection process for HIV to establish a working reference in the formulation of relevant prevention policies and revision of AIDS Prevention Handbook so as to shorten the time required for HIV confirmed diagnosis for treatments to be implemented as early as possible.
13. At present, integrase inhibitor has been listed as the recommended first-line medication in the "Regulations on the Use of HIV Prescription Drug". However, as no FDA approved genetic testing kit is available in Taiwan, the Agency is offering an HIV integrase inhibitor resistance test as a basis of reference for the replacement of prescription drugs.

Chapter 4 Immunization

Section 1 Current Immunization Status and Trends

To sustain Taiwan's immunization policy, an "Immunization Fund" was established in accordance with Article 27 of the Communicable Disease Control Act in 2010. The Fund serves as a stable funding source to implement new immunization policies each year. In 2018, the scope of the publicly funded hepatitis A vaccine became available to every national and was included in the routine vaccination program for children. At present, there are 10 free routine vaccines for young children that can prevent 15 infectious diseases. The immunization schedule for these vaccinations is shown in Table 6-3.

A "National Immunization Information System" was established to monitor and track the immunization status of young children. Children's routine vaccination coverage rate has been maintained, as shown in Figure 6-9. To deal with the side effects of immunizations, the government has established the "Vaccine Injury Compensation Program (VICP)" to enable victims to receive the assistance they are legally entitled to.

Table 6-3 Routine Vaccinations for Children, and Immunization Schedule

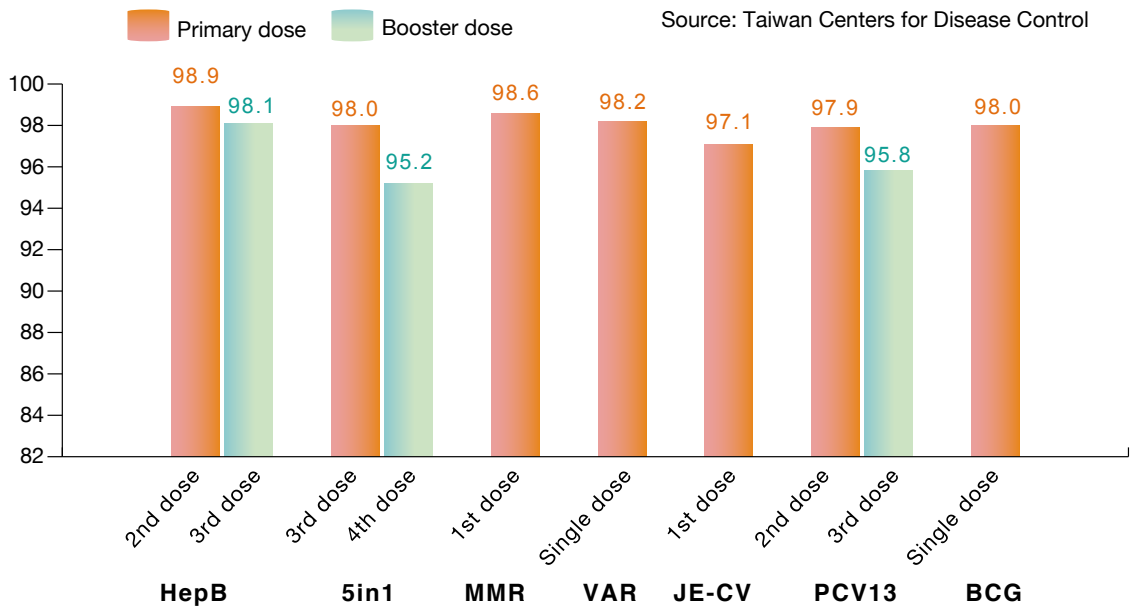
Last updated: 2019 July

Source: Taiwan Centers for Disease Control

Age of inoculation	Vaccine type
Within 24 hours of birth	HBIG[1] (Administered to newborns whose mothers tested positive for HBsAg)
	Hepatitis B 1
1 month	Hepatitis B 2
2 months	DTaP-Hib-IPV (5in1) 1
	PCV 1(13-valent)
4 months	DTaP-Hib-IPV (5in1) 2
	PCV 2(13-valent)
5 months	BCG 1 (recommended vaccination time is 5-8 months after birth)
6 months	Hepatitis B 3
	DTaP-Hib-IPV (5in1) 3
6 months to elementary school age	Influenza
12 months	MMR 1
	Varicella
12 – 15 months	PCV 3(13- valent)
	Hepatitis A 1[2]
1 year and 3 months	JE-CV 1
1 year and 6 months	DTaP-Hib-IPV (5in1) 4
1 year and 6 months to 1 year and 9 months	Hepatitis A 2
2 years and 3 months	JE-CV 2
Between 5 years and 1st grade in elementary school	DTaP-IPV
	MMR 2
	JE-CV [3]

Notes: 1. Starting from July 2019, the targets of HBIG haves been expanded from newborns whose mothers tested positive for HBeAg to newborns whose mothers tested positive for HBsAg.
2. After January, 2018, hepatitis A vaccine target children who are more than 12 months old and born after January 1, 2017, as well as the pre-school children in 30 mountainous townships, and 9 neighboring mountainous towns, Kinmen county and Lienchiang county.
3. Children who have completed 3 doses of inactivated vaccines have to receive 1 dose of JE-CV.

Figure 6-9 Immunization Coverage Rate for Children under 3 years old in 2018



- HepB: Hepatitis B vaccine
- 5in1:Diphtheria, tetanus, acellular pertussis, inactivated polio and Haemophilus influenza type b conjugate vaccine
- MMR: Measles, mumps and rubella vaccine
- VAR: Varicella vaccine
- PCV13: 13-valent pneumococcal conjugate vaccine
- BCG: Bacille Calmette-Guérin vaccine
- JE-CV: Japanese encephalitis chimeric vaccine- live attenated.

Note: Due to the transition from mouse brain-derived inactivated Japanese encephalitis (JE) vaccine to live chimeric JE vaccine, children who have received 3 doses of inactivated JE vaccine should receive 1 dose of live chimeric JE vaccine after the age of 5 to complete the series of JE vaccination

※Statistical period: As of end of December 2018

Section 2 Development and Manufacture of Antiserums/vaccines

In an effort to safeguard the health of citizens, Taiwan Centers for Disease Control has opted to manufacture snake antivenom immunoblobulin domestically by commissioning the National Health Research Institute's bioproduction plant to produce snake antivenom immunoblobulin into freeze dried antivenom for the treatment of those bitten by poisonous snakes.

1. MOHW Minister hosted the plaque unveiling ceremony and the inauguration of the National Antivenom Hyperimmune Horse Farm, which is complete with 6 stables, 4 outdoor athletic fields, two horse walkers and a clean room for plasma separation. The farm can house up to 100 horses.
2. In 2018, a total of 500 liters of snake antivenom immunoblobulin is separated from the blood of hyperimmunized horses in 2018. The National Health Research Institute's bioproduction plant was also commissioned to produce 2,600 doses of freeze dried antivenin for domestic patients suffering from poisonous snake bites.

MOHW Minister inspecting the National Antivenom Hyperimmune Horse Farm on October 20, 2018

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7 Management of Food and Drugs

Taiwan Food and Drug Administration (TFDA) spares no efforts in workings to protect the health of consumers. To achieve this goal, the key working points of the agency in 2018 focus on: bolstering legal standards and review mechanisms; solidifying food businesses supervisions; establishing a detailed supply chain monitoring system; improving national laboratory capacity and capability; setting up risk precautionary and management mechanisms; and proactively bolstering consumer protection and communication channels, so as to provide an environment ensuring drug safety and effectiveness, as well as food safety and health to our consumers.

Chapter 1 Management of Food

The Food and Drug Administration of the Ministry of Health and Welfare (hereinafter referred to as TFDA) took advantage of industry self-discipline, government management, and private participation to ensure food safety, improve the management ability of the food industry, and advance food safety management.

Section 1 Food Regulatory Standards and Product Reviews

1. The Administration has actively promoted the Act Governing Food Safety and Sanitation (hereinafter referred to as the Food Safety Act) and Health Food Control Act while promoting the addition and amendment of 46 related Articles. For details on these changes are published on the TFDA website under Food-> Laws & Regulations for open perusal.
2. For the product registration of specific foods, the number of approved licenses is shown in Table 7-1.

Section 2 Food Management at the Source

1. As of the end of 2018, the Food Business Registration Platform (http://fadenbook.fda.gov.tw/) carried the information of more than 440,000 food businesses. In order to flesh out the registration database even further, the Regulations Governing the Registration of Food Businesses have been amended on July 18, 2018 to require food businesses to upload the basic information of their storage place on the registration platform.
2. In 2018, 25 categories of food businesses shall use an electronic approach to declare the information of the traceability system (http://ftracebook.fda.gov.tw/) to refine food trace management.
3. Border Inspection of Imported Food
   (1) Imported food items announced by the competent authorities are required to be categorized using food inspection commodity numbers. As of the end of 2018, TFDA has promulgated a total of 2,613 commodity numbers subject to imported food inspections.

Table 7-1 Number of Registered Specific Food Products, 2018

Source: Taiwan Food and Drug Administration

Category		Effective Licenses
Imported foods in tablet or capsule form		6,922
Health foods		372
Food additives		6,296
Genetically modified foods		140
Special dietary foods	Formulas for certain diseases	200
	Infant and follow-up formula	126
Domestic vitamin products in tablet or capsule form		1,265
Vacuum-packed ready-to-eat soybean food		14
Total		15,335

(2) About 682,575 batches of food and related products were inspected in 2018. Products that did not pass the inspections were returned or destroyed according to regulations.

Section 3 Monitoring the Food Safety Chain

1. TFDA implements long-term rolling monitoring for surveillance items including agricultural chemical residues, veterinary drug residues, mycotoxins and heavy metals in sample inspections for foods in high-risk group sold in the market through its pot-market monitoring plan to foster relevant protection. 9,170 food samples were inspected in 2018, with the results shown in Table 7-2.
2. Selective Inspection of Specific Cases

   By taking the outcomes of audits conducted in previous years into consideration in conjunction with key management targets spelled out in relevant policies while factoring in the general public's consumption habits and issues of social concern, TFDA has integrated the planning of national inspection and audit projects to implement inspections for various food manufacturing businesses and their products. In 2018, relevant health agencies have completed the GHP audit for 175,000 businesses, label inspection for 593,000 cases. The pass rates for imported food and domestic food product inspection came to 98% and 96% respectively.
3. Efforts were made to step up the monitoring of livestock and aquatic products that are higher concern to the general public or have higher failure rate. Taking imported agricultural products as an example, the average compliance rate for 2016 was 92.1%, which gradually increased over the years by reaching 95.6% in 2017 and 96.5% in 2018.

Section 4 Food Safety and Sanitation Management

1. Aligning laws and standards with the international standards : As of the end of 2018, TFDA has established pesticide residue limits for 380 pesticide in 6,753 items of food; 141 kinds of veterinary drugs in 1,433 items and standards for 791 items of food additives.
2. Strengthening import source management: The scope of products subjected to TFDA's systematic inspections has been expanded from "meat products" to "aquatic products" and "dairy products" as a way to strengthen food safety management for imported animal products.
3. Seamless food industry management:

   (1) The first tier quality management: 33 categories of food businesses shall enact the food safety monitoring plan, conduct testing, including 16 categories announced in 2018.

   (2) Traceability: Among the 25 categories of food businesses shall establish traceability system, 3 categories were announced in 2018.

   (3) Professionals with vocational certification: Among the 15 categories of food shall have professionals with technical certification, 10 categories were announced in 2018.

Section 5 Food Sanitation and Safety Management System Certification

475 operators, i.e., 10 types of manufacturers of canned foods, food additives, dairy products, special nutritious foods and edible oils, flour, starch, salt, sugar, and soy sauce with business capital of more than NTD30 million, were informed of the need to conduct safety management system certification as of the end of 2018. Pursuant to Paragraph 5,

Table 7-2 Results of Post-Market Surveillance of Food, 2018

Source: Taiwan Food and Drug Administration

Surveillance Items	Results		
	Samples Taken	Conforming Cases	Compliance (%)
Agricultural chemical residues	4,467	3,977	89.0
Veterinary drug residues	3,580	3,551	99.1
Mycotoxins	570	567	99.4
Heavy metals	553	550	99.4

Article 8 of the Act Governing Food Safety and Sanitation, the new requirement of "Food Businesses that Manufacturing, Processing and Preparing Canned Food, Edible Vegetable and Animal Oils and Fats with business capital of More Than NTD30 Million Shall Obtain the Certification of Sanitation and Safety Management Systems" has been included in the Act and the amendment took effect on December 19, 2018.

Chapter 2 Medicinal Products Management

To ensure the safety and quality of drugs, the Food and Drug Administration actively promotes drug administration reform, improves the process of medicinal product regulations and registration, fosters the competitiveness of pharmaceutical industry, manages the medicinal product source, prohibits illegal drugs and enhances the management of controlled drugs.

Section 1 Drug Regulatory Standards & Product Approval

1. TFDA continued to improve management regulations on medicinal products and amended 20 drug related regulations or guidance in 2018. Relevant details on these amendments can be found on TFDA's website under Drugs>Laws & Regulations & Guidance>Drugs. In addition, TFDA also established "Regulation for the Issuance and Management of Western Pharmaceuticals Distribution Licenses and Certificates", which can be found under Open government information>Laws>GMP related laws for perusal.

Table 7-3 Amendments to Regulations or Guidance Governing Drug Management, 2018

Source: Taiwan Food and Drug Administration

Date	Title	Key Amendments
January 15	Published the revision of "TFDA Processing Times for Applications submitted by the General Public"	Revised the processing time for drug clinical trial protocol applications (including First in Human trials).
January 23	Revised The TFDA Announcement on "Taiwan Clinical Trial Informatiom Website".	The objective of the revision is to enable potential subjects to receive relevant information on clinical trials that have been approved in Taiwan to facilitate information transparency. Efective from February 1, 2018, all clinical trials approved by MOHW will be posted and published on Taiwan Clinical Trial Informatiom Website. Parties responsible for the clinical trials are required to update the latest information and progress of the trial during its implementation on the website to ensure that the information featured is complete and accurate.
February 8	Increased 30 new items to the medicinal products trace and track system and took effect on July 1, 2018.	In an effort to manage the source and flow of medicinal products, TFDA has referred to Article 6-1 of the Pharmaceutical Affairs Act and announced the inclusions of 30 new items as the subject of drug traceability declaration on February 8, 2018. Effective from July 1, 2018, the specified pharmaceutical companies carrying the license for the drug, including vendors distributing said drug in bulk are required to upload the source and flow of the drug for the previous month to the trace and track system of medicinal products constructed by TFDA before the 10th of the following month. The category of high-concern drugs has been established based on risk assessment of high value and high use NHI drugs while excluding drugs for rare diseases, restricted drugs and items involving high technical thresholds with low risks for imitation to identify 30 new drugs as targets for drug traceability management.
March 22	Announcement of Import Regulation Code "F04"	Applications to import active pharmaceutical ingredients for human use should be submitted to TFDA based on "Regulations for the Inspection and Examination of Imported Medicaments".
April 11	Facilitated customs clearance for imports of laboratory consumables for collecting specimens in clinical trial	TFDA, along with Bureau of Foreign Trade and Customs Administration have worked together to promote facilitated customs clearance for imports of laboratory consumables for collecting specimens in clinical trial in order to improve the efficacy and quality of domestic clinical trial programs by improving the efficiency of government administrative processes.

Source: Taiwan Food and Drug Administration

Date	Title	Key Amendments
May 2	The revision to "Import/Export Application Documentation Checklist and Guidelines for Experimental Drugs used in Clinical Trials"	In light of the facilitated customs clearance for imports of laboratory consumables for collecting specimens in clinical trial, relevant revisions have been made to "Import/Export Application Documentation Checklist and Guidelines for Experimental Drugs used in Clinical Trials".
May 9	Announcement on the substitution of technical documents of active pharmaceutical ingredients by other dossiers as promulgated by the central health competent authorities identified in Article 49-1, Appendix 2 in Article 39 and Appendix 4 in Article 40 of the Regulations for Registration of Medicinal Products	Considering international drug management and achieving good manufacturing practices of active pharmaceutical ingredients in Taiwan, TFDA has established that technical documents of active pharmaceutical ingredients used in drug products (over-the-counter drugs) can be replaced by synthetic processes, testing specifications, methods, and certiticate of analysis of active pharmaceutical ingredients.
June 19	Announcement for "Adjustment to the Import Application for Experimental Drug used in Clinical Trial Programs"	For import applications involving single experimental drug sourced by multiple suppliers, starting from June 30, 2018, applicants no longer need to fill in specific items and quantities when completing the Application for Import Certificate.
July 16	Amendment of Article 2 in "Standards of Review Fees for the Registration of Western Medicines and Medical Devices"	The amendments specified the items that need submit review fees for review of clinical trial amendment, including protocol or protocol amendment, change of the medical institution or investigator, the sponsor and change of the investigational product manufacturer and the investigational medicinal product dossier.
August 21	Announcement for follow-up management mechanism and handling principles to facilitated customs clearance for imports of laboratory consumables for collecting specimens in clinical trial	Follow-up process involving three stages has been established for items that are found to be noncompliant to the regulations for facilitated customs clearance for imports of laboratory consumables for collecting specimens in clinical trial.
August 22	Announcement on amendment of specific articles of "Regulations for the Inspection and Examination of Imported Medicaments"	For active pharmaceutical ingredients that belong to classification codes in Chapters 28 and 29 of the Import and Export Commodity Classification of the Republic of China should be subjected to inspection and examination.
September 11	Announcement for the Draft of Regulations for the Patent Linkage of Drugs	In conjunction of the newly amended Chapter IV-1 on Patent Linkage of Drugs in the Pharmaceutical Affairs Act, the announcement is to reflect the amendment of: (I) the method and content of submission of the patent information, the amendment and deletion thereof, the listing and publication of the patent information; (II) the declaration made by the applicant for a generic drug permit, the method and content of the written notification made by the applicant for the generic drug permit; (III) the notifications of infringement complaint filed by the applicant for a new drug permit against the patentee or exclusive licensee of a drug patent and the final and binding judgment confirming infringement; (IV) the commencement and termination of the marketing exclusivity period; (V) the applicable regulations for new drug permit application other than new drugs of a new molecular entity; (VI) the exclusion of indication, declaration and other matters shall be abided by in this regard.
September 20	Relating to TFDA's establishment of Refuse to File (RTF) Checklist for New Drug Application and its pilot program for a year.	The new Refuse to File (RTF) standard that has been established for new drug application is now in effect and the RTF notification time has been shortened from 60 days to 40 days.
September 20	Revision to the previously announced registration and review process for new drug application and control of time	In light of the changes in notification time from 60 days to 40 days due to RTF, time control for this process has been adjusted accordingly.
September 20	Pilot run of "Data Exclusivity and Domestic/ Foreign Clinical Trial Data Sheet"	The revised data sheet is prepared based on the original domestic/foreign clinical trial data sheet, with items on data exclusivity incorporated.
October 5	Amendment to Guidelines on the Review of Over-The-Counter (OTC) Drug	Announcement on new Guidelines on the Review of Over-The-Counter (OTC) Drug including "topical antimicrobial and antiseptic drug products", "topical antifungal drug products", "topical antipruritic and anti-inflammatory drug products", topical acne drug products" and "diaper rash and antimiliaria drug products" and "preparations for skin dryness, cracks and keratin removal".

Source: Taiwan Food and Drug Administration

Date	Title	Key Amendments
October 12	Announcement for the Draft of Regulations for the Notification of Drug Patent Linkage Agreement	In conjunction of the newly amended Chapter IV-1 on Patent Linkage of Drugs in the Pharmaceutical Affairs Act, the announcement is to establish (1) method of notification for reverse payment agreements, contents and starting date of the notification; (II) Other matters that the notifier shall abide by; (III) If the Central Competent Health Authority considers that the agreement notified under Paragraph 1 hereof is likely to violate the Fair Trade Act, it may notify the Fair Trade Commission.
November 13	Announcement on the commissioning of 35 medical institutions/juridical entities including Chung Shan Medical University Hospital to carry out the review of FIH experimental program for new drugs	TFDA commissioned 35 institutions and juridical entities to review changes in subject consent for drug clinical trials. More specifically, for drugs that have already received MOHW permit, as long as the dosage used is within the scope that has been previously approved, the drug can be used in new indication clinical trial programs for the sole purpose of academic research.
November 23	Revision to the Review Process and Checklist for Changes in Indication, Application and Dosage	In an effort to improve review transparency and boost the efficiency, Approval Letter is implanted in the review process. In addition, corresponding to the Patent Linkage policy, License notification shall be issued in accordance with applicants' needs for patent registration.
December 28	Announcement on the amendment to the deadline for document submission for drug clinical trial applications, which shall be implemented officially starting July 1, 2019	In an effort to expedite the processing of applications for drug clinical trials, the Ministry has established a consultation and counseling mechanism prior to the actual submission of the application. Effective from July 1, 2019, the deadline for additional document submission for drug clinical trial applications has been changed to 14 days and applicants may only make 1 additional submission with no further extensions. Late submissions will not be accepted.

2. Medicine registration management: In 2018, there had been 310 new domestic applications for clinical trials, 192 drug clinical trial reports, 108 new drugs and 202 generic drugs applications approved.

Section 2 Source Management for Medicinal Products

1. As the end of 2018, there were a total of 141 domestic pharmaceutical manufacturers has been authorized and 937 overseas pharmaceutical manufacturers (from 50 countries) has been registered against the PIC/S (Pharmaceutical Inspection Co-operation Scheme) GMP guide.
2. As the end of 2018, for the active pharmaceutical ingredients (API) manufacturer, 263 items of 27 domestic manufacturers met the GMP requirements.The GMP compliance of foreign manufacturers of 1,444 API import licenses has been verified.

Section 3 Supply Chain Monitoring for Drugs

1. The implementation details and schedules of "western pharmaceuticals good distribution practice regulations" was announced. As the end of 2018, 769 companies had applied for GDP inspections and among them 647 had passed the inspections.

2. Drug Quality Monitoring

(1) The results of quality control on medicinal products on the market are listed as follows: 1003 cases of suspected defective drug, 22 cases of drug with suspected therapeutic inequivalence issues and 981 cases of international drug quality (recall) alerts.

(2) In 2018, the TFDA completed lot release for 453 batches, totally 14,826,250 doses of biologics. Meanwhile, the TFDA also successfully blocked two batches, totally 518,405 vials of noncompliant influenza vaccines from entering into Taiwan.

(3) The drug quality monitoring results for 2018 are shown in Table 7-4. The unqualified products were handled as required by law.

Table 7-4 Results of Drug Quality Testing, 2018

Source: Taiwan Food and Drug Administration

Tested Items	No. of reported case	Compliant cases	Compliance rate (%)
Quality Surveillance on the Preparations of Steroids (Betamethasone esters), Antibiotics (Levofloxacin) and Cardiovascular Drugs (Atenolol)	97	93	95.9
Quality Surveillance on Heparin Preparations	45	45	100
Microbiological Survey of domestic non-sterile preparations	206	206	100
Total	348	344	98.9

3. Since its establishment in 2010, the "Counterfeit and Defective Drugs Elimination Team" has maintained an average of at least 1,500 inspections per month. The counterfeit and defective drugs confiscation rate dropped significantly from 27.22% in the early days (in April, 2010) to 0.96% (in December, 2018). See Figure 7-1. 7,111 cases of illegal advertising of food, drugs, and cosmetics were punished,and the fines amounted to NT$232 million. The illegal advertising rate dropped from 13.93% (in January, 2010) to 4.72% (in December, 2018),as shown in Figure 7-2.

Figure 7-1 Violation Rate of Illegal Drugs 2010-2018

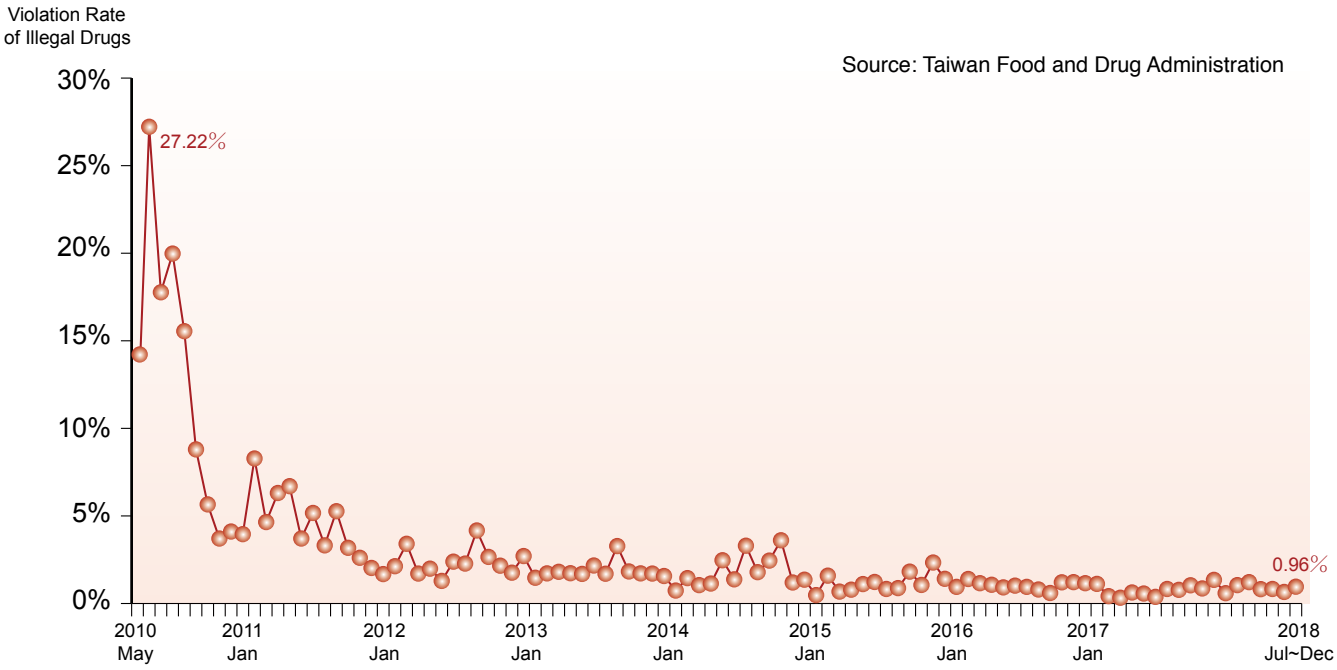
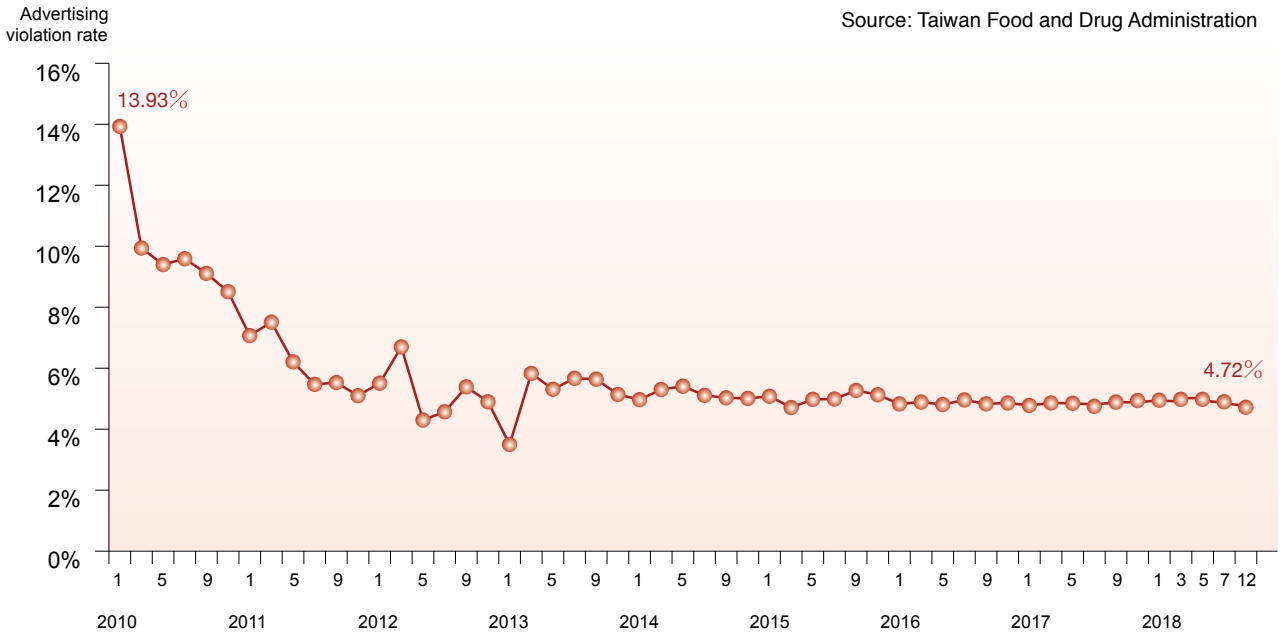


Figure 7-2 Food and Drug Advertisement Violation Rate



Section 4 Management of Drug Safety

1. Drug safety monitoring in 2018: TFDA received 15,713 domestic reports on adverse drug reaction and monitored 107 cases of local and international drug safety alerts. In addition, the Administration conducted drug safety assessment for 51 items and published 12 drug risk communications.
2. In 2018, 185 drug injury relief applications were received, and 114 were approved, the approval rate vis 59.7% and NTD20,079,823 in total.

Section 5 Management of Controlled Drugs

1 A management system was established in accordance with the regulations prescribed in the Controlled Drug Act and in 2018, "Controlled Drugs Review Committee of the Ministry of Health and Welfare" held two meetings for the "Controlled Drugs Review Committee" and announced the addition of two new Schedule 3 controlled drugs on May 11, 2018. These are Methiopropamine (MPA) and Benzedrone (MBC, including its three isomers). Both of these fall under the category of central nervous system stimulants.

2. As of the end of 2018, there were 15,493 institutions and business operators with controlled drug registration certificates and 56,405 practitioners with controlled drug prescription licenses.
3. In 2018, a total of 17,598 on-site inspections were conducted, with a 2.74% violation rate. Violators all received relevant penalties.
4. Seven guidelines and regulations such as "Guidelines and Regulations for Clinicians Long-Term Prescribing Narcotic Analgesics To Patients With Non-cancer Chronic Intractable Pain" were amended in 2018 (Table 7-5) and the "Cancer Pain Treatment Manual" and "Specification for Clinical Use of Narcotic Analgesics" were abolished.
5. Implemented and promoted new-generation anti-drug strategy by announcing the amendment specific portions of "Regulations for the Inspection and Examination of Imported Medicaments" on August 22, 2018 by including substance as a target for inspection. In addition, inspection personnel responsible for this operation are required to use Raman handheld analyzer when performing the check so as to build the spectroscopic database (for substances, drugs and controlled drugs and so forth with 750 entries. Thus far, the database now contains 176 narcotics and emerging standards, with 251 entries of standard quality spectroscopic images in the database, while TFDA continues to aggressively develop relevant information methods.
6. Totally 155 lecturers have trained by hosting seed instructor training and also established 8 anti-drug resource centers cooperating with 85 outreach point to strengthen the drug abuse prevention and control network.

Table 7-5 Amendments of Guidelines and Regulations for the Use of Narcotic Analgesics in 2018

Source: Taiwan Food and Drug Administration

Date	Announcement name	Description of the amendment
December 4	Amendment to the "Guidelines and Regulations for Clinicians Long-Term Prescribing Narcotic Analgesics To Patients With Non-cancer Chronic Intractable Pain".	The "Agreement form" signed by the patients with non-cancer chronic intractable pain who long-term use narcotic analgesics was revised to "Informed Consent Form" with specific portions of the contents revised accordingly.
	Amendment to the "Regulations for Terminal Patient's Use of Addictive Narcotic Drugs at Home".	The "Regulations for the Use of Narcotic Analgesics in Terminal Cancer Patients Receiving Home Care" was amended to the"Regulations for the Use of Narcotic Analgesics in Patients Receiving End-Of-Life Home Care".
	Amendment to the "Guidelines and Regulations for the Use of Narcotic Analgesics in Patient Controlled Analgesia (PCA)".	Added the use guidelines and revised management regulations.
	Amendment to the "Guidelines and Regulations for the Use of Transdermal Fentanyl Patch For Pain Management".	Added the use guidelines and revised regulations regarding prescription days.
	Additional regulation of the "Guidelines and Regulations for the Use of Narcotic Analgesics in Cancer Pain Management".	The guideline for the use of narcotic analgesics was amended to three patient categories: "Non-cancer Patients", "Cancer patients" and "Terminal illness patients". This regulation was added to be used for clinical reference.
	Amended the "Regulations for the Use of Narcotic Analgesics in Hospital Setting".	The "narcotic drugs" was amended to "narcotic analgesics". The "narcotic drugs manager" was amended to "controlled drug managers". "The residue of the controlled drugs from the dispensing and administering of a registrant shall be destroyed by its manager and related people, and records kept for future reference".
	Amendment of specific portions for "Notes on Long-Term Prescription of Narcotic Analgesics for Chronic Non-Cancer Pain Patients by Physicians".	The title of the document has been revised, with the new addition of "Substance use disorder diagnosis standard" as a reference for clinical diagnosis.

Section 6 Management of Chinese Medicine

1. In order to ensure the effectiveness and safety of medicinal products, MOHW announced the "Standards for Stability Testing of Chinese Medicine" on May 29, 2018. The standards came into effect on January 1, 2019.
2. To help Chinese medicine factories catch up with international levels in terms of medicine quality management system while promoting their implementation of validation, MOHW has announced the launch of "Standards of Chinese Medicine Good Manufacturing Validation Procedures" on September 20, 2018 along with its schedule for actual implementation. With the approval from MOHW, the standard will be implemented for Chinese medicine factories producing concentrated preparations starting from January 1, 2020 over four specific stages.
3. The Third Edition of Taiwan Herbal Pharmacopeia was announced for publication on November 2, 2018. In this latest edition, the number of Chinese medicinal ingredients has been increased to 357, with 2 TCM concentrated preparations and 6 endemic species that are only found in Taiwan. The publication is aimed at improving the standard of Chinese medicine quality by raising it to international standards so that the pharmaceutical industry for Chinese medicine will be able to expand their operations through export.
4. To bolster Chinese medicine practitioners' competency and knowledge, MOHW has held 6 seminars on the differentiation of different Chinese medicine materials for manufacturers or dealers of Chinese medicine, and 14 training sessions of validation procedures for Chinese medicine factories.
5. In 2018, 93 GMP Chinese medicine factories completed 42 follow-up inspections according to Regulations of Medicine Manufacturer Inspection, and the pass rate came to 97.6%.
6. Promoted Chinese medicine quality control and Chinese medicine (materials) safety and hygiene management by implementing inspections for 21 materials of Chinese medicine including ginseng roots, Chinese angelica root and so forth. In 2018, 4,059 items (weighing 13,810 tons) were reported; 32 items were found to be noncompliant after inspection. The nonconforming products were returned or destroyed as required by law. Conducted quality monitoring of commercially available Chinese medicine (materials) by testing for heavy metals, sulfur dioxide, aflatoxins and residual pesticides. In 2018, 592 items were inspected and among which 49 items were found to be noncompliant. Noncompliant items are handled according to pertinent law.

7. Administrative penalties of illegal Chinese medicine advertisements were issued for 546 cases, with fines totaling 17.35 million. The unqualified products were handled in strict accordance with pertinent regulations.

Chapter 3 Management of Medical Devices and Cosmetics

To effectively ensure the safety and quality of medical devices and cosmetics, a complete quality management policy was established from the international regulatory harmonization, production source control, pre-market gatekeeping, post-market monitoring and supply chain management.

Section 1 Medical Device and Cosmetics Regulation Standard and Product Review

1. The regulatory environment was adapted to international regulations, and the revisions in 2018 are shown in Table 7-6.
2. In 2018, a total of 174 cases of registration review for innovative medical devices with no similar products were completed, an increase of 6% over 2017. In 2018, Development of 15 domestic preclinical testing guidance documents were completed for medical devices. Examples include “Extracorporeal shock wave lithotripter”, “Laser surgical instrument for use in general, plastic surgery and dermatology”, “Technical Specification for Dengue Virus Nucleic Acid Amplification Test”, “Guidance for Pre-clinical Testing of Dental CT x-ray System” and so forth. In addition, 1,036 medical device international standards and 110 product guidance for medical device were recognized to enhance review consistency and transparency. (The registration data are shown in Table 7-7.)
3. In order to strengthen the domestic medical device regulatory system and enhance alignment with international standards, TFDA established the draft of “Medical Device Act”. This draft completed the article-by-article deliberation on October 25, 2018, and passed the inter-party negotiation in Legislative Yuan on December 14, 2018. Furthermore, efforts have been made to expedite the development of 15 subsidiary regulations and 19 announcements that are related to and support the Act.
4. A comprehensive counseling network for medical devices and cosmetics regulations was established. 18,992 consultation calls were received, of which 10,847 calls for cosmetics regulations consultations. The network promptly responded to questions from all walks of life and posted Q&A on the website of the Food and Drug Administration. The supporting mechanisms for manufacturers of innovative medical devices was implemented, successfully assisting the domestic products such as “Foamagen Dura Substitute”and “Ti-7.5Mo Alloy for dental applications” to be approved for selling.
5. In light of the trends for harmonization in the domain of international regulations, the Office of the President officially enacted the “Cosmetic Hygiene and Safety Act” on May 2, 2018. This new regulation stipulates that cosmetic manufacturers and importers are required to complete product notification, establish product information file and ensure that relevant manufacturing facilities are GMP compliant before products are introduced to the market within specific timeframe so as to create a safer and better environment for cosmetic consumers.

Table 7-6 Important Amendments and Revisions to Regulations Governing Medical Devices and Cosmetics in 2018

Source: Taiwan Food and Drug Administration

Date	Name	Objective of Revision
January 12	Guidelines for Additive Manufactured (3D Printed) of Medical Device	This document clearly defines the scope of management for 3D printed medical Device in Taiwan and provides special considerations in respective parts of the 3D printing technology for management.
March 28	Regulations on the Residue Limit for Impurity Heavy Metal Cadmium Contained in Cosmetics	The Regulation stipulates that the residue limit for impurity heavy metal cadmium in end products may not exceed 5 ppm.
March 28	Regulations on the Management of Barium in Cosmetics	The regulation clearly states that starting from September 1 2018, all cosmetic products containing barium shall be prohibited in manufacturing, import, distribution, supply or display with the intention to sell.
May 2	Announcement of Presidential Order on “Cosmetic Hygiene and Safety Act”	The Act asks that manufacturers are required to complete product registration, establish product information file and comply with cosmetic Good Manufacturing Practice Regulations and so forth in an effort to enhance hygiene and safety management for cosmetic products.
December 17	Guidance on Laboratory Developed Tests and Services (LDTS) for Precision Medicine Molecular Testing	It is harmonized with the ISO 15189 standard and can be used as a reference for molecular testing laboratories in establishing their quality management system. This will strengthenthe quality of molecular testing laboratories in Taiwan and facilitate the development of relevant technologies.

Table 7-7 Statistics of Medical Devices and Cosmetics Applications for Reviews as of 2018

Source: Taiwan Food and Drug Administration

Items	Medical Devices Registration	Medicated Cosmetics Registration
Number of received applications	5,310	1,497
Number of closures	4,969	1,612

Valid Licenses: 45,890 for medical devices, 15,410 for medicated cosmetics

Section 2 Source Management of Medical Devices and Cosmetics

1. All medical device manufacturers were brought under the regulation of medical device GMP. At the end of 2018, valid GMP compliance letters for domestically made medical devices were 748 items; valid quality system documentation compliance letters for imported medical devices were 4,177 items, valid voluntary cosmetic GMP 50 manufacturers.
2. At the end of 2018, there were 16,064 registered cosmetics in cosmetic products notification portal, an increase of 8,511 over 2017.

Section 3 Quality Chain Monitoring of Medical Devices and Cosmetics

1. The quality monitoring results of medical devices and cosmetics are shown in Table 7-8. The unqualified products were handled as required by law.
2. The Food and Drug Administration and the local health bureau jointly inspected the packaging labels of medical equipment and cosmetics. The results are shown in Table 7-9.

Table 7-8 Results of Medical Devices and Cosmetics Surveillance in 2018

Source: Taiwan Food and Drug Administration

Name of Project	Total Cases	Inspection Items			
		Quality		Package Labeling	
		Number of Conformity	Conformity Rate (%)	Number of Conformity	Conformity Rate (%)
Survey on the quality of marketed Surgical gloves in Taiwan	30	29	96.7	21	70.0
Survey of the quality of marketed Canes and Walking aids in Taiwan	28	25	88.2	22	78.6
Medical devices, total	58	54	93.1	43	74.1
Survey on colorants and heavy metals in makeup cosmetics	100	98	98.0	100	100
Survey on Formaldehyde, Methanol, Benzene and Phthalate Esters in marketed perfumes and hair sprays in Taiwan	50	47	94.0	44	88.0
Survey on Microorganisms and Preservatives in marketed baby wipes in Taiwan	30	30	100	22	73.3
Cosmetics, total	180	175	97.2	166	92.2

Table 7-9 Statistical Analysis of Medical Device and Cosmetic Joint Inspection Data, 2018

Source: Taiwan Food and Drug Administration

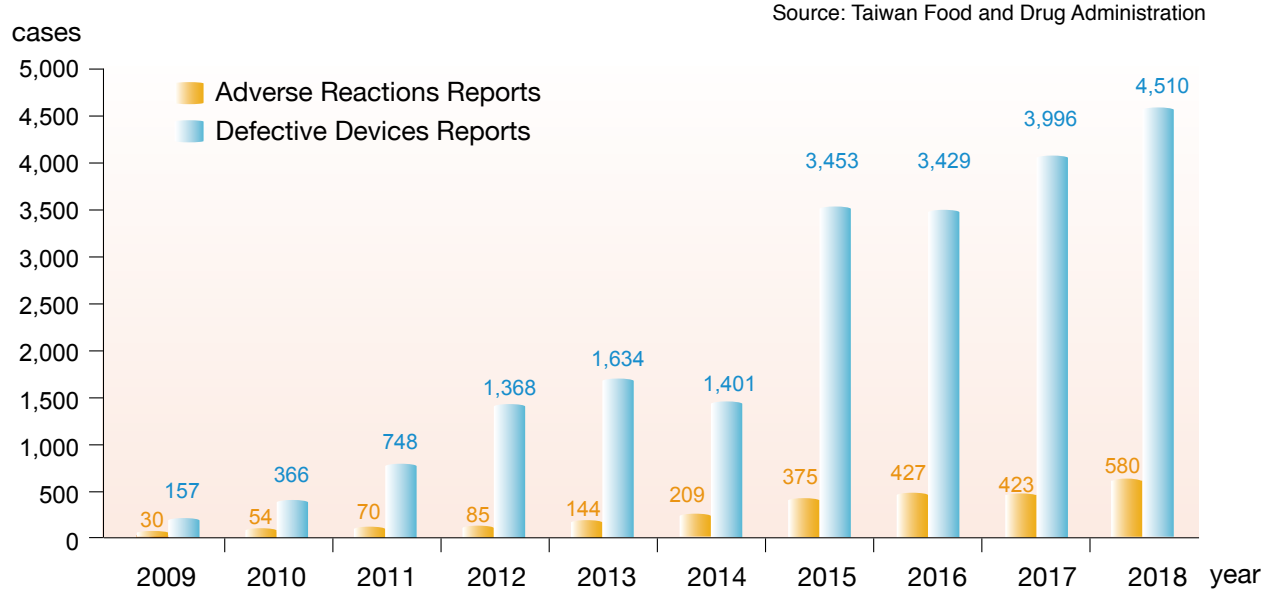
Product Name	Number of Inspected Counties/ Cities	Number of Inspected Stores/ Street Vendors	Product Labeling		
			Inspected Number	Number of Conformity	Conformity Rate (%)
Dental injecting needles	9	29	29	26	89.7
Sutures and implants			53	51	96.2
Low-frequency electric therapy apparatus		69	47	45	95.7
Degree goggles			39	35	89.7
Massage essential oil cosmetics	10	51	75	57	76.0

Section 4 Safety Management of Medical Devices and Cosmetics

1. In 2018, submissions to the Taiwan National Adverse Drug Reactions Reporting System included 4,510 reports of defective medical devices and 580 reports of adverse reactions to medical devices (Figure 7-3). The TFDA, which actively monitors medical device 2,235 safety vigilance information from Taiwan and overseas, translated and issued 143 alerts online for reference by all sectors of society.
2. In 2018, there were 101 reports of adverse events for cosmetics, 277 safety alerts monitored, and 102 consumers "red and green light alerts."

Figure 7-3 Reported Defective Medical Devices and Adverse Reactions to Medical Devices, by Year

Source: Taiwan Food and Drug Administration



Chapter 4 National Laboratories and Risk Management

Continue to improve the functions of national laboratory, construct inspection techniques in line with international trends, improve the development of inspection technology and support administrative management by testing technology; Implement risk management and crisis management mechanisms, complete food and drug safety management system to effectively reduce risks and the impact of crises.

Section 1 Missions and Functions of National Laboratories

1. First, in response to the needs of various types of product inspection, actively develop rapid and accurate inspection methods to quickly clarify the beginning and end of emergencies,propose strategies, and resolve public concerns through press releases and the media. In 2018, 6,967 inspections were carried out, and the number of inspected items was 26,349 including inspection and registration of product application purpose, lot release testing for biologics,customs inspection of condoms, and inspection of emergencies, etc., and inspection technology and support were provided to government agencies.
2. TFDA continued to improve and expand inspection technology and capacity, also formulated technical documents for use to all relevant interested parties. In 2018, TFDA published 42 announcements on new, revised and corrected testing methods for food products, and 24 articles on recommended testing methods for foods, 11 for cosmetics and 4 for medicines and controlled drugs.
3. In 2018, the National Laboratories took part in 17 international proficiency testing in food, medicine and cosmetics, with all outcomes being satisfactory as the Laboratories' capabilities for inspection received international recognition.
4. In 2018, TFDA held many international events, including the "2018 APEC Workshop on Food Safety and Food Adulterated with Drugs", "2018 APEC Workshop on the Analytical Technology of New Psychoactive Substances" and "Conference on Medical Devices Evaluation Technology of Asia" to facilitate technical exchanges and sharing of experiences with other participants.
5. TFDA National Laboratory has been officially notified to be an associate member of General European Official Medicines Control Laboratory Network (GEON) on March 2, 2018. It specifies that TFDA National Laboratory in the field of quality control of vaccines and other biologics for human use has been internationally recognized, being an internationally recognized laboratory

Section 2 Risk Management and Crisis Management Mechanisms

1. Organizational risk management:

The Ministry has continued to implement its "Risk Management and Crisis Handling Training" by inviting relevant experts to give lectures on topics such as "Risk Management and Crisis Handling - Experience from the Centers for Disease Control" and "Food Safety and Risk Governance". These lectures featured actual instances of risk management and crisis handling at different administrative agencies to deepen participants' risk identification and crisis prevention while raising their awareness for risk management and crisis handling, thereby cultivating the culture of risk management in the organization. A total of 224 participants attended the training, which also offered risk forecast and detection using relevant big data. The Ministry has also held its Annual Risk Review Meeting, in which 9 major risk items including "Food poisoning", "Excessive food additives", "Import food control" and so forth were identified and established. With these items established, the Ministry strengthened the management for relevant items, assessed the risks and formulated response strategies in order to reduce the likelihood of major events from happening and potential impact on the Ministry.

2. Handling of major crisis:

Once a major incident has been confirmed, the Ministry would activate its crisis handling mechanism immediately. In response to the 0206 Hualien Earthquake disaster and the unfortunate train crash that took place on October 21, the Ministry activated its major emergency medicine shortage monitoring mechanism and initiated its disaster prevention medical supplies deployment support system to achieve sustained monitoring of medicine shortage in the disaster struck areas. During these disasters, the Ministry allocated 32 crates of medical supplies (containing 27 medicinal products and 5 medical devices including antibiotics, infusion solutions, gauze, bandages and other medications for external injuries) donated by the Singaporean government to hospitals in the impacted areas to ensure that injured victims would have access to medication as the Ministry put its emergency response mechanism into operation.

Section 3 Local and Private Laboratory Accreditation and Management

1. Through the "Regional Integrated Laboratory Testing System," TFDA continuously coordinate and assist designated test items. The local health bureau's self-test ability rate was improved to 85%. As the end of 2018, 890 items passed the laboratory accreditation of the TFDA, and the pass rate of designated test items was 98.3%.
2. In order to expand the domestic testing capacity, the number of private testing institutions and test items accredited by TFDA reached 131 and 1,629 items, which is 5.6% higher than last year, as shown in Figures 7-4 and 7-5. The satisfaction rate of the drug and cosmetics proficiency test reached 85.9%.

Figure 7-4 TFDA-Accredited Testing Institutions, by Year

Source: Taiwan Food and Drug Administration

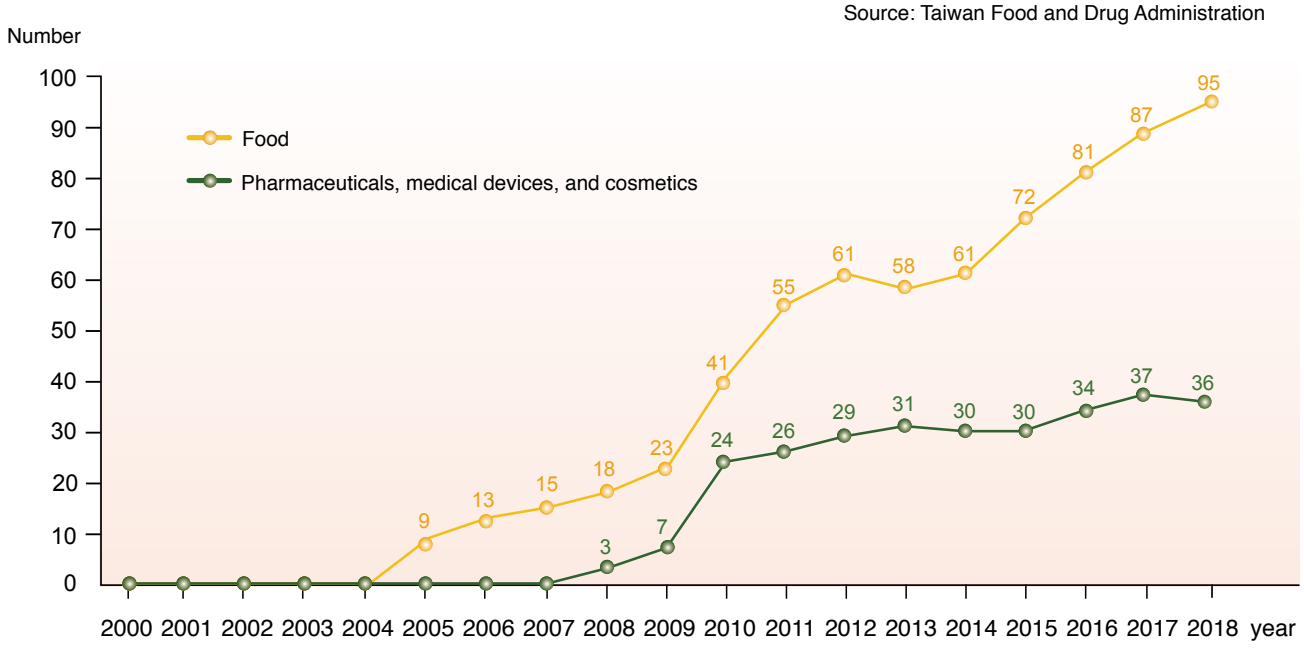
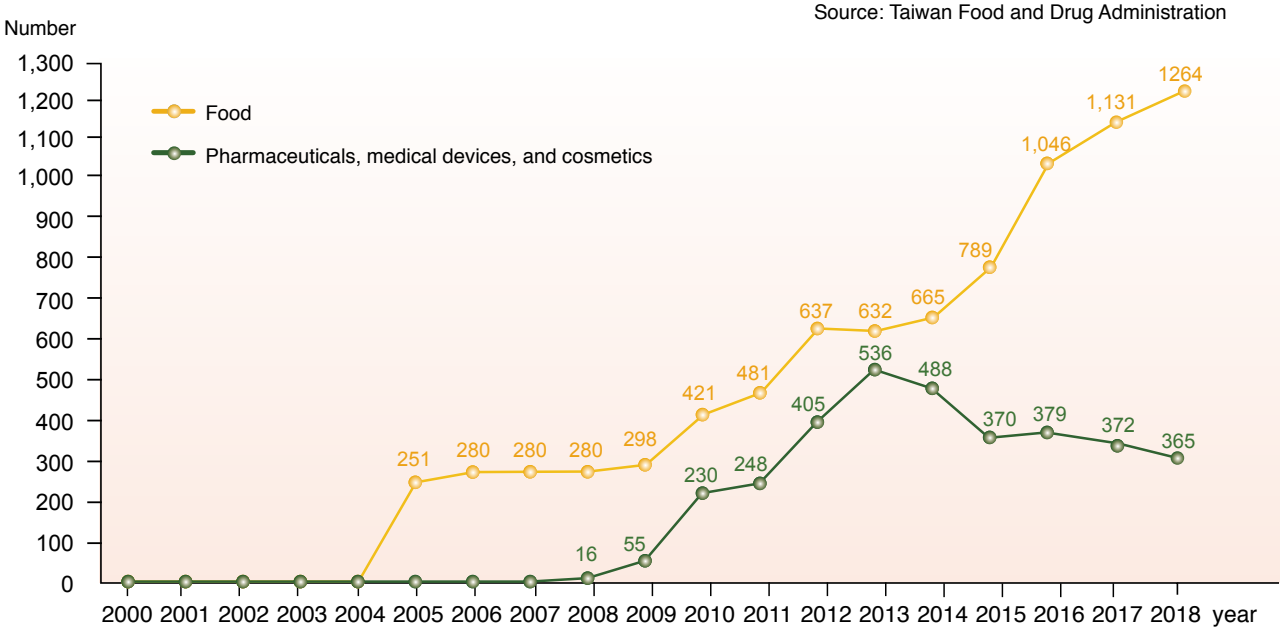


Figure 7-5 Accredited Items of TFDA-Accredited Testing Institutions, by Year

Source: Taiwan Food and Drug Administration



3. In response to the incident arising from the impurities of nitrosamine (NDMA) in angiotensin II receptor blockers such as valsartan, the TFDA launched an emergency mobilization involving private laboratories with the capabilities to test for NDMA and NDEA in Sartan ingredients" and announced the list of the two laboratories involved.

Chapter 5 Consumer Protection and Communication

Through the new communication channels, by means of "offline to online" new media marketing methods, the safety risk education and governance messages were circulated, and a new health education and policy marketing model was established, in an attempt to achieve effective policy advocacy.

Section 1 Keeping Consumers Informed

1. The "Articles of Food and Drugs" (Website: http://fda-article.consumer.fda.gov.tw/) website was set up to provide information and knowledge on food and medicine. Sections such as "Rumor Buster" and "Rumors Collection Mailbox"were established for rumor clarification and to rumor collection. By the end of 2018, more than 430 articles were posted on the website, accumulating 1,263,251 visitors.
2. The latest health education information is posted to the Facebook fan page "TFDA" (Website: https://www.facebook.com/tfda2014.tw/) which has more than 100,000 followers.
3. The TFDA collected rumors and provided clarification through "Food and Drugs Rumor Buster" on its official website. 353 messages were released, with more than 8.92 million hits and articles being referenced for more than 2,285 times by the media.

4. TFDA has established a section on "New Psychoactive Substance Abuse" on its website as a place for the general public to find out the latest status in new psychoactive substance (NPS) abuse and investigation in Taiwan, along with other information such as a list of approved testing institutions that provide urine sample testing to detect substance abuse, the list of detectable drugs that can be tested using a urine sample test kit, and the "Statistics on Substance Abuse Cases and Inspections Chart" as shown in Figure 7-6.

Section 2 Consumer Communication and Campaigns

1. The national food safety hotline "1919" and citizen service hotline "02-27878200" have received more than 70,000 calls made in 2018 and received 92 cases of grievances. The service rate for the hotlines has exceeded 90%, with the callers' satisfaction also at 80%.
2. TFDA publishes a column titled "Food Frontline" in all major newspapers and strives to interact with the general public at various food events and shows to disseminate concepts of food safety. In addition, TFDA has also published a magazine titled "Keeping Bacteria and Virus Out" that is aimed at delivering the right dietary habits and tips for the general public to pay attentions to specific details in the process of food preparation. The magazine also teaches children to learn the cause of food poisoning by microorganism from a scientific perspective and ways to prevent food poisoning in the hopes of entrenching the knowledge of food safety for the younger populations.

2018 Statistics on Substance Abuse Cases and Tests

3. TFDA collaborated with 18 private organizations and organized 422 sessions of substance prevention promotional event and posted the "2018 Substance Abuse Prevention Guidelines" and a poster "4 Signs Of Drug Addiction" in the Anti-drug resource Section. As of the end of 2018, approximately 529,000 visitors have browsed the page.
4. TFDA held three large-scale events in 2018 along with 317 seminar on the promotion of food safety. These events attracted a total of 9,000 participants and they reflect TFDA's hopes of disseminating the right values and knowledge in communities and schools so as to boost the general public's knowledge for safe medicine use.

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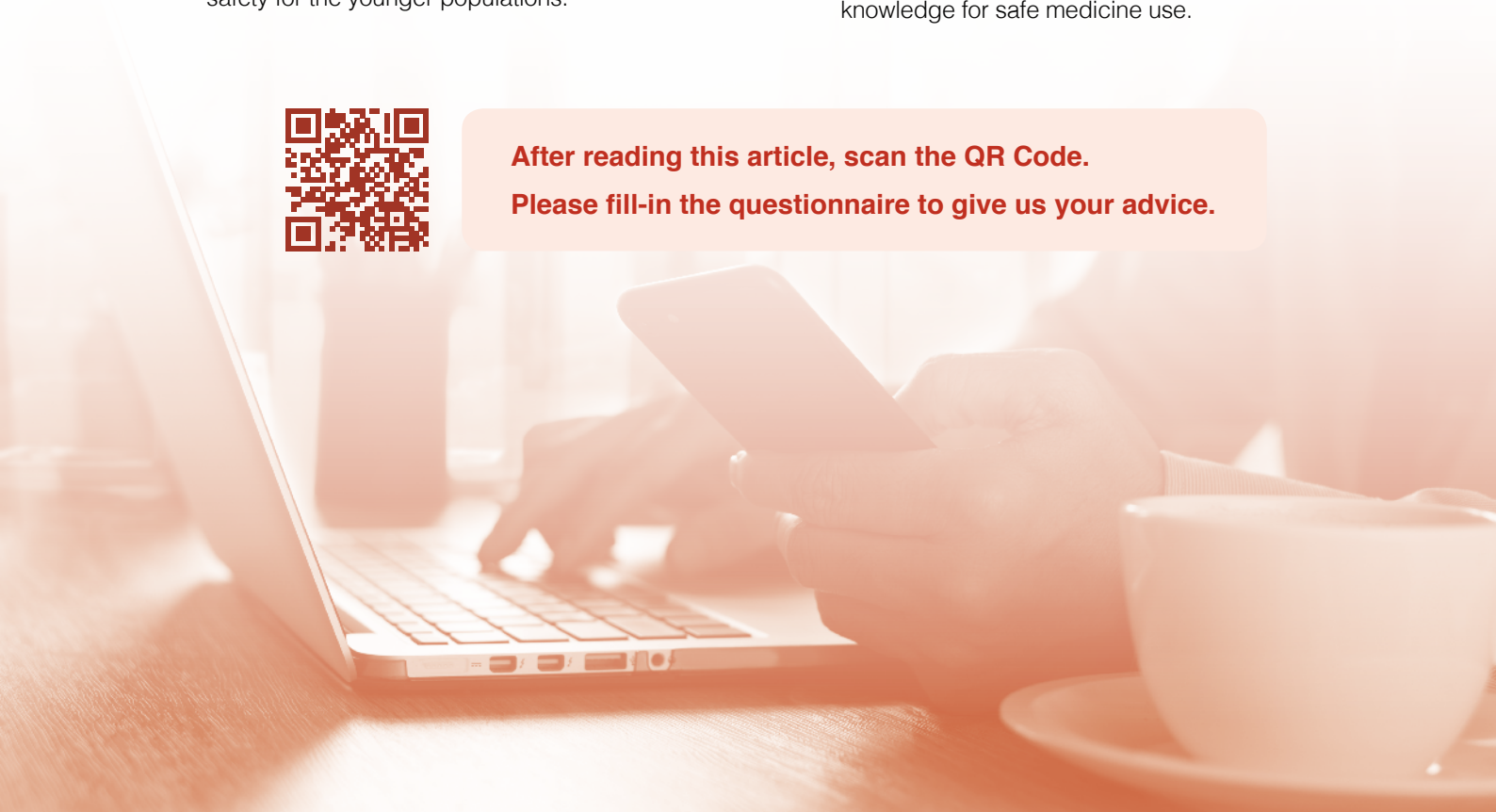


8 National Health Insurance and National Pension

- Chapter 1 National Health Insurance
- Chapter 2 National Pension System

To help protect people against financial hardship due to birth, old age, illness, death, disability and unemployment; a sound social security system has been established under the principles of mutual assistance and risk sharing.

Chapter 1 National Health Insurance

Section 1 Current Status of National Health Insurance

After many years of hard work, Taiwan's National Health Insurance (NHI) has attracted global attention for its "universality, affordability, convenience, and high customer satisfaction." It has maintained not only a satisfaction rate of over 80% domestically (Figure 8-1.), but has also attracted numerous foreigners to Taiwan to learn about its advantages.

By the end of 2018, the total number of insured people was 23.948 million, and the NHI coverage rate hovered around 99.82%. As much as 92.8% of the medical institutions in Taiwan have signed contracts with the National Health Insurance Administration (NHIA) enabling improved healthcare access.

Health insurance funding mainly derives from insurance premiums paid by the insured, their employers and the government; a small portion also comes from external financial resources: Public Welfare Lottery Surpluses and Welfare Surcharge on Tobacco Products. At the end of 2018, the cumulative surplus of NHI was NT$210.9 billion, showing that finance status of NHI was in good shape.

Section 2 Universal Coverage and Easy Access to Healthcare

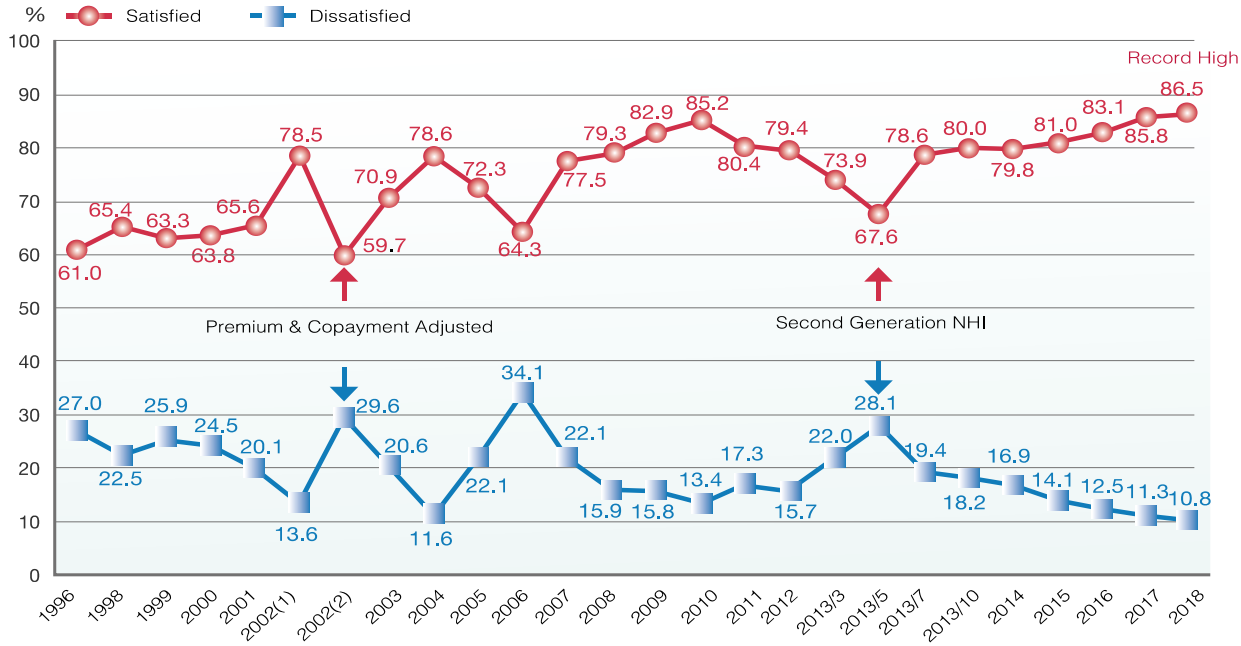
In 2018, the total number of outpatient visits was 357.74 million; the total number of hospitalizations was 3.43 million. While the average number of outpatient visits per person per year was 15 (combining Western medicine, Chinese medicine and dental clinics), the number of hospitalizations per person per year was 0.14. The average length of hospital stay was 1.36 days.

By the end of 2018, the number of health facilities having contracts with NHI reached 28,753, of which 21,292 were contracted hospitals and clinics that account for 92.8% of the total medical institutions nationwide. The insureds may choose their healthcare providers.

Since June 2016, the Ministry of Health and Welfare (MOHW) has been working to enhance the system's efficiency and cost-effectiveness; i.e. primary care physicians (PCPs) will gradually play an important role as entry point or gatekeepers to Taiwan's healthcare system. MOHW has formulated six major strategies and related measures to encourage people to see their PCPs as coordinators of health-related services. If the PCP deems

Figure 8-1 Trends in satisfaction with National Health Insurance

Source: National Health Insurance Administration, MOHW



it medically necessary for the patient to see a specialist, the patient will be referred accordingly. This plan calls for major medical centers to focus on intensive care and medical research, and for primary care facilities to serve as the gatekeepers for public health. The proportion of outpatient visits for all levels of institutions over the last decade showed that in 2018 there was a reversal in the proportion of visits to clinics and district hospitals (64.7%), while visits to medical centers and regional hospitals decreased slightly as well (Figure 8-2).

The vertical integration of the healthcare system is being actively promoted by NHIA by applying a patient-centric approach to the evaluation of people's care requirements so that they can be transferred to an appropriate district hospital, clinic or long-term care institution for proper care or treatment. A total of 78 strategic alliances had been established by the end of 2018 involving 7,056 contracted institutions (including 25 medical centers, 81 regional hospitals, 298 district hospitals, 6,535 clinics, 113 home nursing care institutions, 3 recovery homes, and 1 midwifery clinic).

To promote tiered medical care and improve referral efficiency, an electronic referral platform that strengthened the referral process and two-way communications was introduced by the NHIA on March 1, 2017. The system was used by 9,568 institutions during the course of 2018 and approximately 705,000 referrals were made.

Section 3 Improving Finances by Establishing a Linkage Mechanism between Revenues and Expenditures

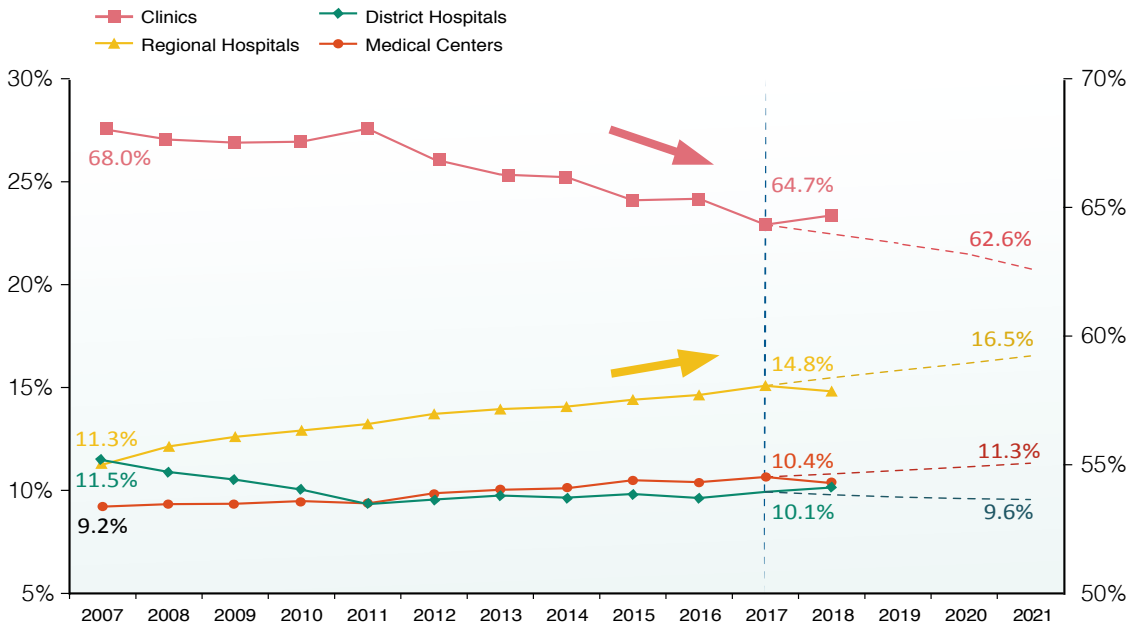
After implementing the Second-Generation NHI, the distribution of health-insurance burden has become more equitable due to the expansion of the premium base that includes increased supplementary premium and the government contributions, and the resulting funding gap was significantly reduced. At the end of 2018, the balance sheet for the year headed up NT$210.9 billion as shown in Figure 8-3. Approximately NT$46.4 billion in supplementary premiums were collected in 2018.

The "National Health Insurance Financial Balance and Revenue/ Expenditure Linkage Mechanism" was defined by the 2nd Generation National Health Insurance to ensure the sustainability of NHI and for computing the following year's premium rate. In 2018 the regular insurance premium rate was kept at 4.69% and the supplemental premium rate at 1.91%.

Presently, the system is financially sound; however, due to factors such as an aging population and recent medical advances, financial pressure will continue to mount in the foreseeable future. The MOHW will keep refining the insurance system to ensure its long-term stability and a fairer burden-sharing among insureds.

Figure 8-2 Trends in Western medicine outpatient visits at each level

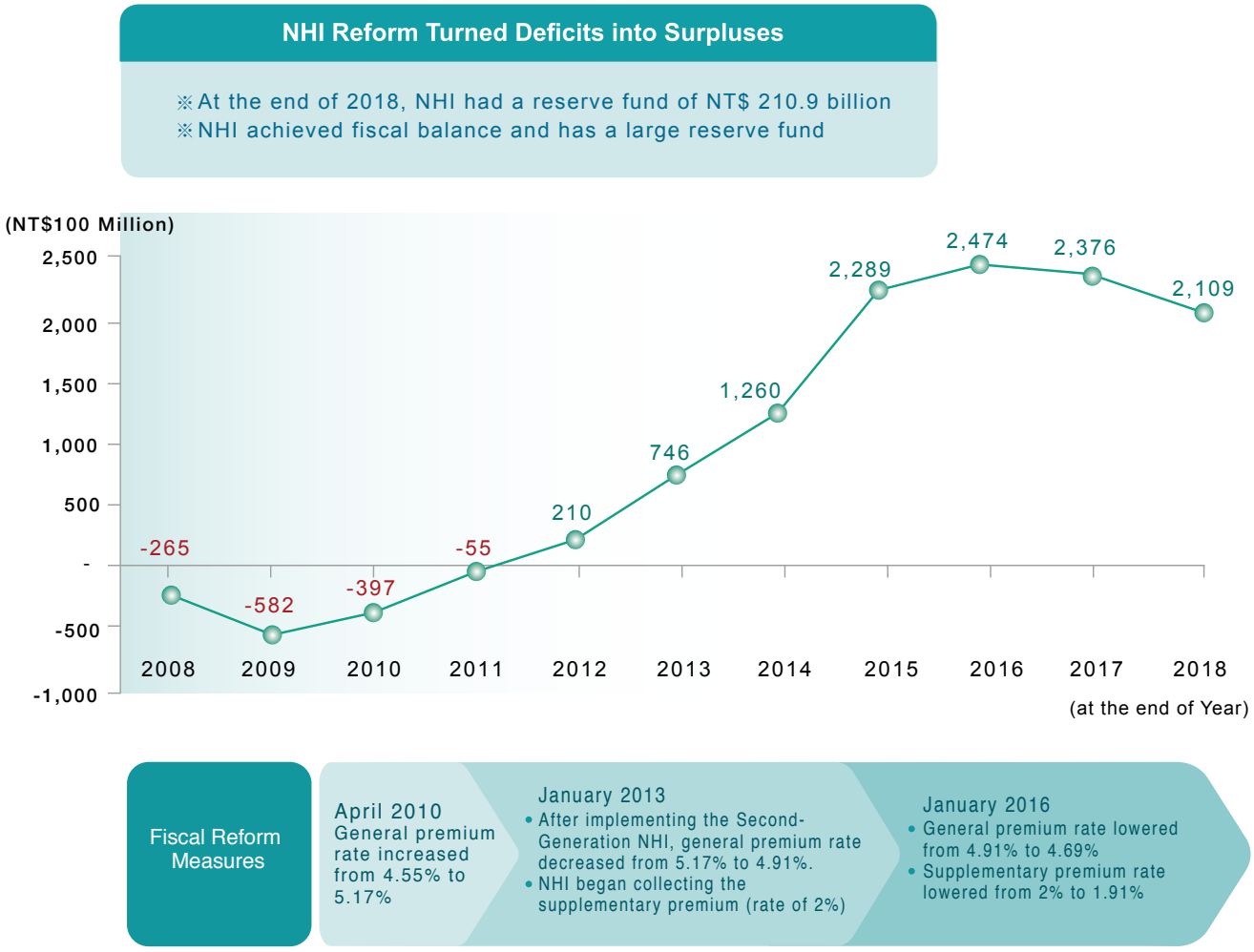
Source: National Health Insurance Administration, MOHW



Note: The number of cases and Relative Value Unit (RVU) in 2018 were estimated using the compounded annual growth rate of cases over the last 10 years.

Figure 8-3 Reserve Fund, Before and After Implementation of the Second-Generation NHI

Source: National Health Insurance Administration, MOHW



Section 4 Diverse Payment Methods and Rational Management

The main payment method for NHI medical services has been "Fee-for-Service" (FFS). To effectively control the growth in medical expenses, the Global Budget Payment System was introduced in July 2002 and this has kept the annual growth in medical expenditure at approximately 5%. Meanwhile, through diverse payment methods such as Case Payment and Pay-for-Performance (P4P) reform programs, quality of care can be improved through encouraging first-contact care, increasing coordination of services, and reducing redundant or improper care. On January 1, 2010, Taiwan Diagnosis Related Groups (Tw-DRGs) was enforced, while its second phase was enforced on July 1, 2014.

The "NHI High-utilization Patient Counseling Program" provide counseling to people that made more than 90 outpatient visits in the preceding year. If there was no significant improvement after one year of counseling and the user was determined by a review physician to be engaging in abnormal seeking of medical care, no payments will be made unless they seek treatment at designated institutions (except in the case of emergency). In terms of counseling effectiveness, counseling of people who used outpatient services more than 90 times in 2017 saw the number of average visits reduced by 18% in 2018. Medical costs were also reduced by approximately NT$528 million.

The Integrated Home Care Plan had 214 participating care providers at the end of 2018 including 2,384 institutions. A total of 57,750 people were provided with care services during the course of 2018.

Post-Acute Care (PAC) program established "PAC Teams" at district and regional hospitals for the treatment of stroke, burn, traumatic nerve injury, fragility fracture, heart failure and frail elderly patients. PAC Teams provide such patients with integrated care during the golden treatment period

such as intensive physiotherapy, occupational therapy, and language therapy as well as social workers and nutritionists. A total of 38 teams and 202 hospitals are currently in the program. More than 17,000 cases were accepted during the course of 2018. In 70% of the patients clear progress was made in their function with their score for Activities of Daily Living (ADLs) improving from 39 to 64. 88% of the patients were able to return home.

As part of continuing reviews of ensure reasonable payment schedules, the budget increase (of NT$2.698 billion) from the "Change to Cost of Medical Services Index" to the hospital global budget was earmarked for improving the quality of critical care (such as intensive care wards) and to continue supporting "Nurse-to-Patient Ratio and NHI Payment Linkage." These included a 5% increase to the nursing fee for intensive care beds, changing the nurse-to-patient ratio bonus ratio range from 3% ~ 14% to 2% ~ 20%, and giving hospitals with better nurse-to-patient ratios more bonus incentives; on Relative Value Unit (RVU) adjustments for specified treatment items, the RVU for 11 items including wound treatment, surgical/wound treatment and dressing change, CPR and catheter implantation for continuous ambulatory peritoneal dialysis were increased; hospital outpatient volume controls for regional and higher level hospitals were also suspended as of December 1, 2018 (excluding outpatient volume control of psychiatric departments); at the same time, clinics were encouraged to stay open on public holidays, the outpatient examination fee for district hospitals on Saturdays/Sundays and national holidays was increased by 100 RVU and 150 RVU respectively, and a 30% modifier (excluding drugs, special materials, and outpatient examination) applied to outpatient medical services (not including the emergency department). The clinic global budget also set aside NT$450 million to pay the performance of 6 service items including "Pulse or ear oximetry - time" from February 1, 2018, and another 3 service items including "vaginal ultrasound" from June 1, 2018 at the clinic level.

Differences over professional review opinions led to members of the public calling for the NHIA to publish the names of reviewers for the sake of accountability. The "Named Professional Double Review" pilot plan was therefore introduced by NHIA in October 2016 for the medical expenditures in the global hospital budget. The "Professional Double Review" meant two physicians were assigned to review specific cases while "Named Review" was divided into the "Named Reviewer for Individual Deduction Cases" and "Named Group" categories. The first category was trialed for 7 departments (pediatrics, obstetrics and gynecology, otorhinolaryngology, ophthalomology, neurology, psychiatry and urology) in selected regions; for the latter category, the names of reviewers for each department were published on the NHI information system. The overall rate of consent among reviewers in 2018 was 52%. Since the launching of the pilot plan, the number of disputed medical deduction cases requiring review decreased from 65,000 cases in 2017 to 47,000 cases in 2018 so the goal of "reducing disparity in individual professional opinions and improving reasonable deductions to medical expenditures" has been achieved.

The introduction of a new full oral drug for treating Hepatitis C with improved cure rate, reduced side effects and a shorter course of treatment led to NHI earmarking NT$3.101 billion from the 2017 total medical budget for the funding of Hepatitis C drugs. NHI coverage of the new Hepatitis C drug was added in January, 2017, and in 2018 the budget was increased to NT$4.936 billion. Approximately 29,000 individual cases benefited as a result over two years. Viral testing of patients 12 weeks after the completion of their treatment course found that the treatment was successful in 97% of the cases with no detectable viral count.

Section 5 Disclosure of Information to Improve Quality

Information on NHI services such as the quality of care at contracted medical service providers, scope of payments, the financial reports submitted by each hospital, the current status of medical services at each hospital (e.g., number of beds, number of outpatient claims and RVUs), average daily nurse-to-patient ratio, and the quality of care at individual hospitals are all published on the NHIA global website. Such information provide the general public and interested parties with a macroscopic view of medical institutions' business performance. The exposure of serious violations is also to push for improvements in care quality by medical service providers.

NHIA has set up a "Balance-billing Medical Materials Price Comparison Website" to push for greater transparency in Balance-billing medical materials. The general public can now compare the prices for self-paid or self-payment gap items (such as drug-eluting coronary stents, special function artificial intraocular lens, and artificial hip joints) charged by each hospital.

The NHIA website has also established a "Patient Opinion Sharing Platform" (https://www.nhi.gov.tw) to allow public review of new drugs under consideration for NHI coverage. The platform will continuously update new drugs and new implant materials. The patients/patient groups/caregivers can make suggestions or provide their experiences of care and treatment outcomes.

Section 6 Care for the Disadvantaged in Remote Areas

1. Subsidies for the Economically Disadvantaged

(1) Besides subsidizing premiums for specific underprivileged groups, there are other assistance measures as shown in Table 8-1.

(2) Since June 7, 2016, NHI has implemented "Decoupling of the Payment of Premiums from the Right to Receive Medical Care," (NHI card unlocking) after which people can seek medical treatment as long as they apply for insurance.

(3) Using Feedback Fund of Public Welfare Lottery to Reduce the Financial Burden of Health Care for the Disadvantaged: Assistance provided in 2018 included payment of NHI premium arrears and fees associated with treatment. Assistance was provided 44,000 cases of people, with approximately NT$248 million in total.

Table 8-1 2018 NHI Premium Subsidies for the Disadvantaged

Source: National Health Insurance Administration, MOHW

Item	Beneficiaries	Total Assisted	Total Contribution
Premium Subsidies	Low-income households, lower- middle- income households, unemployed veterans, unemployed laborers and their families, disabled persons, unemployed indigenous peoples below age 20 or above age 55	3.055 million persons	NT$ 25.2 billion
Relief Fund Loans	People qualified "economic hardships"	2,406 cases	NT$ 180 million
Payment by Installments	People unable to fulfill their payment obligations at once	81,000 cases	NT$ 2.31 billion
Charity Donation Referrals	People unable to pay their premiums	5,749 cases	NT$ 25.79 million

2. Caring for Indigenous People and Underserved, Remote Populations

(1) Plan for Improving Health Care in Remote Regions via Integrated Delivery Systems: As of 2018, 50 mountainous and offshore island areas were included in the project, and the people in these regions are exempted from copayments. 26 contracted institutions are involved serving more than 470,000 people. Overall, local people showed 93% satisfaction rate for this project.

(2) Plan for Improving Health Care Treatment in Areas with Insufficient Resources: the program was started in 2012 possessing a special budget to encourage regional hospitals in underserved areas to provide 24-hour emergency care, internal medicine, surgery, obstetrics & gynecology and pediatric outpatient/inpatient care. The maximum subsidy for each hospital amounted to NT$15 million, the maximum annual subsidy for the hospitals that had no 24-hour emergency service but can provide the other needed medical services will be reimbursed NT$1 million. New regional hospitals were added to the "Emergency Responsible Hospitals for Medical Underserved Areas. Hospitals caring for patients with level 1 or 2 trauma will be given NT$1 per point for 10 days of hospitalization. The guaranteed amount for each hospital is capped at NT$5 million. In 2018, 91 regional hospitals participated in the project.

(3) The NHIA has been devoting an additional NT$680 million annually in underserved areas. It aims to encourage dental, Chinese and Western medicine practitioners to work in these regions to deliver better local services. In 2018, 578 contracted institutions rotated in these underserved areas serving more than 660,000 people.

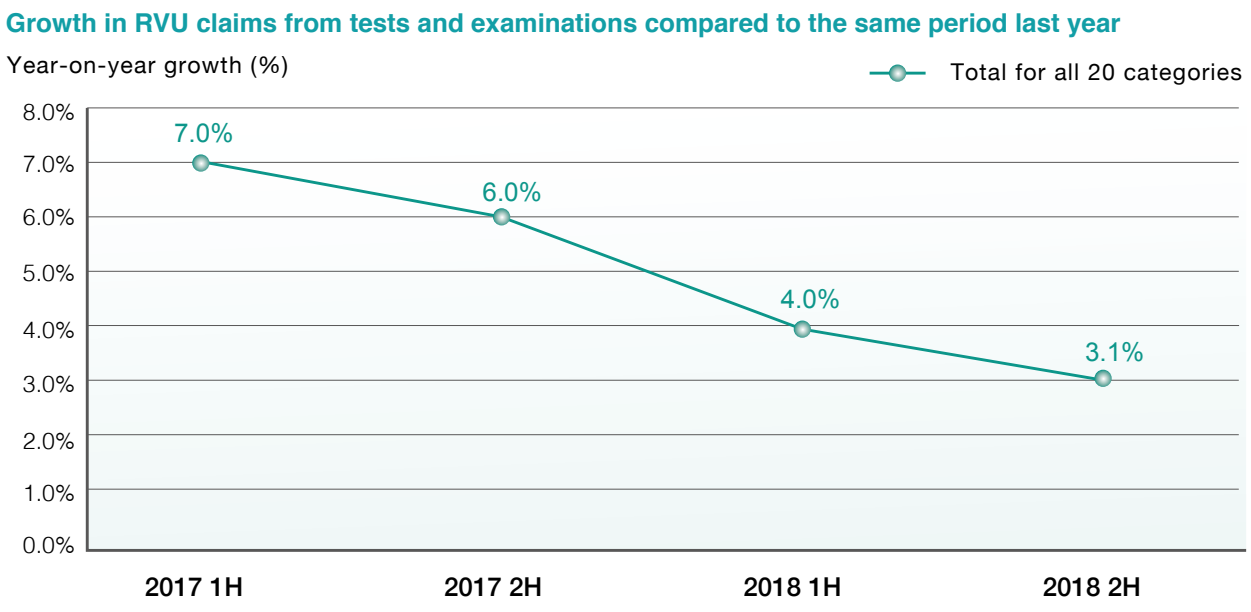
(4) According to National Health Insurance Act and Article 60 of the Enforcement Rules of the National Health Insurance Act, residents in underserved regions are entitled to a 20% copayment discount for the outpatient, emergency and home care services.

3. Caring for Patients with Major Illnesses and Injuries or Rare Diseases

(1) The insured who has obtained a major illness and injury certificate can be exempted from the copayments. By the end of December 2018, over 950,000 major illness/ injury certificate were issued (the number of patients was 890,000 accounting for 3.7% of the total insured), while the expenses for major injury/ disease in 2018 stood at about NT$204.4 billion (accounting for 27.6% of total annual medical expenditure).

Figure 8-4 Growth in RVU claims for 20 categories of managed outpatient tests and examinations

Source: National Health Insurance Administration, MOHW



(2) People with rare MOHW-certified diseases that appear on NHI's major injury/disease list, could not only be exempted from copayments, but also be fully covered for the use of medicines designated by the MOHW as necessary treatment for these rare diseases. As of the end of December 2018, 10,292 major illness and injury certificate were approved.

Section 7 Using Technology to Increase Efficiency

Taiwan is one of the few Asian countries to use smart chip cards as insurance certificates. It has improved administrative efficiency, and allowed health insurance cards to record major illnesses/injuries, drug allergies, health notifications (including prescriptions, testing and examinations). The card also can record the owner's organ donation designation, and his/her willingness to receive hospice palliative care and/ or cardiopulmonary resuscitation or advance decision notation.

The uploading, retrieval and sharing of medical imagery was added to the services provided by NHIA's "NHI MediCloud System" in 2018. Twelve query services had been added by the end of 2018 including: PharmaCloud (Western medication record), traditional Chinese medication record, drug allergies, special controlled medication record, specific clotting factor medication record, test/examination records and results, dental treatment and surgical records, rehabilitation care, surgical records, discharge summaries, and Centers for Disease Control immunizations. Query services were activated by 25,885 medical service providers in 2018, with an average of 31 million queries per month. Around 86.5% of all those seeking treatment used the query service. Further analysis of patients whose medication records were queried showed that the rate of redundant prescriptions by multiple medical service providers in six categories (anti-hypertensive, anti-hyperlipidemic, hypoglycemic, sedative-hypnotic, anti-psychotic, and anti-depressant) have been decreasing every year. The system is therefore effectively helping to prevent redundant medication. There was a decrease in the amount of RVU claimed for 20 types of outpatient examinations including computed tomography scan (CT), magnetic resonance imaging (MRI) and blood tests in the first half of 2018 compared to 2017 as shown in Figure 8-4. Medical service providers can now retrieve medical images from other institutions. This saves NHI approximately 67 million RVUs a month, or up to 800 million RVUs a year.

The NHIA picture archiving and communication system has collected approximately 1.3 billion medical images including CT and MRI scans as of January 2018. Hospitals and schools have partnered with the industry to apply for access to anonymized CT/MRI medical imagery. These will be used to realize the goal of precision medicine through deep learning and training of AI models.

To enhance public control over their own health and medical treatment, people can now register with the "My Health Bank "system to query or download their personal medical information including outpatient, inpatient, medication, surgery, allergies, test (examination) results, imagery or pathology tests, discharge summaries, organ donation/palliative care consent/advanced decision, adult preventive health exam results, screening results for 4 types of cancer, and immunization records. The content and functionality of My Health Bank is continuing to be refined as well. The "National Health Insurance Action Express" app for logging into My Health Bank over a verified mobile phone was added in May, 2018, and recording of information from self-paid health exams was added in December 2018. At the end of December, 2018, My Health Bank had been used by 1,055,000 people more than 9,830,000 times.

Since July 2018, members of the public can now use the Taiwan Mobile Payment app to scan the QR (Quick Response) code on their payment form and pay their NHI premiums with ease at any time and place.

Chapter 2 National Pension System

Taiwan's National Pension Insurance (NPI) was established on October 1, 2008 to cover citizens aged between 25 and 65 years old who do not participate in related social insurances for military personnel, civil servants and teachers, laborers, or farmers. By providing basic economic security for insured persons and their families when insured persons become old or face maternity, disability,or death, NPI is a key milestone on the road to comprehensive social security. Establishment of NPI marked the start of a new era for Taiwan.

Section 1 Status of National Pension System

1. There were 3,286,664 insured persons of NPI in December 2018.
2. Insurance premium rate: 8.5% (insurance premium is calculated based on monthly insured amount and insurance premium rate).
3. Insurance Premium Subsidy rate：General insured persons receive 40% (NT$622 a month) in government subsidies. For middle-low income insured persons or disabled insured persons with mild or medium disability, the government will subsidy 55% (NT$855) or 70% (NT$1,088) of the premiums. For low-income households insured persons or disabled insured persons with a severe or extremely-disability, the government will subsidy 100% (NT$1,554) of the premiums
4. Monthly insurance amount: NT$18,282.
5. Premium Payment Rate of the Insured: From the establishment of NPI (on October 1, 2008) to 2018, receivable premiums of insured persons were more than NT$318.4 billion and more than NT$178.8 billion was received. The payment rate was 56.15%.
6. Payment items
   (1) Insurance Payments: Include old age pension payments, maternity payments, mental/physical disability pension payments, funeral payments, and surviving family pension payments.
   (2) Other Payments: Include old age basic guaranteed pension payments, mental/physical disability basic guaranteed pension payments, and aboriginal pension payments.
7. Financial Status of the NPI Fund: Diversification of domestic and foreign assets allocation to balance returns and security. NT$310.4 billion of the NPI fund were under utilization at the end of 2018.

Table 8-2 Insured Persons and Ratios of NPI, December 2018

Source: Bureau of Labor Insurance (hereafter referred to as BLI)

Classification	Insured Persons	Ratio (%)
General Insured Persons	2,820,384	85.81
Low-Income Households	69,978	2.13
Persons with Severe or Extremely Disability	92,740	2.82
Persons with Medium Disability	73,670	2.24
Persons with Mild Disability	60,185	1.83
Middle-low income persons (income less than 1.5-fold minimum cost of living)	121,694	3.70
Middle-low income persons (income less than 2-fold minimum cost of living)	48,013	1.46
Total	3,286,664	100

Table 8-3 NPI Benefit Recipients and Payments, 2018 (separated by gender)

Source: Bureau of Labor Insurance

Payment Type		Recipients (People)			2018 Payment Amounts (NT$1,000s)		
		Male	Female	Total	Male	Female	Total
Insurance Payments	Old Age Pension Payments	449,553	558,162	1,007,715	19,164,415	24,880,303	44,044,718
	Maternity Payments	0	20,231	20,231	0	727,302	727,302
	Mental/Physical Disability Pension Payments	4,268	2,974	7,242	177,927	140,250	318,177
	Funeral Payments	8,966	4,013	12,979	819,231	366,683	1,185,914
	Surviving Family Pension Payments	65,021	21,709	86,730	2,988,970	997,839	3,986,809
	Subtotal	527,808	607,089	1,134,897	23,150,543	27,112,377	50,262,920
Other Payment	Old Age Basic Guaranteed Pension Payments	209,572	364,436	574,008	9,408,751	16,341,617	25,750,368
	Mental/Physical Disability Basic Guaranteed Pension Payments	10,512	9,903	20,415	620,330	588,116	1,208,446
	Aboriginal Pension Payments	15,842	25,036	40,878	685,205	1,076,001	1,761,206
	Subtotal	235,926	399,375	635,301	10,714,286	18,005,734	28,720,020
Total		763,734	1,006,464	1,770,198	33,864,829	45,118,111	78,982,940

Note: Recipients of lump sum payments are accumulated of the persons per month over the course of the year. Recipients of pension payments are the recipients at the end of the year.

Section 2 National Pension System Reform and Important Results

1. Five conferences were convened to review the NPI schemes in 2018. Issues including the implementation of enrolment, collection of premiums, payment benefits and financial resources were discussed with an eye to future reforms.
2. The MOHW continues to oversee the Bureau of Labor Funds of the Ministry of Labor to draft 2018 utilization plans of NPI Fund to improve its performance. The average rate of return between 2008 and 2018 was 2.74%.
3. Amendment of Article 9 of the “Regulations for Management, Utilization and Supervision of the National Pension Insurance Fund" was issued on November 2, 2018. The cap on ratio of foreign investments of NPI fund was increased from 50% to 60% in order to make the fund more flexibility on its investment portfolios and diversify the investment risk from the domestic market.
4. The MOHW continues to oversee the BLI to undertake systematic collection of premiums in arrears. In 2018, more than NT$6.3 billion in arrears was collected.
5. To improve the accuracy rate for the administration of NPI benefit, the MOHW has urged the BLI to improve databases and auditing mechanism. In 2018, there were 1,938 overpayment cases, a decrease of 23.1% compared to that in 2017.
6. The MOHW has cooperated with the Council of Indigenous Peoples, BLI and local governments to promote the NPI by using diverse promotion channels, and by visiting people who have premiums in arrears. Over 235,000 people were visited and more than 33,000 promotion events were conducted in 2018.
7. The MOHW has conducted “Countermeasures Response Strategies for 10-year Deadline of paying NPI Premiums” to ensure that people can pay premiums in time and receive the payments benefits.

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9 Social Welfare

In order to ensure appropriate care for disadvantaged groups following globalization,urbanization, low birth rates, population aging,rapid change of social structure and family function, the government has planned and integrated welfare policies that used to be divided into women, children and youth, the elderly, and the disabled persons. By combining family and community resources, it meets the visions which are guaranteed rights, supportive families, a friendly society, and progress for all.

Chapter 1 Children and Youth Welfare

At the end of 2018 there were 3,778,520 children and youth in Taiwan, or 16% of the total population. In accordance with the "Plan for Addressing the Declining National Birth rate (2018 ~ 2022)" approved by the Executive Yuan in 2018, the Social and Family Affairs Administration of Ministry of Health and Welfare (SFAA) introduced a total of 67 measures in 12 areas such as total care from 0 to 5 years of age, family-friendly workplace strategies, children's health rights and protection, and children-friendly policies in conjunction with the relevant agencies. The measures are designed to increase the birth rate, realize gender equality (balance between work and family), reduce the burden of child-rearing on families, improve the quality of baby/child-care and other goals. These child-friendly measures are listed in Fig. 9-1. The "Implementation Act of the Convention on the Rights of the Child (CRC)" was also implemented with government agencies working together to publicize the CRC, carry out education and training, and review related laws and regulations. The initial state report under the CRC and international review metting were also completed.

Figure 9-1 Supportive Measures for Children and Youth

Source: Social and Family Affairs Administration

Project \ Age	0–1	1–2	2–3	3–4	4–5	5–6
Economic Support Measures	Child-raising allowance for families with children aged under 2					
	Special for preschool children Deductions					
			Education subsidies for low and mid-income families			Free early childhood education for 5-year-old
	Unpaid parental leave subsidy					
	Children living allowance for families in hardship (between 0 to 15 years of age), Childcare allowance (between 0 to 6 years of age)					
	Emergency living relief to disadvantaged children and teenagers					
Low-Cost High-Quality Child Care Measures	Public and quasi-public childcare subsidy (baby care center,family childcare provider) Public kindergarten, Non-Profit Preschools					
	collaborative Resource centers for childcare					
Friendly Workplace Measures	Family Care Leaves					
Preventive Healthcare Measures	Health Care Subsidies for Children under 3 Years Old					
	Intervention and Transportation Subsidies for Children with Developmental Delays					
	NHI Subsidies for Children and Youth of Middle-to-Low-Income Households					
	Children's Preventive Health Care Services					
Personal Safety Protection Measures	3-tiered child protection measures					

Partial Wealth Exclusion Vulnerable Groups No wealth Exclusion

Section 1 Subsidies for Children and Youth

1. Child-raising allowance for families with children aged under 2: In accordance with the "Plan for Addressing the Declining National Birth rate (2018 ~ 2022)" issued by the Executive Yuan, the "Parental allowance for families with unemployed parents" was no longer restricted to families with at least one unemployed parent as of August 1, 2018. Each child now receive between NT$2,500 to NT$5,000 in monthly means-tested benefits. The third and each additional child after that receive extra amount NT$1,000 in allowance per month. More than NT$6,435,650,000 in benefits were paid for 393,641 children in 2018.
2. Emergency Living Subsidy for Children and Youth of Vulnerable Families: Each high-risk family which suffered from misfortune and financial difficulty with children in need of care was given an emergency living subsidy of NT$3,000 per person every month as assistance in the economic hardship. In 2018, there were 3,317 families and 5,139 children and youth of subsidies totaling more than NT$103,190,000.
3. Health Care Allowance for Children and Youth of Middle-To-Low Income Families: The children and youth under 18 years old of lowand middle-income families were subsided for national healthcare insurance. In 2018, there were 1,375,776 recipients of subsidies totaling more than NT$853,960,000.
4. Health Care Subsidies for Children under 3 Years Old: Part of the clinic (emergency) charges and hospitalization expense were automatically reduced for children under 3 years old who are covered under the national healthcare insurance during their doctoral visits. In 2018, 14,963,253 persons were offered free medical treatment and exempted their parents from the burden of more than NT$1,986,460,000 in payments.
5. Medical Subsidies for Disadvantaged Children and Youth: In order to provide children from disadvantaged families with suitable health care, payment assistance was offered for NHI arrears; intervention, training, and evaluation fees for children with developmental delays; nursing fees during hospital stays; and copayments. There were 7,802 recipients of subsidies totaling more than NT$115,550,000.
6. Early Intervention for Children with Developmental Delay
   (1) Local governments were supervised to set 28 reporting and referral centers. In 2018, 23,953 children with developmental delay were reported and the nationwide reporting rate was 11.8% (Figure 9-2).
   (2) In 2018, local governments were supervised to set 54 case management centers, and- helped developmentally delayed children apply for 51,973 intervention subsidies totaling NT$442,227,944 (Figure 9-3).
   (3) In 2018, 13 local governments promoted community-based intervention services in 81 townships and villages with insufficient early intervention resources.

Figure 9-2 National Reporting Rate of Developmentally Delayed Children, by Year

Source: Social and Family Affairs Administration

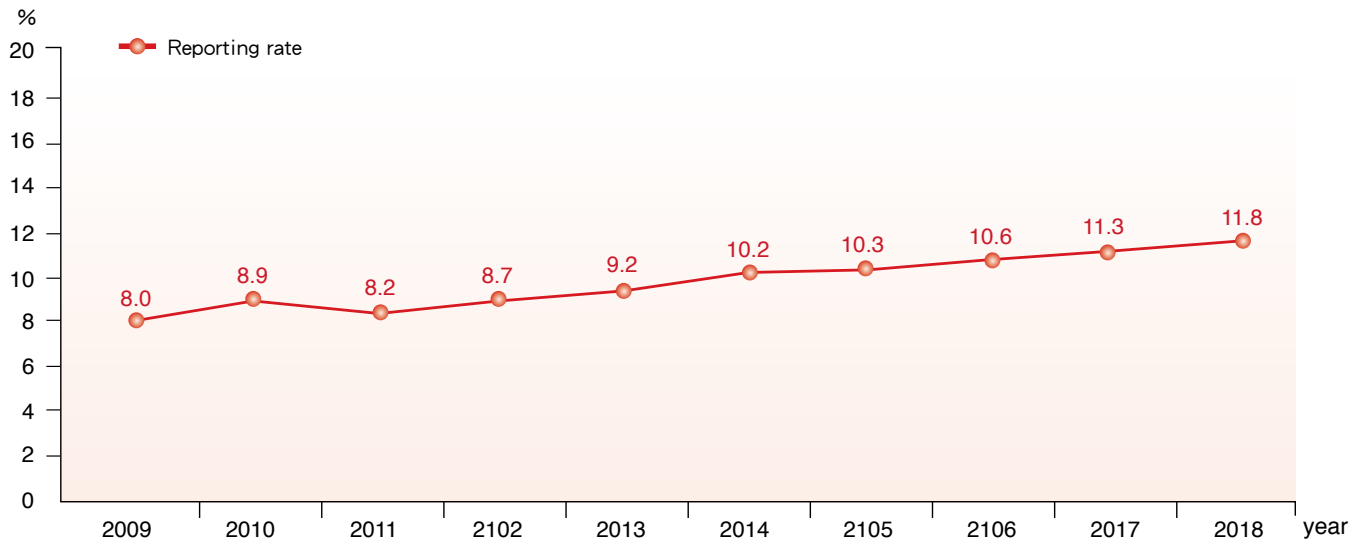
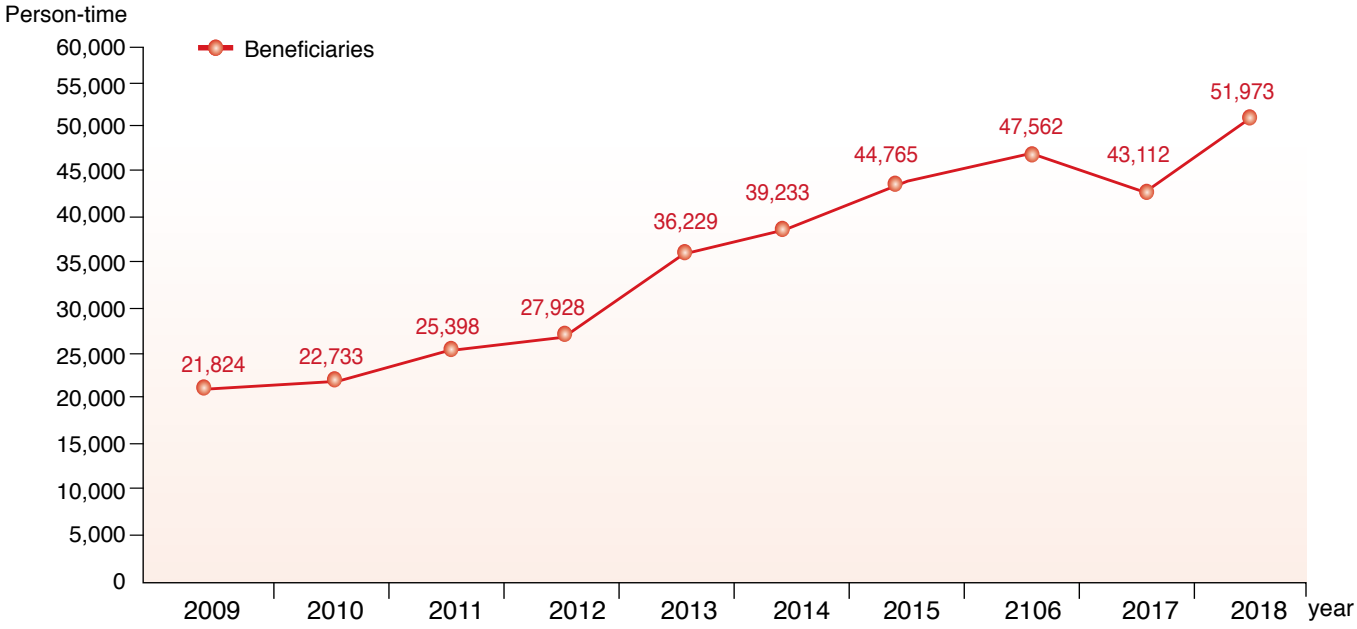


Figure 9-3 Subsidies for Early Intervention, by Year

Source: Social and Family Affairs Administration



Section 2 Protecting the Interests And Rights of Children And Youth

1. Establishment of a professional multi-disciplinary communication platform on child rights: The Executive Yuan and this Ministry have each established a policy-making and coordination mechanism on child policy. The mechanisms are used by the central government, local government, non-government organizations, experts and academics to coordinate, study, review and consult upon matters related to the implementation of CRC.
2. Implemented Children and Youth's Safety Projects: Safety implementation on in physical, home, traffic, campus, playground, waters, employment, internet and all the other aspects for children and youth was promoted. The Children and Youth's Accident and Injury Prevention Task Force was firned to regularly manage and evaluate the performance of the departments and agencies and actively provide a safe growth environment for children and youth.
3. Maintained the Rights and Interests of Children and Youth without Household Registration/ Nationality: The latest status of the local governments on maintaining the rights and interests of children and youth without household registration/nationality was regulary followed up in order to protect their rights in schooling, fostering and medication. In 2018, 150 out of 366 cases were concluded and the other 216 cases are still under follow-up.

2018 Formosan Day of the Girl Child Press Conference

4. Promoted children and youth's human rights and improved children and youth's development and social participation
   (1) In 2018, events advocat ing the rights of children and youth are carried out in cooperation with local governments and 39 NGOs. 71,266 persons in total were benefited.
   (2) A press conference was held on October 11 for the Formosan Day of the Girl Child to promote empowerment and investment in girls, emphasizing the "HeForShe" spirit and calling on all sectors regardless of age and gender to work together to realize gender equality.

(3) 2018 Local governments and NGOs were provided with assistance on the cultivation of 379 children's representatives. The representatives take part in local decision-making and coordination on child affairs so that children and teenagers' right to participation and expression in society can be embraced across the board. Subsidies were also provided to chlild empowerment programs that benefited 8,697 people.

Section 3 Childcare Services

1. Subsidies for public and quasi-public childcare: Families that sentd children under the age of 2 to quasi-public home-based childcare workers or privately-owned baby care centers received monthly subsidies between NT$6,000 to NT$10,000 in subsidies each month; those that used public institutions run by private baby care centers received monthly subsidies between NT$3,000 to NT$7,000 in subsidies each month. The third and each additional child after that received another NT$1,000 in subsidies per month. In 2018, abovementioned subsidies totaled NT$1,959,770,680 and there were 34,142 beneficiaries as of December, 2018.
2. At the end of 2018, there were 71 centers of family childcare service that oversaw 26,240 childcare providers caring for 25,364 children under the age of 2 (Figure 9-4). Among registered childcare providers, 24,404 or 93%, had a technician certificate for childcare providers. Of these, 17,680 signed contracts under the quasi-public policy for a contracting rate of 75.22%. Under the childcare publicization and quasi-publicization policy introduced by the Executive Yuan on August 1, 2018, kinship care was considered as domestic care so that a kinship caregiver should collect parental benefits rather than subsidies for public and quasi-public childcare.
   (1) At the end of 2018, there were 1,034 baby care centers with 26,428 children under care in Taiwan as shown in Figure 9-5. These included 852 private baby care centers with 20,098 children under care. 662 were contracted under the quasi-public policy so the contracting rate was 88.98%; there were 182 public institutions run by private baby care centers(including 60 public community baby care centers) with 6,330 children under care.
   (2) To increase the supply of public childcare places, fund under the Forward-Looking Infrastructure Program was secured by the MOHW to continue the roll-out of public community baby care centers. 92 community care centers were approved at the end of 2018 and 60 have now been established.
   (3) Community-based family support included 153 public-privately collaborative resource centers for childcare that provided child care consultations, parental education, and other services approximately 15,100,000 times.

Section 4 Placement Services

1. Promotion of Institutional Placement

(1) The MOHW encouraged and commissioned NGOs to participate in youth placement to aid children in need of assistance. At the end of 2018, there were 122 placement institutions (Table 9-1).

(2) In 2018,subsidies for institutional professional fees, facilities and equipment,after-school program, and welfare services,totaled NT$77,946,056.

2. Conducted Joint Evaluation over the Institutions Specialized in the Placement and Education of Children and Youth: A total of 97 children's institutions took part in the 2018 joint evaluation including 9 MOHW and provincial children's institutions, and 88 children's institutions owned by 20 counties/cities including New Taipei City. The evaluations were conducted between July and September, 2019, with the results published online on March 28, 2018. A total of 27 (28.9%) received a grade of Distinction, 35 (36.0%) received the A grade, 20 (20.6%) receive the B grade, 9 (9.3%) received the C grade, and 5 (5.2%) received the D grade.
3. Promoting Foster Care: Guideline is developed and provided to local governments and NGOs which are commissioned to provide foster care. In 2018, there were 1,018 households registered to serve as foster care homes, 340 reserve foster care homes, and 1,605 children and youth receiving foster care (Table 9-2).

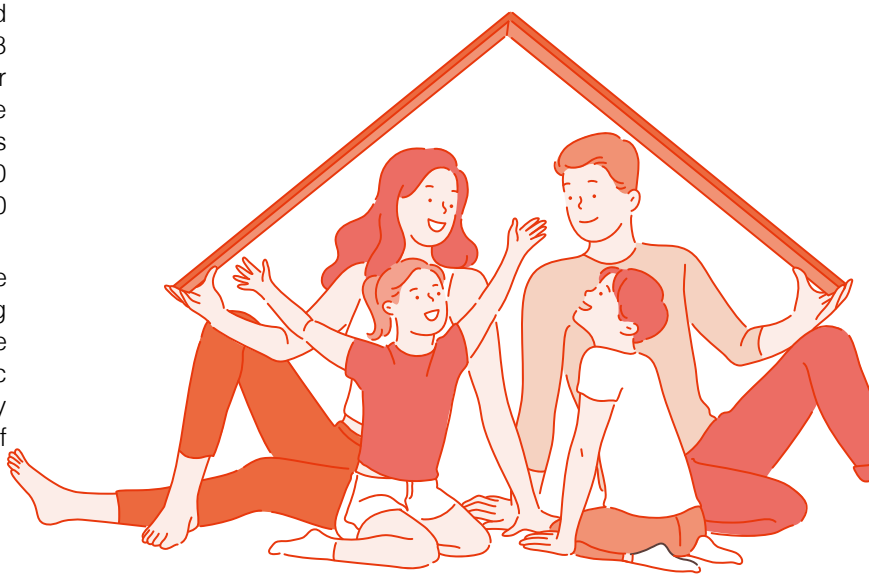
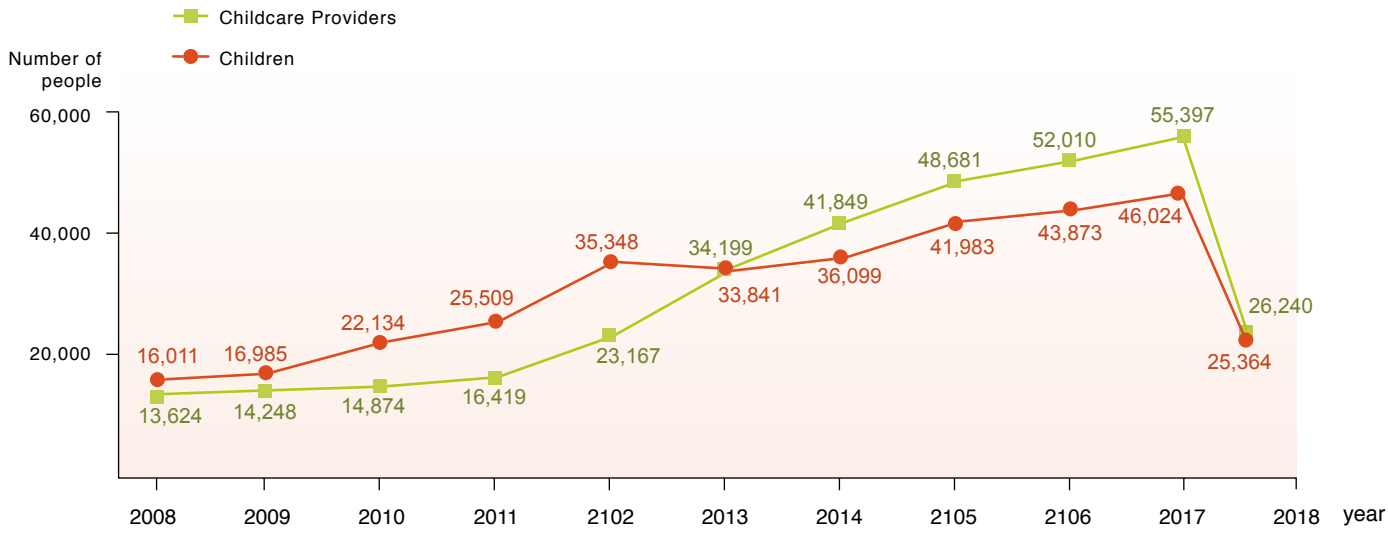


Figure 9-4 Family Childcare Providers and Children

Source: Social and Family Affairs Administration



Note: Under the childcare publicization and quasi-publicization policy introduced by the Executive Yuan on August 1, 2018, kinship care was considered as domestic care so that a kinship caregiver should collect parental benefits rather than subsidies for public and quasi-public childcare. Kinship caregivers, therefore, no longer counted as childcare personnel so a reduction showed in the 2018 statistics.

Figure 9-5 Volume of Baby Care Centers and Children

Source: Social and Family Affairs Administration

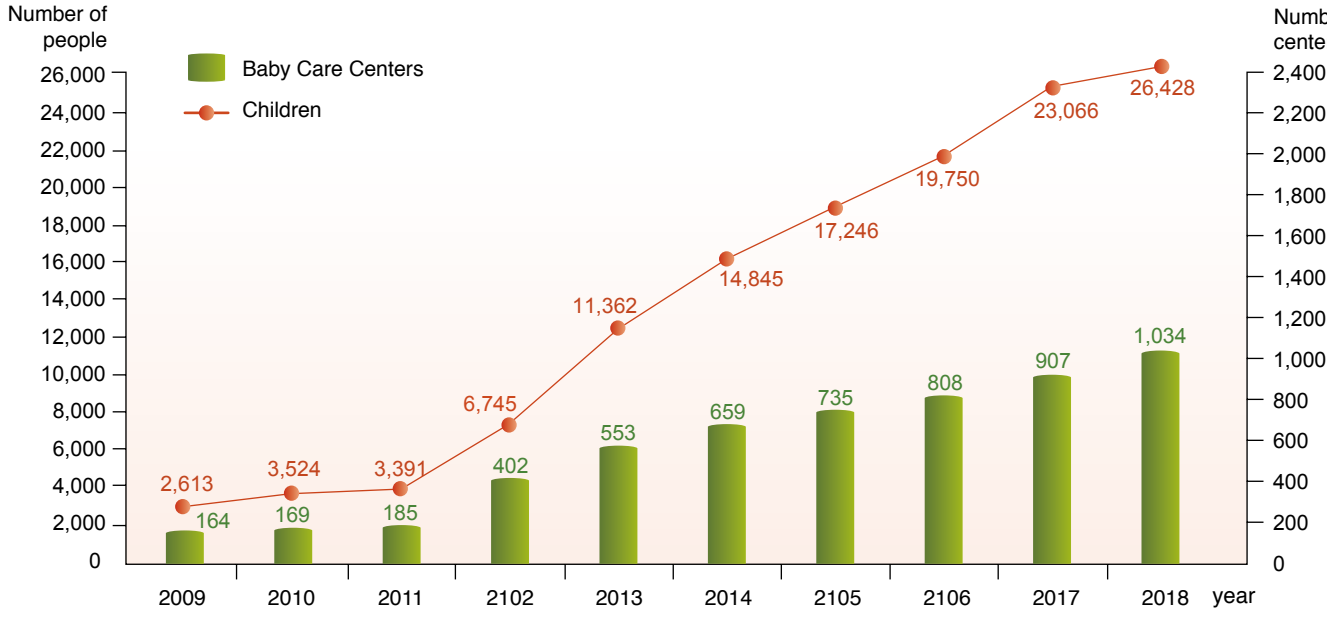


Table 9-1 Institutions Specializing in the Placement and Education of Children and Youth, 2014-2018

Source: Social and Family Affairs Administration

Year		2014	2015	2016	2017	2018
Number of Institutions		124	122	122	124	122
Approved Number of Beds		4,991	5,004	5,094	5,211	5,076
Children	Males	1,818	1,771	1,702	1,583	1,485
	Females	1,683	1,704	1,617	1,565	1,500

Table 9-2 Foster Care Homes and Children, 2014-2018

Source: Social and Family Affairs Administration

Year		2014	2015	2016	2017	2018
Families (Households)		1,289	1,326	1,299	1,193	1,018
Children	Males	850	804	786	769	766
	Females	893	858	836	852	839

4. Enhanced the Management System of Youth Placement and Follow-Up: The completion of the judicial residential care query system in 2018 gave the judicial system the ability to query availability of residential care places. Online reporting for care institutions is now being planned so that care institutions and local governments can submit their quarterly operating reports.

Chapter 2 Welfare for Women and Family Support

In consideration of the changes in the society over the past 10 years, the Social Welfare Promotion Committee, Executive Yuan revised the Taiwan Family Policy in the 23rd committee meeting on May 26, 2015. The major five goals are: (1) develop a holistic care and support system to facilitate the family's function; (2) construct economic security and friendly workplaces to realize work-family balance; (3) implement violence prevention and living justice to promote family harmony and peaceful life; (4) strengthen family education and gender equality to boost positive family relationships; (5) advocate family values and inclusion to enhance family cohesion and integration. The revi sed family policy consisting of 33 items and 98 measures, was implemented starting 2016.

The "Strengthen Social Safety Network Program" approved by the Executive Yuan on February 26, 2018, conducted a review of existing policy and shifted the focus of intervention efforts from the "individual" to a "family-centric" approach. The principles of "risk prevention", "single point of contact" and "integrated services" were adopted for the integration and connection of services in each system. The roll-out of social welfare centers and vulnerable family services served to construct a comprehensive social safety net.

Section 1 Women's Welfare

Social services for women are aimed to empower women from women's standpoint. Key achievements in 2018 follow:

1. In collaboration with NGOs, the government promoted support services to boost women's welfare and to enhance women's capabilities,and to create opportunities for further development. The total subsidies in 2018 were NT$29.5 million yuan.
2. By strengthening capacity of 29 women's welfare centers, the MOHW linked government and private resources to improve welfare, rights, legal and learning services for women. In 2018, the centers provided services for 2,600,679 times.

3. By operating the Taiwan Women's Center,which serves as a platform for promoting women's welfare, women's rights, and gender mainstreaming, and interaction with international women's organizations and between public and private agencies. In 2018, there were 48 domestic organizations used its facilities. The center also welcomed 65 domestic organizations and foreign guests, and 129,000 visits made to the center.
4. Support was provided to local governments to promote counseling programs for women's welfare. An expert team was established to assist ten local regions, namely Taipei City, Hsinchu City, Nantou County, Changhua County, Tainan City, Kaohsiung City, Pingtung County, Yilan County, Hualien County and Taitung County, with assessment the needs of the local government and to diagnose problems in their operations. Women's welfare services tailored to local conditions were progressively developed and the local governments provided with assistance on implementing a mechanism for long-term supervision of operations.

Section 2 Services for Disadvantaged Families

1. Roll-out of social welfare service centers to enhance the delivery of welfare services: 154 social welfare service centers were progressively completed over multiple years to create a safety net for families. A total of 124 centers were completed by 2018. Subsidies were provided for hiring 50 additional social worker supervisors and 342 social workers around the country. A total of 381,946 people from 98,830 families were served.
2. Strengthening services for vulnerable families through public-private partnerships: The roll-out of social welfare centers and additional manpower for service organizations were used to re-build the private-public partnership so that vulnerable families could receive timely assistance. NGO groups that previous serviced children and youth in families at high risk were redirected to provide multi-dimensional services for vulnerable families or other specialized service programs to strengthen preventive services in community. In 2018, 18 NGOs received NT$14,645,050 in subsidies towards the employment of 32 social workers assigned to the multi-dimensional services for vulnerable families. In 2018, our social workers screened and visited a total of 24,399 high risk families, opened 8,056 support cases and registered 16,422 children and teenagers for assistance.
3. Continued to implement the outreach program for disadvantaged children under the age of 6: Tracking and counseling mechanism for 7 categories of children under the age of 6 including those that did not enroll for elementary school as required by law, and did not complete their scheduled vaccinations, etc. was strengthened. When high-risk families were identified by household registries, social services, health clinics (public health nurses) and schools, the local department of social services was notified to visit and check on the family. In 2018, a total of 1,252 such visits were conducted.

Section 3 Services for Families with Special Needs

1. Adoption Service for Children and Youth: Starting from May 30, 2012, unless there is a direct family or stepfamily relationship, all adoptions must be screened and evaluated by approved children and youth adoption providers and preference must be given to domestic adoptive parents. At the end of 2018, there were nine approved institutions (with 13 service stations). These institutions matched 245children with adoptive parents in 2018 (137 were adopted domestically and 108 overseas).
2. Assistance for Families in Special Hardship: In 2018, emergency relief assistance, living allowances for children, nursery allowances, health care subsidies for injury or illness, litigation subsidies, education subsidies for children, and career development loans are available for families in special hardship. There were 20,655families receiving these benefits for a total of 131,434 times, with total subsidies exceeding NT$467,660,000
3. Support for Pregnant Teens
   (1) A teen pregnancy hotline (0800-25-7085) and website (http//www.257085.org.tw) provided assistance and consultation to minors who became pregnant. In 2018, there were 821 calls to the hotline, 90,509 visits to the website, and 504 consultation mails and online inquiries received.
   (2) Each city and county provides case management and assists with financial subsidies, health care, child care, and referrals for foster care and adoptions. In 2018, these services were used 6,415 times.

Chapter 3 Welfare for the Elderly

The number of aged people over 65 reached 1,485,200 and accounted for 7.09% of the total population at the end of September, 1993, meeting the WHO criteria for an aging society; Taiwan formally became an aged society in March, 2018, and at the end of 2018 there were 3,433,517 aged persons in Taiwan, or 14.56% of the total population. In response to the trend towards an aged society, MOHW now seeks to look after the physical and mental wellbeing of senior citizens by promoting a range of senior welfare services focused on economic security, health maintenance, living care and social participation. Accelerating the roll-out of community support sites, improving the quality of care and service at senior welfare institutions, and the promotion of mobile recreation services for seniors help to ensure that senior citizens can receive appropriate care services locally.

Section 1 Income Security for the Elderly

1. Monthly living allowances of NT$3,731 or NT$7,463 are offered to guarantee the economic security and basic living standard of lowermiddle-income elder people. In 2018, there were 143,160 elder people who received a total of more than NT$11,319,740,000 in subsidie.
2. Monthly special care allowances worth NT$5,000 were offered to lower-middleincome caregivers who sacrificed employment to care for an elderly family member. In 2018, there were 8,745 such allowances worth a total of NT$43,770,000.
3. To provide senior citizens with an additional option for economic security by helping them convert real estate they own into cash that can be collected monthly, the Senior Citizens Welfare Act now encourages financial service providers to offer commercial reverse mortgage services. At the end of 2018, the service was offered at 14 banks with 3,069 applications received.

Section 2 Health Care for the Elderly

1. In order to reduce the economic barrier to health care due to NHI premiums and copayments for elder people with economic difficulties,premiums are fully subsidized for lower-middleincome elderly persons aged 70 and above. In 2018, these subsidies were provided to 80,332 people.
2. Daily subsidies of NT$1,800, with an annual limit of NT$216,000, are offered to pay the attendant care during hospitalization for lowermiddle-income elder people who are in the care of MOHW-commissioned institutional care facilities. In 2018, four institutions received these subsidies to care for a total of 286 people.
3. In order to improve oral hygine of disadvantaged elderly people, denture installation are offered to elderly people over 65 years old and indigenous people over 55 years old remaining their quality of life and dignity. In 2018, 5,269 people received the subsidies.

Section 3 Care for Elder People

1. Ongoing efforts to improve care for living alone elder people, carring on a 24-hour emergency assistance network. A center for tracking missing elderly had found 1,499 out of 2,535 reported missing people since 2001 through the end of 2018.
2. Ongoing efforts to encourage the instituations on service quality improvement and diversified operations to meet the elder people's needs.By the end of 2018, there are 1,098 permitted elderly care instituations.
3. The "Mackay Program" was launched on June 1, 2011, commemorating the contributions made by Dr. Leslie Mackay to helpthe weak and poor. Those who are have made a long-term or special contribution to Taiwan are granted concessions for public transportation in Taiwan. A total of 278 foreign senior citizens were found to have satisfied the criteria by the end of 2018.
4. To establish elderly consultation center, operating a specialized hotline that answers a variety of questions for the elderly (0800-228585). The hotline handled close to 1,000 calls per month on average.
5. Local governments were encouraged to work with village offices and community groups to establish 3,294 community support sites as shown in Figure 9-6. The sites provide care visits, telephone visits and referral services, catering services, and heal promoting activities. Value-adding funding was introduced in 2018 to help 268 sites extend their hours of service, enhance their level of service and set up Class C local long-care stations.

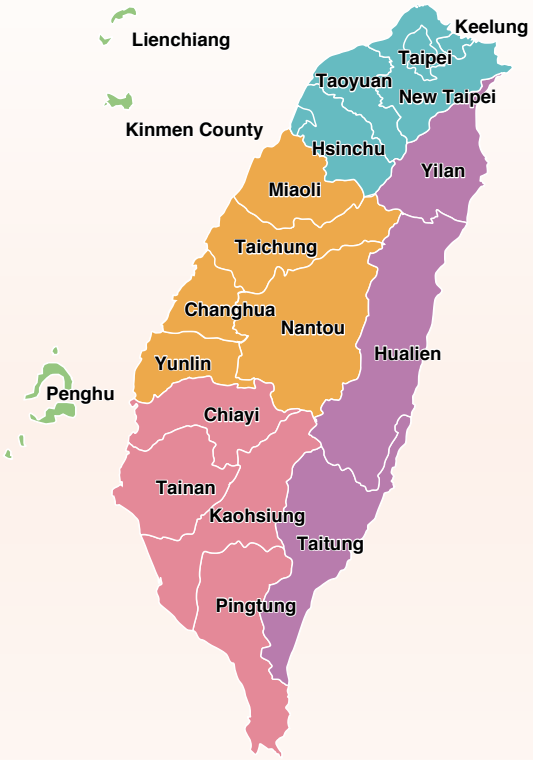
Figure 9-6 Distribution of Nationwide Community Care Points

Source: Social and Family Affairs Administration

Central region	
Miaoli	114
Taichung	395
Nantou	112
Changhua	188
Yunlin	86

Outlying Islands	
Kinmen	26
Lienchiang	7
Penghu	40

Southern Region	
Chiayi County	108
Chiayi City	27
Tainan	367
Kaohsiung	321
Pingtung	289



Northern Region	
Keelung	75
Taipei	199
New Taipei	317
Taoyuan	270
Hsinchu County	50
Hsinchu City	40

Eastern Region	
Yilan	101
Hualien	97
Taitung	65

Section 4 Social Participation by Elder People

1. Conducting Senior Citizens' Learning Classes and various welfare activities for the elderly.In 2018, 642 services and activities are available for seniors. seniors benefitted from discounts of up to half off on public transit and entry into health and leisure centers and cultural and educational facilities. These subsidized activities and financial incentives encourage the elderly to participate activities in community to promote physical and mental health.
2. In 2018, mobile tours of culture, health, and leisure for seniors were made possible by the subsidized purchase of 18 multifunctional buses by 16 cities and counties. Services included welfare and health consultations as well as leisure, culture, and entertainment activities. Participating cities and counties hosted 7,449 tours with total attendance of 337,103 seniors.
3. Chong Yang Festival events: Organized the Chung Yang Family Day - JOJO's Big Adventure, Table Game Party for Seniors, "Silver LOHAS" sports carnival for senior welfare institutions, and "Silver Collar" carnival. The hosting of national seniors events helped to promote the ideals of "aging energetically" and "generational fusion."

Chapter 4 Welfare for Persons with Disabilities

In response to the growing number of persons with disabilities, diverse individual needs, and international trends, the MOHW has adopted a new system for assessing the needs of persons with disabilities. The system, which is based on the WHO's International Classification of Functioning, Disabilities and Health (ICF), was implemented in 2012 and is used to determine services and support.

The 2018 Chong Yang Family Day - Jojo's Big Adventure was held at the Huashan 1914 Creative Park on October 5, 2018

The Table Game Party for Seniors was organized as part of the 2018 Chong Yang campaign at the Taipei New Horizon building on October 13, 2018

The "Silver LOHAS" sports carnival for senior welfare institutions in Taiwan was held at the Greater Taichung International Expo Center on October 17, 2018

The "Silver Collar" carnival was held at the Taipei Gymnasium on October 23, 2018

At the end of 2018, there were 1,173,978 persons with disabilities in Taiwan, accounting for 4.98% of the population. Taiwan's welfare policy for persons with disabilities is based on actual needs as well as the "Act to Implement the Convention on the Rights of Persons with Disabilities," "People with Disabilities Rights Protection Act" and a white paper on protecting the rights of persons with disabilities. After being assessed by the new mechanisms, the disability policy aims to ensure economic security, diverse and continuing state services, accessible environments, and opportunities of social participation for persons with disabilities.

Section 1 Rights Protection for Persons with Disabilities

1. The Convention on the Rights of Persons with Disabilities (CRPD) adopted by the UN General Assembly in 2006 defined the international standard for protecting the human rights of disabled people. The Act to Implement the CRPD was announced by the President on August 20, 2014, to turn the CRPD into domestic law. The new law took effect in the same year on December 3, the International Day of Persons with Disabilities. The MOHW reviewed a total of 372 sections/674 articles from high-priority regulations and administration measures and published the first national report in 2016 in accordance with the schedule set out by the CRPD Act. A review by a committee of international experts was held in 2017 and a total of 85 concluding observations were proposed by the committee as a reference for future reviews or amendments to related legislation, policies or administrative measures in Taiwan. In 2019, the government proposed a plan in response to the recommendations made by the international review committee on the first national CRPD report. The plan will be progressively implemented by each ministry in a strategic manner so that domestic initiatives on disabled persons will focus on human rights.
2. A new system for assessing the needs of persons with disabilities, particularly related to body structures and functions, activities and social participation, as well as its reliance on professional assessment teams, was formally enacted on July 11, 2012. A one-stop window was also created for people to receive a range of personalized and diverse welfare services. In 2018, there were 419,370 people who applied for disability card, with 385,817 people who met the criteria and 393,553 who underwent needs assessment.

Section 2 Financial Security for Persons with Disabilities

1. In 2018, persons with disabilities who meet the criteria for household income and assets received monthly life subsidies of NT$3,628, NT$4,872, or NT$8,499. There were 349,084 recipients per month on average, and the total amount was NT$21,257,020,000.
2. Day care and residential care subsidies for persons with disabilities exceeded NT$8,801,920,000 in 2018 and benefitted an average of 47,841 recipients each month.

Section 3 Life Care for Persons with Disabilities

1. Personalized Care for Persons with Disabilities (Home and Community Care): services that improve living quality and social participation concluding observations among persons with disabilities include home care, supportive service for independent life, daily living reconstruction, day care, homebased care services, and residence/housing in community. By the end of 2018, more than NT$2,193,300,000 exended and benefit 6,790,665 recipients.
2. Home Support for Persons with Disabilities: temporary and short-term care, training and practicing for the caregivers, and family care visits provide diverse care channels for households with persons with disabilities and reduce the burden on caregivers. By the end of 2018, more than NT$854,200,000 was exended and benefit 3,079,858 recipients.
3. Localizing and Downsizing of Care Institutions: at the end of 2018, there were 271 welfare institutions for persons with disabilities with a total of 22,387 beds and 18,221 residents. Primary services includ day care, art education, work activities, and health care. The MOHW also helped the institutions downsize and include persons with disabilities in the community to improve service accessibility.

Section 4 Assistive Devices for Persons with Disabilities

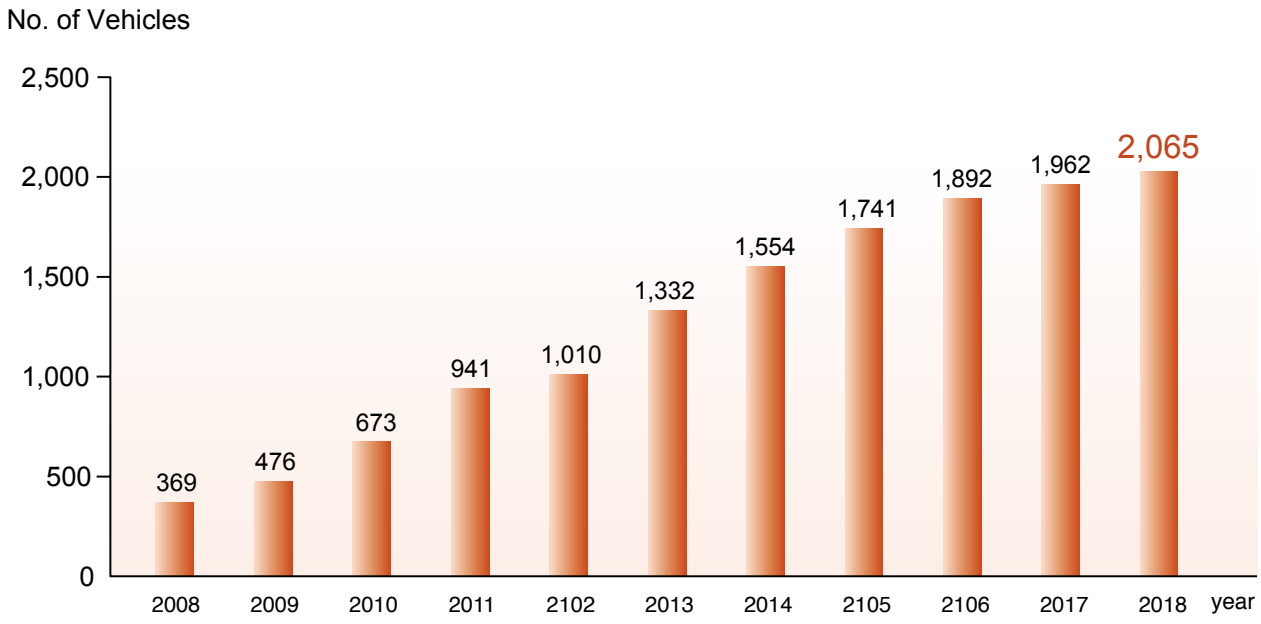
1. A nationwide joint meeting on assistive device resources and integrated services took place and a web portal was established to consolidate information.
2. A system for assistive devices was established across central and local government. Centers for multifunctional assistive devices provided consultations, education and training, website maintenance, exhibitions, and promotional activities. In 2018, there were 33 assistive device centers across Taiwan to provide assessment and consultation for people in need of devices as well as promotion and maintenance services.
3. Persons with disabilities continued to receive subsidies cover assistive devices. In 2018, more than NT$755,080,000 of subsidies was 81,695 recipients.
4. In order to assist persons with disabilities, the elderly, and others with mobility issues caused by stairs, assistance was provided to local governments of ten cities and counties to install stair climbers for persons with disabilities from the public welfare lottery subsidized programs by the end of 2018.
5. A comprehensive plan for subsidizing medical assistive devices to persons with disabilities was implemented on July 11, 2012. In 2018, there were 9,140 payments (60% to males, 40% to females) totaling NT$50,807,500.

Section 5 Social Participation for Persons with Disabilities

1. In 2018, 391 cases of subsidies, totaling NT$11,565,154, were granted to NGOs not only for leisure activities, training programs, and others for persons with disabilities, but also establishing barrier-free web pages, facilities, and equipment used by persons with disabilities.
2. Activities were held on December 1, 2018 to commemorate International Day of Persons with Disabilities. There was a special ceremony to present the 22nd Golden Eagle Awards to outstanding person with disabilities. 10 winners were invited to share their life stories to encourage more persons with disabilities to start a new life.
3. Subsidies and certifications were offered to qualified guide dog training and advocacy programs. In 2018, there were 35 in-service guide dogs and 127 puppies in training.
4. By the end of 2018, to identify qualified persons with disabilities with an establishment of 25,426 designated parking lots, a distribution of special license plates, and 318,112 disabled parking permits.
5. In 2018, there were 2,065 “Rehabilitation Bus” in Taiwan (Figure 9-7) and total ridership of 4,067,774.
6. Consultation was provided to local governments for establishing sign language/real-time captioning information centers and procedures. There were 336 certified sign language interpreters, 261 real-time captioning personnel.

Figure 9-7 Number of "Rehabilitation Bus", 2008 - 2018

Source: Social and Family Affairs Administration



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10

Social Assistance and Social Work

- Chapter 1 Social Assistance
- Chapter 2 Social Work
- Chapter 3 Community and links to other resources

Chapter 1 Social Assistance

We always follow the principle of "providing care actively, respecting needs, and enabling selfsufficiency" in social assistance. Various measures are taken, laws and regulations are reviewed at regular intervals, and unemployment benefits and the welfare service system of social work are considered, so as to guarantee that people in need can get appropriate assistance.

Section 1 Living Support

Life assistance for low-income households means providing persistent financial assistance for families whose monthly income per person is below the minimum living expenditure and whose properties do not exceed the annual amount announced by the central government or competent authorities of municipalities. The Public Assistance Act was modified in 2015, and it clearly stipulates that the life assistance fee for low-income households should be adjusted according to the growth rate of the consumer price index every four years, in order to protect vulnerable people's rights and interests. Minimum cost of living over the last 5 years were as shown in Table 10-1.

The current subsidies provided by various local governments for low-income households include family subsidy, school subsidy, and children subsidy. According to Article 12 of the Public Assistance Act, competent authorities should increase the original cash amount received by members of low-income households who are elderly, pregnant for three months or longer, or disabled by no more than 40%. In order to avoid providing too much financial assistance, which could influence the willingness to work, Article 8 of the Public Assistance Act states that the monthly assistance amount received by every person according to this law or other laws should not exceed the basic wage declared by the government. The major items of life assistance for low-income households handled by the government in 2018 are shown in Table 10-2.

Besides making cash payments, various local governments should provide additional benefits, including nutritional supplements to pregnant women (including nutrition subsidies for single mothers and newborns), birth allowance, priority of living in social housing, subsidy for residential rent, subsidy for simple residence repair cost and loan interest subsidy for purchased or self-built residences,subsidy for students' nutrition lunch fee, and subsidy for hospitalization fee, so as to meet the basic needs of low-income and middle-low-income households.

In order to assist low-income and middle-low-income households in standing on their own, Article 15 of the Public Assistance Act stipulates that "Competent authorities of municipalities and counties (cities) shall provide or recommend employment services and vocational training to low-income and middle-low-income households having working competence, or relieve people in disaster areas by giving them employment instead of outright grants." The governments at various levels have provided employment services positively according to such regulations, and offer other employment services and subsidies like entrepreneurship training, subsidies for start-up loan interest, subsidies for travel during the job search period, and subsidies for temporary child care and day care during a job search or vocational training period. In addition, people can also receive subsistence allowance for vocational training in the period of participating in vocational training, so as to make a living and remove worries.

Table 10-1 Minimum Cost of Living Over the Past 5 Years

Source: Department of Social Assistance and Social Work, Ministry of Health and Welfare, R.O.C.(Taiwan)

Region / Year	Taiwan	Taipei	Kaohsiung	New Taipei	Taichung	Tainan	Taoyuan	Fujian Province	
								Kinmen	Lienchiang
2014	10,869	14,794	11,890	12,439	11,860	10,869	–	9,769	
2015	10,869	14,794	12,485	12,840	11,860	10,869	12,821	9,769	
2016	11,448	15,162	12,485	12,840	13,084	11,448	13,692	10,290	
2017	11,448	15,544	12,941	13,700	13,084	11,448	13,692	10,290	
2018	12,388	16,157	14,385	13,692	13,813	12,388	12,941	11,135	

Table 10-2 Key Living Support Measures Provided to Low-Income Households, 2018

Source: Department of Social Assistance and Social Work, Ministry of Health and Welfare, R.O.C.(Taiwan)

Subsidy Item	No. of Subsidies	Total Subsidy Amount (NTD)
Family Subsidy	1,002,506	5,685,716,390
Student Subsidy	546,030	3,329,309,336
Workfare Programs	27,659	494,312,805
Holiday Bonus	757,820	597,386,580

With respect to lifting the poor out of poverty, the Ministry of Health and Welfare enacted The Regulation of Active Anti-proverty Strategies on June 6, 2016. In 2018, the local government and non-government social welfare groups implemented 41 schemes to promote employment and the overcoming of poverty, and the amount of the subsidies was NT$28,428,500.

Section 2 Medical Subsidies

According to Articles 18 and 19 of the Public Assistance Act, the existing medical subsidies for low-income and middle-low-income households include the following items:

1. Premium subsidies: The subsidies for health insurance premiums in 2018 were over NT$6,279,440,000.
2. Co-payment Fee Subsidies: In order to relieve the health care burdens of low-income households, Article 49 of the National Health Insurance Law clearly stipulates that “the out-of-pocket fee of low-income households for their medical care shall be paid by the central authority in charge of social welfare.” The subsidies for some medical fees (including outpatient service and hospitalization fees) received by low-income households in 2018 was over NT$1,548,050,000.
3. Subsidies for medical fees not covered by national health insurance: In order to meet the medical needs of low-income and middle-low-income households, various local governments have also established relevant regulations to stipulate the allowance standard of medical fees. The assistance covered 5,062 people, and the total amount of the subsidies was NT$156,590,000 in 2018.

Section 3 Emergency Relief

According to Article 21 of the Public Assistance Act, timely assistance shall be provided for people falling into difficulties due to emergencies, and their economic difficulties must be relieved. People still in difficulties after receiving assistance from the governments of municipalities and counties (cities) shall be reported to our department for relief according to the Operation Directions for Emergency Relief Application Approval and Appropriation Control by Ministry of Health and Welfare. The emergency relief project of "Immediate Care" shall be initiated, and the local village office, non-governmental public interest groups, and associations of counties (towns, cities, and districts) shall visit and take care of such groups. The results are presented in Table 10-3.

Section 4 Disaster Relief

In recent years, extreme climates happen frequently and disasters keep pouring in, so high attention is paid to various kinds of disaster prevention work.Disaster prevention and rescue work is developed and advanced continuously, including disaster reduction,disaster preparedness, emergency handling and restoration. Meanwhile, the role functions of social administration are reviewed and improved all the time. The Social Assistance and Social Work Division of the Ministry of Health and Welfare mainly takes charge of "residential relocation for victims," "material preparation for people's livelihood," and "consolation and care for victims." Only by making full preparations before the disaster, can we deal with various problems when disasters happen.

1. Sheltering and Supply Preparations for Disaster

(1) When the flood season and typhoon season were coming every year, the local government would take special measures including temporary sheltering for victims, social assistance and vulnerable protection according to Disaster Prevention and Response Act. In 2018, various counties and cities prepared 5,803 shelters for victims, which could accept 2,517,034 people. Emergency shelters were set up at 143 locations during the course of 2018 for 6 disasters including the Hualien Earthquake on February 6. The shelters were used 3,952 times.

(2) The mode of "regional union & real-time assistance" and "one person for one case" is established, and the local government is divided into five regions according to the geographic area. They will support the nearby disaster- stricken counties and cities, and service patterns are developed according to the disaster types. Victims are provided with services covering real- time assistance, t rauma counseling, psychological support and demand investigation.

(3) The "Guidelines for the Management and Use of Disaster Donations by Local Governments" was issued on June 20, 2018, to ensure that donations to fund-raising campaigns organized by local governments can be effectively used for helping disaster victims and reconstruction.

2. Post-Disaster Condolence Payments

When severe natural disasters happen, and the Executive Bureau gives instructions or the central disaster response center is established, we should refer to the relevant reports and contact the local government

Table 10-3 Emergency Relief in 2016-2018

Source: Department of Social Assistance and Social Work, Ministry of Health and Welfare, R.O.C.(Taiwan)

Type \ Year		2016		2017		2018	
		Beneficiaries (People)	Relief Payment Amount (NTD)	Beneficiaries (People)	Relief Payment Amount (NTD)	Beneficiaries (People)	Relief Payment Amount (NTD)
Emergency Relief from Municipal and County (City) Authorities		35,900	223,191,601	34,188	217,920,503	34,469	221,302,550
from MOHW	Emergency Relief	1,096	13,255,000	1,011	13,960,000	1,006	11,560,000
	Immediate Care	12,400	274,700,000	11,813	243,948,925	12,089	174,155,300

to confirm deaths, missing individuals or serious injuries caused by such disasters. The items should be reported to the governor, in order to pay consolation money. The "MOHW Guidelines on Disbursement of Condolence Payments from the Disaster Relief Donation Fund" was issued by the MOHW on August 8, 2018, to manage the disbursement of condolence payments for deaths, missing persons, serious injuries or other disasters determined by the MOHW from the former Taiwan Provincial Government's disaster relief donation account.

Those whose eligibility to receive the disaster relief payment is verified by the municipal, county or city government through the relevant documentation will receive NT$200,000 for each death or missing person. Those with serious injuries receive NT$100,000 in financial assistance. The MOHW and Relief Foundation have also followed the standard below for disbursement of additional condolence payments:

1. Consolation money for death: NT$600,000 (the Ministry of Health and Welfare NT$200,000;the Disaster Relief Fund NT$400,000).
2. Consolation money for missing: NT$600,000 (the Ministry of Health and Welfare NT$200,000; the Disaster Relief Fund NT$400,000).
3. Consolation money for serious injury: NT$150,000 (the Ministry of Health and Welfare NT$50,000; the Disaster Relief Fund NT$100,000).

The situations of consolation money payment in 2018 are as follows: A total of NT$1,000,000 in condolence payments were made for 5 deaths resulting from the Hualien Earthquake on February 6. A total of NT$1,450,000 in condolence payments were made for 6 deaths, 1 missing person, and 1 seriously injured person resulting from the August 23 floods.

Section 5 Assistance for the Homeless

Counseling and Shelter Service for vagrants provides three-stage services including "emergency service, transition service and stabilization service," and to help vagrants rebuild and adapt to their life on the premise of respecting their basic human rights and considering regional differences.

There were 2,603 homeless people registered with the local governments at the end of 2018. Over 70% were located in 6 municipalities including Taipei City. In contrast, there were 6 counties/cities with less than 50 homeless people. Furthermore, there were no homeless people in Kinmen County, Lienchiang County and Penghu County, which shown a great difference between various places in the number of vagrants.

According to Article 17 of the Public Assistance Act, the local government shall for mulat autonomous regulations or methods of vagrant training according to the number of vagrants, vagrant assistance scale and needs within its jurisdiction. The existing measures are as follows:

1. Shelters for Homeless People: For homeless people without a living plcae, the governments also initiatively provide temporary shelters (such as vagrant hospice) for homeless vagrants who wander on the streets or are unwilling to accept the agency's arrangement. Such places can be treated as their temporary and short-term shelter from the cold. By the end of 2018, 10 public vagrant hospices (including 7 hospices founded by the government but managed privately) had been established.
2. Living maintenance: In order to maintain vagrants'basic living safety, the Ministry of Health and Welfare has planned budgets to help municipalities and counties (cities) handle vagrant businesses during recent years. The government and relevant associations have united the forces of nongovernmental organizations to provide street services and guarantee basic life maintenance for vagrants, including hot food, bathing, protection against cold, haircut, clean clothing, sleeping bag, and hygiene.
3. Employment Assistance Program: Coordinating with the labor authority to provide vocational training for vagrants having working competence or willingness, or discussed with relevant units to provide employment opportunities for them by assessing their characteristics. For example, cultivating vagrants' working habit through providing work relief program instead of giving outright grant, or offered counselling services, so as to improve vagrants' self-reliance ability and help them return to families and social life.
4. Cold Weather Care Services: The Ministry of Health and Welfare issued Plan on Strengthening the Care for Vulnerable People in Cold Weather and Spring Festival Holidays on 10 Nov. 2014. When the Central Weather Bureau published a special report about low temperature below 10°C, the local government and non-governmental organizations shall initiatively provide the caring service in cold weather, and offer hot food, winter clothes and temporary hospices to vagrants.

In 2018, services for 382,982 vagrants was provided, including giving caring service to 349,965 vagrants, helping 351 vagrants return home, serving 13,395 vagrants in the Spring Festival holidays, welfare referral to 3,777 vagrants, recommending employment opportunities to 2,036 vagrants, helping 280 vagrants lease a house, settling down 3,496 vagrants, and providing other services for 9,540 vagrants.

Section 6 Children Future Education and Development Account (CFEDA)

In order to take care of economically disadvantaged families, a social investment-oriented

strategy targeting poverty alleviation through self-reliance has been adopted in 2016. Furthermore, the Scheme of Promoting Children Future Education and Development Account (CFEDA) was issued on November 22, 2016. This scheme is implemented under cooperation between the government and families in poverty. Parents deposit the fund with a maximum of NT$15,000 for their qualified child every year, and the government will provide a match fund with an equal amount to encourage families in poverty to engage in a long-term deposit (for 18 years). In addition, supportive measures like financial education and family service are taken. As for children without reliable support and poor families who are unable to save money, the government will work with NGOs to provide assistance. Social workers will provide accompany and counseling while the period of saving funds to reduce the risks that the families might encountered. CFEDA were first set up on June 1, 2017. On June 6, 2018, "Children Future Educational and Development Account Act" was enacted and promulgated by the President to ensure that the proper laws are in place. 7,173 people has enrolled CFEDA by the end of 2018.

Chapter 2 Social Work

Section 1 Social Work System

The professional system of social work has already become a fashionable trend in the world. By the end of 2018, 12,288 people had passed the social worker examination, there had been 7,033 licensed social workers, and 15,643 full-time social workers (12,748 female (81.49%) and 2,895 male (18.51%) workers) had engaged in the social work field in both the public and private sectors, as shown in Figure 10-1.

1. Examination

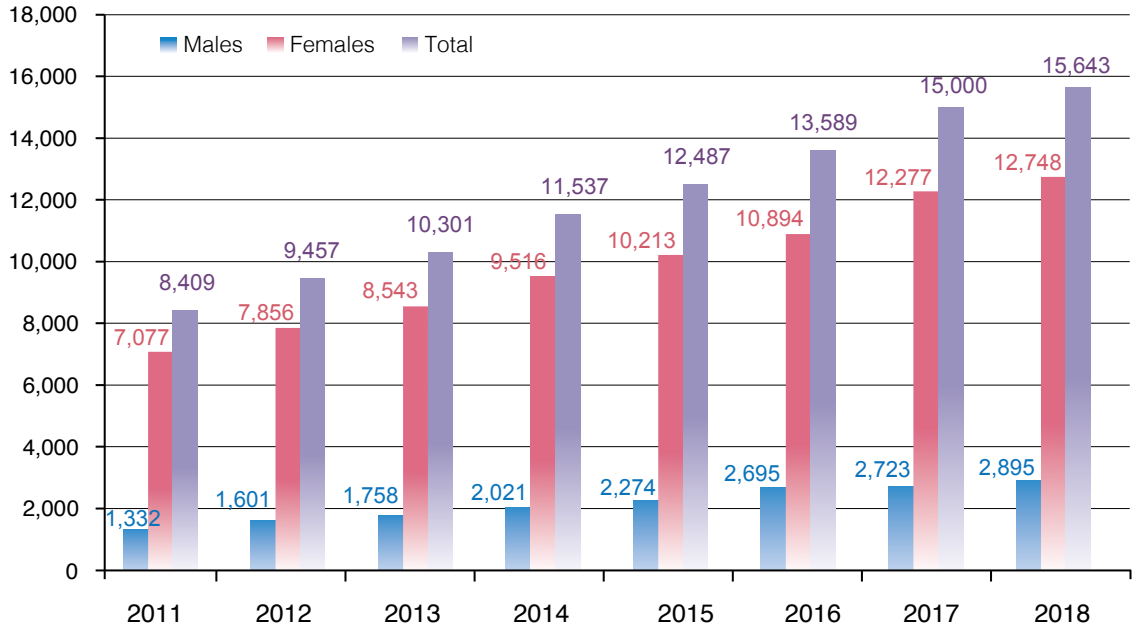
(1) The Ministry of Health and Welfare cooperated with the Ministry of Examination to advance the national examination function analysis work in 2013, and they completed function analysis for public social worker and social work examinations. In addition, the Ministry of Education was invited to encourage the schools to adjust their curriculum planning according to the social worker examination system, so as to cultivate excellent social workers at front line.

(2) We conducted qualification review for practical social work experience and business according to the test-free subjects of professional social workers stipulated by the Ministry of Examination. By the end of 2018, 74 committee meetings were held, and 11,626 application cases for social worker were reexamined.

(3) According to Article 7 of The Regulation of Specialized Social Worker's Category Verification and Continuing Education, accreditation for specialized social workers shall be conducted at least once every five years after the method is implemented. Beginning in the sixth year after the implementation,accreditation shall be conducted at least once every two years, and

Figure 10-1 Social Workers Assigned to Social Welfare Tasks in Public and Private Agencies, 2011-2018

Source: Department of Social Assistance and Social Work, Ministry of Health and Welfare



the central governing authority shall regulate the number of times according to the supply and demand situations about specialized social workers. By the end of 2018, 418 specialized social workers had been employed, including 141 medical workers, 116 mental health workers,106 workers for children, juveniles, women and families, 29 workers for the older adults, and 26 workers for mental and physical disturbance.

2. Professional Training

(1) In order to meet the needs of practical workers and relieve their burden of repeated training,the requirements for comprehensive basic training and advanced training of various fields was planned, and the Professional Training Plan for Social Workers was formulated.

(2) The social workers' professional knowledge and skill are improved according to the License Updating for Social Workers and the The Regulation of Specialized Social Worker's Category Verification and Continuing Education. In 2018, the continuing education credits of 2,815 social works were reviewed.

3. Protection of Social Workers' Rights

(1) In order to provide social workers with a friendly work environment and encourage them to choose full-time and long-term jobs,the Ministry of Health and Welfare discussed with the Personnel Administration Department of Executive Bureau and Ministry of Personnel about measures like post adjustment and professional tables. We have improved labor conditions and rights & interests of unauthorized personnel (appointed employment) of public sectors and social workers of private sectors,ensured the working safety of social workers in various fields, and intensified prevention,inspecting mechanism and employee assistance. In order to continuously study and develop the professional system of social workers, we have introduced the policy communication platform of "The strengthening Social safety Net Program" so as to advance relevant policies via cross-department coordination meetings.

(2) For social workers employed by the private sector, a certification allowance for specialized social workers was added by the MOHW in the 2016 Guidelines for Subsidizing Promotion Social Welfare. In the 2018 Guidelines for Subsidizing Promotion Social Welfare, the professional service fee for social workers was increased from NT$33,000 to NT$34,000, and for social worker supervisors from NT$37,000 to NT$38,200.

(3) To protect the labor rights of social workers, the "Social Worker Labor Grievances and Communication Platform" was established on March 31, 2018. A labor disputes and grievances process was also issued on August 24, 2018.

Section 2 Manpower allocation and utilization for social workers

To maximize the use of human resources through national coordination of social workers, in 2018 the Executive Yuan rolled the "Local Government Social Worker Manpower Allocation and Employment Augmentation Plan" approved in 2010 into the "The Strengthening Social Safety Network Program" by the Executive Yuan. The move established a mechanism for vertical and horizontal cooperation between the central/local governments and actual practitioners. Up to 2,145 new social workers are expected to be added and they will be used to increase the manpower of the Strengthening Social Safety Network Program in the future.

The local government subsidies approved by the MOHW in June, 2018 this year authorized local governments to employ 1,859 social workers (including 922 new hires and 867 people from the previous social worker augmentation program). At the end of 2018, there were a total of 1,400 social workers (including 648 new hires, and 752 people already hired under the previous social worker augmentation program.) Employment rate was 65% for new social workers and 87% for those previously hired under the social worker augmentation plan. The overall employment rate was therefore 75%. The number of social workers employed by local governments reached 3,687 people, an increase of 2,097 people over the 1,590 people from before program implementation. The number of people served by each local government social worker was also reduced from 14,549 to 6,238 people, effectively reducing the burden on social workers and improving their quality of service.

A social worker manpower database was established in 2014 to enhance the management of social worker human sources. The "Online Review for Continuing Education of Social Workers" function was activated in June 2015, while the "Online Review for Continuing Education of Specialized Social Workers" was added in July 2016.

Section 3 Occupational Safety of Social Workers

In order to intensify social workers' operating safety, the Ministry of Health and Welfare has brought relevant measures about social workers' personal safety into Social Workers Act, Law on Welfare and Rights Protection of Children and Juveniles,and Family Violence Prevention Act. The Executive Bureau issued Act on Operating Safety of Social Workers (2015-2017) in 2015. The relevant strategies were reviewed in 2018 prior to their continued implementation in order to realize the three goals of "Secure employment", "Safe service" and "Stable management". The specific measures are as follows:

1. The "table for high-risk and general-risk businesses of social workers" should be completed, and the subsidy for risky operation paid to social workers. From 2015 to 2018, the total number of beneficiaries of subsidy for risky operation was 3,867, 4,153, 4,243 and 4,568. By the end of 2018, the total amount of subsidies was NT$96,525,014.
2. Funding was sought from the Public Welfare Lottery Fund to carry out the "Social Worker Personal Safety Promotion Plan": Municipal/local government social service agencies (including social welfare NGOs and institutions) received subsidies to fund personal protection measures, facilities and equipment for social workers. Subsidies were also given for other measures such as tiered continuing education courses on personal safety for social workers, emotional support, stress reduction, mental health, and support for assault victims, and occupational safety insurance. NT$2,156,000 in subsidies were given to 17 projects in 2018.
3. All the strategies and implementation measures approved by the Executive Yuan under the "Occupational Safety for Social Workers Plan" on August 1, 2018 were merged into the supporting measures of the Strengthening Social Safety Net Program in 2019. Risk allowances were included in the review of the remuneration structure. The number of people that received risk allowances and the amount paid are shown in Table 10-4.

Table 10-4 Summary of social worker risk allowance funding between 2015 ~ 2018

Source: Department of Social Assistance and Social Work, Ministry of Health and Welfare

Year	Standard risk No. of people	High risk No. of people	Total No. of people	Amount of subsidy (NTD)	Notes
2015	1,192	2,675	3,867	11,512,800	The secondary reserve was tapped in 2015 so allowances were only paid from October through to December
2016	1,182	2,971	4,153	27,776,000	
2017	1,382	2,861	4,243	27,718,699	
2018	1,548	3,020	4,568	29,517,515	
Total	5,304	11,527	16,831	96,525,014	

Chapter 3 Community and links to other resources

Section 1 Community Development

Our community development follows the pattern of mass organization according to Regulation on Community Development Work. Construction is conducted among communities, including Construction of public facilities, production and welfare development and spiritual and ethical development. and social welfare enters the communities. In this way, the well-being of people living in communities is enhanced.

As for community development, the folk force is utilized to advance various welfare services. We try to integrate community residents' consciousness,promote harmony and good-neighborliness, and increase living quality by issuing community periodicals and holding activities. The effects of 2018 are as follows:

1. 6,823 community development associations nation-wide; 3,765 community centers.
2. Welfare communities were built: community-oriented social welfare flagship plans, human resource training, disaster prevention and preparedness advocation, and proposal empowerment were conducted, and subsidies were provided for 133 cases; the total amount was NT$11,987,000.
3. Organized the national welfare community observation tour and national community development task force that were attended by more than 600 people.
4. Organized competition to recognize outstanding communities in community development for 2018. A total of 41 community development associations including Jhongsun Community in Taipei City's Wenshan District received awards.

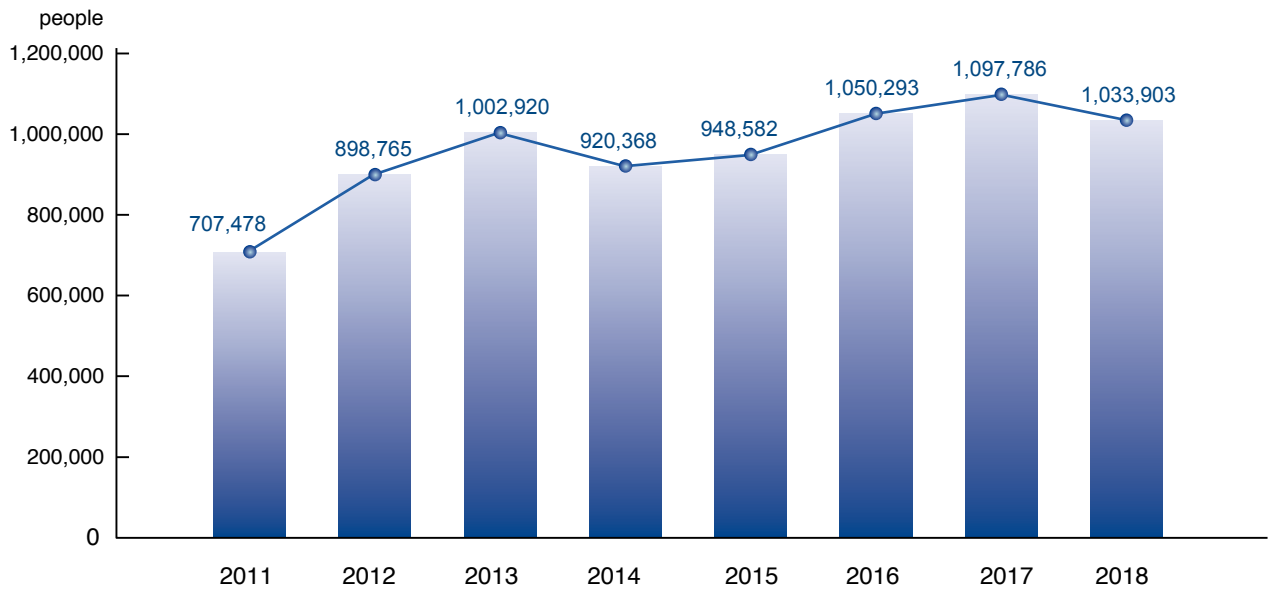
Section 2 Promoting Volunteerism

In order to effectively unite the folk force and encourage the members of the public to help one another, the Voluntary Service Law was established in 2001. To promote the development of volunteer service, we have established the "information integration system for national volunt eer service" covering basic dat a of volunteers,and "management system of materials and volunteers for major disasters," which can assist the work of disaster relief. Volunteer service review, investigation, educational training, and awarding were carried out. In 2018, the Ministry of Health and Welfare commended 8,878 volunteers. 47,897 people have been issued with the Service Honor Card. The card grants free admission to 157 locations including public scenic areas, recreational facilities without reserved seating, and cultural & educational facilities.

There were 1,033,9903 volunteers organized into 22,448 volunteer groups nationwide in 2018 as shown in Fig.10-2. These including 304,803 men (29%) and 729,100 women (71%). In the respect of service scope, the education type had the highest population (403,934), followed by the health welfare type (360,290) and environmental protection type (180,151).

Figure 10-2 Number of Volunteers, 2011-2018

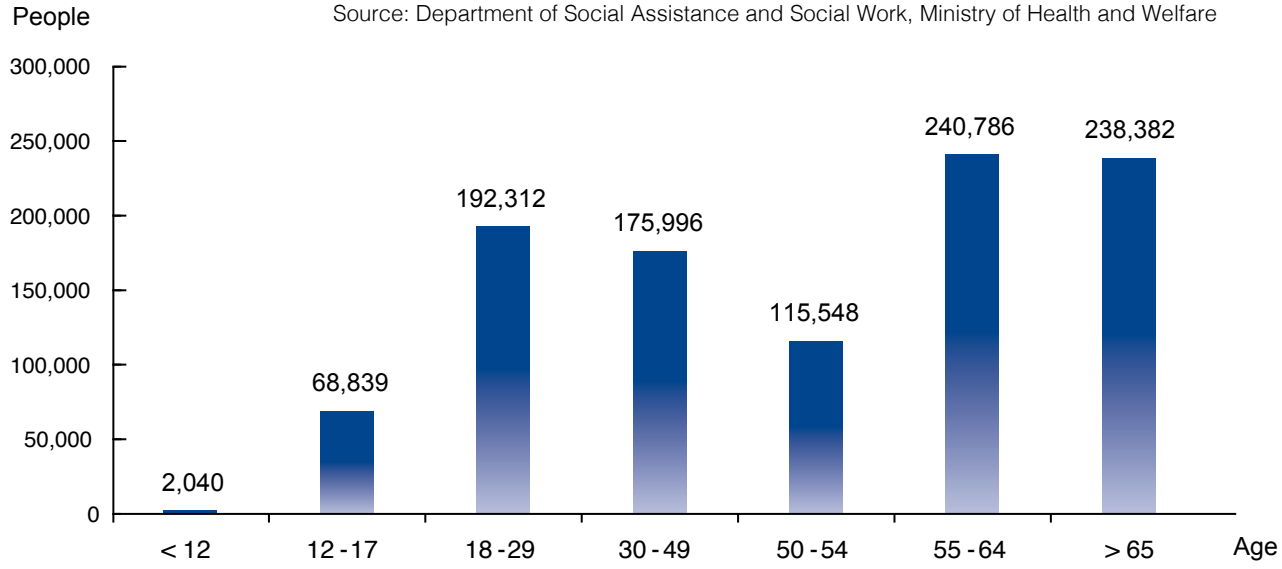
Source: Department of Social Assistance and Social Work, Ministry of Health and Welfare



In terms of volunteers' age distribution, those aged between 55 to 64 were the largest group with 242,626 people (22%); volunteers over the age of 65 numbered 238,372 people (20%) as shown in Fig.10-3. In 2018, they served 532,111,648 people, and the duration of service was 106,054,323 hours,equivalent to 50,988 full-time workers.

Figure 10-3 Age Groups of Volunteers, 2018

Source: Department of Social Assistance and Social Work, Ministry of Health and Welfare



Section 3 Charity Donations Destined for Social Welfare Funds

In order to manage the behavior of contribution solicitation, and to properly utilize social resources,the government issued Charity Donations Destined For Social Welfare Funds Implementation Regulations in 2006. It stipulates that contribution solicitation activities shall be initiated for social and welfare services,cultural and educational undertakings, social charity, foreign aid, international humanitarian assistance, and other undertakings affirmed by other competent authorities. The statistics for MOHW-approved fund-raisers at the end of 2018 are shown in Table 10-5.

In order to improve fiscal accountability and operational effectiveness of fundraising groups,our department will entrust accounting firms to check the amount, use and flow of properties collected every year. Cases reviewed over the past 3 years: 96 cases in 2016, 80 cases in 2017, and 140 cases in 2018.

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Section 4 1957 Welfare Consulting Hotline

In order to help families or individuals encountering difficulties in life, the Ministry of Health and Welfare has set up a special line for welfare consultation (1957), which will provide the public with consultation and referral services for free 24 hours all year round. In 2018, the Taiwan Fund for Children and Families was commissioned to recruit 35 professional social workers to provide services from 8:00 to 22:00. If social workers of the special line discover any referral cases to be reported,they will report these cases to the Social Affairs Bureau (Department) of the relevant municipality or county (city), which will then arrange for personnel to visit or provide relevant services for the cases. Analysis of service outcomes is shown in Figure 10-4 and 10-5.

Table 10-5 Statistics for approved fund-raisers between 2011 and 2018

Source: Department of Social Assistance and Social Work, Ministry of Health and Welfare

Year	Number	Groups	Anticipated donations	Actual donations	Reason for difference
2011	179	157	5,054,287,103	4,626,586,110	The Tohoku Earthquake struck Japan on March 31 of that year (major disaster)
2012	221	190	5,752,360,430 元	2,425,399,813	
2013	283	236	8,394,511,818 元	3,039,441,780	
2014	347	293	12,970,015,606 元	3,767,363,447	
2015	442	373	16,357,426,700 元	2,898,820,857	
2016	422	372	19,056,482,132 元	4,317,464,413	
2017	448	386	16,835,374,869 元	4,507,754,461	
2018	485	423	16,241,762,754 元	5,038,433,097	

Figure 10-4 Call statistics for the MOHW 1957 Consultation Hotline between 2011 and 2018

Source: Department of Social Assistance and Social Work, Ministry of Health and Welfare

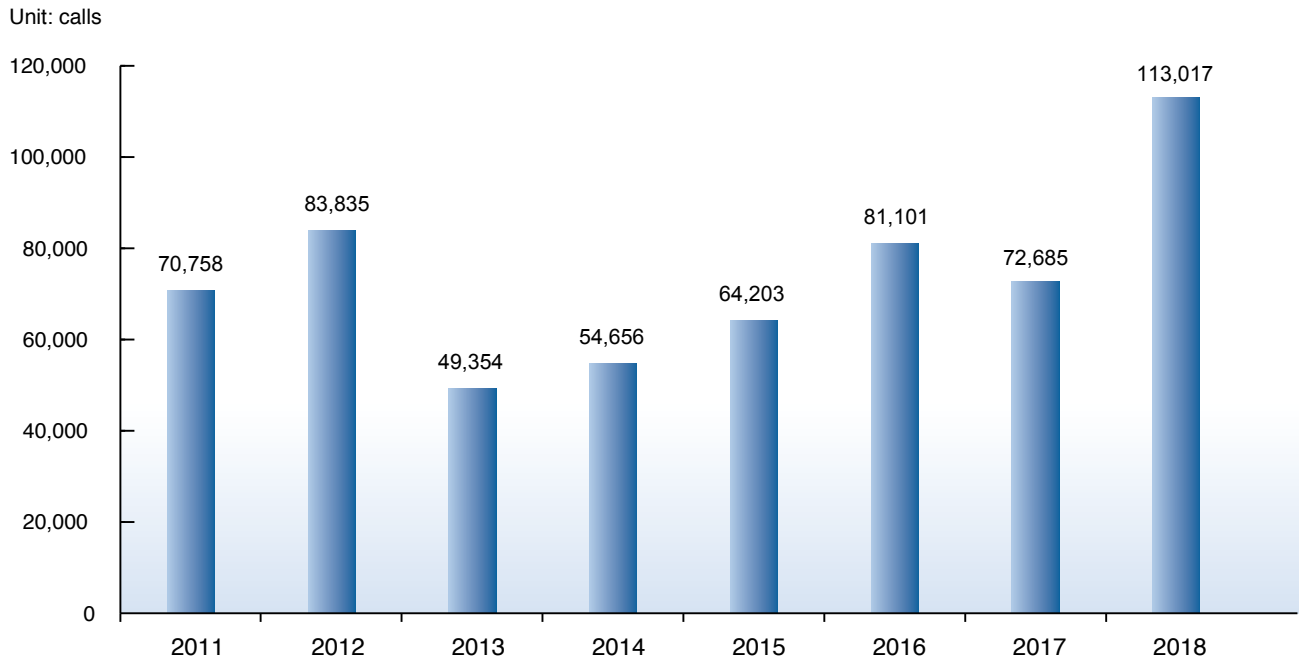
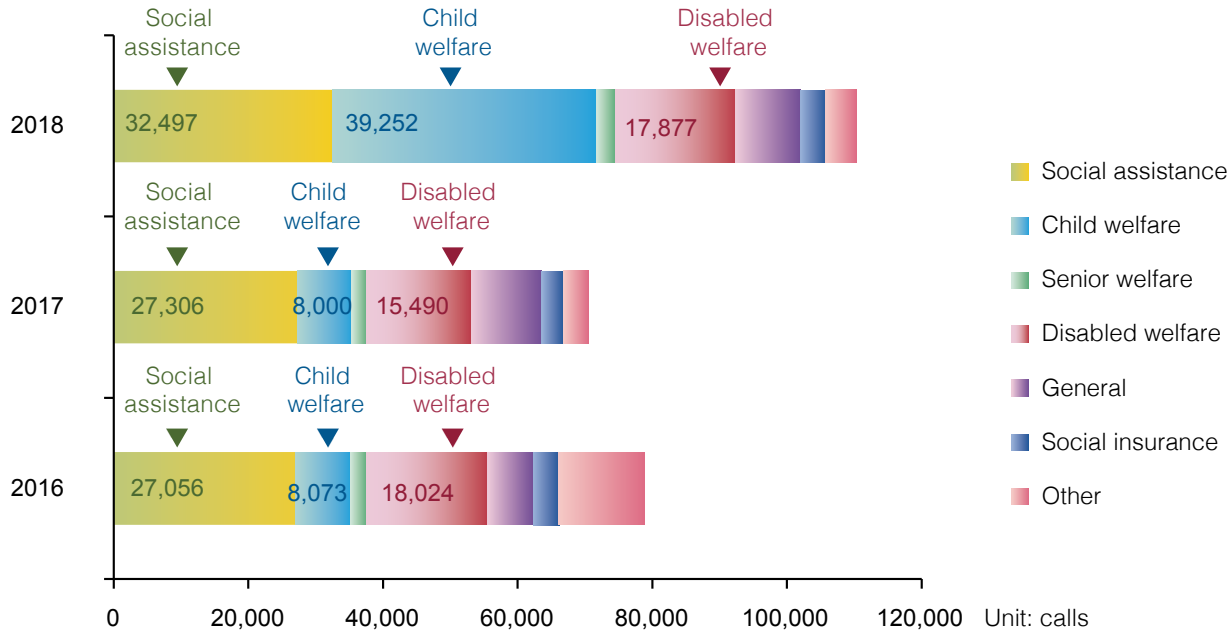


Figure 10-5 Analysis of calls made to the MOHW 1957 Consultation

Source: Department of Social Assistance and Social Work, Ministry of Health and Welfare



After reading this article, scan the QR Code.
Please fill-in the questionnaire to give us your advice.

Sexual Violence Prevention and Protective Services

Gender-based violence generally refers to violent behaviors caused by "gender inequality." Common forms include intimate violence, sexual assault,sexual harassment, and the abuse of children,the elderly, and people with physical and mental disabilities, which all are serious violations of life and health. It requires the establishment of laws by the state, the establishment of crossunit cooperation mechanisms, the development of victim protection measures and counseling programs for victims, and preventive education to comprehensively eliminate gender-based violence and keep people from living in fear.

Chapter 1 Prevention of Gender-Based Violence

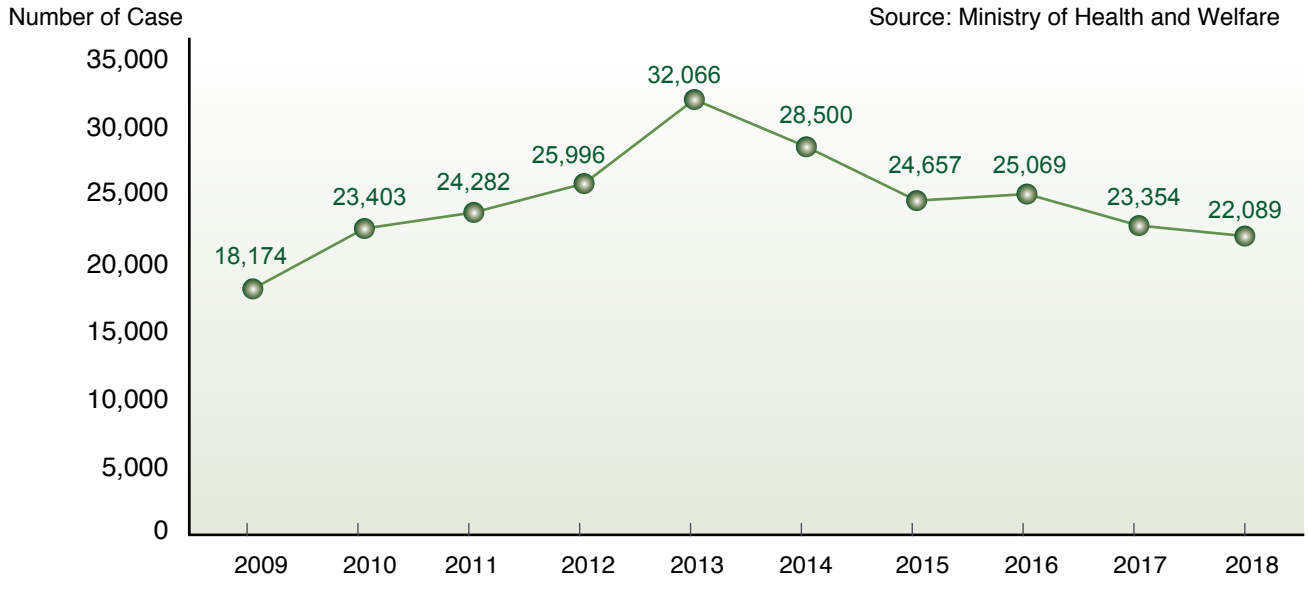
Section 1 Inter-departmental Network Integration Mechanism

1. Established an inter-departmental communication platform: In 2018, six meetings were held on the promotion of domestic violence and sexual assault prevention, which reviewed the current situation of the gender violence prevention and protection service network, and proposed suggestions for improving inter-professional network coordination and intervention strategies.
2. The 5th Purple Ribbon Awards ceremony was held: The "5th Purple Ribbon Award" ceremony was held in December 2018 to honor the members of the prevention and control network who have made achievements in protective service, and to honor workers who made outstanding contributions in protecting against gender-based violence. The 12 winners came from various protective services, including social administration, police administration, health care, education, and judicature.

Section 2 Reporting System and Information Platform

1. Implemented the statutory responsibility report and established the National Protection Information System and Case Management Process Control System: "Promoting Care E Plan." A case tracking management mechanism was put in place, and an information sharing platform was established for the use of a prevention and control network by related staff. A total of 168,111 cases of domestic violence, sexual abuse, child protection, disabled person protection, senior protection and sexual exploitation were reported through the "eCare" online reporting platform in 2018.
2. Set up 113 Protection Hotline: According to the statistics, the number of reports received in 2018 was 22,089, with the largest number of cases involving child protection (8,115), followed by intimate violence (7,792) of marriage/divorce/cohabitation relationships. In order, the rest of the

Figure 11-1 Case Number of the 113 Protection Hotline, 2009-2018



cases involved violence among family members (4,108), protection of the elderly (940 cases), cases of sexual assault (683 cases), violence between people over the age of 18 in intimate relationships not living together (309 cases), protection of disabled people (99 cases), and sexual exploitation (43 cases), as shown in Figure 11-1.

Section 3 Promoting Prevention of Gender-Based Violence

1. Taiwan Against Gender-Based Violence (TAGV) Website and TAGV Newsletter: In 2018, the website had 20,156 data items, and achieved over 5.08 million hits. A total of 23 TAGV Newsletters were published, and the TAGV video and audio zone, digital learning platform,and interactive learning zone resources were integrated to complete the establishment of the "Gender-Based Violence Prevention Digital Learning Integration Platform," which allows for the direct uploading of digital learning hours to the public service portal and Social Workers Resource Management System of the MOHW.
2. Promoted the primary violence prevention plan in communities: Subsidies were used to guide community groups in conducting gender-based violence prevention and education activities, and in fostering a concept of zero-violence and zerotolerance in communities. 22 counties and cities and 72 plans were subsidized in 2018, with 380 communities participating.

Section 4 Long-term Employment for Social Workers Specializing in Protective Services

1. Plan of strengthening local government social worker assignment and career development: Subsidized local governments' social workers.In 2018, the plan subsidized 501 social workers who engaged in child protection and domestic violence and sexual assault prevention, with subsidies amounting to more than NT$147 million.
2. Implementation of the Protective Social Worker Manpower Audit Plan: A manpower audit of protective social workers was completed by municipal, county and city governments in 2018 with results reported to the MOHW. In accordance with the "Protective Social Workers Qualification Requirements and Standard for Determining the Scope of Duties", education and training were conducted by local governments based on the protective social worker training plan issued by the MOHW. Personnel that underwent the training were also entered into the "Social Worker Human Resource Management System."
3. Implementation of the Protective Social Worker Training Plan: The MOHW "Protective Social Worker Training Plan" is intended to ensure the professionalism and accountability of protection operations. Education and training of new recruits and supervisors are conducted by the central government while in-service training is organized by local governments. In 2018, the MOHW hosted 10 training sessions for new protective social workers and supervisors. To enhance the professional competency of protective social worker supervisors, a professional development plan for protective social worker supervisors was also commissioned by the MOHW. Themed workshops were conducted for social worker supervisors with a certain level of seniority covering special issues that are often encountered during protection operations. The training helps to ensure the quality of service by assisting supervisors with fulfilling their teaching, support and administrative supervision functions. In 2018, 5 themed advanced supervisor training courses were organized in 2018 and these were attended by 156 people.

Chapter 2 Prevention of Domestic Violence

Section 1 Status of Domestic Violence Services

The Domestic Violence Prevention and Control Act (hereinafter referred to as the Domestic Violence Act) was promulgated on June 24, 1998, and nearly 100,000 victims have been reported every year since then. In 2018, most of the reported cases involved intimate violence, with women being the majority of victims (82.1%). Meanwhile,cases of "violence by other family members" also mostly involved female victims (54.7%). The majority of victims in "child protection cases,"on the other hand, were male (54.1%). The majority of victims in "Abuse of elder relatives by a younger person related by blood (or marriage)" cases were female (60.7%) (see Figure 11-2).

In 2018, the municipal and county (city) governments provided more than 1.30 million assistance for the protection of victims of domestic violence, and the total amount of assistance provided was NT$961,360,000. The main subsidies were subsidies for shelter, emergency support,psychological rehabilitation, medical costs, lawyers,and litigation costs (see Table 11-1).

Section 2 Diverse Intervention for Victims of Domestic Violence

Continue to assist local governments in promoting programs: use social welfare subsidies and public welfare lottery rewards to assist local governments and civil groups in promoting violence prevention and control. The relevant programs are as follows:

1. Shelter program for victims of domestic violence: Subsidies were provided for partnerships between local governments and NGOs to provide emergency shelter and placement services for victims. In 2018, 12 cases received NT$8.11 million in subsidies to provide shelter/placement services 13,000 times. Seven cities and counties also received subsidies in 2018 for organizing medium and long-term shelters to meet the protection requirements of victims at different stages of rehabiliation.

Figure 11-2 Reported Victims of Domestic Violence by Gender, 2018

Source: Ministry of Health and Welfare

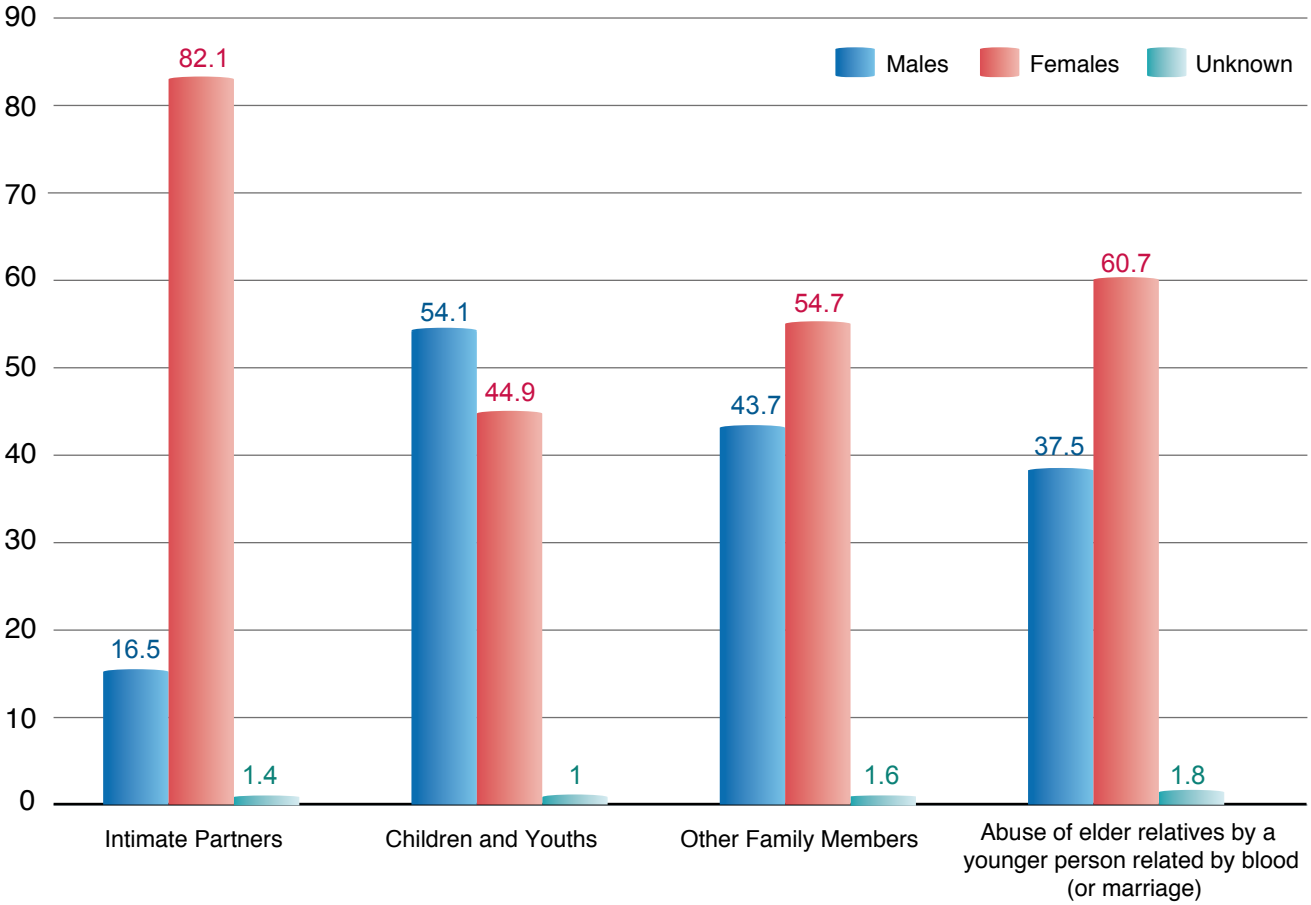


Table 11-1 **Domestic Violence Protective Assistance Incidents and Monetary Amounts, by Year**

Source: Ministry of Health and Welfare

Item/ Year	2014	2015	2016	2017	2018
Protective Assistance Incidents	1,127,784	1,196,998	1,295,786	1,312,095	1,309,184
Protective Assistance Monetary Amounts (NT$)	533,561,364	576,498,676	577,721,960	743,362,409	961,394,330

2. The domestic violence office near court: The local government entrusted the civil society to set up 19 domestic violence service offices near the court, providing legal services, for victims, accompanying court appearances, shelter services, providing legal services,accompanying court appearances and shelter services to the victims, and the subsidies reached NT$4,530,000 in 2018, serving more than 120,000 persons.
3. Counseling and treatment program for children and juvenile witnessing the family violence: Assist the local government to develop a program for children and juvenile witnessing the family violence in conjunction with professional groups. In 2018, the program subsidized 15 cases,totaling NT$11.76 million and serving 20,000 persons.
4. Service plan for domestic violence victims of local tribes and new residents: assist local governments to handle the services for domestic violence victims of local tribes and new residents. In 2018, 8 cases were subsidized, totaling NT$5.15 million and serving over 100,000 people.
5. Domestic violence services for new immigrants: In 2018, approximately NT$3.23 million in subsidies were distributed to 4 domestic violence protection programs for new immigrants. The programs were used around 11,000 times. Local governments also received counseling on using the new immigrant development fund to set up personal protection programs for new immigrants. A total of NT$4.17 million in subsidies were provided to 5 programs.
6. “One-stop” domestic violence service program: Local governments and NGOs were assisted on the development of one-stop services for victims (must provide at least 3 services such as tracking & monitoring, services for young witnesses, job seeking services for victims, and independence services). In 2018, 17 programs in 12 counties/cities received more than NT$40.32 million in funding to process 5,606 cases. Protective and support services were provided to victims more than 60,000 times, support services were provided for 780 young and teenage witnesses to domestic violence (more than 15,000 times) and job search services (more than 6,000 times) were provided to 85 victims.

Section 3 Intervention for Domestic Violence Offenders

1. Advocating Civil Protection Orders in Offender Intervention Plans and supervised local governments in implementing the plan. In 2018,intervention was provided to 5,291 people, 1,574 of whom already completed the program. The number of people dead or entering the prison or protection order revoked not included, the implementation rate was 100%.
2. Preventive Service for Offenders of Domestic Violence
   (1) The 0800-013-999 male hotline was established to consult men in domestic conflicts and reduce the chance of violence. In 2018, the hotline received 19,585 calls and serving 17,970 people (including 8,434 indepth services and 9,530 general consultation services).
   (2) Surplus from the public welfare lottery subsidize domestic violence offender prevention plans, which are co-handled by local governments and NGOs and include direct guidance for offenders, case management, follow-up, and professional training. In 2018, there were 28 plans subsidized, with total subsidized of NTD25.9907 million and services provided 40,852 times.

Section 4 Quality of Domestic Violence Prevention and Education

1. Continued to promote the "Domestic Violence Safety Net Program": For victims of domestic violence assessed to be in a life-threatening situation, cross-platform conferences were convened by municipal, county and city governments every month to draw up a safety program for victims. A total of 560 cross-network platform conferences were conducted in 2018 with 10,740 cases put up for discussion. Intervention by the preventive network reduced the level of risk in 5,671 cases, or 53%.
2. "Elder abuse in Taiwan survey": National Taipei University of Nursing and Health Science was commissioned in 2018 to conduct a survey of elder abuse in Taiwan. The survey is expected to be completed in September, 2019, and will be used to estimate the prevalence of elder abuse in Taiwan.
3. Strengthened the professional knowledge of domestic violence prevention and control personnel: In 2018, administrative training for social workers on domestic violence prevention was conducted, Training was completed by a total of 540 people.
4. Increasing the sensitivity of elder protection alerts: Network cooperation was strengthened by enhancing home care and mandatory reporting personnel's understanding of elder protection. In 2018, 8 training sessions for mandatory reporting personnel and 7 training sessions for care attendants were conducted in conjunction with NGOs. More than 1,200 people took part in the training.
5. Education and training for treatment personnel: 109 mandatory, optional, and group education courses on domestic violence prevention/ awareness and parental education counseling were reviewed in 2018.

Chapter 3 Prevention of Sexual Assault and Sexual Harassment

Section 1 Status of Sexual Assault Services

1. Overview of sexual assault services

(1) Since the publication of the Law on the Prevention and Control of Sexual Offences on January 22, 1997, about 13,000 suspected cases were reported each year, and more than 8,000 people were victimized in 2018. 81% were women, 50% were between the ages of 12 to 18, 13% were those with suspected or confirmed handicaps; 82% of suspects were male, with 33% between the ages of 12 to 24. The majority of cases (72%) were "sexual assault by someone known to the victim; 5% were sexual assault by a stranger. The remainder were unknown or other. The most common type of relationship between the two parties in such cases was "intimate" such as (ex)spouse, fiancé/fiancée, (ex)boyfriend/girlfriend (24%), followed by "unknown or other" (23%), or "friends" (family friend, ordinary friend, online friend, neighbor) at 20%.

(2) In 2018, the domestic violence and sexual assault prevention centers of municipal, county and city governments assisted sexual assault victims 245,515 times and distributed in NT$152,520,000 in assistance funds. Most of the assistance consisted protective and assistance measures such as shelter services, assistance with police report and interviews, economic assistance, assistance with medical examination/treatment, and legal aid.

2. Overview of sexual harassment services

The Law on the Prevention and Control of Sexual Harassment was promulgated on February 5,2006.All relevant organs (units) accepted 765 cases of sexual harassment complaints in 2018. The cases are as follows:

(1) 546 cases were established, 159 were not established, and 60 were withdrawn, 15.55% higher than 662 cases (500established, 129 not established, 33 withdrawn) in 2017. The police authorities accepted the most cases (accounting for 76.7%), followed by the companies of the injurers (19.5%).

(2) 95.42% of the victims were women, and 91.6% of the perpetrators were men. The most common type of relationship between the two parties was "Strangers" (70.33%), followed by "colleagues" (4.76%); the most common location was "public area" (40.04%), followed by "virtual environment - high-tech equipment" (e.g. the Internet) (19.03%); the most common type of behavior was "surprise kiss, embrace, or touching of the breasts, buttocks or other private parts" (45.78%), followed by the

"display or sending of sexual images (files)" (16.7%), and "physical contact and skirt-lifting" (12.74%).

Section 2 Diverse Intervention for Victims of Sexual Assault and Sexual Harassment

1. Protection and assistance for victims of sexual assault: set up victim service and subsidy standards, and guided the prevention and treatment centers to provide victims with emergency rescue, medical treatment, medical examination to obtain evidence and emergency resettlement, etc. More than 240,000 people were served, and the amount of support was more than NT$150 million in 2018.
2. Traumatic rehabilitation service for victims of sexual assault: From 2017 onwards, the public welfare lottery reward fund was used to subsidize the civil society to conduct the plan of the "sexual assault victims rehabilitation center construction,"which provided rehabilitation services to people suffering sexual abuse when there was lack of judicial assistance in the early years. More than 3,000 people were served in 2018.
3. Improvement of the inspection and identification of sexual assault: 3,227 victims were provided with injury certificates in 2018, of which 1,781 cases were sent to the Criminal Police Station for testing.
4. Promoted the plan to "reduce repetitive victim statements in sexual assault cases": Police,prosecutors, social workers, medical and other service teams worked together to improve the quality of interrogation and reduce repeated representations of victims. 1,349 cases in 2018 entered this service.
5. "Competitive Plan for Constructing Sexual Harassment Prevention and Control Service System": In 2018, 9 counties and municipalities were subsidized for 124 professional trainings,1,524 victims were given legal counseling and psychological counseling services, and more than 780,000 people were benefited. 1,723 sexual harassment prevention measures were subject to on-site inspection.

Section 3 Intervention for Sexual Assault Offenders

1. The MOHW oversaw compulsory therapy for sexual assault offenders who had completed criminal prison sentences. At the end of December 2018, there were six medical institutions designated to handle compulsory therapy (Tsaotun Psychiatric Center [MOHW],Tsaotun's Dadu Villa [MOHW], Jianan Psychiatric Center [MOHW], Kai-Syuan Psychiatric Hospital, Taipei Veterans General Hospital Yuli Branch, and Taichung Prison's Pei Teh Hospital), 67 people were place under custody for treatment.
2. Community intervention provided for sexual assault offenders. In 2018 a total of 7,198 offenders underwent therapy and counseling,including 1,567 offenders who completed the intervention and 4,500 who were still undergoing intervention. There were 10 offenders referred for compulsory therapy, 736 who did not completed therapy due to explained excuses,and 385 punished for failure to show.

Section 4 Quality of Prevention and Education on Sexual Assault and Sexual Harassment

1. "Severe Sexual Assault Case Review Meeting": A total of 7 cases were reviewed at 1 meeting in 2018. The three main types of cases were sexual assault within the family, sexual assault outside of non-institutional children's homes, and sexual assault in juvenile/disabled institutions. Resolutions passed by the meeting included requiring the service provider discuss and notify the subject before case closure, as well as the continued provision of support resources; institutions were recommended to establish clear channels for reporting of sexual assault cases with regular meetings for publicly stating their institutional policy and to eliminate gossip. The MOHW and Social and Family Affairs Administration were asked to amend Article 90 of the Rights Protection Act for Persons with Disabilities to include punitive action against institutions that fail to report mental/physical abuse of the disabled to the competent authority.
2. Professional training on prevention of sexual assault and sexual harassment: Two "Professional Training Class for New Sexual Assault Prevention Personnel" were conducted in 2018. The course covered topics in human sexual development, sexual assault within institutions, sexual assault of disabled people, legal protection and initiatives for victims of sexual assault, as well as medical care and protection of sexual assault victims. Three supplementary classes on "Introduction to sexual assault", "Introduction to victims of sexual

assault" and "Introduction to sexual trauma" were also offered. A total of 101 people took part in the training. To enhance the professional knowledge and skills of personnel involved in processing and investigating sexual harassment cases, a total of 8 sexual harassment investigator training sessions were conducted in 2018 (completed by 506 people).

3. Strengthening of preventive education: In 2018, MOHW subsidies and rebates from Taiwan Public Welfare Lottery were provided. More than 780,000 people in 9 counties (cities) benefited from the subsidies. E-learning materials on "Prevention of sexual assault in children and juvenile institutions" were completed in the same year to help frontline personnel learn about sexual assault in institutions and improve their professional knowledge and skills.
4. Education and training for treatment personnel: 77 sessions about sexual assault prevention, including the core and advanced courses, were reviewed by MOHW in 2018.

Chapter 4 Children and Youth Protection

Section 1 Overview of child protection services

In 2018, 59,936 child and juvenile protection cases (hereinafter referred to as child protection) were reported. The responsible informants reported a total of 51,746 (86%) cases, and the general public reported a total of 8,190 (14%) cases. The cases were classified into 20,550 (34%) domestic cases, 13,267 (22%) non-domestic cases, and 26,119 (44%) other cases. 6,967 children, 2,683 (39%) male and 4,284 (61%) female in the cases were given follow-up services.

Section 2 Multi-dimensional child protection services

1. Promotion of "Integrated Service Program for Abused Children and Family Recovery": Funding for landmark projects provided by the Ministry of Finance Public Welfare Lottery Fund was used by MOHW to subsidize the aforementioned plan at local governments. The program covered family support services for child protection, multi-dimensional parental education services for children, and placement of families and relatives in child protection cases. A total of NT$10,235,360 in subsidies were given to 11 programs in 8 counties/cities in 2018.
2. MOHW supported the establishment of regional integrated child protection centers: To help frontline workers accurately identify child abuse cases and strengthen cooperation between the medical facilities and social administration agencies, the MOHW began promoting the establishment of regional integrated child protection centers at the regional hospital and higher levels from July, 2018 onwards as part of the Strengthen Social Safety Net program. Between July and December, 2018, the seven regional integrated child protection centers helped examine injuries in 139 child abuse cases. They also hosted 30 education and training sessions that were attended by 1,817 people, as well as 46 case study conferences and online coordination meetings that were attended by 856 people.

3. Supervised the implementation of the Institute of Watch Internet Network (iWIN) by municipal, county and city governments: One conference was held in 2018 and the following resolutions were passed: All reporting of child protection cases in the news media or on the Internet should adhere to the spirit of the Child Protection Act, and the purpose of the Act as stated in Article 69. The nature of the Internet means that the disclosure of children's personal information may have unintended consequences so caution should still be practiced. Administrative agencies may nevertheless convene the relevant agencies, children's welfare groups or industry associations for a joint review if it is for children's welfare or in the public interest. There were a total of 5,599 iWIN cases in 2018 with the majority being related to "sexual content" (72.85%).
4. Professional vendors were commissioned on December 27, 2018, to produce e-learning materials on child protection and parental education to ensure their implementation by local governments. These materials can be used by child protection workers and parental education instructors when dealing with families or during parental education.

5. To improve the execution of child protection and protect the children's best interests, the Taiwan Fund for Children and Families was commissioned on December 25, 2018, to introduce the Team Decision-Making Meetings Model from overseas and analyze the feasibility of its application to child protection in Taiwan. Family Engagement will be made a key component of future decision-making in child protection.

Section 3 Children and Youth Sexual Transaction Prevention

1. Legal system: The Regulations on the Prevention and Control of Sexual Exploitation of Children and Juvenile were amended according to the Presidential Decree on November 29,2017 and January 3, 2018. The amendments include: the diversified treatment for victims, the expansion of responsibility scope of informant the scope of the personnel, and the increase of the criminal responsibility of perpetrator.
2. Victim protection assistance: 1,233 cases were reported. 645 cases were received by police (52.3%), followed by 298 cases (24.2%) by education staff and 191 (15.5%) by social workers. The number of victims was 729. The local social and political organs sent staff to participate in the investigation, serving 456 people, and resettled 138 people. According to the ruling of the court, 125 people were resettled in the short-term, 99 people were resettled in the medium and long term, and more than 800 people were given follow-up counseling services, including home visits, counseling, school counseling, financial assistance, family treatment, employment and medical resources.

Section 4 Child protection service quality and education

1. Hosting of "Review meetings for serious child abuse cases":

   MOHW convened the child abuse prevention task force a total of 4 times in 2018. The meetings were held in January, April, September and December. A total of 37 serious child abuse cases were reviewed. Key resolutions approved at the 4 meetings included: MOHW should strengthen existing psychiatric care and suicide prevention process to make more visits to children under 6 in monitored families. The implementation of search mechanisms for missing children should be strengthened by the government as well for child protection to prevent

missed cases; local governments were asked to submit child protection cases with multiple problems or serious abuse onto the domestic violence safety net platform for online discussion. Social workers were also asked to assess the competencies related to the children's mental and physical development so they can detect developmental problems and determine whether it was due to carer negligence or other special circumstances; the Ministry of Education was asked to murder-suicide detection and asking for help into related school curriculums. Mandatory reporting by teachers at child care centers was also emphasized to make them more sensitive to abused children.

2. Strengthening of professional child protection training: Two family function assessment and family circumstances programs were conducted in 2018. The event was attended by 60 people. Two initial training sessions for social workers were also organized and these were attended by 80 people. A separate 5-day workshop was held in January, 2018, with experts, academics, safety assessment cadre instructors, risk assessment task force members, and experimental social workers in attendance. Trainees looked at the experimental results of risk assessment, reviewed how well risk assessment tools match real-world tasks, and refined the operational knowledge and teaching techniques for safety assessment. Around 60 people took part.
3. Enforcing schedule tracking for child abuse cases: A timer alert function was implemented for the "Domestic Violence, Sexual Abuse and Child Protection Information System". The IT system is used to remind social workers of the time limit when handling child abuse cases.

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12 Research, Development, and International Cooperation

- Chapter 1 Technological studies on health and welfare
- Chapter 2 International Cooperation

Chapter 1 Technological studies on health and welfare

The budget for technological development in 2018 was NT$ 4.97 billion, as shown in Figure 12-1, accounting for 2.7% of MOHW's budget. This funding was mainly used for empirical studies, innovation, translational research, and health and welfare data analysis and statistics compilation in accordance with public health and social welfare policies. We entrusted or subsidized 749 research projects, and the actual application rate for technological achievements was 68.3%.

Section 1 Task-oriented research to support evidence-based policymaking

1. Infectious disease prevention and control

(1) The testing technologies for *Naegleria fowleri*, sandfly, 36 types of respiratory pathogens, and emerging zoonotic diseases, as well as rapid screening for arbovirus and rapid detection of *Rickettsia* were refined to improve disease prevention and control.

(2) New technologies were developed and introduced to enhance disease surveillance and capabilities for decision making. These technologies include VR teaching materials for dengue fever, an AI-powered flu forecasting station, a LINE@ chatbot, the AI malaria blood smear analysis technology, and an indoor air quality sensor prototype.

2. Public health promotion

(1) Strengthened research into active ageing and senior nutrition, completed the collection of active ageing data and visualization analysis of indicators for decision-making, improved collection of physiological, psychological and social data for studies on senior nutrition, and devised response strategies for different nutrition conditions, and devised classification standards for food quality.

(2) Developed health literary assessment and promotion tools, completed the ***A Practical Guidebook for Health Literate Organization***, 3 online learning modules for medical personnel, heat injury literary assessment form and prevention kit, as well as multi-dimensional and multi-language health education information for cold temperatures.

(3) Utilized and summarized multiple sources of data from national nutrition and health surveys, to complete a total of 25 global and local policy relevant indicators on the national level.

3. Food and drug management

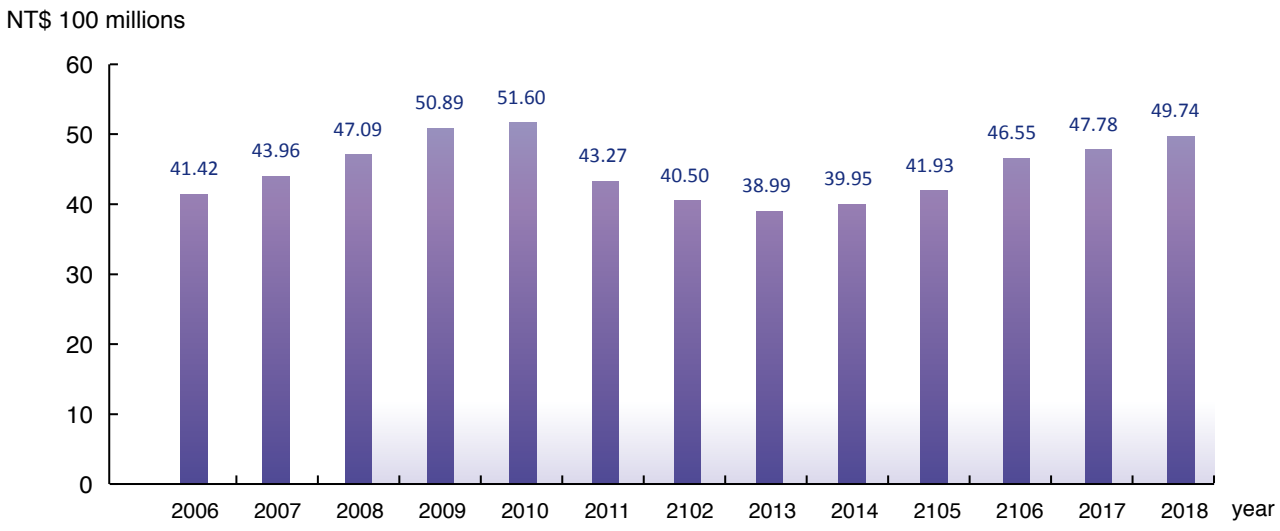
(1) We established multiple testing techniques for more than 100 chemical substances of different types to improve the depth and breadth of testing.

(2) We developed next generation sequencing for food microorganisms to improve the ability to detect potential pathogens in food.

(3) We provided regulatory consultation and evaluated technical data for clinical testing

Figure 12-1 Annual R&D Budget Trends

Source: Office of Science and Technology, Ministry of Health and Welfare



to assist 6 high-value drugs in obtaining market approval and 4 locally produced drugs with their overseas applications. In addition, 15 management regulations relating to pharmaceutical administration were formulated and 19 pharmaceutical and cosmetic testing methods were developed.

(4) We developed analytical methods for the emerging drug abuse of synthetic cathinones, synthesizing 13 standard substances and 65 abused drugs of metabolites to increase the power of tests.

4. Research, development and promotion of traditional Chinese medicine

(1) The *Compendium of Medicinal Plants Used by the Indigenous People of Taiwan 2nd Edition* was published to promote the revival of indigenous traditional medicine. The traditional knowledge and modern research into 301 medicinal plants compiled in the book ensures that the traditional resources of the indigenous people can be preserved and applied.

(2) We have established a quality analysis database for traditional Chinese medicine (qaTCM). By the end of 2018, we had collected 113 TCM items regarding the description and microscopic identification, TLC identification, marker component analysis and quantitative data that will help in realizing industry government-academic-research cooperation and public enqueries.

(3) According to a real-world data analysis, patients underwent coronary stenting procedure received aspirin, clopidogrel and combined use of traditional Chinese medicine (TCM), such as *Salviia miltiorrhiza* and/or Shu Jing Huo Xue Tang would not increase the risk of bleeding. Moreover, combined use of *Salviia miltiorrhiza* and/ or Shu Jing Huo Xue Tang has a lower risk of cardiovascular death. The results could provide valuable information for the public and clinical physicians.

(4) The active ingredient in *Tournefortia sarmentosa* pill was developed into new stilbene and benzofuran polyphenolic compounds that have excellent neuro protection and anti-neuro-inflammation properties. An R.O.C. patent has been awarded for the invention.

5. Improved clinical care systems

(1) The recommendations of the composite level decision-making module were added to the the scores proposed by experts, disabled people and group representatives for the functioning scale of the disability evaluation system-adult version (FUNDES). What disabled people want is a personalized assessment of their requirements that results in better environments and support services. They also want greater personalization in existing welfare services and support. The scores from the FUNDES have now been adopted as the primary basis for assessing the needs and welfare services of the disabled. It also provides an indicator for overall application.

(2) The “Application Program for Analysis and Standardization of Nursing Services and Evaluations by Home Nursing Care Agencies” was conducted in 2018. Home nursing care agencies were recruited to take part in the pilot trial and an expert team set up to draft a set of standards for home nursing services. The draft standards provide a reference for nursing applications and promotion strategies.

(3) The “Regulation Governing the Application of Specific Medical Examination Technique and Medical Device” was amended on September 6, 2018, making cell therapies that have been proven to be safe and low-risk available for clinical treatment where indicated. The amendment will ensure the quality and safety of treatment, while encouraging the industry to invest in related research and production.

6. Omnidirectional reinforcement of National Health Insurance system

(1) National Health Insurance Reforms: A DRG classification structure based on ICD-10-CM/PCS was studied to establish public indicators for treatment quality of individual diseases. Information on the financial impact of NHI payments for new drugs was compiled and a consumer satisfaction monitoring system was put into place.

(2) Medical model optimization: The NHI payment process was optimized to enhance the application of precision medicine. The performance of the "NHI MediCloud System" was assessed and the referral system was enforced.

7. Mental and Oral Health Monitoring Improvement

To improve the quality of mental care and oral health among the population of Taiwan, related theoretical research was commissioned by MOHW. Policy recommendations and health education handbooks were produced as a result including: "Policy Recommendations for Promoting the Seniors' Mental Well-Being in Taiwan", "Clinical Care and Family Care Handbook for Autism", "Integrated Drug Addiction Treatment Model and Operating Manual (Initial Draft)", "On-site Review SOP and Key Indicators for Institutional Providers of Special Dentistry Services", and "Research Report and Database on the Oral Health of Children Under the Age of 6".

8. Establish model for estimating the medical costs of domestic violence in intimate partner violence

MOHW commissioned National Taiwan University to conduct a research project entitled "A Preliminary Study of Medical Resource utilization by Victims of Intimate Partner Violence and related cost estimate formula". In addition to presenting the medical utilization and medical expenditure of victims of intimate partner violence in Taiwan and establishing a model for estimating the medical costs of intimate partner violence, three policy recommendations were made: 1. Adjustment to NHI fee schedule to enhance the reporting and treatment capabilities of primary care clinics; 2. Elevation of gender sensitivity of medical personnel and capacity building in identification and treatment of victim injuries. 3. Initiation of a systematic review of the treatment process and related facility design to provide a gender-friendly care environment.

9. Improving welfare service system

(1) For "research into the role and assimilation of social housing in the community", action research was conducted at inhabited social housing in Taipei City and New Taipei City to learn about the positioning and inclusion experience and process of social housing in the community. Policy recommendations were proposed in four aspects (community, resident, welfare transmission and future development) to promote social housings interact and integrate with the community.

(2) "Research into a performance evaluation mechanism for social welfare and charitable trusts" made recommendations on how to evaluate the operational performance of charitable trusts based on 5 aspects and 16 sub-categories including "institutional transformation, setup and termination, operation division, performance assessment, and asset management".

(3) "Exploration on Optimization of the Social Welfare Performance Evaluation Indicators" provided practical suggestions on group evaluations, simplification of the evaluation procedure, and use of information systems to reduce the need for supporting documentation.

(4) "Exploration of mechanism and model for empowering women with disabilities" used review of literature and focus interviews to collect the views of women with disabilities themselves. The recommendations on a mechanism and model for empowering women with disabilities were aimed at boosting social engagement among women with disabilities.

(5) "Integration of government services and rental model for assistive devices used by people with disabilities in Taiwan: Review and promotion plan" Provide a framework for the provision of holistic services based on the construction of the spirit of case management. Analyze and study the feasibility of promoting the service to other regions in reference to the experience with promoting a 4-in-1 integrated service window in Yunlin County, the promotion of rental services for assistive devices from overseas was collated to propose a framework, process, and complementary measures for an assistive device rental scheme in Taiwan.

10. Upgrading the national welfare information integration platform for persons with disabilities:

In order to enhance the quality of service, the new platform of the National Disability Database was upgraded. Namely, the platform builds cross-platform application and creates a service-oriented architecture into the management system of disability assessments, disability welfare services and transition from education to employment for persons with disabilities.

Section 2 Developing innovative and translational research

1. Technology transfer and patent licensing

We achieved four research and development results in 2018, and the total income from research and development results was NT$ 7,514,894, as shown in Figure 12-2.

2. Dengue fever prevention research

(1) Smart Multi-modal mosquito trap: AI technology was integrated with a patented design to accurately identify the species of mosquitoes captured by the device and to immediately upload the data to a cloud database. The device enables real-time analysis and prediction of disease risks from mosquito vectors in each region.

(2) Indoor and outdoor mosquito trap: A low-energy, low-cost mosquito sticky ovitrap which can be deployed at homes and in the community to monitor the density of mosquito vectors. Moreover, it can perform direct killing and effectively reduce the number of mosquito vectors in the environment.

Various types of mosquito sticky ovitraps

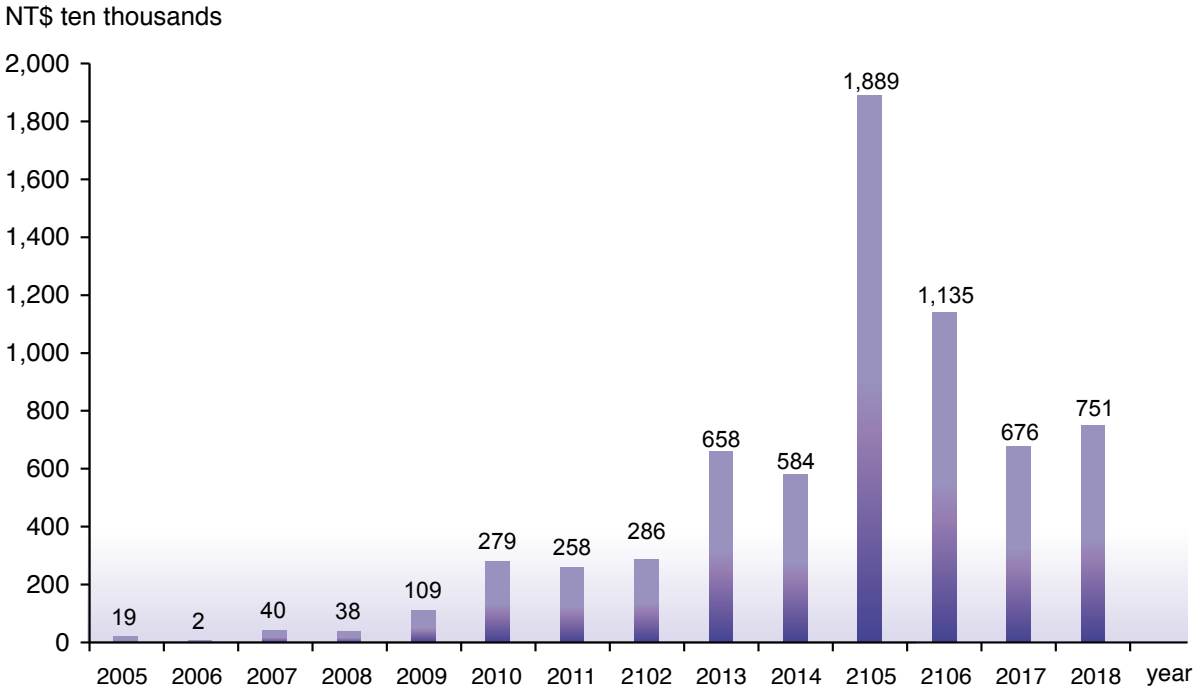
3. Initiated Phase IIIof the Cancer Research Program (2018 – 2021)

(1) A study on the incidence of liver cancer among those taking anti-viral drugs found that duration of anti-viral drug use, age, gender, liver cirrhosis, and diabetes were all key risk factors. The research results were published in the Journal of Hepatology 2018 69(2):278-85.

(2) The study proposed recommendations on the treatment of liver cancer, hepatitis, leukemia, and molecular classification of breast cancer. These included establishing the domestic principles for surgical removal or non-surgical removal through radio- or chemo-therapy off germ cell tumors in children, establishing the routine genetic testing for leukemia (NPM1,

Figure 12-2 Annual R&D Revenue Trends

Source: Office of Science and Technology, Ministry of Health and Welfare



FLT3-ITD, CEBPA, KIT etc.) and the provision of certified molecular classification services at all hospitals nation-wide to improve the correct diagnosis of patients and molecular classification treatment.

4. To Promote Innovation and Competitiveness of Clinical Trials Project

(1) A multinational multicenter institutional review board (central-IRB, c-IRB, mechanism) review was completed in 141 cases, with an average review period of 7.9 days/case. Moreover, the Center for Drug Evaluation built the Taiwan Clinical Trials platform acting as a one stop shop to help Taiwan attract more clinical trials.

(2) Developing the 2018 treatment consensus for diabetic patients with cardiovascular diseases that aim to improve cardiorenal outcomes in diabetic patients and reduce the health burden of our society in conjunction with the Taiwan Society of Cardiology and the Diabetes Association of the Republic of China.

Section 3 Application Service of Health and welfare Reserch

1. Management of applications service platform

The Health and Welfare Data Science Center (HWDC) opened in 2011 to improve the quality of public decision-making and expand academic research. Besides strengthening data security management and promoting review mechanisms for big data application management. Third-party verification and certification of the de-identification process for 13 categories of data were also completed.

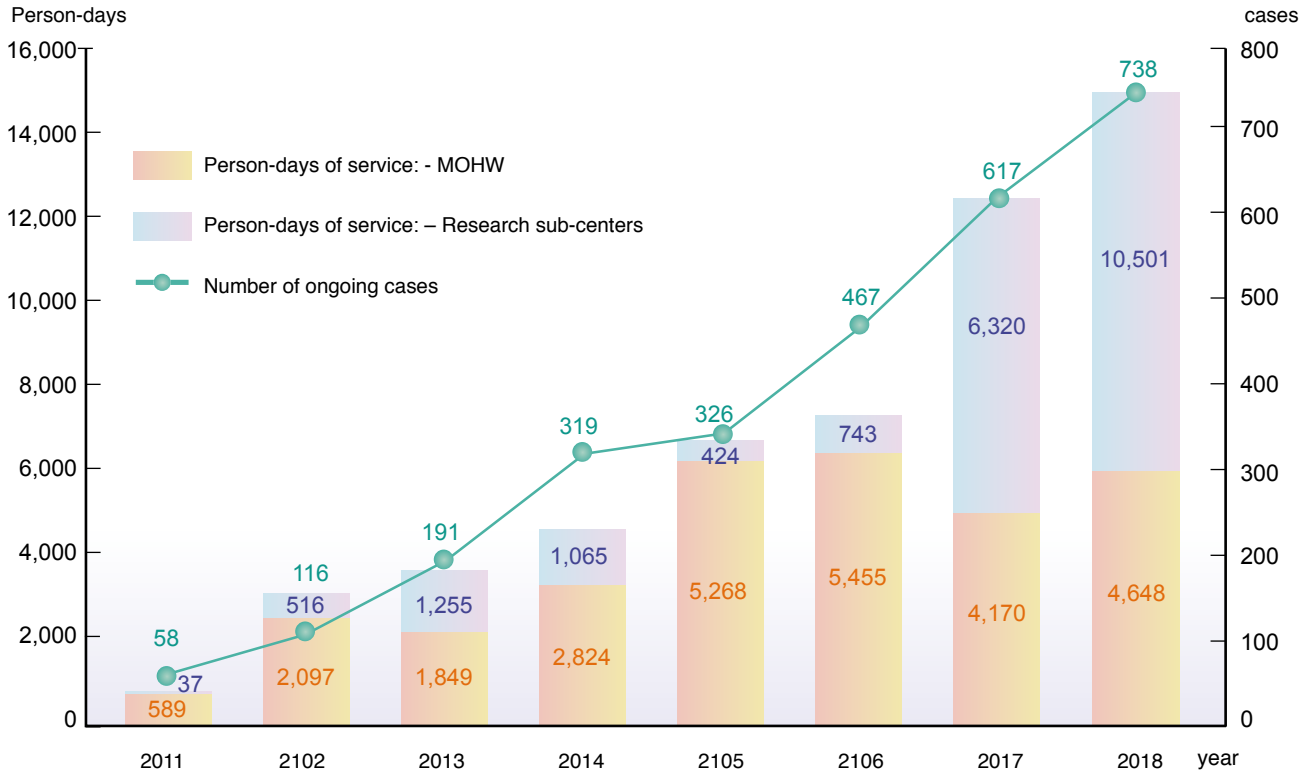
2. Service content and quantity

(1) By the end of 2018, 105 databases were opened for public use.

(2) Ten research sub-centers can connect to our department's system for data statistical applications through the Virtual Desktop Infrastructure (VDI), and the average rate of equipment utilization increased from 3% in 2015 to 56% in 2018.

Figure 12-3 HWDC Annual Service Quantity

Source: Department of Statistics, Ministry of Health and Welfare



(3) The number of ongoing cases increased from 58 in 2011 to 738 in 2018, as shown in Figure 12-3, presenting an average annual growth rate of 44%. During the same period, the person-days of service also increased from 626 in 2011 to 15,149 in 2018, presenting an average annual growth rate of 58%.

Chapter 2 International cooperation

In this era of globalization, Taiwan actively participates in international health cooperation and emergency humanitarian assistance by contributing our skills in medicine and sharing our experiences and achievements.

Section 1 Joining international organizations

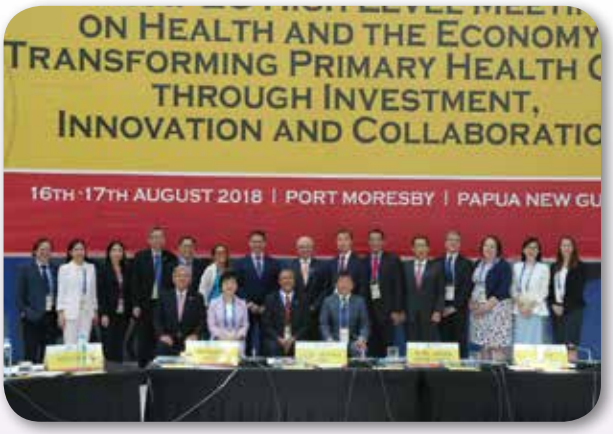
1. World Health Organization

Participating in various mechanisms, activities and meetings of the World Health Organization (WHO) promotes the interests and the right to health of all people. Taiwan plays an indispensable role in the world health and epidemic prevention system. The 71st World Health Assembly (WHA) was convened in Geneva, Switzerland from May 21 to May 26, 2018. Though not formally invited, Minister of Health and Welfare, Shih-Chung Chen, led the Taiwan WHA Action Team to Geneva and conducted 60 bilateral meetings with countries, including the United States and important international organizations. These meetings promoted in-depth discussion about important health issues and shared Taiwan's healthcare achievements, showing international community our determination to participate in global health affairs professionally and practically, contributing health expertise to maintain health and human rights.

2. Asia-Pacific Economic Cooperation (APEC)

Minister of Health and Warfare, Shih-Chung Chen, led a delegation to the Life Sciences Innovation Forum (LSIF) Executive Board Meeting and the 8th APEC High-Level Meeting on Health and the Economy in Papua New Guinea in August 2018. Minister Chen shared Taiwan's public health achievements and was elected as the LSIF Executive Board Chair, the highest position held by Taiwanese in the APEC Health field.

President Tsai met the Taiwan WHA Action Team in May 2018



The 8th APEC High-Level Meeting on Health and the Economy in August 2018

The APEC Conference on Severe Dengue Prevention and Strategies for Reducing Disease Burden in May 2018

The APEC Conference on Strategies Against the Evolving Threats from Antimicrobial Resistance (AMR): From Awareness to Concrete Action in September 2018

The MOHW successfully secured a grant from APEC in hosting the "APEC Conference on Severe Dengue Prevention and Strategies for Reducing Disease Burden Meeting" in May 2018. A total of 88 experts in public health and medicine from 10 APEC member economies took part in the discussions and sharing of experiences on topics such as "Early diagnosis of dengue fever and patient management", "Dengue fever vaccine", and "New technologies for monitoring and control of mosquito vectors." Through this conference, a quarantine network platform was established among Asian-Pacific countries to collectively enhance the regional capacity of dengue fever prevention and control.

The MOHW successfully secured a grant from APEC in hosting the "APEC Conference on Strategies Against the Evolving Threats from Antimicrobial Resistance (AMR): From Awareness to Concrete Action." A total of 143 experts in public health and medicine from 15 APEC member economies took part in the discussions and sharing of experiences on topics such as "Monitoring of AMR", "Antibiotic management policy", and "AMR infection control strategies." The conference helped to boost regional capacity against the threat of AMR.

Section 2 International exchange and assistance

1. International cooperation and exchange

(1) Attended 159 international conferences or seminars, organized 54 international conferences in Taiwan, and invited 926 foreign visitors from 54 countries in 2018.

A. Attending international conferences

(a) In July 2018, the MOHW delegation visited dementia care/ research centers in Chicago, USA and attended the 33rd International Conference of Alzheimer's Disease International to learn about important global issues and resolution for dementia, helping Taiwan implement/ improve our dementia prevention and care policies, and keeping them in line with international development trends.

(b) In July 2018, the MOHW delegation attended the Joint World, Education and Social Development Conference and the 90th Annual Meeting of the International Council on Social Welfare (ICSW) and the

33rd International Conference of Alzheimer's Disease International in July 2018

The 6th CDMH International Forum and the 4th APNA Conference in September 2018

17th Meeting of Consortium for Globalization of Chinese Medicine in August, 2018

Joint World, Education and Social Development Conference in July 2018

North-East Asia Regional Conference in Dublin, Ireland to learn important trends in international social work and social welfare and to strengthen links to international organizations.

(c) In August 2018, the MOHW delegation attended the 17th Meeting of Consortium for Globalization of Chinese Medicine in Borneo, Malaysia, and co-hosted the Regulations and Interregional Collaborations of Academia, Government and Industry Meeting, and helped better understand the development of Traditional Chinese Medicine (TCM) management in Taiwan by introducing TCM practices, policies and regulations.

(d) In September 2018, the MOHW delegation attended the 6th Children Development and Mental Health (CDMH) International Forum and the 4th Asian Pacific Neurofeedback/ Biofeedback Association (APNA) Conference in Chiang Mai, Thailand, sharing Taiwan's experience with international experts/academics and promoting Taiwan's New Southbound Mental Health Professional Training Program.

(e) In September 2018, the MOHW delegation attended the Social Enterprise World Forum in Edinburg, Scotland, effectively increasing international exposure of Taiwanese social enterprise and helping Taiwan to host the 2019 Asia-Pacific Social Enterprise Summit.

(f) In October 2018, the American Institute in Taiwan and the American Chamber of Commerce hosted the U.S.-Taiwan Liver Health Forum. Deputy Minister of Health and Welfare, Chi-Kung Ho, gave the opening speech and the Vice President, Chien-Jen Chen, gave a keynote speech. By sharing knowledge and exchanging experience between Taiwan and the U.S. liver experts strengthened bilateral liver health R&D and through public and private partnership helped Taiwan become the "Liver Health Management Center of Excellence in Asia".

The Social Enterprise World Forum in September 2018

B. Holding international conferences

(a) Under the "Global Cooperation and Training Framework" agreement between the U.S. and Taiwan, the Taiwan Centers for Disease Control, the Ministry of Foreign Affairs, and the American Institute in Taiwan co-organized the "International Workshop on Laboratory Diagnosis for

The U.S.-Taiwan Liver Health Forum in October 2018

The International Workshop on Laboratory Diagnosis for Enterovirus in April 2018

Enterovirus" in April 2018. A total of 31 public health officials and senior laboratory professionals from 15 nations took part in the workshop to share molecular diagnosis and standard testing techniques for enterovirus. The improvement of enterovirus diagnostic skills effectively boosted regional capacity for the prevention and control of infectious diseases.

(b) In May 2018, The Taiwan - U.S. Health and Welfare Policy Symposium with a theme "Transforming Lives with Integrated Solutions and Meaningful Impacts." Approximately 250 people attended the symposium. Six American health and welfare officials, experts and academics were invited to discuss important current health and welfare topics, future challenges, policy outcomes, and share their practical experience.

(c) In May 2018, guests from the Taiwan - U.S. Health and Welfare Policy Symposium, including the Commissioner of the Texas Department of State Health Services, the CEO of the Nebraska Department of Health and Human Services, the Director of the California Department of Social Services, and the Surgeon General and Secretary of the Florida Department of Health, visited the National Health Insurance (NHI) Administration to learn about the latest developments of NHI.

Taiwan - U.S. Health and Welfare Policy Symposium in May 2018

Health administrators from the U.S. visited the National Health Insurance Administration in May 2018

(d) In May 2018, MOHW and the Taiwan Dental Association jointly hosted the "International Summit of Geriatric Dentistry for Aging Society in Taiwan" during the 71st World Health Assembly in Geneva. Global experts were invited to exchange opinions on senior oral care and to sign the "Declaration of the International Summit of Geriatric Dentistry for Aging Society in Taiwan" to draw the WHO's attention to Taiwan and the health of its people.

(e) In June 2018, The International Disaster Conference in Taiwan invited 6 experts from Japan, the United States, Belgium, Geneva and Hong Kong to share their experience and broaden Taiwan's disaster medicine horizons.

(f) In June 2018, TFDA officially became a regulatory member at the International Council for Harmonization (ICH) Assembly meeting at Kobe, Japan. This set a milestone for Taiwan's participation in international pharmaceutical and technical collaborations, showing that Taiwanese pharmaceutical products has reached international standards as a result of diligent cooperation between TFDA and pharmaceutical industry. Taiwan will continue actively participating in the ICH related events and constructing a regulatory environment that complies with the ICH guidelines.

International Disaster Conference in Taiwan in June 2018

Taiwan became a formal ICH member in June 2018

International Summit of Geriatric Dentistry for Aging Society in Taiwan in May 2018

(g) In October 2018, Vice President Chen gave opening remarks at the Global Health Forum in Taiwan; the H. E. Archbishop Silvano Maria Tomasi was invited to give an opening speech. Featured topics contained health emergency response system to natural disasters, psychological resilience: challenges and opportunities, the prospect of national HPV vaccine program, the global burden of disease, and health promotion on non-communicable diseases. Attendees included 11 minister/deputy ministers, 63 senior health officials and experts from 31 countries, totaling 1,305 people, which was the highest number of participants since its initiation in 2005. Forum's parallel session 6, "The Global Burden of Disease: Taiwan's Perspective," invited the Institute for Health Metrics and Evaluation (IHME), the Ministry of Health (Brazil), the Harvard Medical School along with local experts/academics to share their experience. After many years of existence, the forum has developed as a powerful professional platform to discuss the world health issues.

Global Health Forum in Taiwan in October 2018

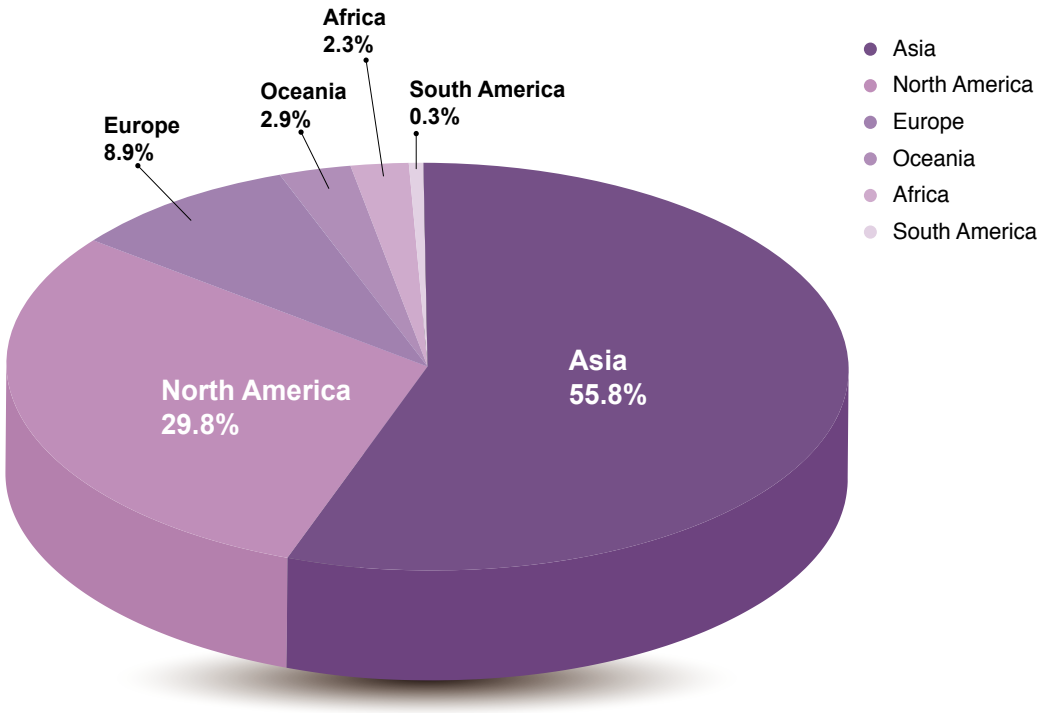
C. Foreign Visitors: 926 foreign guests from 54 countries visited in 2018. We shared information on health and welfare policy, medicine, food, health insurance, technology and bilateral cooperation, as shown in Figure 12-4.

(2) International cooperation

A. In May 2018, MOHW signed a MOU on Foot Care Education Program with the Copenhagen School of Foot Therapy affiliated with Roskilde Technical Colleague in Denmark. The MOU represented a breakthrough in foot care education and research for nursing personnel in Taiwan and will help cultivate an advanced

Figure 12-4 Foreign Visitors by Region of Origin, 2018

Source: Ministry of Health and Welfare



capability for professional instruction in foot care.

B. To promote research on traditional medicine between Taiwan and Japan, National Research Institute of Chinese Medicine (NRICM) signed a MOU with Nihon Pharmaceutical University in July 2018. NRICM further signed MOUs with the Yokohama College of Pharmacy and Daichi University of Pharmacy in December 2018 to establish long-term partnerships.

2. International Medical Aid

Facing global climatic anomalies and frequent disasters, we have shown compassion by offering international assistance in health care while demonstrating Taiwan's significance to the international community.

(1) Taiwan International Health Action (TaiwanIHA): a task force funded by MOHW and Ministry of Foreign Affairs in 2006. It organizes international medical cooperation and emergency humanitarian assistance in accordance with our diplomatic policy and actively partners with domestic and foreign NGOs to expand our international humanitarian assistance network. It has since executed 30 missions. In 2018, it collaborated with the Noordhoff Craniofacial Foundation to train craniofacial medical teams in Indonesia as well as to exchange medical techniques and health education activities. The team also visited the Vietnam National Children's Hospital in Hanoi and donated medical instruments, such as the nasopharyngoscope, to enhance the hospital's speech therapy capability.

(2) Global Medical Instruments Support & Service Program (GMISS) collects usable and essential medical equipment from hospitals in Taiwan and donates to the needed countries in accordance with our diplomatic policy. In 2018, 301 medical devices were donated in 7 shipments to the Solomon Islands, Haiti, Paraguay, El Salvador, Vietnam, Mongolia and Saint Kitts and Nevis.

(3) Taiwan International Healthcare Training Center (TIHTC) promotes diplomatic relations by training health care professionals in regions short of medical resources. TIHTC trained 131 foreign healthcare professionals from 14 countries in 2018.

(4) We continued cooperating with the Ministry of Foreign Affairs in 2018, and commissioned with 8 domestic hospitals to implement the Medical Cooperation Program in the Pacific Allies and Friendly Countries, including the Taiwan Health Center Project in Marshall Islands and Solomon Islands, the Taiwan Medical Program in Palau, Kiribati, Nauru and Tuvalu, and the Mobile Medical Mission in Fiji and Papua New Guinea. All programs were fully funded by the MOFA.

MOU signing ceremony for Foot Care Education Program in May 2018

NRICM, Yokohama College of Pharmacy and Daichi University of Pharmacy signing ceremony in December 2018

Section 3 Internationalization of medical services

1. Background: We tried to display the advantages of our medical care services and quality of care through promoting the internationalization of medical care services so as to advance the development of our medical industry and increase international competitiveness.
2. Goal:
   (1) To coach hospitals to establish their key strengths, to develop medical brands, to provide diversified medical services, and to cooperate with professionals from different

industries so as to expand the innovative strategies for the future medical industry.

(2) To develop the international health industry, and to lead the development of industries covering biotech, pharmacy, medical devices, information and health care.

3. Achievements:

(1) The "Taiwan Task Force for Medical Travel" has been founded as the platform for information exchange and experience sharing. 78 organizations have been coached to establish a foreigner-friendly environment.

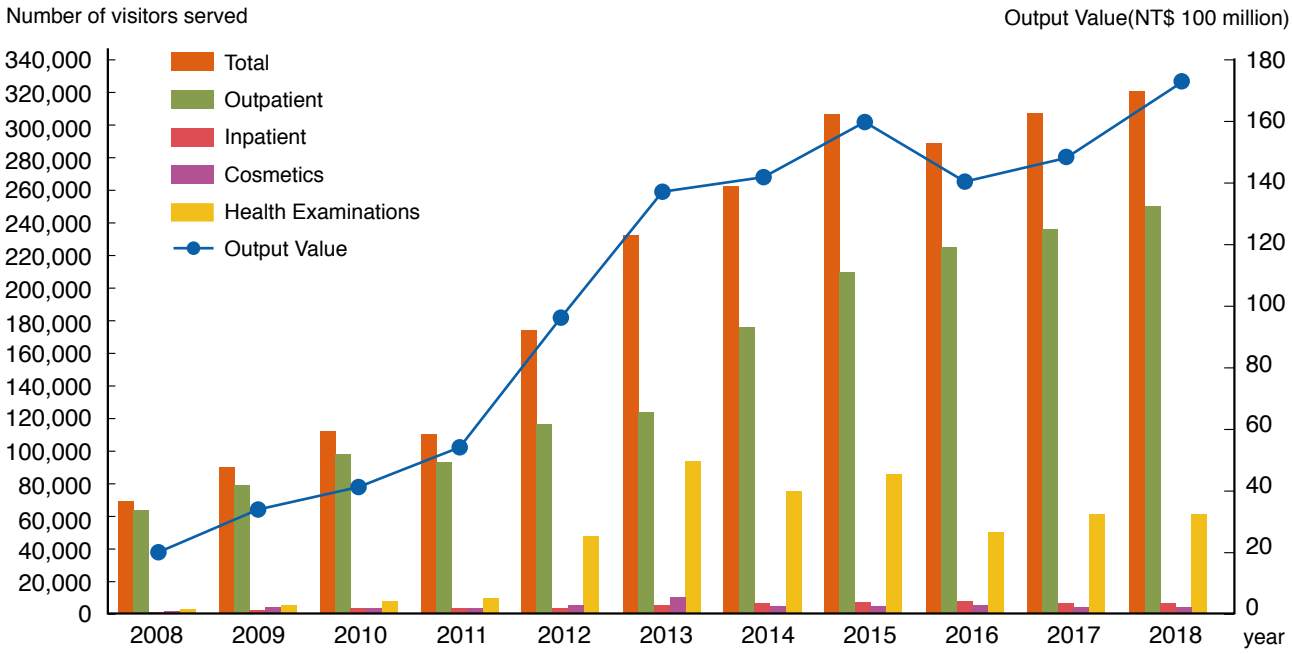
(2) The regulations were relaxed and streamline of legislation was released. 67 hospitals are allowed to invite people from the Mainland to have health examination and aesthetic medicine in Taiwan.This provides a convenient way of visiting Taiwan.

(3) Figure 12-6 shows the number of people receiving international medical services and the output value from 2008 to 2018.

(4) The "Taiwan Medical Travel" website was revamped and a Malaysian language edition added. The 6 languages now supported include Traditional Chinese, English, Simplified Chinese, Vietnamese, Indonesian, and Malaysian. The website had been viewed more than 8.9 million times by the end of, 2018.

Figure 12-5 International Health Care Promotion

Source: Ministry of Health and Welfare



68,545	89,507	110,664	109,133	173,311	231,164	259,674	305,045	286,599	305,618	414,369
63,388	78,553	96,850	92,931	115,569	123,107	174,342	208,198	224,164	233,545	323,156
1,102	1,818	2,157	3,150	3,845	4,293	6,078	6,970	7,220	7,325	8,028
1,072	3,902	3,125	3,254	5,822	10,627	4,308	4,874	4,530	4,076	4,335
2,983	5,234	8,532	9,843	48,075	93,137	74,946	85,003	50,685	60,672	78,850
20.29	41.49	41.49	54.14	96.23	136.48	141.35	158.96	139.90	147.27	171.35

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Appendices

- Appendix 1　Health and Welfare Indicators
- Appendix 2　Notifiable Disease Statistics
- Appendix 3　Technical Term Keys

Appendix 1 Health and Welfare Indicators

Table 1 Population Indicators

Data source: Ministry of the Interior, R.O.C. (Taiwan)

Year	Total population	Population structure			Crude birth rate	Crude death rate	Natural increase rate	Total fertility rate	Fertility rate of teenage girls	Population density
		0–14 years	15–64 years	Above 65 years						
	1,000 persons	%	%	%	‰	‰	‰	Per woman	‰	persons/ Km^2
2008	23,037	17.0	72.6	10.4	8.6	6.3	2.4	1.1	5	637
2009	23,120	16.3	73.0	10.6	8.3	6.2	2.1	1.0	4	639
2010	23,162	15.6	73.6	10.7	7.2	6.3	0.9	0.9	4	640
2011	23,225	15.1	74.0	10.9	8.5	6.6	1.9	1.1	4	642
2012	23,316	14.6	74.2	11.2	9.9	6.6	3.2	1.3	4	644
2013	23,374	14.3	74.2	11.5	8.5	6.7	1.9	1.1	4	646
2014	23,434	14.0	74.0	12.0	9.0	7.0	2.0	1.2	4	647
2015	23,492	13.6	73.9	12.5	9.1	7.0	2.1	1.2	4	649
2016	23,540	13.3	73.5	13.2	8.9	7.3	1.5	1.2	4	650
2017	23,571	13.1	73.0	13.9	8.2	7.3	1.0	1.1	4	651
2018	23,589	12.9	72.5	14.6	7.7	7.3	0.4	1.1	4	652

Table 2 Life Expectancy and Mortality Rate

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Life expectancy at birth			Under-five mortality rate	Adult mortality rate (Aged 15-60 years)
	Total Population	Male	Female		
	Years	Years	Years	Per 1,000 live births	Per 1,000 persons
2007	78.4	75.5	81.7	6.4	105.6
2008	78.6	75.6	81.9	6.3	103.3
2009	79.0	76.0	82.3	5.6	101.0
2010	79.2	76.1	82.5	5.5	99.2
2011	79.1	76.0	82.6	5.7	99.0
2012	79.5	76.4	82.8	5.1	96.3
2013	80.0	76.9	83.4	4.7	93.6
2014	79.8	76.7	83.2	4.6	94.5
2015	80.2	77.0	83.6	5.0	92.0
2016	80.0	76.8	83.4	4.8	94.1
2017	80.4	77.3	83.7	4.6	90.0
2018	80.7	77.5	84.0	4.9	88.6

Table 3 National Health Expenditure

Data source: Directorate-General of Budget, Accounting and Statistics, Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	GDP per Capita		National Health Expenditure (NHE)		Public sector ratio	NHE as percentage of GDP	NHE per Cpaita	
	NTD	USD	NTD millions	USD millions	%	%	NTD	USD
2006	553,851	17,026	782,443	24,053	56.7	6.2	34,282	1,054
2007	585,016	17,814	814,591	24,805	57.2	6.1	35,545	1,082
2008	571,838	18,131	834,681	26,464	56.9	6.4	36,294	1,151
2009	561,636	16,988	873,219	26,413	57.4	6.7	37,837	1,144
2010	610,140	19,278	889,345	28,099	57.8	6.3	38,432	1,214
2011	617,078	20,939	917,040	31,118	57.4	6.4	39,539	1,342
2012	631,142	21,308	927,956	31,329	59.1	6.3	39,877	1,346
2013	652,429	21,916	967,872	32,512	59.1	6.4	41,460	1,393
2014	688,434	22,668	1,007,923	33,188	59.3	6.3	43,067	1,418
2015	714,774	22,400	1,038,486	32,544	59.8	6.2	44,261	1,387
2016	730,411	22,592	1,086,848	33,617	59.5	6.3	46,217	1,430
2017	742,976	24,408	1,127,360	37,035	60.4	6.4	47,860	1,572

Table 4-1 Medical facilities

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Number of medical institutions											
		Hospital							Clinic			
			Western medicine			Chinese medicine				Western medicine	Chinese medicine	Dentistry
				Public	Non-public		Public	Non-public				
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
2007	19,900	530	507	79	428	23	1	22	19,370	10,197	3,069	6,104
2008	20,174	515	493	79	414	22	1	21	19,659	10,326	3,160	6,173
2009	20,306	514	496	79	417	18	1	17	19,792	10,361	3,217	6,214
2010	20,691	508	492	81	411	16	1	15	20,183	10,599	3,289	6,295
2011	21,135	507	491	81	410	16	1	15	20,628	10,815	3,411	6,402
2012	21,437	502	488	81	407	14	1	13	20,935	10,997	3,462	6,476
2013	21,713	495	482	80	402	13	1	12	21,218	11,105	3,548	6,565
2014	22,041	497	486	80	406	11	1	10	21,544	11,277	3,637	6,630
2015	22,177	494	486	80	406	8	1	7	21,683	11,313	3,705	6,665
2016	22,384	490	485	80	405	5	1	4	21,894	11,395	3,772	6,727
2017	22,612	483	478	79	399	5	1	4	22,129	11,499	3,839	6,791
2018	22,816	483	478	80	398	5	1	4	22,333	11,580	3,917	6,836

Table 4-2 Medical facilities

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Number of beds							Number of beds per 10,000 population				
		Hospital					Clinic		Hospital			Clinic
			Public	Non-public	Acute beds					Acute beds		
						Acute general beds					Acute general beds	
	Beds	Beds	Beds	Beds	Beds	Beds	Beds	Beds	Beds	Beds	Beds	Beds
2007	150,628	131,776	44,873	86,903	79,695	73,337	18,852	65.6	57.4	34.7	31.9	8.2
2008	152,901	133,020	45,450	87,570	80,021	73,426	19,881	66.4	57.7	34.7	31.9	8.6
2009	156,740	134,716	45,913	88,803	80,884	74,132	22,024	67.8	58.3	35.0	32.1	9.5
2010	158,922	135,401	45,981	89,420	81,072	74,140	23,521	68.6	58.5	35.0	32.0	10.2
2011	160,472	135,431	45,603	89,828	81,173	74,082	25,041	69.1	58.3	35.0	31.9	10.8
2012	160,900	135,002	45,549	89,453	81,064	73,876	25,898	69.0	57.9	34.8	31.7	11.1
2013	159,422	134,197	45,134	89,063	80,096	72,692	25,225	68.2	57.4	34.3	31.1	10.8
2014	161,491	133,518	44,524	88,994	79,745	72,303	27,973	68.9	57.0	34.0	30.9	11.9
2015	162,163	133,335	43,881	89,454	79,663	72,255	28,828	69.0	56.8	33.9	30.8	12.3
2016	163,148	133,499	43,827	89,672	79,931	72,635	29,649	69.3	56.7	34.0	30.9	12.6
2017	164,590	134,134	43,187	90,947	80,590	73,191	30,456	69.8	56.9	34.2	31.1	12.9
2018	167,521	135,496	43,606	91,890	81,633	74,195	32,025	71.0	57.4	34.6	31.5	13.6

Table 4-3 Medical force

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Number of Registered Health Workforce										
		Western medicine physicians	Doctors of Chinese medicine	Dentists	Pharmacists (assistants)	Medical technologists (technicians)	Medical radiologic technologists (technicians)	Registered professional nurses	Registered professional midwives (midives)	Dietitians	Others
	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons
2007	214,748	35,849	4,862	10,740	28,040	7,642	4,211	113,832	347	1,239	7,986
2008	223,623	37,142	5,112	11,093	28,741	7,896	4,443	118,785	308	1,379	8,724
2009	233,553	37,880	5,290	11,351	29,587	8,203	4,651	125,081	258	1,563	9,689
2010	241,156	38,887	5,354	11,656	30,001	8,377	4,913	128,955	208	1,687	11,118
2011	250,258	40,002	5,570	11,992	31,300	8,579	5,133	133,336	134	1,824	12,388
2012	258,283	40,938	5,740	12,391	32,015	8,751	5,341	137,641	120	2,050	13,296
2013	265,759	41,965	5,977	12,794	32,668	9,006	5,507	140,915	132	2,234	14,561
2014	271,555	42,961	6,156	13,178	33,162	9,132	5,774	142,708	149	2,304	16,031
2015	280,508	44,006	6,298	13,502	33,516	9,261	5,952	148,223	150	2,392	17,208
2016	289,174	44,849	6,441	13,912	33,908	9,400	6,164	153,509	154	2,525	18,312
2017	299,782	46,356	6,692	14,380	34,526	9,561	6,416	159,621	164	2,631	19,435
2018	312,887	47,471	6,880	14,718	34,838	9,698	6,629	167,803	179	3,061	21,610

Remark: Others include dental assistants, physical therapists (technicians), occupational therapists (technicians), clinical psychologists, counseling psychologists, respiratory therapists, speech therapists, audiologists, dental technologists (technicians).

Table 4-4 Medical force

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Number of Registered Health Workforce per 10,000 Population										
		Western medicine physicians	Doctors of Chinese medicine	Dentists	Pharmacists (assistants)	Medical technologists (technicians)	Medical radiologic technologists (technicians)	Registered professional nurses	Registered professional midwives (midives)	Dietitians	Others
	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons
2007	93.5	15.6	2.1	4.7	12.2	3.3	1.8	49.6	0.2	0.5	3.5
2008	97.1	16.1	2.2	4.8	12.5	3.4	1.9	51.6	0.1	0.6	3.8
2009	101.0	16.4	2.3	4.9	12.8	3.5	2.0	54.1	0.1	0.7	4.2
2010	104.1	16.8	2.3	5.0	13.0	3.6	2.1	55.7	0.1	0.7	4.8
2011	107.8	17.2	2.4	5.2	13.5	3.7	2.2	57.4	0.1	0.8	5.3
2012	110.8	17.6	2.5	5.3	13.7	3.8	2.3	59.0	0.1	0.9	5.7
2013	113.7	18.0	2.6	5.5	14.0	3.9	2.4	60.3	0.1	1.0	6.2
2014	115.9	18.3	2.6	5.6	14.2	3.9	2.5	60.9	0.1	1.0	6.8
2015	119.4	18.7	2.7	5.7	14.3	3.9	2.5	63.1	0.1	1.0	7.3
2016	122.8	19.1	2.7	5.9	14.4	4.0	2.6	65.2	0.1	1.1	7.8
2017	127.2	19.7	2.8	6.1	14.6	4.1	2.7	67.7	0.1	1.1	8.2
2018	132.6	20.1	2.9	6.2	14.8	4.1	2.8	71.1	0.1	1.3	9.2

Remark: Others include dental assistants, physical therapists (technicians), occupational therapists (technicians), clinical psychologists, counseling psychologists, respiratory therapists, speech therapists, audiologists, dental technologists (technicians).

Table 4-5 Facilities of nursing institutions

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Nursing institutions			
	General nursing homes	Psychiatric nursing homes	Home care	Postpartum nursing care
	No.	No.	No.	No.
2007	324	17	503	60
2008	347	19	487	74
2009	367	25	495	94
2010	390	28	516	103
2011	423	30	498	117
2012	447	29	498	148
2013	472	32	507	171
2014	487	35	507	187
2015	500	37	513	201
2016	511	41	547	219
2017	532	42	567	243
2018	542	44	618	267

Table 4-6 Facilities of nuring institutions

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Nursing institutions		
	General nursing homes	Psychiatric nursing homes	Postpartum nursing care
	Beds	Beds	Beds
2007	19,551	1,303	2,026
2008	21,461	1,539	2,924
2009	23,077	2,089	3,568
2010	25,849	2,252	3,809
2011	28,476	2,235	4,379
2012	30,447	2,512	5,618
2013	33,101	2,757	6,582
2014	35,202	3,246	7,477
2015	37,263	3,494	8,558
2016	39,132	3,742	9,786
2017	41,548	3,805	11,546
2018	43,119	4,104	12,842

Table 5 Notifiable diseases

Data source: Taiwan Centers for Disease Control

Year	Confirmed cases															
	Cholera	Diphtheria	Japanese encephalitis	Hansen's disease	Malaria	Measles	Meningococcal meningitis	Mumps	Pertussis	Poliomyelitis	Congenital rubella syndrome	Rubella	Neonatal tetanus	Tetanus	Tuberculosis	Yellow fever
	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons
2001	–	…	33	2	29	9	43	444	6	–	3	17	…	19	14,486	–
2002	2	–	19	8	28	24	46	665	18	–	–	4	…	15	16,758	–
2003	1	–	25	2	34	6	26	676	26	–	–	2	…	13	14,074	–
2004	1	–	32	5	18	–	24	1,081	21	–	–	4	…	16	17,142	–
2005	2	–	35	9	26	7	20	1,158	38	–	–	7	…	16	16,472	–
2006	1	–	29	11	26	4	13	971	14	–	–	6	…	14	15,378	–
2007	–	–	37	12	13	10	20	1,208	41	–	1	54	–	10	14,480	–
2008	1	–	17	8	18	16	19	1,145	41	–	1	33	–	18	14,265	–
2009	3	–	18	7	11	48	2	1,068	90	–	–	23	–	12	13,336	–
2010	5	–	33	5	21	12	7	1,125	61	–	–	21	–	12	13,237	–
2011	3	–	22	5	17	33	5	1,171	77	–	–	60	–	10	12,634	–
2012	5	–	32	13	12	9	6	1,061	54	–	–	12	–	17	12,338	–
2013	7	–	16	7	13	8	6	1,170	51	–	–	7	–	24	11,528	–
2014	4	–	18	9	19	26	3	880	78	–	–	7	–	9	11,326	–
2015	10	–	30	16	8	29	3	773	70	–	–	7	–	12	10,711	–
2016	9	–	23	10	13	14	8	616	17	–	–	4	–	14	10,208	–
2017	2	–	25	10	7	6	12	636	34	–	1	3	–	11	9,759	–
2018	7	–	37	7	7	40	6	600	30	–	–00	10	–	4	9,179	–

Remark:
1. Data downloaded on: 1 May 2019.
2. Mumps and tetanus are cases reported.
3. There are no local malaria cases.
4.“Leprosy” was renamed as “Hansen’s disease” in 2008.

Table 6 Food and drug administration

Data source: Taiwan Food and Drug Administration

Year	Food poisoning cases			Number of pharmaceutical companies			
		Number of patients	Deaths		Pharmacies	Medicine and medical device sales industry	Medicine and medical device manufacturing industry
	Cases	Persons	Persons	No.	No.	No.	No.
2008	272	2,924	–	58,834	7,215	50,514	1,105
2009	351	4,642	–	58,524	7,450	49,814	1,260
2010	503	6,880	1	60,222	7,558	51,289	1,375
2011	426	5,819	1	63,274	7,699	54,090	1,485
2012	527	5,701	–	64,024	7,620	54,843	1,561
2013	409	3,890	–	65,280	7,701	55,926	1,653
2014	480	4,504	–	66,678	7,866	57,125	1,687
2015	632	6,235	–	67,597	7,922	57,945	1,730
2016	486	5,260	–	69,610	7,907	59,871	1,832
2017	528	6,237	–	71,083	7,950	61,244	1,889
2018	398	4,616	–	72,520	8,048	62,514	1,958

Table 7-1 Major causes of death

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Infant mortality rate	All causes of death		Major causes of death									
				Malignant neoplasms		Heart disease		Pneumonia		Cerebrovascular disease		Diabetes mellitus	
	Per 1,000 live births	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population
2008	4.6	142,283	484.3	38,913	133.7	15,726	51.7	8,661	27.5	10,663	35.0	8,036	26.9
2009	4.0	142,240	466.7	39,918	132.5	15,094	47.7	8,358	25.3	10,383	32.8	8,230	26.6
2010	4.2	144,709	455.6	41,046	131.6	15,675	47.4	8,909	25.6	10,134	30.6	8,211	25.3
2011	4.2	152,030	462.4	42,559	132.2	16,513	47.9	9,047	24.8	10,823	31.3	9,081	26.9
2012	3.7	153,823	450.6	43,665	131.3	17,121	47.9	9,314	24.4	11,061	30.8	9,281	26.5
2013	3.9	154,374	435.3	44,791	130.4	17,694	47.7	9,042	22.5	11,313	30.3	9,438	25.8
2014	3.6	162,886	443.5	46,093	130.2	19,399	50.2	10,353	24.7	11,733	30.4	9,846	26.0
2015	4.1	163,574	431.5	46,829	128.0	19,202	48.1	10,761	24.6	11,169	27.9	9,530	24.3
2016	3.9	172,418	439.4	47,760	126.8	20,812	50.3	12,212	26.9	11,846	28.6	9,960	24.5
2017	4.0	171,857	424.3	48,037	123.4	20,644	48.5	12,480	26.5	11,755	27.5	9,845	23.5
2018	4.2	172,859	415.0	48,784	121.8	21,569	48.8	13,421	27.4	11,520	26.1	9,374	21.5

Remark:
1. The standardized mortality rate is worked out according to the world's standard population age structure of 2000 gained by WHO.
2. ICD-10 has been adopted for statistical classification since 2008.

Table 7-1 Major causes of death (continued)

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Major causes of death											
	Accident injury		Chronic lower respiratory disease		Chronic liver disease and cirrhosis		Hypertensive disease		Nephritis, nephrotic syndrome and nephrosis		Intentional self-harm(suicide)	
	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population
2008	7,077	27.0	5,374	16.9	4,917	17.1	3,507	11.2	4,012	13.2	4,128	15.2
2009	7,358	27.7	4,955	14.9	4,918	16.6	3,721	11.5	3,999	12.5	4,063	14.7
2010	6,669	24.4	5,197	14.8	4,912	16.1	4,174	12.2	4,105	12.4	3,889	13.8
2011	6,726	24.1	5,984	16.2	5,153	16.5	4,631	12.9	4,368	12.6	3,507	12.3
2012	6,873	23.8	6,326	16.4	4,975	15.6	4,986	13.3	4,327	12.1	3,766	13.1
2013	6,619	22.4	5,959	14.9	4,843	14.8	5,033	12.9	4,489	11.9	3,565	12.0
2014	7,118	23.7	6,428	15.3	4,962	14.8	5,459	13.5	4,868	12.5	3,542	11.8
2015	7,033	22.8	6,383	14.6	4,688	13.6	5,536	13.2	4,762	11.8	3,675	12.1
2016	7,206	23.1	6,787	15.1	4,738	13.4	5,881	13.5	5,226	12.4	3,765	12.3
2017	6,965	21.9	6,260	13.3	4,554	12.6	6,072	13.3	5,381	12.4	3,871	12.5
2018	6,846	21.1	6,146	12.7	4,315	11.6	5,991	12.8	5,523	12.3	3,865	12.5

Remark:
1. The standardized mortality rate is worked out according to the world's standard population age structure of 2000 gained by WHO.
2. ICD-10 has been adopted for statistical classification since 2008.

Table 7-2 Major causes of cancer death

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Major causes of cancer death									
	Trachea cancer, bronchus and lung cancer		Liver and intrahepatic bile ducts cancer		Colon, rectum and anus cancer		Female breast cancer		Prostate cancer	
	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population	Deaths	Standardized mortality rate per 100,000 population
2008	7,777	26.3	7,651	26.8	4,266	14.4	1,541	10.7	892	5.7
2009	7,951	25.9	7,759	26.2	4,531	14.8	1,589	10.6	936	5.9
2010	8,194	25.8	7,744	25.2	4,676	14.6	1,706	11.0	1,021	6.1
2011	8,541	26.0	8,022	25.3	4,921	15.0	1,852	11.6	1,096	6.4
2012	8,587	25.4	8,116	24.7	5,131	14.9	1,912	11.6	1,187	6.7
2013	8,854	25.3	8,217	24.2	5,265	14.9	1,962	11.6	1,207	6.6
2014	9,167	25.3	8,178	23.3	5,603	15.3	2,071	11.9	1,218	6.5
2015	9,232	24.7	8,258	22.8	5,687	14.9	2,141	12.0	1,231	6.4
2016	9,372	24.4	8,353	22.2	5,772	14.6	2,176	11.8	1,347	6.8
2017	9,235	23.1	8,402	21.6	5,812	14.4	2,377	12.6	1,392	6.9
2018	9,388	22.8	8,222	20.3	5,823	14.0	2,418	12.5	1,377	6.6

Remark:
1. The standardized mortality rate is worked out according to the world's standard population age structure of 2000 gained by WHO.
2. ICD-10 has been adopted for statistical classification since 2008.

Table 8 Social insurance

Data source: National Health Insurance Administration, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	National health insurance						
	Beneficiaries	Coverage	Index of health care utilization				
			Outpatient visits per beneficiary	Inpatient visits per 100 beneficiaries	Average costs per outpatient case	Average costs per inpatient case	Average length of stay
	1,000 persons	%	Times	Cases	Points	Points	Days
2008	22,918	…	14.0	13.1	1,032	54,534	10.0
2009	23,026	99.3	14.4	13.4	1,052	54,775	9.9
2010	23,074	99.4	14.6	13.5	1,067	54,794	9.9
2011	23,199	99.5	15.1	13.8	1,086	55,346	9.9
2012	23,281	99.5	15.1	13.8	1,113	55,661	9.8
2013	23,463	99.6	15.1	13.5	1,168	57,259	9.9
2014	23,622	99.6	14.9	13.7	1,223	58,662	9.7
2015	23,737	99.7	14.7	13.9	1,257	59,076	9.5
2016	23,815	99.7	14.9	14.1	1,297	61,458	9.7
2017	23,880	99.8	14.8	14.2	1,386	63,245	9.4
2018	23,948	99.8	15.1	14.5	1,427	65,411	9.4

Remark:

1. Data source for index of health care utilization: Detail files in the NHIA three-generation storage system about object summary, outpatient service, delivery institutions and inpatient service.
2. The statistical range of this table does not include commission cases.
3. The denominator of visits per beneficiary/100 beneficiaries equal to the average value of number of NHI beneficiaries in February, May, August and November.
4. Outpatient visits exclude cases to home care and psychiatric community-based rehabilitation, medical examination referrals commissioned by other medical institutions, refillable prescriptions for patients with chronic illnesses, pathology centers, delivery institutions, supplementary claims of partial orders or balance discrepancies, other undeclared diagnosis fees required to be split or combined at time of treatment in accordance with the regulations, and second or subsequent treatment in the same therapeutic course and scheduled examination.
5. Outpatient cases exclude cases to medical examination referrals commissioned by other medical institutions, refillable prescriptions for patients with chronic illnesses, pathology centers, delivery institutions, supplementary claims of partial orders or balance discrepancies, other undeclared diagnosis fees required to be split or combined at time of treatment in accordance with the regulations, and second or subsequent treatment in the same therapeutic course and scheduled examination.
6. Inpatient cases exclude cases to supplementary claims of partial orders or balance discrepancies, and other undeclared diagnosis fees required to be split or combined at time of treatment in accordance with the regulations.
7. The length of hospitalized stay is equivalent to the sum of acute and chronic bed days.

Table 8 Social insurance (continued)

Data source: Department of Social Insurance, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	National annuity								
	Number of insured objects	Percentage in people at 25-64 years of age	General identity	Low-income household	People whose income is below a certain standard		People with disabilities		
					The first item	The second item	Above severe	Moderate	Mild
	1,000 persons	%	1,000 persons	1,000 persons	1,000 persons	1,000 persons	1,000 persons	1,000 persons	1,000 persons
2008	4,221	31.3	3,931	39	6	3	88	81	72
2009	4,015	29.4	3,563	50	100	51	95	84	72
2010	3,872	27.9	3,390	51	120	62	96	83	70
2011	3,784	27.1	3,296	62	120	55	98	83	70
2012	3,726	26.5	3,221	73	127	57	99	81	69
2013	3,678	25.9	3,180	76	123	52	100	79	67
2014	3,584	25.2	3,086	77	126	52	98	78	66
2015	3,510	24.6	3,025	76	122	48	97	77	66
2016	3,425	24.0	2,943	74	125	49	95	76	64
2017	3,349	23.5	2,883	71	118	46	94	75	62
2018	3,287	23.1	2,820	70	122	48	93	74	60

Remark: Item 1 refers to Article 12 of the National Pension Act, for when the amount of total family income divided by the number of insured family members fails to each 1.5 times of the lowest living expense of that specific year and does not exceed 1 time of the average monthly consumption per person in the Taiwan area; item 2 is for when the amount of total family income divided by the number of insured family members does not reach 2 times of the lowest living expense of that specific year and does not exceed 1.6 times of the average monthly consumption per person in the Taiwan area.

Table 9 Social assistance

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Low-income households				Low and middle-income household			
	Number of households	Proportion in total number of households	Populatio	Proportion in total population	Number of households	Proportion in total number of households	Populatio	Proportion in total population
	Households	%	Persons	%	Households	%	Persons	%
2008	93,032	1.2	223,697	1.0	–	–	–	–
2009	105,265	1.3	256,342	1.1	–	–	–	–
2010	112,200	1.4	273,361	1.2	–	–	–	–
2011	128,237	1.6	314,282	1.4	35,420	0.4	120,042	0.5
2012	145,613	1.8	357,446	1.5	88,988	1.1	282,019	1.2
2013	148,590	1.8	361,765	1.5	108,589	1.3	334,391	1.4
2014	149,958	1.8	357,722	1.5	114,522	1.4	349,130	1.5
2015	146,379	1.7	342,490	1.5	117,686	1.4	356,185	1.5
2016	145,176	1.7	331,776	1.4	119,081	1.4	358,161	1.5
2017	142,814	1.7	317,257	1.3	117,776	1.4	350,425	1.5
2018	143,941	1.6	311,526	1.4	115,570	1.3	338,468	1.4

Remark: The new social assistance law has been implemented since 1 Jul. 2011; the identification standard becomes loose, and low and middle-income households are included.

Table 9 Social assistance (continued)

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Medical subsidy		Inpatient subsidy for low and middle-income households		Amount of salvage money for disasters	Emergency relief	
	Person-times	NTD10,000s	Person-times	NTD10,000s	NTD10,000s	Person-times	NTD10,000s
2008	5,295	5,627	6,501	11,411	18,870	48,074	27,366
2009	5,486	6,639	7,033	12,167	82,180	44,129	24,576
2010	5,773	6,403	8,066	12,871	79,226	47,863	28,373
2011	5,383	7,092	9,761	16,269	4,672	45,418	27,423
2012	5,013	7,176	9,667	16,283	17,363	46,978	26,910
2013	4,322	8,041	10,258	16,936	8,853	40,961	24,669
2014	4,260	8,987	10,767	18,050	4,816	42,232	25,349
2015	4,499	10,256	10,923	17,837	7,337	37,897	23,261
2016	4,779	12,261	11,345	20,235	14,370	35,900	22,319
2017	5,250	13,566	12,156	20,185	6,170	34,177	21,748
2018	5,062	15,660	12,553	21,166	11,575	34,469	22,130

Table 10 Social welfare

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Children and youth welfare (below 18 years of age)						Senior welfare (over 65)					
	Population	Proportion in total population	Family foster		Life assistance for vulnerable children and youths		Population	Proportion in total population	Low and medium-income senior living allowance		Low and medium-income senior special care allowance	
			Population	Amount	Person-time	Amount			No. of approvals at the end of the year	Amount	Person-time	Amount
	Persons	%	Persons	NTD10,000s	Person-times	NTD10,000s	Persons	%	Persons	NTD10,000s	Person-times	NTD10,000s
2008	4,868,304	21.1	1,849	48,253	1,039,134	158,318	2,402,220	10.4	125,951	785,875	6,519	3,177
2009	4,745,159	20.5	1,761	48,160	1,222,200	195,916	2,457,648	10.6	122,523	768,898	7,263	3,535
2010	4,595,767	19.8	1,905	43,785	1,355,253	205,352	2,487,893	10.7	119,861	760,908	7,862	3,814
2011	4,469,350	19.2	1,802	43,366	1,348,606	199,776	2,528,249	10.9	120,266	761,814	8,116	4,062
2012	4,380,203	18.8	1,835	46,625	1,466,688	288,034	2,600,152	11.2	120,968	923,968	9,042	4,529
2013	4,258,385	18.2	1,804	45,030	1,406,040	278,058	2,694,406	11.5	120,869	924,823	9,152	4,587
2014	4,149,792	17.7	1,743	43,185	1,401,476	274,211	2,808,690	12.0	122,423	938,459	9,077	4,555
2015	4,043,357	17.2	1,662	42,342	1,385,684	270,860	2,938,579	12.5	124,490	963,091	9,470	4,753
2016	3,987,202	16.9	1,622	42,533	1,382,965	279,673	3,106,105	13.2	128,108	1,020,710	9,448	4,746
2017	3,900,662	16.5	1,621	39,999	1,339,627	270,791	3,268,013	13.9	134,365	1,062,674	9,360	4,694
2018	3,778,520	16.0	1,605	48,419	1,309,150	263,527	3,433,517	14.6	143,610	1,131,975	8,745	4,378

Table 10 Social welfare (continued 1)

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	Family support					Female welfare			
	Number of cases accepted by the single parent halfway house	Babysitting center (below 3 years of age)		Family support service for special circumstances		Female welfare service center	Women's halfway house and asylum center		
		Number of infants accepted	Nursery staff and care ratio				Number of institutions	Number of persons accepted	Number of cases accepted
	Person-times	Persons	%	Person-times	NTD10,000s	No.	No.	Persons	Person-times
2008	2,661	…	…	107,149	30,625	58	37	331	2,987
2009	2,150	…	…	153,175	40,913	61	38	345	3,340
2010	2,055	…	…	188,433	47,861	63	41	412	3,292
2011	539	…	…	188,987	48,159	52	37	460	2,917
2012	548	…	…	156,784	44,840	51	40	449	2,927
2013	581	…	…	137,464	40,303	56	41	440	2,982
2014	678	14,845	4.0	139,513	42,978	72	58	464	3,178
2015	654	17,246	4.0	133,370	42,012	74	60	496	3,206
2016	542	19,750	4.0	127,966	43,075	82	64	486	3,076
2017	581	23,066	4.1	127,947	43,987	73	51	582	3,154
2018	601	26,637	4.1	131,434	46,766	77	46	590	3,128

Table 10 Social welfare (continued)

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan)

Year	People with disabilities										
	Population	Proportion in population of physical disorder			Proportion in total population	Subsistence allowance		Subsidy for day care and residential care		Subsidy for life assistance device	
		Below 18 years of age	18-64 years of age	Above 65 years of age							
	Persons	%	%	%	%	Person-times	NTD10,000s	Population in the end of the year	NTD10,000s	Person-times	NTD10,000s
2008	1,040,585	6.1	57.4	36.5	4.5	3,712,397	1,498,714	26,823	431,025	55,425	53,900
2009	1,071,073	5.9	57.1	37.0	4.6	3,862,823	1,565,270	29,860	475,602	64,138	60,975
2010	1,076,293	5.8	57.6	36.6	4.7	3,998,947	1,621,943	30,449	517,837	70,873	66,296
2011	1,100,436	5.6	57.4	37.0	4.7	4,132,534	1,680,850	32,592	565,535	76,289	72,187
2012	1,117,518	5.6	57.6	36.8	4.8	4,176,404	2,016,490	33,779	613,446	77,422	72,882
2013	1,125,113	5.3	57.2	37.5	4.8	4,179,798	2,042,815	37,298	648,569	70,564	67,823
2014	1,141,677	5.1	56.7	38.2	4.9	4,206,306	2,052,774	39,199	706,541	75,057	72,924
2015	1,155,650	4.9	56.1	39.0	4.9	4,209,760	2,056,215	41,225	764,264	80,148	76,617
2016	1,170,199	4.8	55.2	40.1	5.0	4,214,338	2,130,780	43,300	802,516	86,369	78,220
2017	1,167,450	4.6	54.6	40.8	5.0	4,207,046	2,128,290	45,930	850,433	92,887	83,153
2018	1,173,978	4.5	53.6	41.9	5.0	4,189,002	2,125,703	47,841	880,192	81,695	75,508

Table 11 Protective services

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan), Municipal, County (City) Governments

Year	Family violence events			Sexual assault events			Child and youth protection
	Number of victims declared	Protection and assistance for victims		Number of victims declared	Protection and assistance for victims		Number of battered children and youths
	Persons	Person-times	NTD10,000s	Persons	Person-times	NTD10,000s	Persons
2008	75,438	416,844	25,456	7,285	95,247	5,878	13,703
2009	83,728	478,769	32,684	8,008	101,482	6,491	13,400
2010	98,720	601,567	34,427	9,320	100,942	6,027	18,331
2011	94,150	871,146	40,561	11,121	140,326	7,360	17,667
2012	98,399	915,859	39,116	12,066	158,258	7,077	19,174
2013	110,103	988,586	46,854	10,901	177,258	7,753	16,322
2014	95,663	1,127,819	53,360	11,096	199,846	10,947	11,589
2015	95,818	1,191,465	57,650	10,454	219,024	11,354	9,604
2016	95,175	1,297,726	61,223	8,141	218,852	12,421	9,461
2017	95,402	1,312,095	74,336	8,214	229,525	17,274	9,389
2018	96,693	1,309,184	96,139	8,499	245,515	15,252	9,186

Table 12 International comparisons

Data source: Ministry of the Interior and 2018 World Population Data Sheet, Population Reference Bureau

Country	Population				
	Crude birth rate	Crude death rate	Natural increase rate	Total fertility rate	Dependency Ratio
	2018	2018	2018	2018	2018
	‰	‰	‰	Per woman	%
R.O.C.(Taiwan)	8	7	1	1.1	38
Japan	8	11	–3	1.4	67
Republic of Korea	7	6	1	1.1	37
United States	12	9	3	1.8	52
Canada	11	8	3	1.5	49
United Kingdom	12	9	3	1.8	56
Germany	9	11	–2	1.6	52
France	11	9	2	1.9	61
Australia	13	7	6	1.7	54
New Zealand	12	7	5	1.8	52

Note: The data in the table for each country is from 2018 or the most recent year available.

Table 12 International comparisons (continued 1)

Data source: Ministry of Interior Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan); OECD Health Data

Country	Life expectancy and mortality rate			
	Life expectancy at birth			Neonatal mortality rate
	Total Population	Male	Female	
	2017	2017	2017	2017
	Years	Years	Years	Per 1,000 live births
R.O.C.(Taiwan)	80.4	77.3	83.7	2.5
Japan	84.2	81.1	87.3	0.9
Republic of Korea	82.7	79.7	85.7	1.5
United States	78.6	76.1	81.1	3.9
Canada	82.0	79.9	84.0	3.5
United Kingdom	81.3	79.5	83.1	2.8
Germany	81.1	78.7	83.4	2.3
France	82.6	79.6	85.6	2.8
Australia	82.6	80.5	84.6	2.4
New Zealand	81.9	80.2	83.6	2.8

Note: The data in the table for each country is from 2017 or the most recent year available.

Table 12 International comparisons (continued)

Data source: Department of Statistics, Ministry of Health and Welfare, R.O.C. (Taiwan); OECD Health Data

Country	Health expenditure			
	Health expenditure ratios		Health expenditure per capita	
	Current health expenditure as a share of GDP	Public current health expenditure as a share of current health expenditure	Current health expenditure per capita	Public current health expenditure per capita
	2017	2017	2017	2017
	%	%	USD PPPs	USD PPPs
R.O.C.(Taiwan)	6.1	63.5	3,047	1,935
Japan	10.7	84.2	4,717	3,971
Republic of Korea	7.6	58.2	2,897	1,687
United States	17.2	84.5	10,209	8,627
Canada	10.4	70.1	4,826	3,382
United Kingdom	9.6	78.7	4,246	3,341
Germany	11.3	85.0	5,728	4,869
France	11.5	83.0	4,902	4,068
Australia	9.1	68.4	4,543	3,109
New Zealand	9.0	78.6	3,683	2,894

Remark: Relevant health care indexes are summarized according to A System of Health Accounts (SHA) issued by OECD, Health Expenditure and Financing and Current Health Expenditure (CHE).

Appendix 2 Notifiable Diseases Statistics

Table 1 Number of Confirmed Cases of Acute Notifiable Disease, 2018

Source: Taiwan Centers for Disease Control

Category	Disease	Total	Indigenous Case	Imported Case
I	Smallpox	0	0	0
	Plague	0	0	0
	Severe Acute Respiratory Syndrome (SARS)	0	0	0
	Rabies	0	0	0
II	Diphtheria	0	0	0
	Typhoid Fever	17	4	13
	Dengue Fever	533	183	350
	Meningococcal Meningitis	6	5	1
	Paratyphoid Fever	8	1	7
	Poliomyelitis	0	0	0
	Acute Flaccid Paralysis [3]	66	66	0
	Shigellosis	172	113	59
	Amoebiasis	334	163	171
	Malaria	7	0	7
	Measles	40	28	12
	Acute Hepatitis A	88	55	33
	Enterohaemorrhagic Escherichia coli Infection	0	0	0
	Hantavirus Hemorrhagic Fever with Renal Syndrome	1	1	0
	Hantavirus Pulmonary Syndrome (HPS)	0	0	0
	Cholera	7	7	0
	Rubella	10	1	9
	Chikungunya Fever	7	0	7
	West Nile Fever	0	0	0
	Epidemic Typhus Fever	0	0	0
	Anthrax	0	0	0
III	Pertussis	30	28	2
	Tetanus[4]	4	–	–
	Japanese Encephalitis	37	37	0
	Congenital Rubella Syndrome	0	0	0
	Acute Hepatitis B	143	133	10
	Acute Hepatitis C	510	503	7
	Acute Hepatitis D	0	0	0

Source: Taiwan Centers for Disease Control

Category	Disease	Total	Indigenous Case	Imported Case
III	Acute Hepatitis E	10	10	0
	Acute Hepatitis, Unspecified	0	0	0
	Mumps[4]	600	–	–
	Legionnaires' Disease	211	200	11
	Invasive Haemophilus Influenzae Type b (Hib) Infection	5	5	0
	Neonatal Tetanus	0	0	0
	Enteroviruses Infection with Severe Complications	36	36	0
IV	Herpesvirus B Infection	0	0	0
	Leptospirosis	96	95	1
	Melioidosis	23	21	2
	Botulism	0	0	0
	Invasive Pneumococcal Disease	459	459	0
	Q Fever	20	18	2
	Endemic Typhus Fever	22	21	1
	Lyme Disease	3	0	3
	Tularemia	0	0	0
	Scrub Typhus	386	384	2
	Complicated Varicella	54	54	0
	Toxoplasmosis	17	16	1
	Severe Complicated Influenza	1,196	1,191	5
	Brucellosis	0	0	0
	Listeriosis	168	167	1
V	Rift Valley Fever	0	0	0
	Marburg Haemorrhagic Fever	0	0	0
	Yellow Fever	0	0	0
	Ebola Virus Disease	0	0	0
	Lassa Fever	0	0	0
	Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Infections	0	0	0
	Novel Influenza A Virus Infections	0	0	0
	Zika Virus Infection	3	0	3

Notes: 1. Date of Download: Data were downloaded on May 1, 2019.
2. Day of disease onset is used as the basis of analysis for all acute notifiable diseases.
3. No wild poliovirus has been detected in Taiwan since 1984. Nationwide surveillance of acute flaccid paralysis has been used for detecting cases of poliomyelitis since the implementation of the Eradication Program for Measles,Congenital Rubella Syndrome, Poliomyelitis, and Neonatal Tetanus in 1992.
4. Tetanus and mumps are cases reported by the physician without laboratory testing of specimens.

Table 2 Number of Confirmed Cases of Chronic Notifiable Disease, 2018

Source: Taiwan Centers for Disease Control

Category	Diseases	Number of Confirmed Notifiable
II	Multidrug-Resistant Tuberculosis (MDR-TB)	120
III	Tuberculosis	9,179
	Syphilis	9,808
	Congenital syphilis	0
	Gonorrhea	4,209
	Human Immunodeficiency Virus Infection	1,992
	Acquired Immunodeficiency Syndrome （AIDS）	1,091
	Hansen's Disease	7
IV	Creutzfeldt-Jakob Disease	0

Notes:1. Date of Download: Data were downloaded on May 1, 2019.
2. Caseloads of MDR-TB were calculated based on the registration date by Taiwan CDC. Tuberculosis caseloads were based on the notification date. Other chronic notifiable diseases were analyzed based on the diagnosis date.

Appendix 3 Technical Term Keys

Number	acronym	noun
1.	ADLs	Activities of Daily Living
2.	AED	Automated External Defibrillator
3.	AFHC	Alliance For Healthy Cities
4.	AMDA	Association of Medical Doctors of Asia
5.	APEC	Asia–Pacific Economic Cooperation
6.	APP	Application
7.	CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
8.	CHE	Current Health Expenditure
9.	CRC	Convention on the Rights of the Child
10.	CRPD	Convention on the Rights of Persons with Disabilities
11.	ECDC	European Centre for Disease Prevention and Control
12.	FACS	Food safety Accreditation and Certification System
13.	FFS	Fee for Service
14.	GDP	Gross Domestic Product
15.	GDP	Good Distribution Practice
16.	GMP	Good Manufacture Practice
17.	GHSA	Global Health Security Agenda
18.	GMISS	Global Medical Instruments Support & Service Program
19.	HAART	Highly Active Antiretroviral Therapy
20.	HACCP	Hazard Analysis and Critical Control Points
21.	HPV	Human Papillomavirus
22.	HRH	human resources for health
23.	IADLs	Instrumental Activities of Daily Living
24.	IDS	Integrated Delivery System
25.	IHR	International Health Regulations
26.	IUHPE	International Union of Health Promotion and Education

Number	acronym	noun
27.	LGBTI	Lesbian, Gay, Bisexual, Transgender and Intersex
28.	LTBI	Latent Tuberculosis Infection
29.	MPOWER	Monitor, Protect, Offer, Warning, Enforce, Raise
30.	NCDs	Noncommunicable Diseases
31.	NHE	National Health Expenditure
32.	OECD	Organization for Economic Co-operation and Development
33.	P4P	Pay-for-Performance
34.	PAC	Post-Acute Care
35.	PACS	Picture archiving and communication system
36.	PGY	Post-Graduated Year
37.	PIC / S GMP	The Pharmaceutical Inspetion Convention and Pharmaceutical Inspection Co-operation Scheme：Guide to Good Manufacturing Practice for Medicinal Products
38.	PPP	Purchasing Power Parity
39.	QSD	Quality System Documentation
40.	TaiwanIHA	Taiwan International Health Action
41.	SDGs	Sustainable Development Goals
42.	TIHTC	Taiwan International Healthcare Training Center
43.	Tw-DRGs	Taiwan Diagnosis Related Groups
44.	UHC	universal health coverage
45.	WHA	World Health Assembly
46.	WHO	World Health Organization

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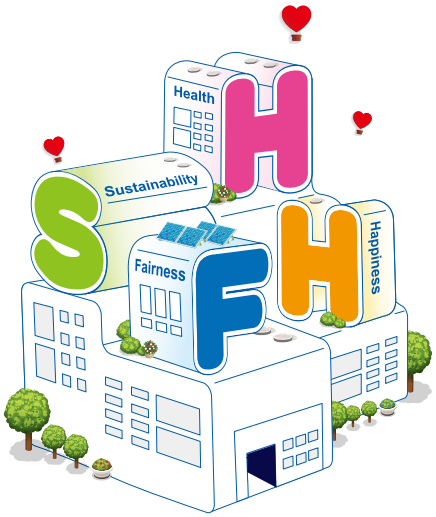

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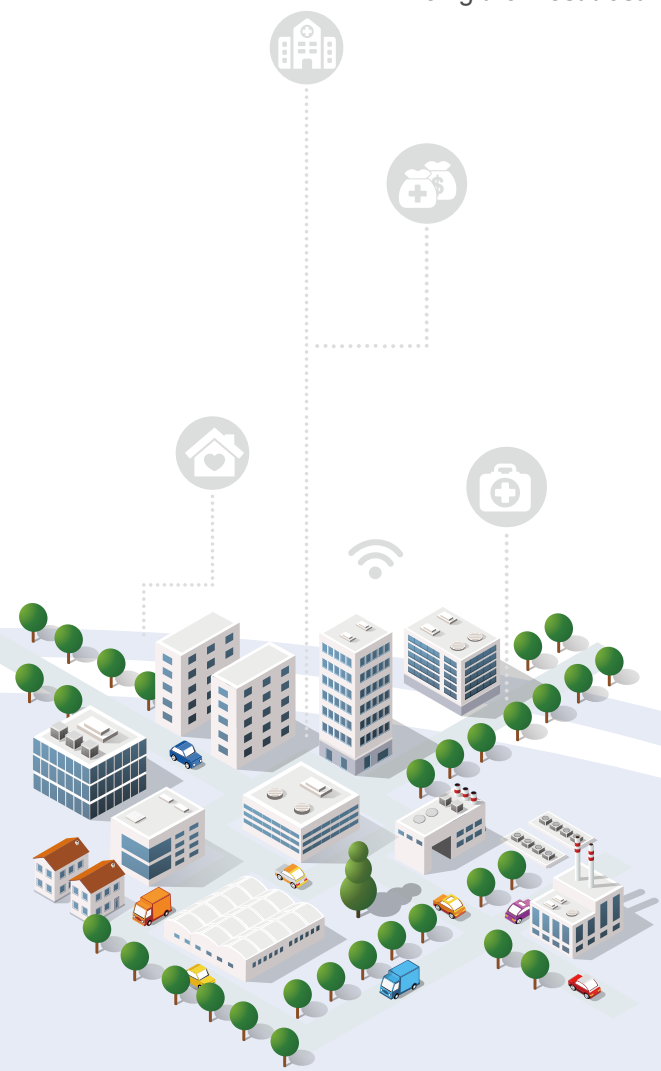

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