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2017 Taiwan Health and Welfare Report

Health Happiness Fairness Sustainability

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

Taiwan Health and Welfare Report 2017

Adhering to the Whole-Person Care Value,
Achieving Holistic Health and Social Welfare Policies.

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

Foreword

The Ministry of Health and Welfare (MOHW) manages all of the government policies that promote the health and well-being of Taiwan's people. It oversees health-care services and health education, disease prevention efforts, food and pharmaceuticals safety systems, the National Health Insurance and national pension systems, social assistance programs and welfare services.

Because this sweeping mission reaches deeply into most people's lives, our activities are of great interest to the public. The Taiwan Health and Welfare Report provides an annual account of our challenges and accomplishments, with this year's twelve sections focusing on health-care services, regulatory issues and social welfare assistance, as well as key policies our ministry implemented in 2016 and the results we achieved.

Of the challenges facing Taiwan's health and welfare system, the most serious is a rapidly aging population. Although the ministry introduced a long-term care system in 2008, insufficient implementation has hampered efforts to establish an effective service network. To more effectively expand services, in 2016 the MOHW began implementing Stage 2.0 of the Long-term Care Plan, adding four targeted service recipient categories and nine new service items.

Besides integrating discharge planning services and home-based services, a three-level community-based integrated model develops a wide range of care resources. We are building partnerships between central and local government agencies and civic organizations to bring Taiwan's long-term care services to all who need them.

To promote effective use of medical resources, in 2016 the MOHW began planning a new referral system implementing six key strategies and related measures to encourage people to seek primary treatment at local clinics. To ensure that disabled or housebound patients can access health services, the MOHW launched an integrated plan for patient-centric, holistic care.

To safeguard labor rights, from September 2019 all physicians with employee status will be protected by the Labor Standards Law while maintaining flexible working hours under the law's Article 84-1. Hospital accreditation paperwork will be reduced by an estimated 40% to reduce workloads of doctors and nursing staff, allowing them to focus on care quality and patient safety while reducing required documentation.

A new Five-Point Food Safety Policy launched in 2016 combines raw materials controls, restructured production management, more rigorous inspections, heavier punishments for deliberate violations, and public involvement mechanisms to encourage wider monitoring of the nation's food supply. These measures combine industry self-regulation, government supervision and public participation to optimally leverage

food safety resources. By enhancing manufacturers' capabilities, these measures also promote innovative food industry management in Taiwan.

To promote social welfare, the ministry's social assistance measures follow the principles of proactive concern, respecting people's needs, and helping to maintain independent living. The Regulations Governing the Implementation of Assistance for People Working to Lift Themselves Out of Poverty promulgated in 2016 help people in low-income households invest in education, find employment, accumulate assets and develop community-based enterprises. The MOHW is also planning an initiative to foster education and development accounts to encourage low-income households to save for their children's futures. We are reviewing legal and regulatory frameworks to fully implement the Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities. After submitting a national report, we plan to hold an international review meeting to safeguard the rights of our nation's youth and those with disabilities.

In early 2016, the World Health Organization announced that cases of microcephaly and nervous system abnormalities in Brazil were a public health emergency of international concern. Taiwan immediately designated the Zika virus as a notifiable disease and set up a Central Epidemic Command Center. The MOHW also collaborated with the U.S.A. to obtain virus serum, and undertook research on testing and diagnosis techniques to strengthen Asia-Pacific regional virus prevention capabilities. Such continued participation in international health-related organizations plays an important role in fighting new diseases and safeguarding public health. Taiwan looks forward to working with other countries around the world to continue such contributions to world health in the future.

Looking back over 2016's many challenges, we are grateful for the efforts of MOHW personnel and our collaborators. Together we have adjusted our strategies to meet changing needs as in 2017, we devote to building people-centric and community-based holistic care, encouraging a hierarchically integrated health care system, promoting comprehensive long-term care services and enhancing the social safety network. We hope that you will continue to support and work with us to protect the health and well-being of all Taiwan's people.

Shih-Chung Chen

Minister of Health and Welfare

CONTENTS




1 Organization and Policy

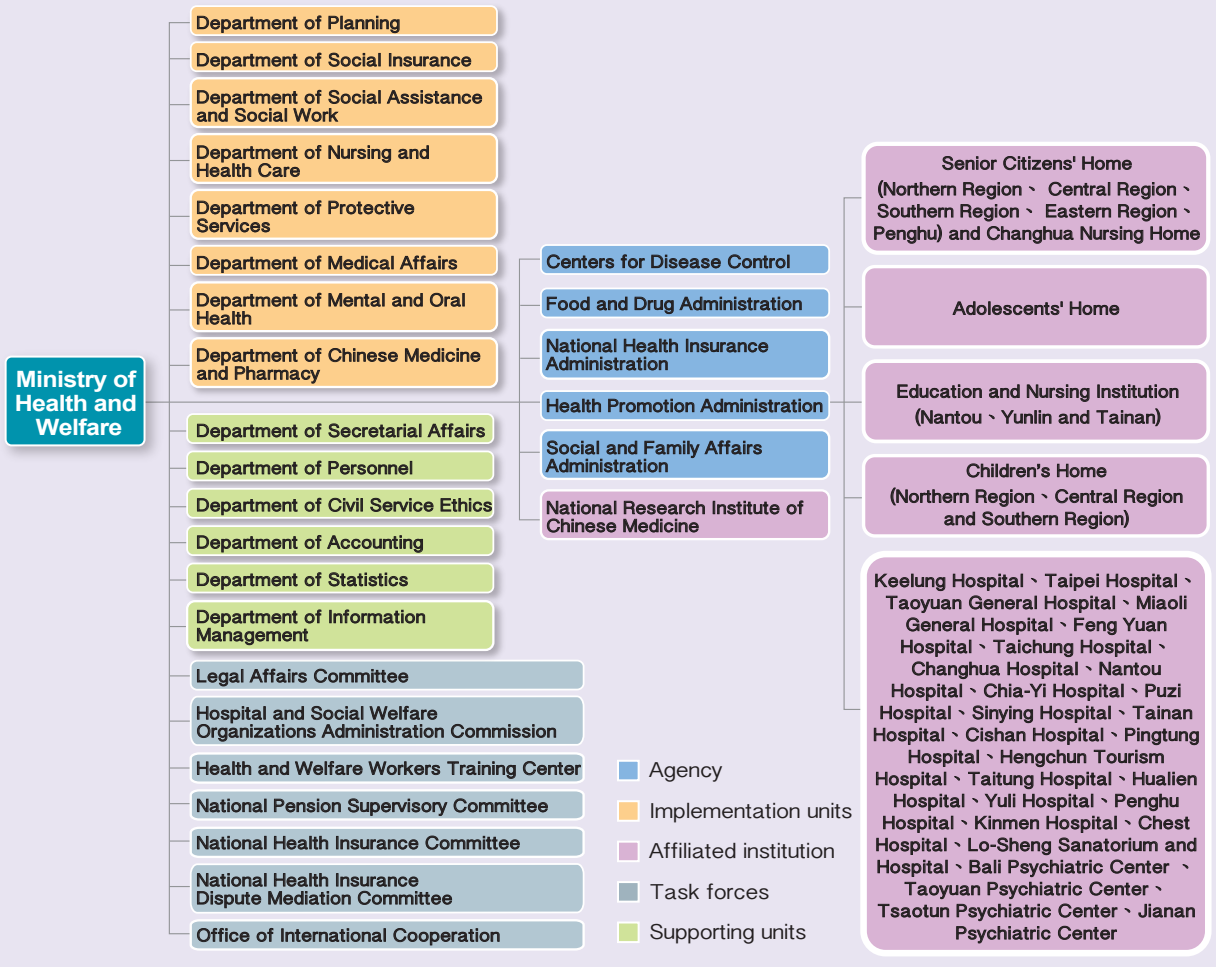
In accordance with organizational restructuring of the Executive Yuan, the Ministry of Health and Welfare (hereinafter referred to as the "MOHW") was formally established on July 23, 2013, by integrating the former Department of Health, Executive Yuan and the Ministry of the Interior's Department of Social Affairs, Child Welfare Bureau, National Pension Supervisory Committee, Domestic Violence and Sexual Assault Prevention Committee as well as the Ministry of Education's National Research Institute of Chinese Medicine.

In response to the needs of social and national development, the MOHW adheres to the global and innovative thinking with localized strategies. Our ministry diligently planned administrative measures and formulated a blueprint for comprehensive health and welfare policies that promote the wellbeing of all citizens. By providing services that satisfy the needs of the general public, we hope to become the most trusted government agency and safeguard the health of the nation.

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 eight 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)



Chapter 2 Expenditure

The total expenditure of 2016 on health and welfare was NTD198,505,053,000, comprising NTD153,845,303,000 for social insurance (accounting for 77.50% of the total), NTD19,355,769,000 for medical and health care(9.75%),NTD19,309,759,000 for welfare services(9.73%),NTD4,482,719,000 for science (2.26%), NTD1,429,233,000 for social assistance (0.72%), and NTD82,270,000 for education (0.04%), as illustrated in Figure 1-2.

Chapter 3 Administrative Goals

Section 1 Annual Objectives

In accordance with administrative policy guidelines of the Executive Yuan, mid-term administrative planning and approved budgets, as well as current socioeconomic trends and future development needs, the MOHW established administrative planning goals for 2016 to fulfill its mission of promoting health and well-being for all (Figure 1-3).

Section 2 Gender Equality Policy

In response to the call for gender equality issues around the world, the MOHW is continuing to implement the Gender Mainstreaming Plan, committed to a gender equality policy program as well as the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and related policies.

In order to strengthen gender equality in the areas of health, medical care and social welfare provision, the MOHW has been actively formulating women's healthcare policies and action plans from a gender perspective. We have put in place comprehensive pregnancy and childbirth care services, established a childbirth risk management system, worked to improve the environment for women to give birth, and continued with efforts to improve the birth ratio of male to female; we have planned the implementation of good-qualiy home-based daycare services , established a comprehensive childcare services system, reduced the burden on family caregivers, and promoted equal division of family responsibilities; we have also worked with civic organizations to establish platforms for promoting women's issues, organizing a wide range of women's empowerment activities, working to strengthen women's social participation, and striving to reduce discrimination and the incidence of violence against women, implementing various policies aimed at preventing gender-based violence.

Figure 1-2 Distribution of 2016 Health and Welfare Final Accounts

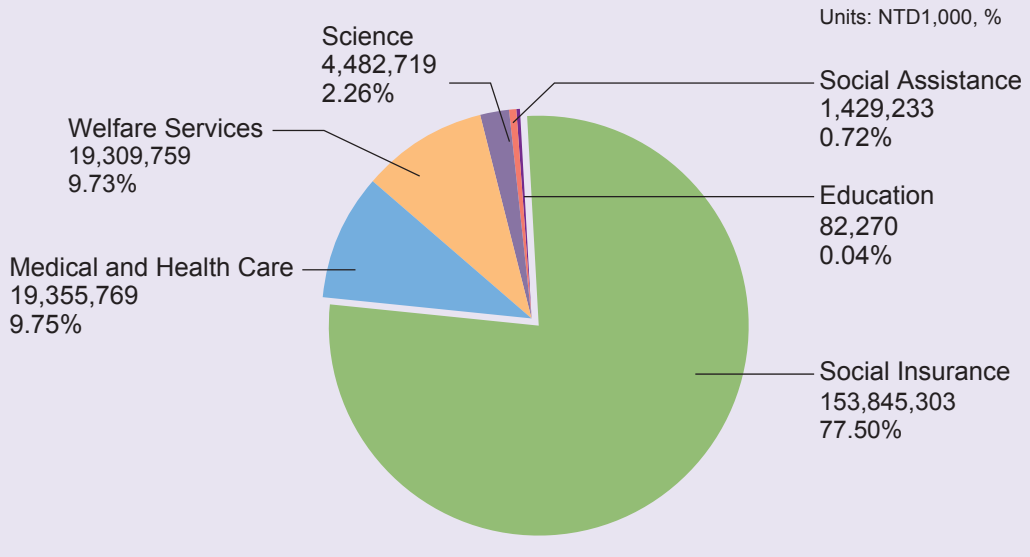
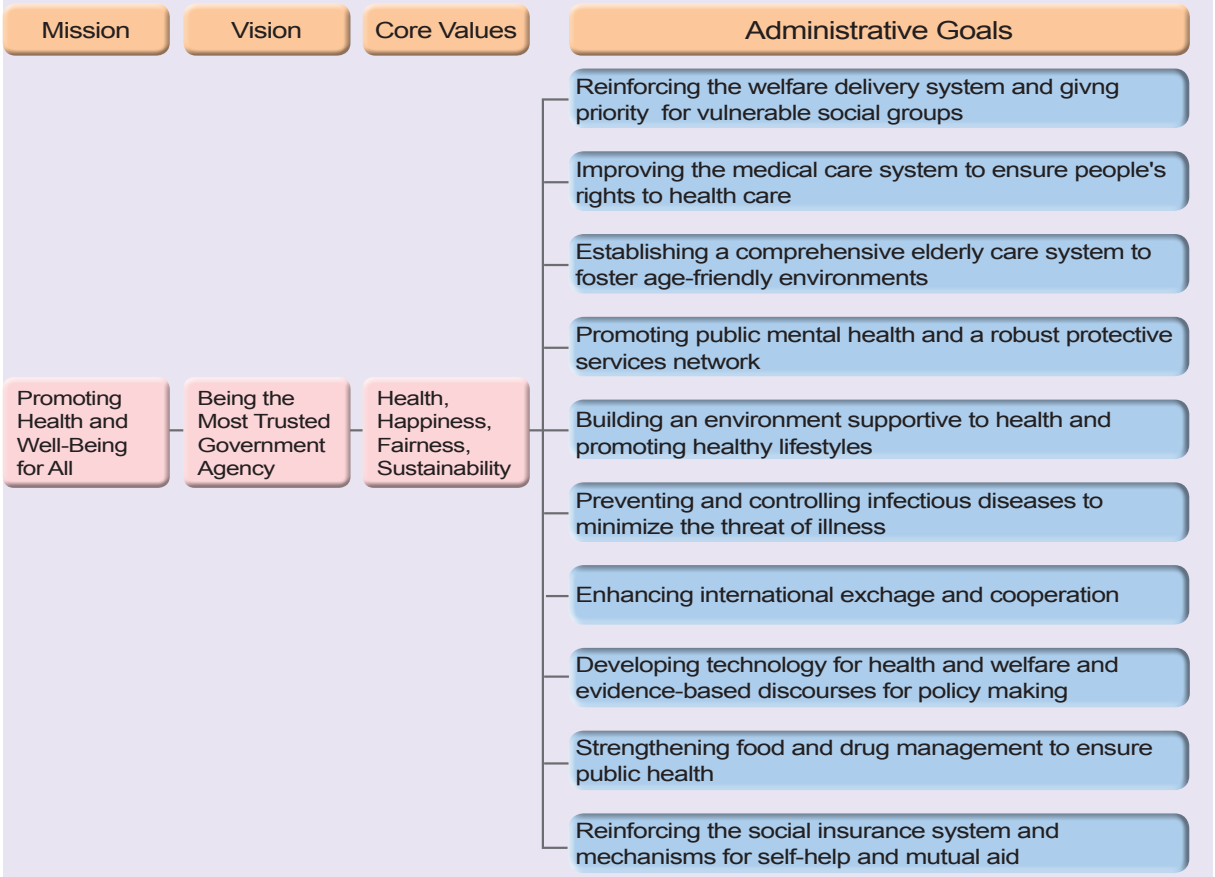


Figure 1-3 Administrative Goals of the MOHW, 2016



In response to the continued increase in the number of "new immigrants" in order to help safeguard the health and welfare of new immigrant women, the MOHW has collaborated with the public health bureaus of local government authorities to implement the "Foreign Spouse Reproductive Health Interpreter Service Plan," with the aim to cultivate interpreters who can provide interpreting services to improve new immigrants' access to the medical and healthcare information. In addition, the MOHW has provided funding support to civic organizations to provide social adaptation classes and multicultural adjustment services, as well as assistance to reduce the risk of new immigrants and their children suffering from social exclusion as a result of cultural and linguistic difficulties, and creating a welcoming environment.

In sum, the MOHW has been working actively to enact new legislation aimed at safeguarding women's rights, and has expanded its efforts to safeguard the rights of new immigrants and foreign nationals. At the same time, gender-inclusive policy implementation has helped to foster the emerging environment with the emphasis on gender equality.

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 2016, Taiwan had a registered population of 23.5 million, an increase of 2.0‰ from 2015. There were 11.7 million males, an increase of 0.6‰, and 11.8 million females, an increase of 3.4‰. The sex ratio (the ratio of males to females in a population) was 99.1%.

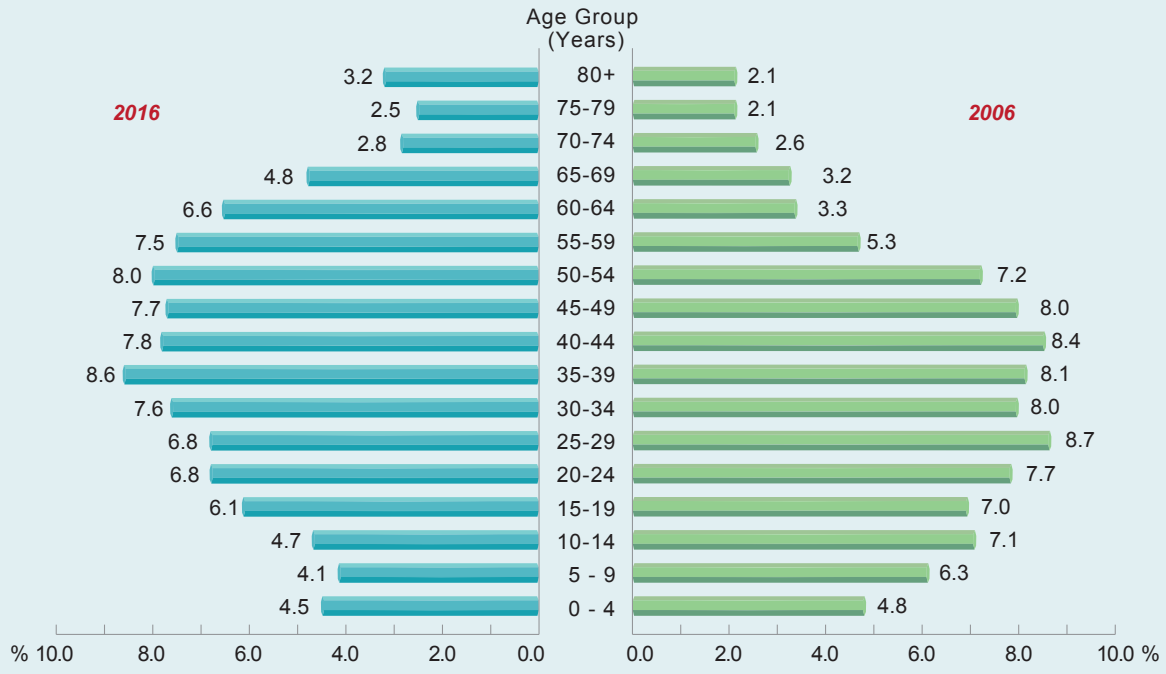
The population density continued to rise slightly. At the end of 2016, there were 650 people per square kilometer. The densest city was Taipei, at 9,918 people. The least dense area was Taitung, at 63 people, followed by Hualien, at 71 people.

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 2006 and 2016, the proportion of the population aged 0-14 dropped from 18.1% to 13.3%. On the other hand, the proportion of the population aged 65 and above exceeded 7.0% in 1993.,rendering Taiwan an aging society. In 2016, the proportion of elderlies rose to 13.2%. The trend in population aging is significant. (Figure 2-1)

Regarding gender differences, females accounted for a greater proportion of aging population than the males. In 2016, females accounted for higher proportion 14.2% of elderlies than males which accounted for 12.2%. On the other hand,females accounted for lower proportion 12.7% of young population than males which accounted for 14.0%. (Figure 2-2).

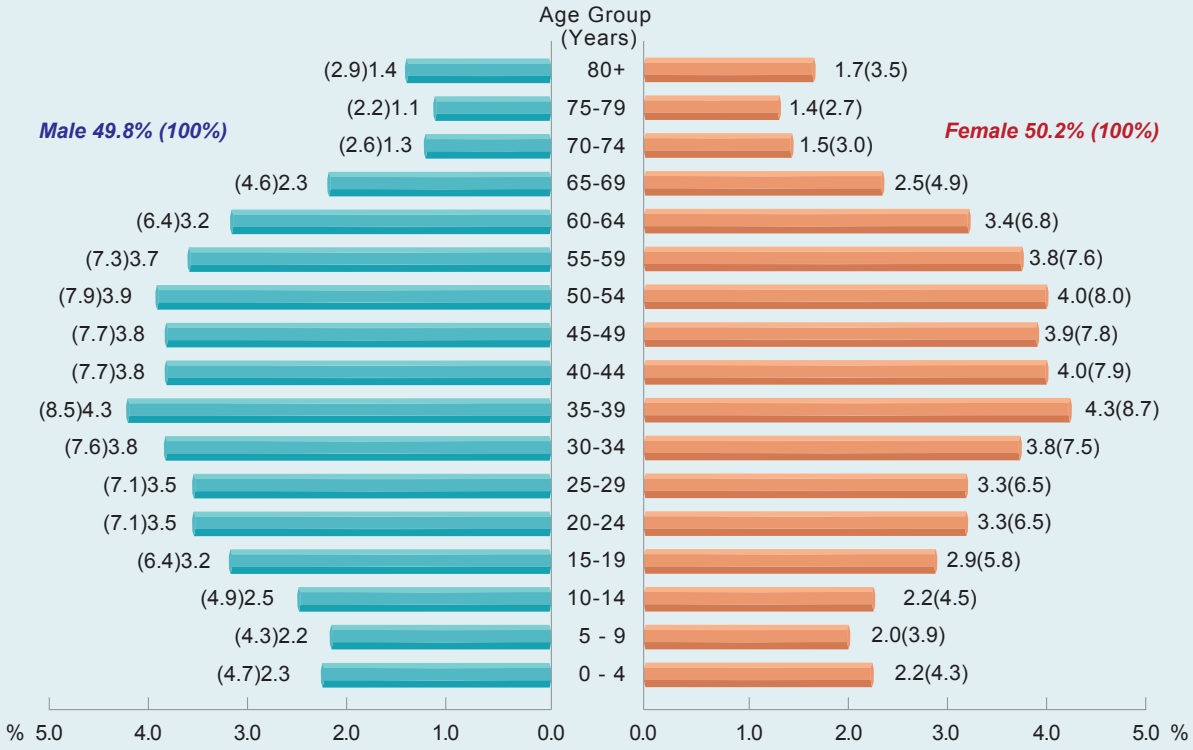
Figure 2-1 Population Age Structure



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

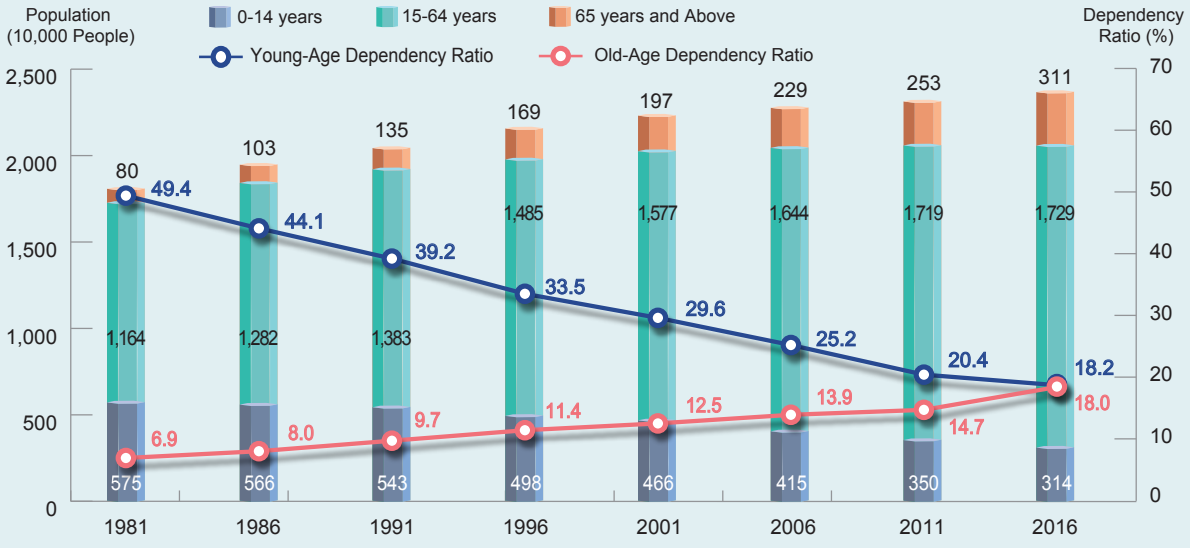
The dependency ratio [(population aged 0-14 + population aged 65 and above)/population aged 15-64* 100] fell from 56.3% in 1981 to 36.1% in 2016. This was primarily due to the rapid decrease in the young-age dependency ratio [population aged 0-14/population aged 15-64* 100] from 49.4% to 18.2%, and the steady increase in the old-age dependency ratio [population aged 65 and above/population aged 15-64* 100] from 6.9% to 18.0% (Figure 2-3).

Figure 2-2 2016 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 8.9‰ in 2016. The crude death rate (deaths/mid-year population* 1,000) rose from 5‰ in the 1980s to 7.3‰ in 2016, 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 1.5‰ in 2016 (Figure 2-4).

Section 3 Life Expectancy

Life expectancy at birth was 80.0 in 2016, representing an increase of 2.1 years over the past decade. Life expectancy at birth increased by 1.9 years to 76.8 for males, and by 2.0 years to 83.4 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).

Chapter 2 Vital Indicators

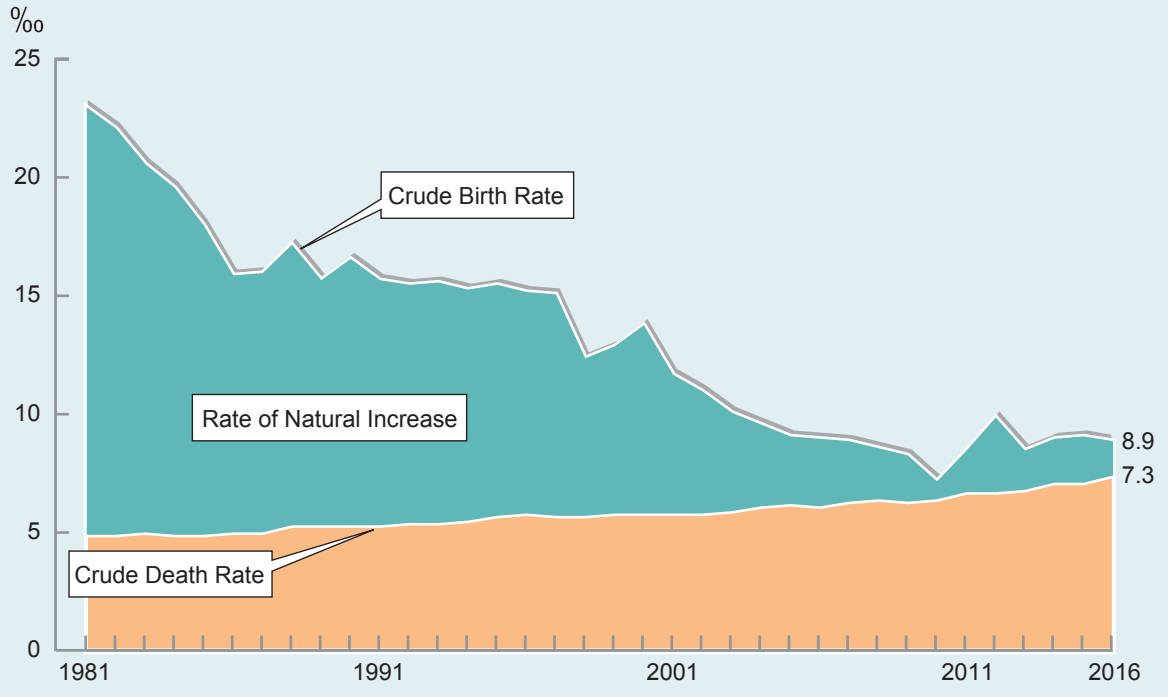
Section 1 Ten Leading Causes of Death

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, accidents, and chronic diseases such as cardiovascular diseases represent the main causes.

In 2016, there were 172,418 deaths and the crude mortality rate was 733.2 per 100,000 population, an increase of 5.2% compared to 2015 and an increase of 23.9% compared to 2006. The standardized mortality rate [based on the WHO standard world population age structure for 2000] was 439.4 people per 100,000 population, an increase of 1.8% compared to 2015 and a decrease of 11.3% compared to 2006.

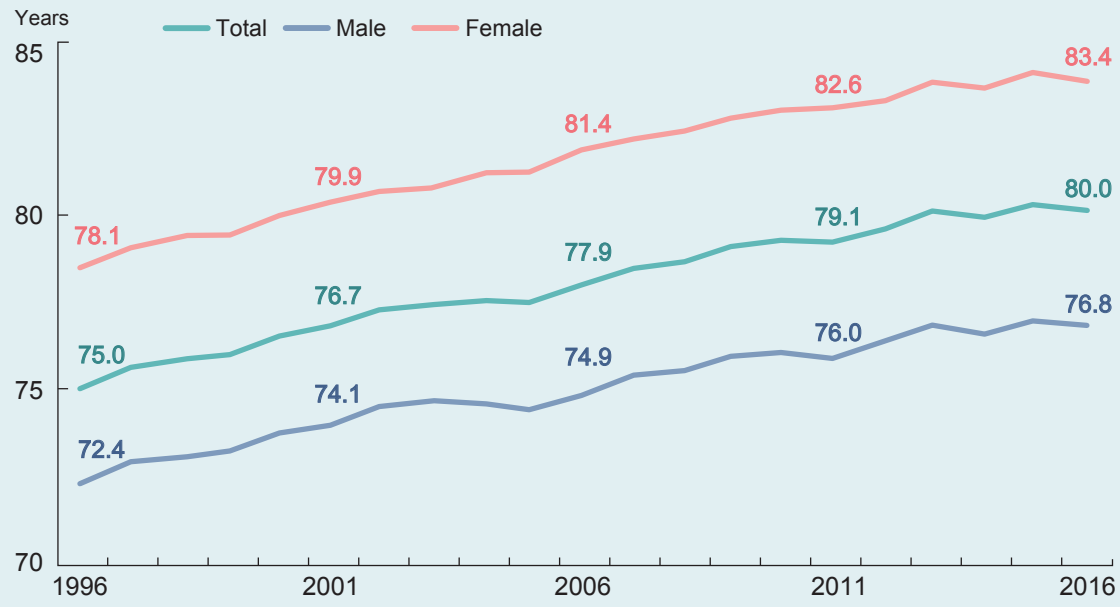
In 2016, the ten leading causes of death accounted for 76.8% of all deaths, and were primarily chronic diseases. In descending order

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)

Figure 2-5 Life Expectancy at Birth, by Year



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

by crude mortality rate they were (1) malignant neoplasms, (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 2006, heart disease, pneumonia, and hypertensive diseases rose in the rankings; cerebrovascular diseases, diabetes mellitus, accidents and adverse effects, nephritis, nephrotic syndrome and nephrosis, chronic liver disease and cirrhosis, and suicide fell in the ranking in 2016 (Figure 2-6).

Section 2 Cancer Incidence and Causes of Cancer Death

1. Cancer Incidence

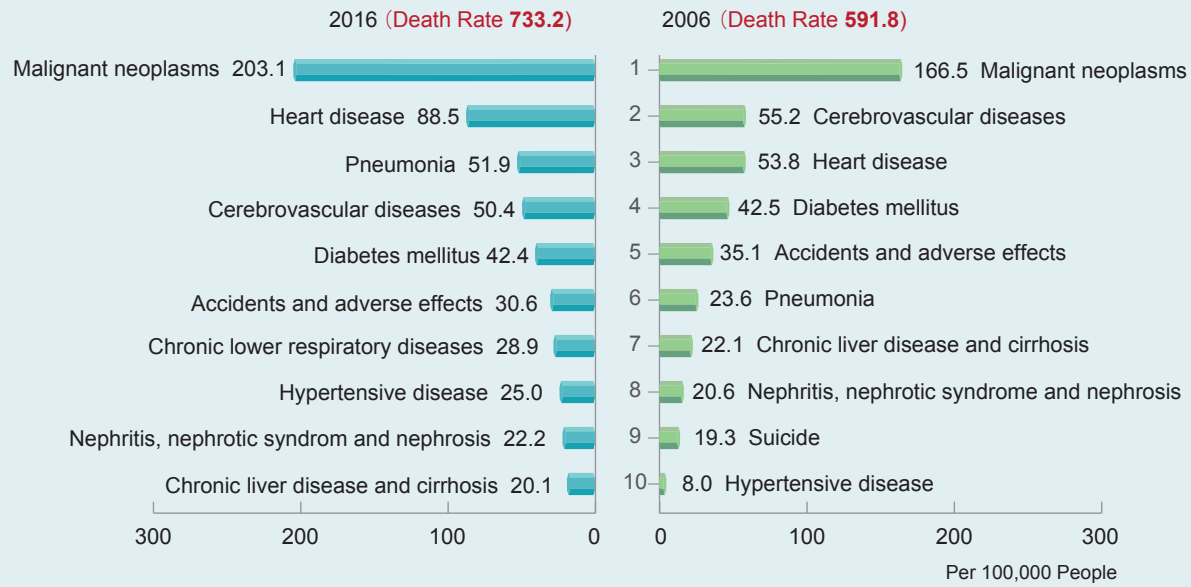
   According to 2014 cancer registry data, the crude incidence rates of cancer for males and females were 479.5 and 400.9 per 100,000 population respectively. If adjustments were made based on the WHO-constructed standard world population age structure from 2000, the age-standardized incidence rates for males and females became 341.4 and 271.4 people per 100,000 population, respectively (Table 2-1).

2. Causes of Cancer Death

   In 2016, there were 47,760 deaths due to malignant neoplasms accounting for 27.7% of total deaths and a crude mortality rate of 203.1 per 100,000 population. This number represented an increase of 1.8% compared to the previous year and an increase of 22.0% compared to 2006. The standardized cancer mortality rate in 2016 was 126.8 per 100,000 population, a decrease of 0.9% compared to 2015 and a decrease of 9.0% compared to 2006.

   The ten leading causes of cancer death in 2016 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) ovary. Compared to 2006, cancers of the oral cavity, prostate, and pancreas and ovary rose in the rankings, while cancers of the stomach, cervix and uterus fell (Figure 2-7).

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



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

Table 2-1 Incidence of Ten Leading Cancers, 2014

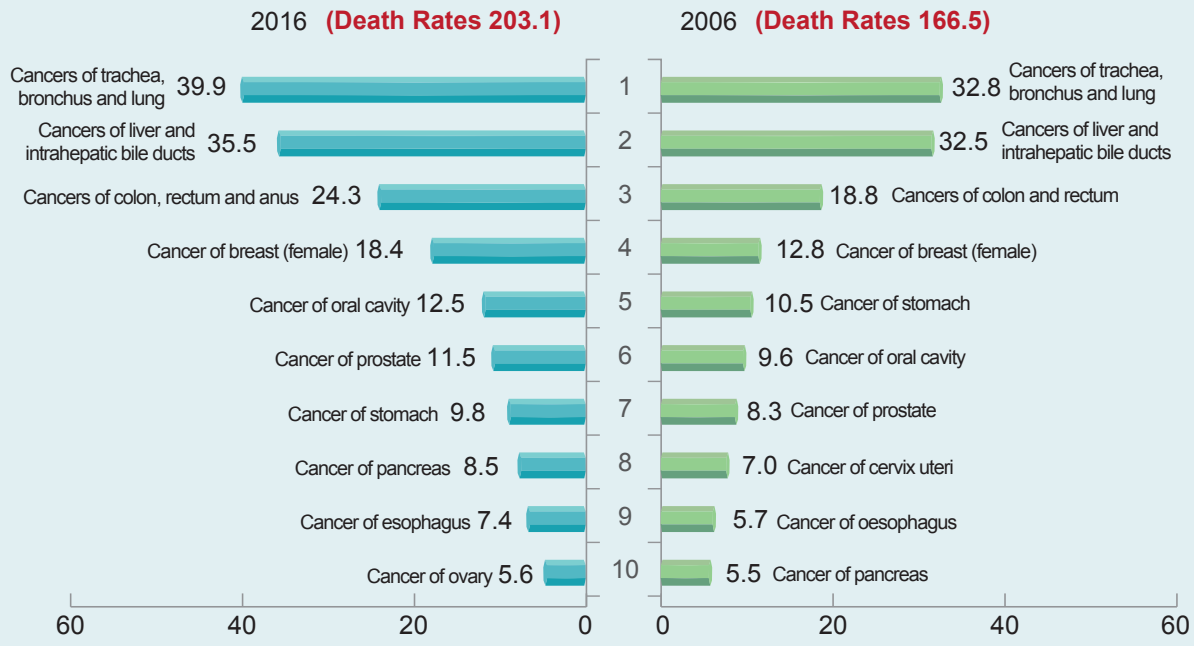
Male				Female			
Rank	Cancer Site	No. of Cases	Age-Standardized Incidence Rate (Per 100,000 Population)	Rank	Cancer Site	No. of Cases	Age-Standardized Incidence Rate (Per 100,000 Population)
1	Colon	9,006	53.9	1	Female Breast	11,769	70.7
2	Liver and Intrahepatic Bile Ducts	7,810	47.3	2	Colon	6,758	36.5
3	Lungs, Bronchus, and Trachea	7,326	43.3	3	Lungs, Bronchus, and Trachea	5,136	28.0
4	Oral Cavity, Oropharynx, and Hypopharynx	6,922	42.9	4	Liver and Intrahepatic Bile Ducts	3,548	19.1
5	Prostate	4,904	29.1	5	Thyroid	2,535	16.6
6	Esophagus	2,448	14.8	6	Uterus	2,257	13.3
7	Stomach	2,328	13.3	7	Ovary, Fallopian Tube, and Broad Ligament	1,447	9.1
8	Skin	2,036	11.9	8	Cervix	1,452	8.5
9	Bladder	1,601	9.3	9	Skin	1,638	8.4
10	Non-Hodgkin's Lymphoma	1,387	8.7	10	Stomach	1,458	7.8
Total		56,093	341.4	Total		47,054	271.4

Source: Cancer registry data (excluding carcinoma in situ)

Notes: 1. Ranked from highest to lowest by age-standardized incidence rate (per 100,000 population).

2. 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.

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

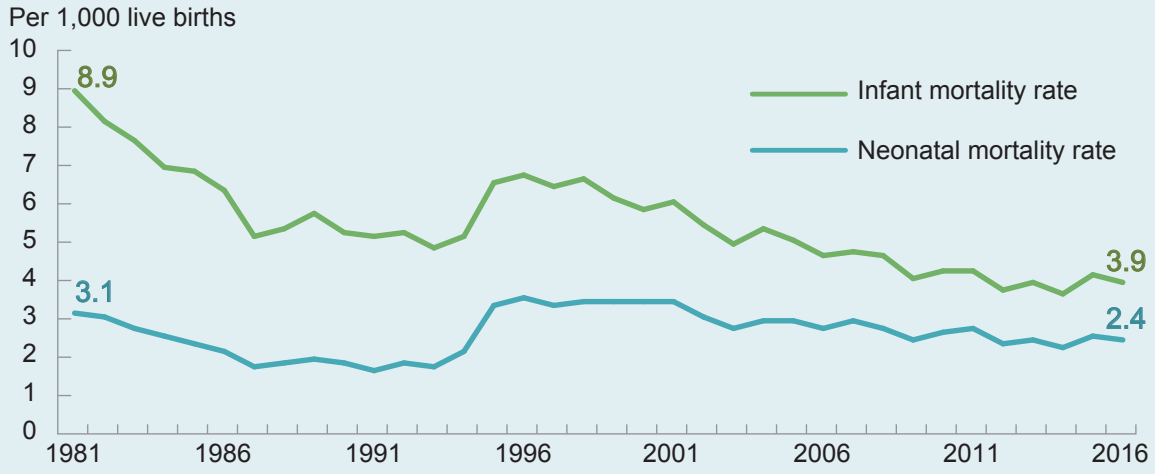


Source: Ministry of Health and Welfare, R.O.C.(Taiwan)

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 has 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 2016, the infant mortality rate declined to 3.9‰, compared to 8.9‰ in 1981. Over the same period, the neonatal mortality rate dropped from 3.1‰ to 2.4‰ (Figure 2-8).

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



Source: Ministry of Health and Welfare, R.O.C.(Taiwan)
N o t e : 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 NTD1,029 billion in 2015. 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 fell from 6.2% in 2005 to 6.1% in 2015. Per capita NHE increased from NTD32,878 in 2005 to NTD43,864 in 2015, for an average annual increase of 2.9% (Figure 2-9).

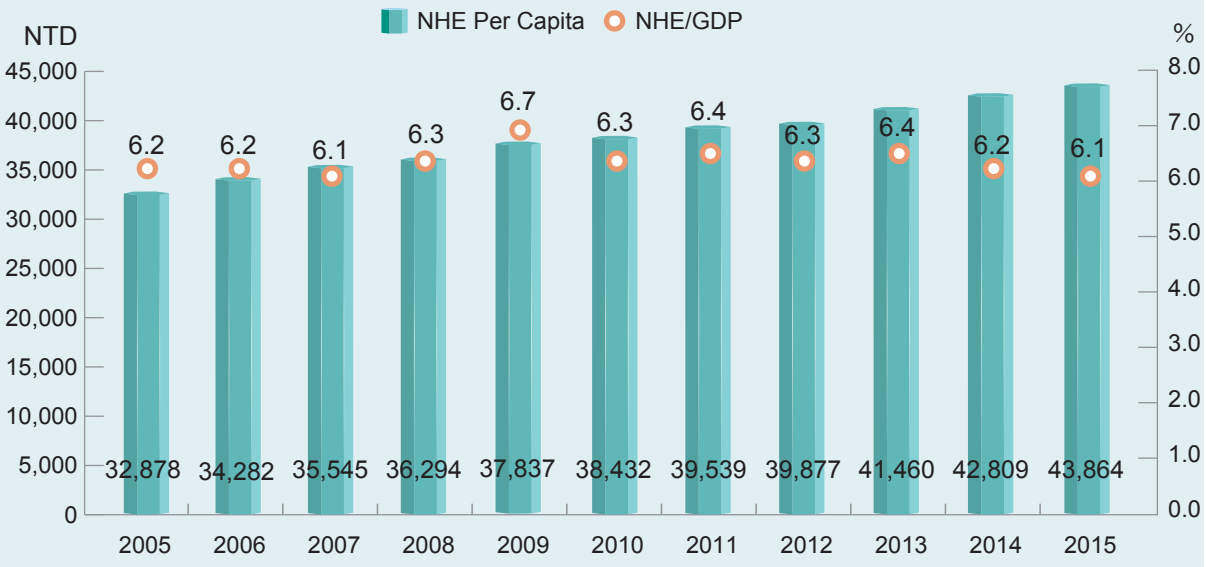
Chapter 4 Social Welfare Indicators

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 2016, there were 264,257 low-income and middle-to-low-income households (145,176 and 119,081 households, respectively), with a total of 689,937 members (331,776 and 358,161, respectively). They accounted for 3.1% of all households and 2.9% of the total population.

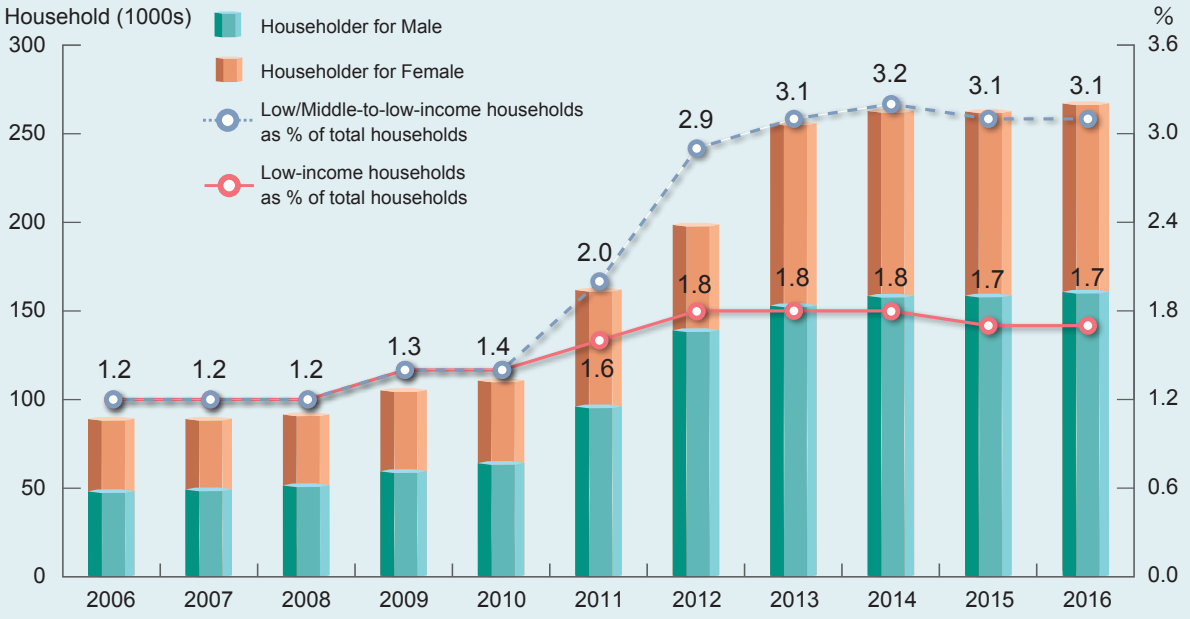
The heads of low-income and middle-to-low-income households consisted of 160,074 males and 104,183 females--a male to female ratio of 1.54, compared to a ratio of 1.37 for all households regardless of income. Among all members of low-income and middle-to-low-income households, there were 352,279 males and 337,658 females, for a male to female ratio of 1.04, compared to a national average of 0.99 (Figures 2-10,2-11)

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



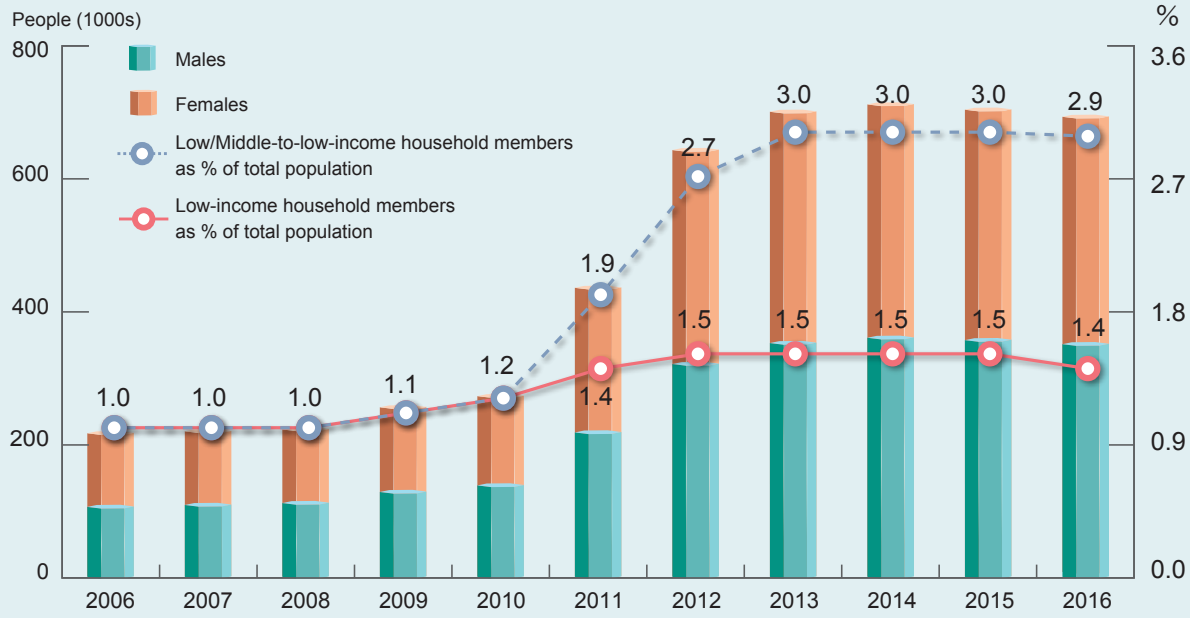
Source: Ministry of Health and Welfare, R.O.C.(Taiwan)

Figure 2-10 Low-Income and Middle-to-Low-Income Households,by Year



Source: Ministry of Health and Welfare, R.O.C.(Taiwan)
N o t e : 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: Ministry of Health and Welfare, R.O.C.(Taiwan)
N o t e : 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 2016, 1,170,199 people were identified as disabled, accounting for 5.0% of the total population and consisting of 662,800 males (56.6%) and 507,399 females (43.4%).

From 2006 to 2016, the number of disabled persons increased by 189,184, or 19.3%, 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 - 14 and 15 - 44 years old fell by 18.0% and 8.5%, respectively. On the other hand, disabled persons aged 45 to 64, and 65 and older increased by 32.4%, and 33.8%, respectively (Table 2-2).

Section 3 Domestic Violence

Taiwanese government has recently been raising public awareness of domestic violence. The launch of the "113 hotline" for reporting domestic violence, a strengthened notification system and better support networks have led to an annual increase in reported cases. In 2016, there were 405 reported victims per 100,000 population, an increase of 128 compared to 2006. By gender, there were 231 male victims for per 100,000 population, and 567 female victims for per 100,000 population. Female victims outnumbered male counterparts by a factor of 2.5 (Figure 2-12).

As for type of cases, spouses, former spouses, or cohabitating partners accounted for 55.3% of the total cases; child abuses accounted for another 13.8%; and elder abuses accounted for the remaining 6.0% (Figure 2-13).

Section 4 Protection of Children and Youths

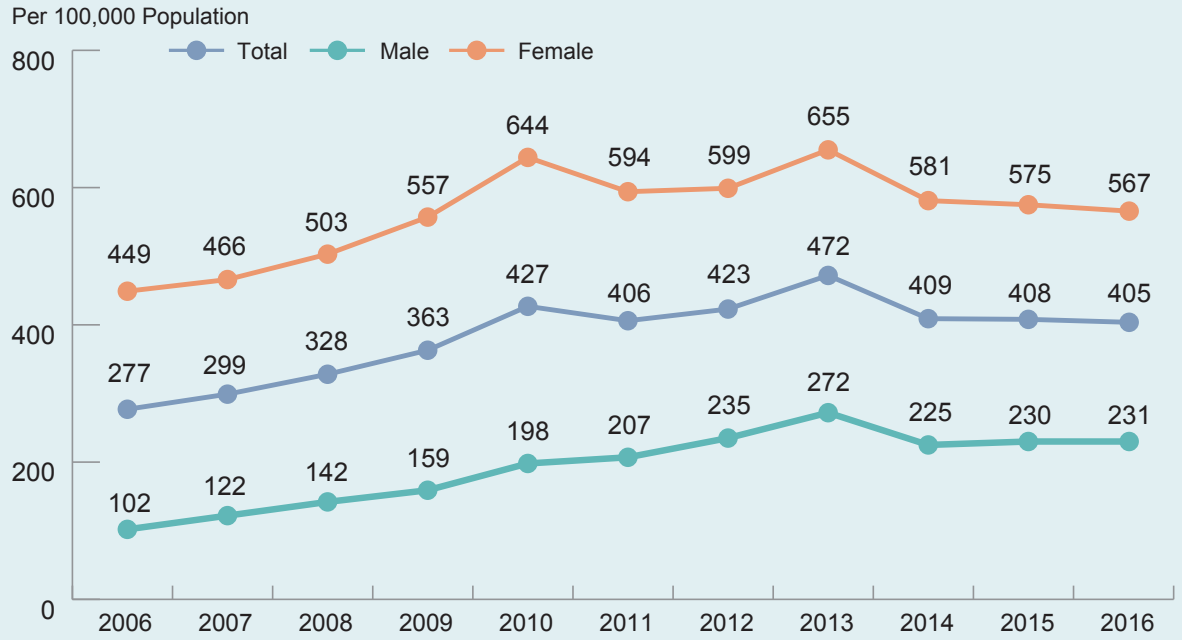
In 2006, 10,093 children and youths suffered abuse. The number of victims increased yearly until reaching 19,174 in 2012. Afterwards, the number began to steadily decline. As of 2016, there were 9,461 victims, a drop of 6.3% compared to 2006. Concerning gender and age differences, among children (under 12 years of age) there were more male victims than female victims. Among youths (aged 12-17), females were more likely to be victims than males. As for protective placement, most victims (86.0%) remain in their homes (Table 2-3 and Figure 2-14).

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

Year (End)	Gender (Persons)			Age group (persons)				As % of total population
	Total	Male	Female	0-14 years	15-44 years	45-64 years	65 years or Above	
2006	981,015	569,234	411,781	48,031	267,331	315,289	350,364	4.3
2007	1,020,760	590,306	430,454	48,345	266,356	334,971	371,088	4.4
2008	1,040,585	599,664	440,921	47,911	262,443	350,245	379,986	4.5
2009	1,071,073	615,621	455,452	47,444	260,544	366,606	396,479	4.6
2010	1,076,293	616,675	459,618	46,485	256,294	379,735	393,779	4.6
2011	1,100,436	629,179	471,257	45,464	254,324	393,458	407,190	4.7
2012	1,117,518	636,287	481,231	45,090	255,687	405,297	411,444	4.8
2013	1,125,113	639,969	485,144	43,319	250,369	409,067	422,358	4.8
2014	1,141,677	648,807	492,870	42,677	248,469	414,583	435,948	4.9
2015	1,155,650	655,444	500,206	40,697	246,478	418,196	450,279	4.9
2016	1,170,199	662,800	507,399	39,382	244,569	417,339	468,909	5.0

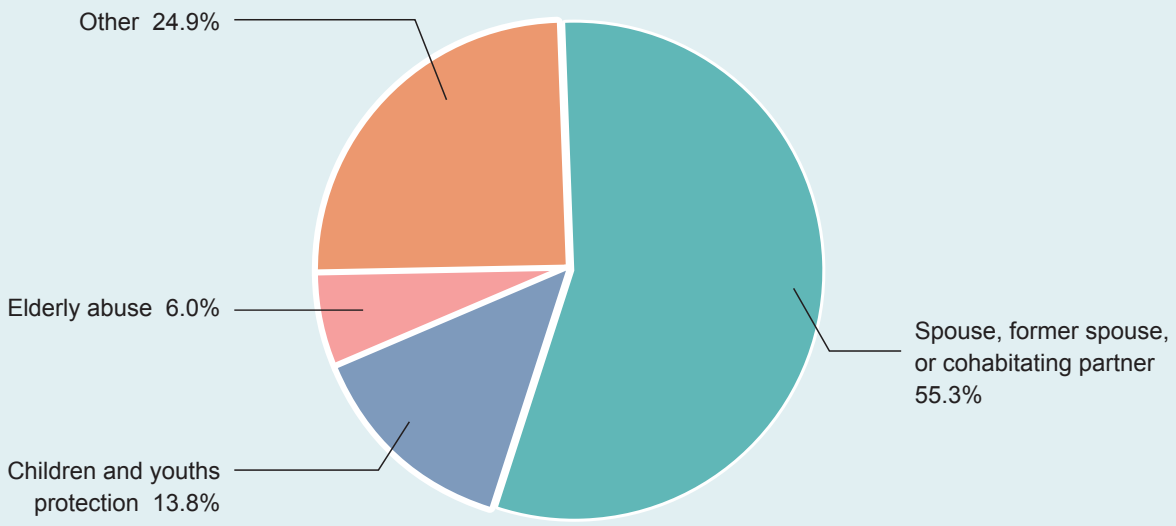
Source: Ministry of Health and Welfare, R.O.C.(Taiwan)

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



Source: Ministry of Health and Welfare, R.O.C.(Taiwan)
Note: Victims of Domestic Violence Rate=Reported victims/mid-year population x 100,000.

Figure 2-13 Domestic Violence Reported Cases by type, 2016



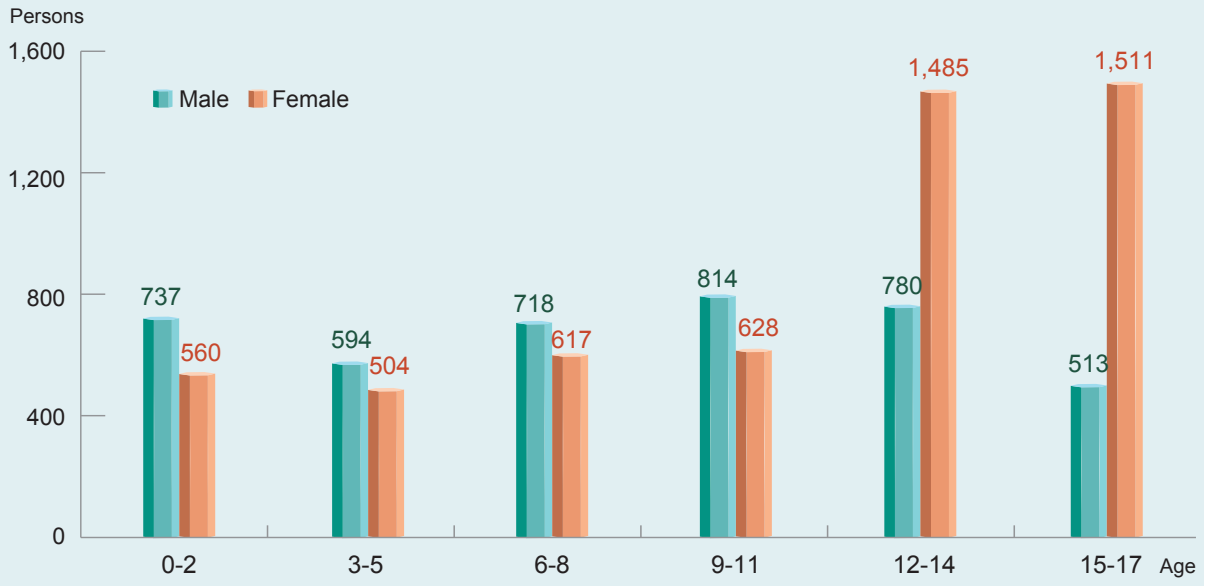
Source: Ministry of Health and Welfare, R.O.C.(Taiwan)

Table 2-3 Protection of Children and Youths, by Year

Year (End)	Total Victims (Persons)			Intervention and Placement (Persons)			
	Total	Male	Female	Remain in the Home	Emergency Placement	Continued Out-of-Home Placement	Other
2006	10,093	5,145	4,948	8,113	801	749	412
2007	13,566	6,435	7,131	11,314	891	897	418
2008	13,703	6,760	6,943	11,893	918	681	461
2009	13,400	6,646	6,754	11,798	625	609	814
2010	18,331	8,839	9,492	15,848	748	929	746
2011	17,667	8,277	9,390	13,603	953	2,268	789
2012	19,174	9,102	10,072	15,753	989	1,415	1,017
2013	16,322	7,616	8,706	12,808	579	1,146	1,789
2014	11,589	5,304	6,285	9,916	595	1,227	495
2015	9,604	4,649	4,955	9,555	396	847	217
2016	9,461	4,156	5,305	8,897	384	858	202

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

Figure 2-14 2016 Children and Youths Abuse, by Gender and Age



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

Chapter 5 International Comparisons

Section 1 Life Expectancy

According to the WHO's 2016 World Health Statistics for major countries, male life expectancy at birth in 2015 was highest in Australia at 80.9 years; in Taiwan, male life expectancy was 77.0 years.

Female life expectancy at birth in 2015 was highest in Japan at 86.8 years; in Taiwan, female life expectancy was 83.6 years (Table 2-4).

Section 2 Rate of Natural Increase

According to the 2016 World Population Data Sheet, in 2016 the world population was 7.4 billion, and the rate of natural increase was 12‰. Notably, both Japan and Germany had negative rates of natural increase. For the same period, the rate in Taiwan was 2‰ (Table 2-5).

The global total fertility rate in 2016 (the average number of live births for a woman over her lifetime) was 2.5. Countries listed in the table were lower than global averages; among these, total fertility rates in Asian countries were noticeably lower than in other major countries, indicating that Asia has become a low fertility rate region. For this period, Taiwan's rate was 1.2. The global birth rate was 20‰ and the death rate was 8‰; among countries listed in the table, only Japan and Germany had birth rates lower than their death rates. Generally, demographic structures in developed countries were trending toward low birth and death rates (Table 2-5).

Table 2-4 Life Expectancy at Birth in Major Countries, 2015

Unit: Years

	Both Sexes	Male	Female
Global	71.4	69.1	73.8
R.O.C.(Taiwan)	80.2	77.0	83.6
Japan	83.7	80.5	86.8
Republic of Korea	82.3	78.8	85.5
United States	79.3	76.9	81.6
Canada	82.2	80.2	84.1
United Kingdom	81.2	79.4	83.0
Germany	81.0	78.7	83.4
France	82.4	79.4	85.4
Australia	82.8	80.9	84.8
New Zealand	81.6	80.0	83.3

Source: Ministry of the Interior,R.O.C.(Taiwan), 2016 World Health Statistics

Table 2-5 Population Status of Major Countries

	2016 Mid-year population (Millions)	Population forecast (Millions)		2050 v.s 2016 Multiple ratio of population	2016 Total fertility rate (Per Woman)	2016 Crude birth rate(‰)	2016 Crude death rate(‰)	2016 Rate of natural increase (‰)
		2030	2050					
Global	7418.0	8539.0	9869.0	1.3	2.5	20	8	12
R.O.C.(Taiwan)	23.5	23.3	20.5	0.9	1.2	9	7	2
Japan	125.3	116.7	100.6	0.8	1.5	8	10	-2
Republic of Korea	50.8	52.2	48.1	0.9	1.2	9	5	4
United States	323.9	359.4	398.3	1.2	1.8	12	8	4
Canada	36.2	41.0	46.9	1.3	1.6	11	8	3
United Kingdom	65.6	71.0	77.0	1.2	1.8	12	9	3
Germany	82.6	83.3	81.0	1.0	1.5	9	11	-2
France	64.6	68.5	72.3	1.1	1.9	12	9	3
Australia	24.1	30.9	41.3	1.7	1.8	13	7	6
New Zealand	4.7	5.3	5.9	1.3	2.0	13	7	6

Source: Ministry of the Interior ,R.O.C.(Taiwan); 2016 World Population Data Sheet, Population Reference Bureau
N o t e : Rate of natural increase=Crude birth rate-Crude death rate

Section 3 Dependency Ratio

According to the 2016 World Population Data Sheet, the global dependency ratio in 2016 was 52%. Among major countries, the dependency ratio was highest in Japan, at 67%, followed by France at 56% and the United Kingdom and New Zealand at 54%. In Taiwan, the dependency ratio was 36%, which was lower than the global average and low compared to most other major countries (Table 2-6).

Section 4 Mortality Rate

According to the latest WHO data, among developed countries Japan had the lowest standardized mortality rate for malignant neoplasms at 99.9 deaths per 100,000 population, compared to a rate of 130.2 deaths in Taiwan. For transport accidents the United Kingdom was the lowest at 2.6 deaths per 100,000 population, compared to a rate of 12.1 deaths in Taiwan. The United Kingdom also had the lowest suicide rate, at 6.5 deaths per 100,000 population, compared to a rate of 11.8 deaths in Taiwan. Japan led in neonatal mortality rate, with 0.9 deaths per 1,000 live births, compared to a rate of 2.5 deaths in Taiwan (Table 2-7).

Section 5 Health Expenditure

In 2014, Taiwan's current health expenditure (CHE) per capita at purchasing power parity (PPP) basis was USD2,715, which was lower than the Organization for Economic Co-operation and Development (OECD) median of USD3,870. If ranked among OECD member states, Taiwan would have been 22nd. GDP per capita on a PPP basis in Taiwan was USD46,250, which was higher than the OECD median of USD37,712 and ranked 10th when compared to OECD member states. CHE accounted for a 5.9% share of Taiwan's GDP, a relatively low amount that was 3.2 percentage points below the OECD median (Table 2-8).

Table 2-6 Dependency Ratios of Major Countries, 2016

	Mid-year population (Millions)	Population Structure			Dependency ratio (%)	Young-age dependency ratio (%)	Old-age dependency ratio (%)
		0-14 years (%)	15-64 years (%)	65 years and Above (%)			
Global	7418.0	26	66	8	52	39	12
R.O.C.(Taiwan)	23.5	13	74	13	36	18	18
Japan	125.3	13	60	27	67	22	45
Republic of Korea	50.8	14	72	14	39	19	19
United States	323.9	19	66	15	52	29	23
Canada	36.2	16	68	16	47	24	24
United Kingdom	65.6	18	65	17	54	28	26
Germany	82.6	13	66	21	52	20	32
France	64.6	18	64	18	56	28	28
Australia	24.1	19	66	15	52	29	23
New Zealand	4.7	20	65	15	54	31	23

Source: Ministry of the Interior, R.O.C.(Taiwan); 2016 World Population Data Sheet, Population Reference Bureau
Notes: 1. Dependency ratio = (Population aged 0-14+ Population aged 65 and above) /Population aged 15-64* 100
2. Young-age dependency ratio= (Population aged 0-14)/ Population aged 15-64* 100
3. Old-age dependency ratio= (Population aged 65 and above) /Population aged 15-64 * 100

Table 2-7 Standardized Mortality Rates of Major Countries

	Year	Malignant neoplasms (per 100,000 population)	Transport accidents (per 100,000 population)	Suicide (per 100,000 population)	Neonatal mortality (per 1,000 live births)
R.O.C.(Taiwan)	2014	130.2	12.1	11.8	2.5
Japan	2014	99.9	3.0	15.4	0.9
Republic of Korea	2013	102.9	9.5	22.4	1.6
United States	2014	109.2	11.0	11.9	3.6
Canada	2012	118.4	6.7	9.8	3.2
United Kingdom	2013	125.5	2.6	6.5	2.4
Germany	2014	116.3	4.0	8.6	2.1
France	2013	116.3	4.5	11.7	2.2
Australia	2012	108.6	6.2	10.3	2.2
New Zealand	2012	121.4	8.6	12.1	3.1

Source: Ministry of Health and Welfare, R.O.C.(Taiwan), WHO Mortality Database, 2017 World Health Statistics
Note: Neonatal mortality rate data for all countries is from 2015

Table 2-8 Comparisons of CHE Per Capita and GDP Per Capita Between R.O.C (Taiwan) and OECD Member States, 2014

Ranking	Country-Ranked by CHE per capita	CHE per capita (USD PPs)	GDP per capita (USD PPs)	CHE/GDP (%)
Median		3,870	37,712	9.1
1	United States	9,024	54,407	16.6
2	Switzerland	6,787	59,536	11.4
3	Luxembourg	6,682	98,460	6.3
4	Norway	6,081	65,702	9.3
5	Netherlands	5,277	48,253	10.9
6	Germany	5,119	46,394	11.0
7	Sweden	5,065	45,298	11.2
8	Ireland	5,001	49,377	10.1
9	Austria	4,896	47,707	10.3
10	Denmark	4,857	45,996	10.6
11	Belgium	4,522	43,409	10.4
12	Canada	4,492	45,025	10.0
13	France	4,367	39,301	11.1
14	Australia	4,207	46,681	9.0
15	Japan	4,152	36,530	11.4
16	United Kingdom	3,971	40,217	9.9
17	Iceland	3,897	43,993	8.9
18	Finland	3,870	40,694	9.5
19	New Zealand	3,537	37,712	9.4
20	Italy	3,207	35,419	9.1
21	Spain	3,053	33,625	9.1
22	R.O.C.(Taiwan)	2,715	46,250	5.9
23	Slovenia	2,599	30,403	8.5
24	Portugal	2,584	28,760	9.0
25	Israel	2,547	33,703	7.6
26	Czech Republic	2,386	31,186	7.7
27	Republic of Korea	2,361	33,395	7.1
28	Greece	2,220	26,795	8.3
29	Slovak Republic	1,971	28,327	7.0
30	Hungary	1,797	25,061	7.2
31	Estonia	1,725	28,140	6.1
32	Chile	1,689	22,059	7.7
33	Poland	1,625	25,262	6.4
34	Latvia	1,295	23,548	5.5
35	Mexico	1,035	18,197	5.7
36	Turkey	990	19,467	5.1

Source: Ministry of Health and Welfare, R.O.C.(Taiwan),2016 OECD Health Data

N o t e : A system of Health Accounts released by OECD recently, health expenditure and financing are based on current health expenditure to compile health care indicators.

3 An Environment Conducive to Health

To realize "Health for All" advocated by the WHO, the MOHW has planned health promotion policies to benefit all people: pregnant women, infants, toddlers, children, adolescents, middle-aged adults, and elderly (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. Through incorporating health considerations in all aspects of decision-making, policy makers hope to improve health, and reduce health inequality.

Also in accordance with the 2012 World Health Assembly (WHA) "25 by 25" objective (to reduce preventable deaths due to noncommunicable diseases 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.

Chapter 1 Healthy Childbirth and Growth

In order to promote health among pediatric populations, the MOHW actively educate pregnant women, children, and adolescents about early detection of abnormalities.

Section 1 Maternal Health

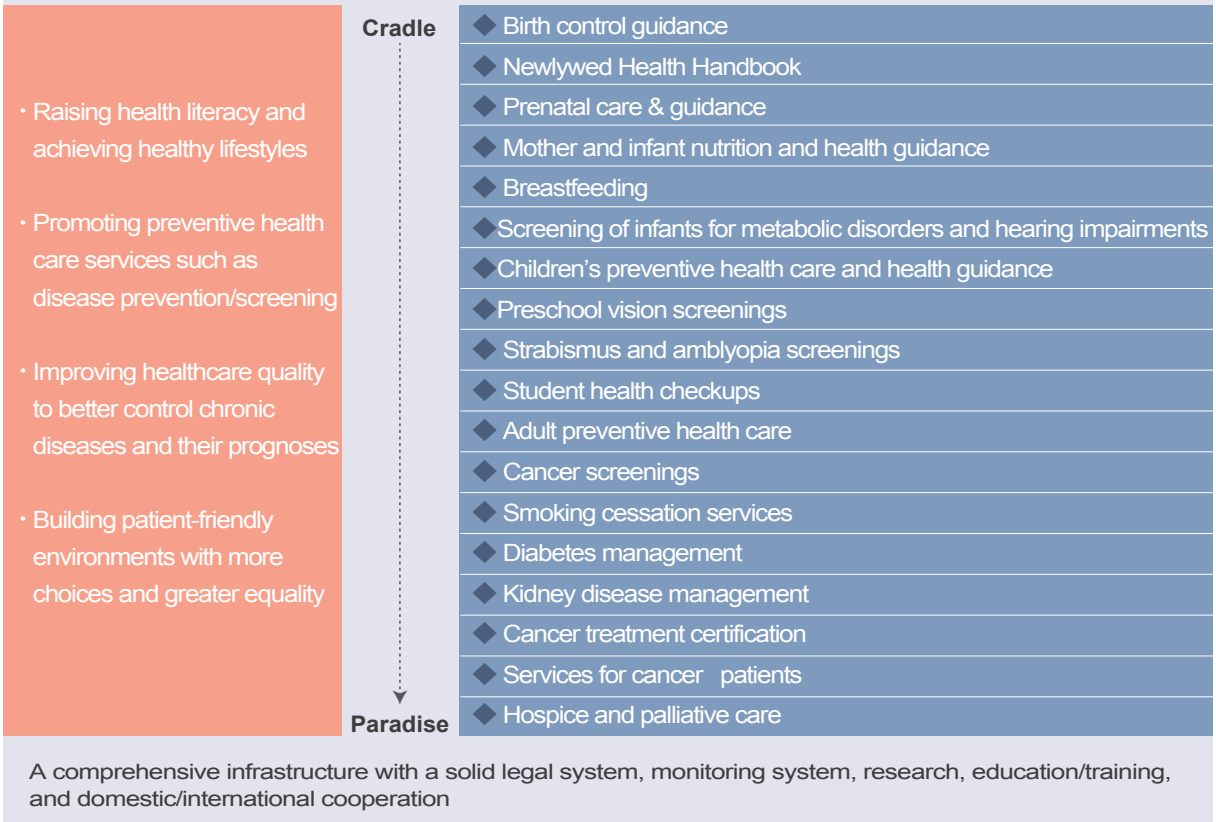
1. Prenatal Care

(1) The average utilization rate of the 10 prenatal examinations and one ultrasound examination offered to pregnant women was 94.8% in 2016, there were 1,877,683 prenatal checks performed, and expectant parents qualified for two prenatal health education guidance.

(2) Subsidized Group B Streptococcus Screenings. In 2016, there were 182,032 GBS screenings, with a coverage rate of 87.3% and a positive rate of 21.2%.

(3) Subsidized prenatal genetic testing is offered to those at high risk of passing on a genetic disease. In 2016, 1,542 abnormalities were

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



detected in 53,919 cases. All were offered follow-up consultations.

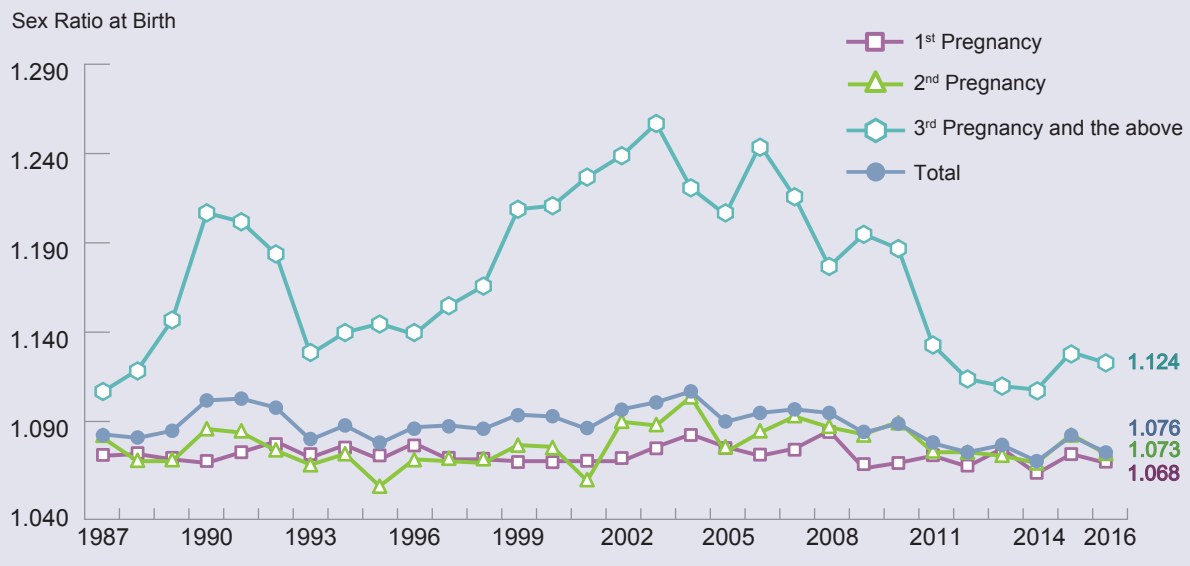
2. A free hotline (0800-870-870), an app, and a website (http://mammy.hpa.gov.tw) were established to provide obstetric care information to expectant mothers. In 2016, there were 17,827 calls to the hotline, 1,922,028 visits to the website, and the app had 30,054 downloads.
3. In accordance with the "Public Breastfeeding Act," by the end of 2016 a total of 2,204 public breastfeeding rooms had been established, and another 918 breastfeeding rooms had been established.
4. In line with WHO policy on breastfeeding, the MOHW has promoted Baby-Friendly Hospital accreditation. In 2016, there were 187 hospitals accredited, with total coverage reaching 79.9% of all births in Taiwan. The exclusive breastfeeding rate under 6 months of age was 44.8%, beating the world average of 38% and bringing Taiwan closer to the WHO global target of 50% by 2025.
5. Sex Ratio at Birth

   Sex Ratio at Birth: A task force was established to monitor the sex ratio at birth. Besides building monitoring mechanisms, improving the legal framework and better policing of laboratory testing, the task force worked with local health departments, checked local censuses, and provided guidance to institutions offering birth and prenatal checkup services. It strengthened gender equality education and medical ethics training among health workers and urged the general public to safeguard female babies' right to be born. Taiwan's sex ratio at birth was 1.076 in 2016, a decline from 1.083 in 2015. According to the "Population estimation report in the Republic of China (2016-2061)" published by the National Development Council, the expected sex ratio at birth in Taiwan from 2036 to 2061 will be 1.07, which has become the target value of annual efforts (Figure 3-2).

Section 2 Health for Infants, Children, and Adolescents

Besides providing screenings for newborns and guidance for parents, the Child Development Assessment Centers were established to provide early assessment and intervention to children suspected of developmental delays. Other measures include seven rounds of pediatric preventive health care and health

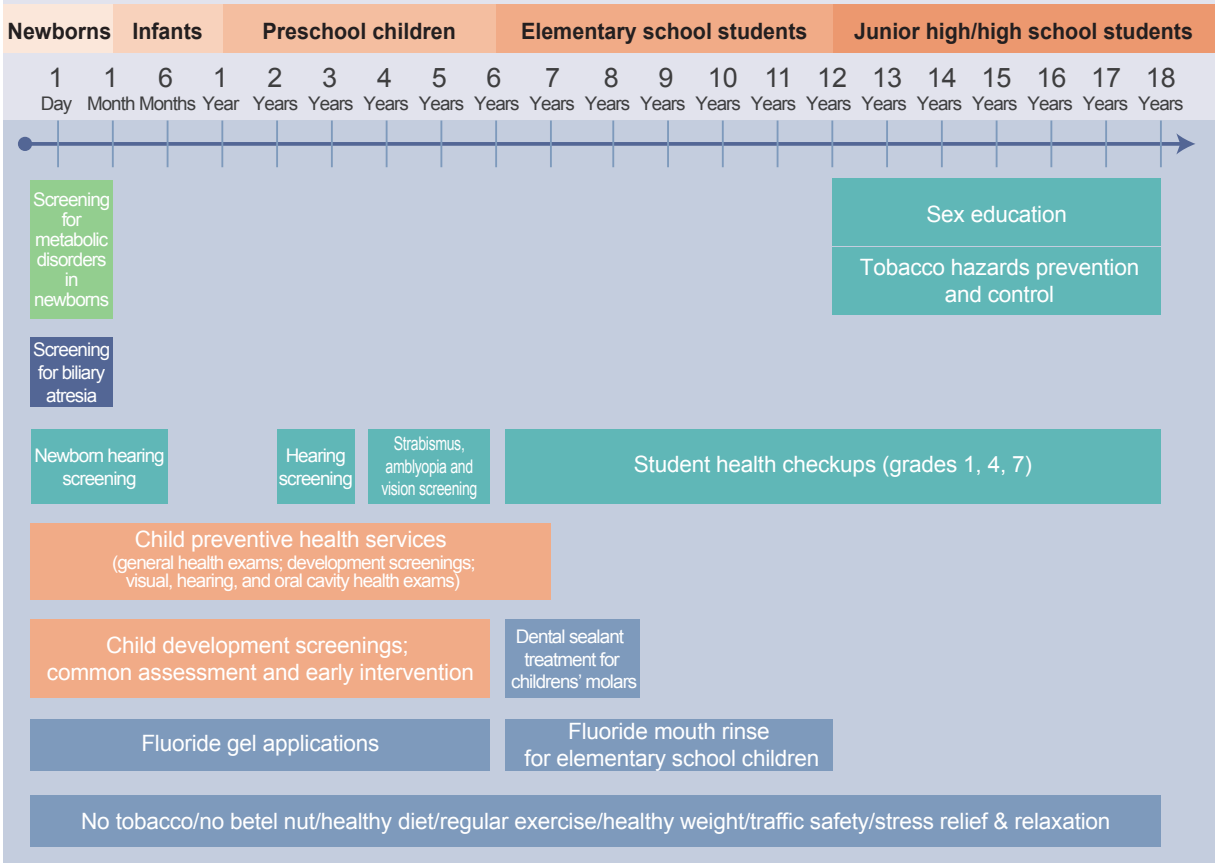
Figure 3-2 Sex Ratio of Live Births in Taiwan, by Year



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 2016, there were 207,422 newborns screened, a coverage rate of over 99%.
2. Fully subsidized hearing screenings for newborns are provided within the first three months of birth. In 2016, 202,741 (98.1% of) newborns were screened. 889 of them were found to have hearing impairments, and were referred for follow-up care.
3. In 2016, the preventive health services for children 7 years old and below used was about 1.13 million times. A total of 2,823 doctors participated in the child health education guidance program providing 948,334 services to parents with children 7 years old and below in 2016.
4. With MOHW assistance, every city and county established one to four Child Development Assessment Center(s). In 2016, 47 centers in 22 cities and counties diagnosed developmental delays in 15,940 children.
5. Continued to encourage strabismus, amblyopia, and vision screenings for preschool children 4 and 5 years of age. In 2016, the screening rate was 98.5%, with 98.9% of diagnosed abnormalities referred for treatment.
6. Through website promotion and "Teenager-Friendly Outpatient Services", we provide adolescent sexual health education,

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



information on reproductive health and assist to resolve problems related to unplanned pregnancies. We have established youth friendly website that provides accurate information on sex knowledge, adolescent physical and mental health, and sexual relation. In 2016, the internet browsing was 89,970 times; a total of 19,311 people participated in 87 sexual health school lectures and parent education lectures. Teenager-Friendly Outpatient Services established in 80 hospitals in 22 cities and countries provided OPD and information services to 18,142 people in 2016.

Chapter 2 Healthy Living

Major unhealthy habits include smoking/chewing betel nuts, poor diet, sedentary life styles, and external factors such as accidents. Tobaccos and betel nut are both group 1 carcinogens. They along with accidents are among the 10 leading causes of death. Taiwan thus must continue to work toward rejecting tobaccos and betel nuts 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 2016 were as follows:

1. The MOHW launched a model to promote healthy food and beverages to catering industries and restaurants around campus. It guided caterers (breakfasts joints, convenience stores, beverage shops, and fast-food restaurants) to develop healthy breakfast combo, low-sugar/sugar-free beverages, and other healthy food products. The objective aimed to promote a supply system for healthy food and build a health supportive environment with balanced diet for students.
2. The MOHW has promoted "The Population Nutrition Act"legislation to enhance people's nutrition and healthy diet literacy.The agency desires to build a health eating supportive environment to improve nutritional status among people.
3. The MOHW has been pushing its Healthy Weight Management Plan. By the end of 2016, overweight participants shed a total of 1.13 million kilograms, and the rates of overweight/obesity dropped from 65.4% to 58.5%.
4. 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 adults increased from 32.7% between 1993-1997 to 43.4% between 2005-2008, a rise of 10.7% (or 32.7% of the previous value). On the other hand, the report of 2013-2016 was 45.4%, indicating the rise in overweight/obesity rate had slowed significantly.

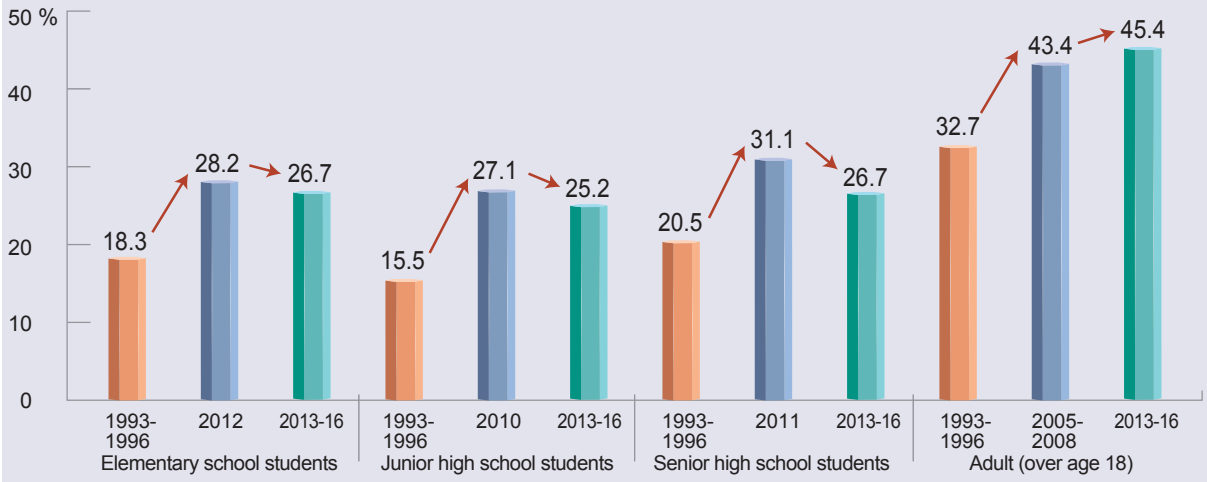
(2) The rate of overweight/obese elementary school students decreased from 28.2% in 2012 to 26.7% in 2013-2016; the rate among junior high school students decreased from 27.1% in 2010 to 25.2% in 2013-2016; and the rate among senior high school students decreased from 31.1% in 2011 to 26.7% in 2013-2016. These figures showed a general decrease in the overweight/obese prevalence among children.

Section 2 Tobaccos and Betel Quid Control

1. Tobacco Control

A steep decline in tobacco use followed the launch of the "Tobacco Hazards Prevention Act" in 1997. The adult smoking rate fell from 29.2% in 1996 to 15.3% in 2016, a drop of 47.6% (Figure 3-5). The smoking rate of adolescents was also brought under control. Smoking rate of junior high school students fell from 6.6% in 2004 to 3.7% in 2016, a decline of 44.1%; smoking rate of high school and vocational school students fell from 15.2% in 2005 to 9.3% in 2016, a decline of 38.9% (Figure 3-6). Taiwan is gradually moving toward the WHO's noncommunicable disease target for 2025 to

Figure 3-4 Overweight and Obese Rate in Taiwan



Source: Nutrition and Health Survey in Taiwan
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

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 6.5% in 2016.

To keep pace with global progress, 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 Smoke-Free Environment through the "Tobacco Hazards Prevention Act"

a. To enhance effectiveness of tobacco taxation use, and tie in with the promulgation of the "Childbirth Accident Emergency Relief Act" we amended and promulgated the "Tobacco Taxation Allocation and Use Regulation" on October 7, 2016.

b. Since 2012, the MOHW has worked with local health departments, schools, related government agencies, and communities to promote smoke-free sidewalks around campus. By December 2016, local communities announced that smoking was prohibited on sidewalks, near campus entrances and parent pick-up/drop-off zones at approximately 2,000 schools across 22 cities and counties. The rules covered 54.1% of campuses at the high school and vocational school levels and below.

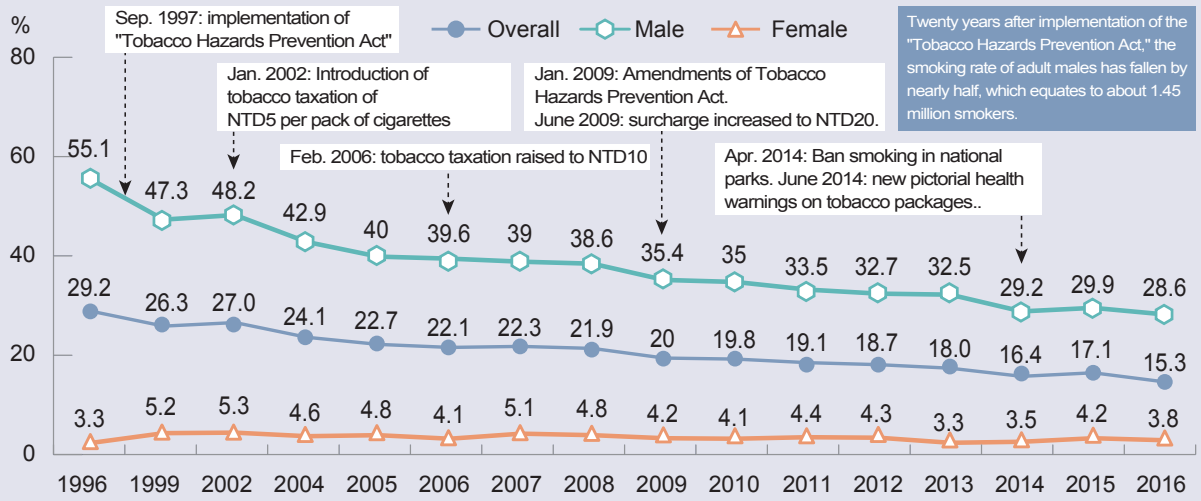
c. In 2016, Local health departments conducted more than 4.11 million inspections at over 670,000 businesses, and recorded 8,403 violations totaling fines of NTD64.53 million.

(2) Comprehensive Smoking Cessation Programs

a. Taiwan offers "Comprehensive Smoking Cessation Programs."They include a second-generation cessation services, a smoking cessation helpline, "Quit and Win" campaign, cessation classes offered by local health departments, and pharmacist consultations. In 2016, smokers used these services 856,120 times. Second-generation smoking cessation services were utilized 565,472 times, which helped 40,000 smokers to quit. In the short-term, the reduction in the number of smokers would likely lower health expenditures by more than NTD220 million. Long-term economic benefits could surpass NTD17.0 billion.

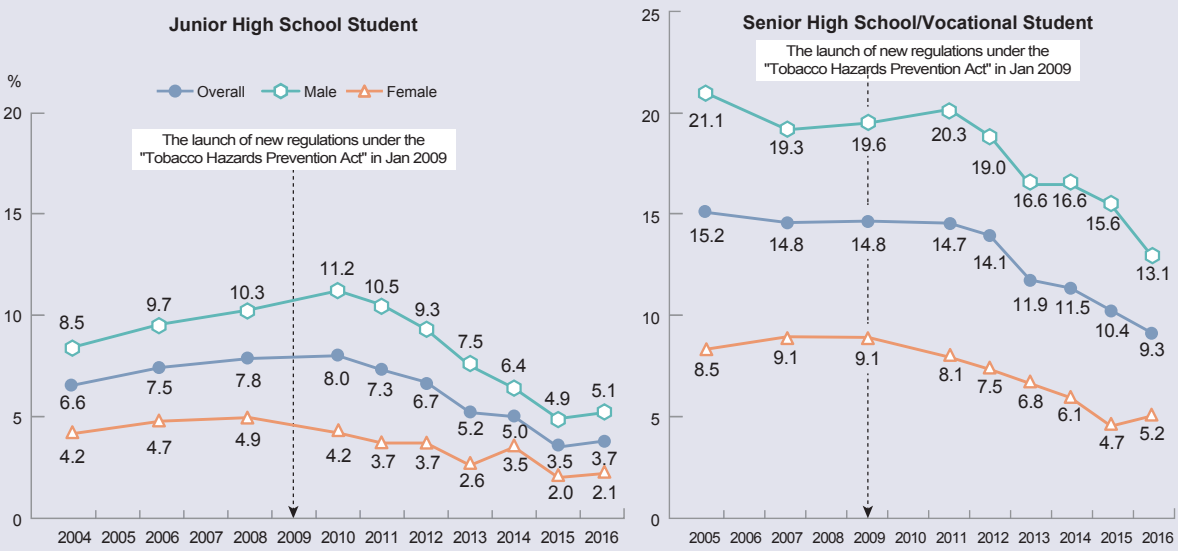
b. In 2016, there were 77,968 calls to the free smoking cessation helpline (0800-636363).

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



Source: 1. 1996 survey data from the Taiwan Tobacco and Wine Monopoly Bureau.
2. 1999 survey data provided by Professor Lee-Lan Yen.
3. 2002 data obtained from the HPA's Survey on Citizen's Knowledge, Attitude, and Behavior Regarding Health Promotion.
4. 2004-2016 data obtained from the HPA' s Adult Smoking Behavior Survey.
5. From 1999 to 2016, an adults smoker was defined as someone who had smoked more than 100 cigarettes (five packs), and who had used a tobacco product within the past 30 days.
6. Data from 2004 to 2016 were weighted and standardized by gender, age, education, and area of residence using data collected by the Directorate-General of Budget, Accounting and Statistics in 2000.

Figure 3-6 Taiwan Adolescent Smoking Rates, by Year



Notes: 1. Data obtained from the HPA' s Global Youth Tobacco Survey.
2. An adolescent smoker was defined as someone who had tried smoking within the past 30 days, even if he/she only had one or two puffs.

(3) Effectiveness of adolescent Prevention

a. The MOHW cooperates with local health departments to regulate tobacco sellers. In 2016, over 330,000 inspections uncovered 502 cases of tobacco being sold to minors, leading to total fines exceeding NTD4.47 million. Another 340,000 inspections uncovered 3,275 cases of minors smoking, with smoking cessation classes completed in 3,115 of these cases.

b. To protect youth from using tobacco, 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.

To examine the retailers' willingness to refuse to sell tobacco to underage customers, we performed a mystery shopping survey from April to September 2016. 660 shops, including convenience stores, supermarkets or malls, betel nut stands, and traditional grocery stores, were visited by the mystery shoppers, 46% of them didn't refuse to sell tobacco to minors. Among these targeted shops, the violation rate of convenience store is 24.5%, Betel nut stands and traditional grocery stores scored much worse. The violation rate are 60% and 57.1 respectively. The results show that the violating sale of tobacco to minors is still a serious problem.

2. Betel Quid Hazards Prevention Program

(1) The MOHW worked with various agencies, and NGOs to build betel quid-free environments, and offer cessation services. In 2016, these cessation services were provided to more than 10,000 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. The percentage of males who were aware of betel quid that causes cancer rose from 39.9% in 2007 to 55.9% in 2016. 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 8.4%.

(3) In order to determine whether the total area used for growing betel quid continues to decline as desired, the MOHW monitors the conversion of abandoned betel quid farms into other crops. In 2016, subsidies were provided to assist converting 100.2 hectares of land.

Section 3 Healthy Environments

In accordance with the WHO's 1997 Jakarta Declaration, the MOHW continues to advocate healthy cities, healthy communities, healthy workplaces, health-promoting schools, and health-promoting hospitals. Using public and private resources, the agency helps cultivate greater health awareness among the general public. It intends to build friendly, supportive environments to better societal health and well-being.

1. Healthy Cities, Communities, Schools, and Workplaces

(1) Healthy Cities

a. In 2016, Taiwan had 13 cities/counties and 12 regions approved to participate as NGOs in the Alliance for Healthy Cities of the WHO's Western Pacific region.

b. In 2016, at the 7th Global Conference of the Alliance for Healthy Cities held in Korea, Taiwan won eight awards for creative developments. Winners were: Kaohsiung, Taoyuan and Taipei's Wanhua District in the "Good Health Systems" category; Tainan in the "Evaluation" category; New Taipei and Taoyuan in the "Healthy Settings and Communicable Disease Control" category; Kaohsiung and Tainan in the "Planning for Resilience and Emergency Preparedness" category.

(2) Healthy Communities

In 2016, 4,172 volunteers participated in community health building plans involving 919 healthy eating events; 125 school-sponsored events encouraged healthy eating options near campuses; 394 safe

and accessible community walking trails were built; and 806 fitness seed instructors underwent training. Additionally, 133 parades involved tobacco, alcohol and betel quid hazard preventions; 542 events encouraged betel-quid free environments/workplaces; 527 events promoted fall prevention among seniors; and 6,563 safety inspections of households with infants/children.

(3) Health-Promoting Schools

a. Since 2002, the MOHW and Ministry of Education have integrated resources toward promoting health in schools. They include programs to promote oral hygiene, visual health, healthy BMI, tobacco and betel quid prevention, sex education (including HIV prevention programs), and national health insurance (including drug use education). In 2016, there were 4,029 schools at the university and college level or below fully implementing health-promoting school concepts.

b. In 2016, at the 22nd International Union of Health Promotion and Education' s World Conference on Health Promotion, the MOHW held a parallel meeting called on the theme "Active Transportation – Active Society, Healthy People" to share the achievements of Promoting active transportation in Taiwan. In addition, we displayed "Tackling Tobacco" poster to share the result of promoting tobacco hazard prevention in Taiwan.

(4) Workplace Health Promotion

The MOHW has undertaken several initiatives to promote health in the workplace. Since 2007 it has offered "healthy workplace certification", with 16,456 workplaces qualified by the end of 2016. In 2016, there were 30 workplaces awarded for excellence in health promotion and two individuals gained recognized for outstanding contributions.

2. Health-Promoting Hospitals

(1) The MOHW has been an active participant in the WHO International Network of Health-Promoting Hospitals & Health Services (HPH). By the end of 2016, Taiwan had 163 certified institutions (148 hospitals, 2 LTC institutions, and 13 health centers). As such Taiwan possesses the largest network within the WHO umbrella. Moreover, Taiwan's St. Martin de Porres Hospital won the Fifth Annual Outstanding Fulfillment of WHO HPH Standards Award, a Taiwanese institution's fifth consecutive win.

(2) Subsidies were provided to 21 local health departments and 137 health care institutions to implement the "Plan to Encourage Health Care Institution Participation in Health-Promotion Work".

(3) The annual HPH Conference in November 2016 welcomed four new member hospitals and honored model hospitals. Awards were given for excellence, organizational restructuring, and 64 creative plans.

(4) Promotion of Low Carbon Hospitals

By the end of 2016, 174 hospitals in Taiwan were promoting energy-saving, initiatives. The MOHW held two environmental awareness workshops, provided on-site guidance to 30 hospitals, and offered professional consultations.

3. Advocating Physical Activity

A key element of regular exercise, walking, was named by the WHO as the easiest form of exercise to put into practice and as the physical activity it most recommends. Since 2002, the MOHW promoted the "10,000 Steps a Day, Health is Here to Stay" campaign. Key achievements in 2016 were as follows:

(1) In order to encourage people to walk more, and exercise regularly, in 2016 the MOHW held walking-themed events in northern, central and southern Taiwan; around 11,000 people attended.

(2) The MOHW and Ministry of Education jointly held the 2016 Conference on Sport-for-All Policy, which centered on exercise among office workers. Speakers from the United Kingdom, Japan, and South Korea discussed their experiences before approximately 200 attendees.

(3) Encouraging exercise among seniors: the WHO recommends that people over the age of 65 engage in at least 150 minutes of moderate-intensity aerobic exercise per week in addition to performing physical activity to enhance balance and prevent falls. To further these efforts, the MOHW produced a 20-minute fitness video designed for seniors. The exercises, which can be done from either while standing or sitting, are designed to boost physical activity, strength, and balance. They promote an active lifestyle into old age.

(4) According to a survey by the Sports Administration (SA), 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% in 2016, an increase of 65%.

4. Prevention of Accidents and Injuries

(1) In order to build safe home environments for youngsters, local health departments conducted home safety inspections. In 2016, 20,104 homes were inspected.

(2) In order to increase understanding among parents and caregivers about accident preventions, the Children's Health Manual provides the "Table for Assessing Children's Accidents and Injuries" and "Steps for Preventing Children's Accidents and Injuries."

(3) Exercises to reinforce balance and strength to prevent falls were promoted at locations where senior citizens often appear. We published the Tips for Elderly Falls Prevention handbook, which local health departments distributed to elderlies.

Chapter 3 Healthy Aging

As population aging continues, Taiwan is expected to become an aged society by 2018. An aging population, a sedentary lifestyle and Western diets have increased the number of people suffering chronic illness. To raise the quality of life of elderlies, the MOHW promotes age-friendly cities, age-friendly health care, health awareness among elderly persons, 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, free preventive health screenings for adults are offered once every three years for people aged 40–64 and annually for people aged 65 and above. The screenings are available at 6,564 health institutions nationwide. In 2016, 1.82 million people received the services for a screening rate of 93%.

2. Local health departments and health institutions hold health promotion activities for seniors at community care access points. These activities contain eight aspects: healthy eating, regular exercise, fall prevention, health examinations, oral health, tobacco hazards prevention, chronic disease

Seniors compete in the 2016 national finals of an active aging show

education, and mental health promotion. In 2016, approximately 5,800 activities took place at 2,379 locations.

3. MOHW sponsored team competitions to raise health awareness among geriatrics. In 2016, over 2,400 teams and more than 100,000 seniors, about 4% of the elderly population, participated in these activities.

4. In 2013, all 22 cities and counties became age-friendly cities. Consequently, Taiwan achieved the highest coverage rate of Age-friendly cities in the world. Drawing on this foundation, there were 396 entries to the 2016 Healthy City and Age-Friendly City Awards; 105 of the entries won awards.

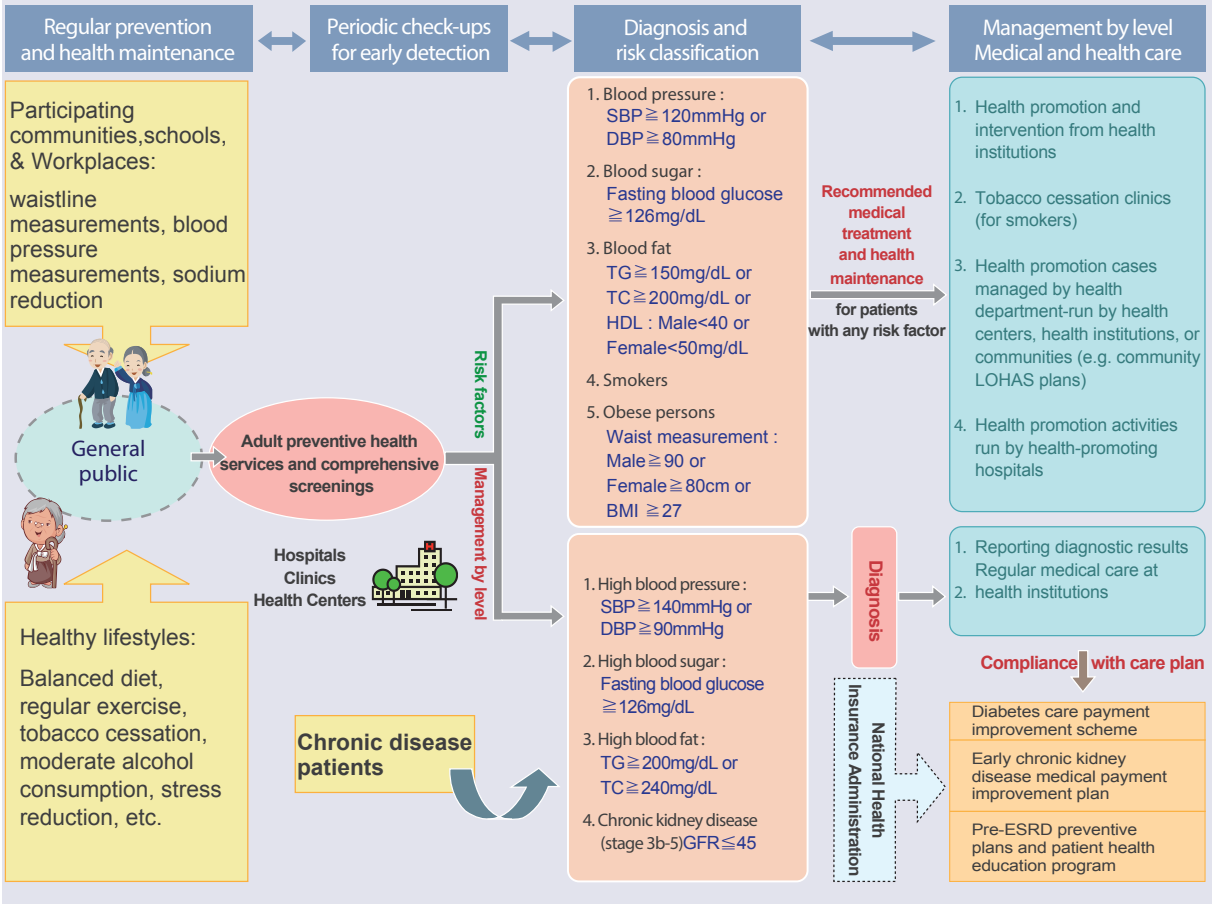
5. In 2014, the MOHW launched the Project for Universal Age-Friendly Health Care Organizations. By the end of 2016, there were 310 health care institutions certified as age friendly (including 169 hospitals, 76 health centers, one health clinic and 64 long-term care facilities).

Section 2 Control of Major Chronic Diseases

1. Control of Major Chronic Diseases

(1) Using multi-channel communications to educate the general public on controlling metabolic syndrome, the rate of public recognition of ideal waist measurement rose from 28.7% in 2006 to 48% in 2016. Local health departments and NGOs jointly campaigned to increase awareness of and to prevent the "Three Highs" (high blood pressure, high blood sugar, high blood fat/ lipids) and other chronic disease prevention information. 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.

Figure 3-7 Chronic Disease Control Framework



(2) In order to enhance care quality for diabetes patients, the MOHW promoted a diabetes shared care network comprising 229 diabetes health promotion institutions. It also established 528 diabetes support groups.

(3) For kidney disease control, the MOHW strengthened publicity and educational campaigns. It also established 172 kidney disease health promotion institutions that provided better case management and strengthened disease control.

(4) At the end of 2016, 2880 blood pressure monitoring stations are available at various public locations for greater accessibility.

2. Menopause Health

In 2016, women made 4,005 calls to a toll-free menopause hotline. Community and medical resources were used for 49 activities including menopause camps, health lectures/consultations, instructor training, and health practitioner training. 3,508 participants attended these events.

Section 3 Cancer Prevention

To reduce the cancer mortality rate, the MOHW has been implementing the 3rd Phase National Cancer Prevention and Control Program. The program features three new key points: (1) lowering cancer risk, (2) expanding cancer screenings, and (3) implementing the Cancer Navigation Plan.

1. Reducing Cancer Risk: Four major risk factors are associated with cancer: smoking, insufficient physical activity, bad 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 2016, 5.124 million screenings detected precancerous lesions in close to 50,000 patients and malignant tumors in over 10,000 patients. (Tables3-1) outlines significant milestones in cancer screenig, while (Tables3-3) summarizes the five-year survival rates for four major types of cancer.

Table 3-1 Screening Volume and Rate, Precancerous Lesions, Follow-up Rate for Positive Screenings and Cancer Cases for the Four Major Types of Cancer, 2016

Cancer Type	Screening Volume (Thousands)	Screening Rate (%)	Precancerous Lesions	Cancer Cases	Follow-up Rate for Positive Screenings
Cervical Cancer	2,139	72.1	10,071	3,833	93.7
Breast Cancer	794	39.3	-	3,691	91.0
Colon Cancer	1,261	40.7	34,725	2,349	73.0
Oral cavity cancer	928	55.1	3,572	1,322	83.0
Total	5,124	-	48,368	11,195	83.7*

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. Oral cavity cancer: the rate of betel nut chewers (including those who quit) or smokers aged 30 and older who have received a screening for oral cavity cancer within the past two years.

Table 3-2 Cancer Detection Rates for the Four Major Types of Cancer, 2016

Cancer Type	Cancer detection rate (Estimates based on 100% follow-up of positive cases)		
	Precancerous Lesions	Cancer	Total
Cervical Cancer	1/91	1/370	1/72
Breast Cancer	-	1/180	1/180
Colon Cancer	1/25	1/380	1/23
Oral Cavity Cancer	1/206	1/555	1/150

Notes: Basis for Detection Rates
1. Precancerous Lesion Detection Rate (Based on 100% follow up): defined as precancerous lesion cases/number of screenings
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, 2016, by Stage

Unit : %

Stage	Breast Cancer	Cervical Cancer	Colon Cancer	Oral Cavity Cancer (including oropharynx and hypopharynx)
Stage 0	97.9	96.9	86.5	71.1
Stage 1	96.0	88.2	82.2	80.2
Stage 2	90.1	68.6	70.7	70.7
Stage 3	73.9	56.5	60.1	55.0
Stage 4	28.1	19.7	12.3	33.8

Source: Taiwan Cancer Registry database (includes carcinoma in situ)
Notes: Analyzed hospital-reported data on the five-year survival rate for four major types of cancer by stage, from 2010 to 2014 (patient tracking through 2015)

(2) In 2016, there were 225 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. The institutions also cooperated with local health departments in conducting community-based screenings and hospital-based health education and betel nut cessation classes.

(3) In order to ensure the quality of cancer screenings, officials conduct periodic reviews of health institutions that offer such screenings. In 2016, accreditations were given to 117 institutions that conduct cervical cancer screenings, 202 that conduct mammograms, and 144 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.

3. Improving the Quality of Cancer Care

(1) Accreditation for cancer hospitals began in 2008. By the end of 2016, 57 hospitals had qualified; over 80% of all such institutions.

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

(3) The MOHW commissioned 90 hospitals nationwide to conduct a cancer patient navigation program. Case managers specializing in tumor cases actively contact patients to encourage them to receive treatment within three months. More than 90,000 new 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

Section1 Health Communication

Health communication utilizes the media, professional associations and civic organizations to transmit accurate health information. It also involves the provision of websites and reference materials focused on specific health-related matters for the use of all citizens. Furthermore, the effective integration of cloud-based services and the establishment of the "Wellness" platform have enhanced health awareness, thereby improving the overall health of Taiwan's inhabitants.

1. Health Communication

(1) Setting Health Education Goals: health education policy in 2016 focused on the coordinated implementation of several key areas: "Safe Use of Traditional Chinese Medicine," "Tuberculosis Prevention," "Food Safety Education," and "Gum Disease Prevention and Fluoride Use in Caries Prevention."

(2) Taiwan has been disseminating health information through websites, social networking sites, and other channels to advance people's health knowledge. Topics include Women's and Children's Health; Tobacco Hazards Prevention; Healthy Cities and Locales; Weight Management through Diet and Exercise; Chronic Disease Control; and Cancer Control.

(3) In response to the development of social networks, we use social media such as Facebook and LINE to disseminate accurate health information. And take the initiative to promote health information and issues, also update read-time accurate information to the citizens.

2. To enhance MOHW's effectiveness, the agency invited 185 staffs to participate in four health education workshops centering on "Sponsorship Experience Sharing & Work Review" and "Professional Advancement" in 2016.

3. e-Health Promotion and Application Services

To further empower Taiwan's citizens, the MOHW has been integrating information and communications technology (ICT), health management and mobile services to gradually promote the "Wellness Cloud" project--a step-by-step establishment of a new health promotion and chronic disease self-management in Taiwan:

(1) Adding new functions such as GPS positioning and sports health management functions to the "Wellness" platform website and mobile app, MOHW hopes that users can record the duration of their physical activity and the distance they have covered. The information gathered can then be used to estimate the number of calories consumed, thereby helping people to stay fit, and reduce the chances of chronic diseases.

(2) Field testing: The MOHW established two biodata measurement sites for field testing, and successfully uploaded the obtained data to cloud-based platforms. About 800 users have utilize these services with a 85% satisfaction rate.

(3) Local public health bureaus and civic groups established new avenues for the exchange of health-related information.

(4) The MOHW organized the 2016 "Artistic Health Materials Design Exhibition and Awards," which received a total of 162 entries, of which 35 received awards. Information about the 5-day Exhibition and the Awards were posted on the official website of the Health Promotion Association, MOHW and on the Health 99 Education Resource website for public viewing.

(5) The MOHW has continued to implement the government's data transparency policy; by the end of 2016, 208 sets of data became accessible on the government' s Open Data Platform, and 129 value-added applications received special commendation.

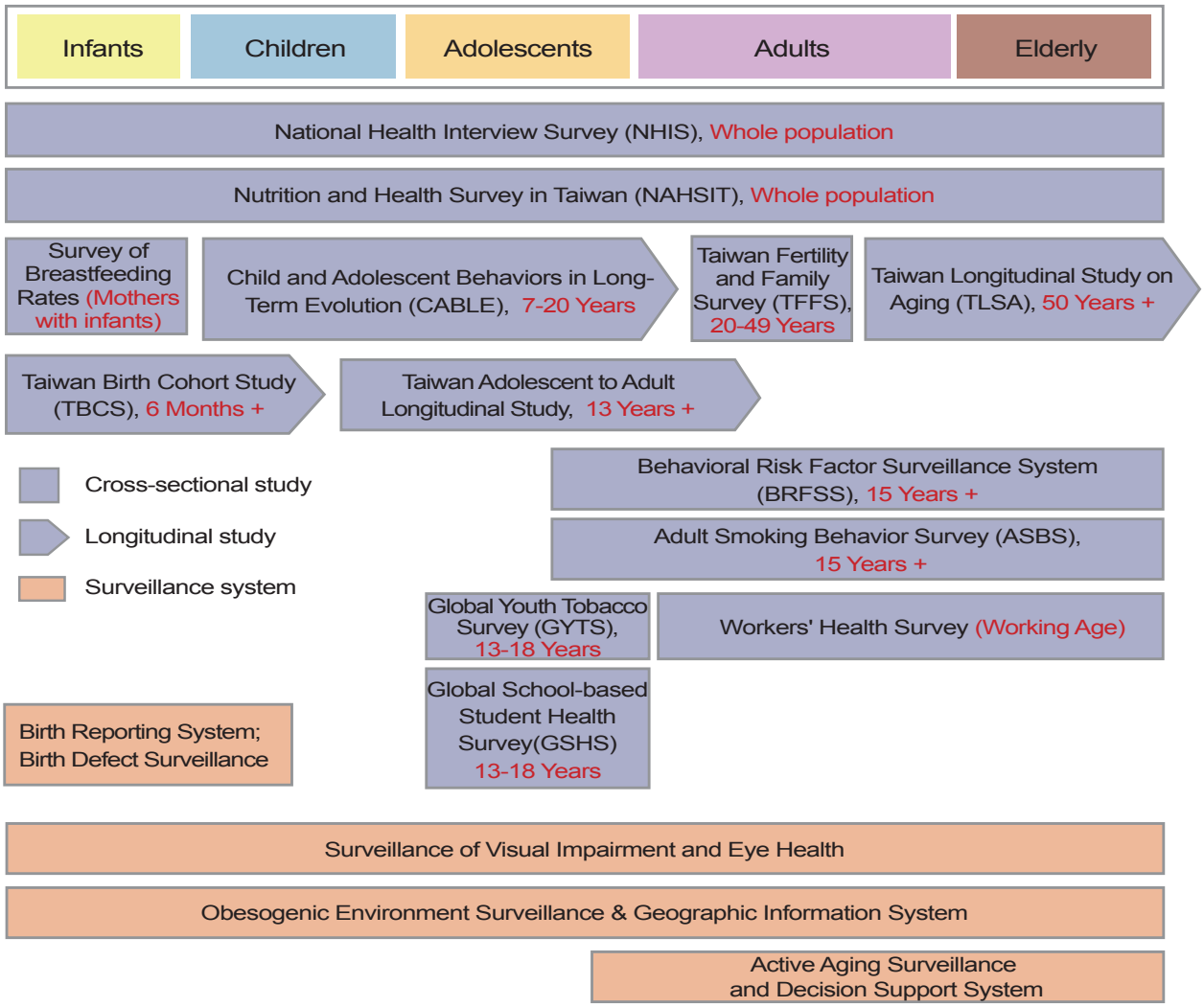
Section 2 Health Surveillance

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

1. The MOHW has established the non-communicable 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 on-line query for health indicators from the surveillance and surveys.

Figure 3-8 Major Health Monitoring and Surveys



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 17 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. This project was successfully implemented in four stages over a 20-year period. This was followed in 2013–2016 by the Equitable Healthcare Provision Plan, which sought to enhance the level of coordination in the healthcare delivery system (in line with the changes made in the structure of the Executive Yuan). Consequently, Taiwan developed 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 2016 are shown below:

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

Table 4-1 Status of Medical Institutions, 2016

Type of Medical Institution		No. of Institutions
Medical Care Institutions	Hospitals	490
	Clinics	21,894
Pharmacies		7,907
Nursing Institutions	General Nursing Homes	511
	Psychiatric Nursing Homes	41
	Home Care Practices	547
	Post-Natal Nursing Institutions	219
Blood Donation Institutions	Blood Donation Centers	6
	Blood Donation Stations	12
Pathology Institutions		10
Other Medical Institutions	Midwifery Practices	25
	Medical Laboratories	398
	Medical Radiological Institutions	55
	Physical Therapy Practices	113
	Occupational Therapy Practices	19
	Denture Clinics	49
	Mental Counseling Clinics	58
	Psychotherapy Clinics	33
	Speech Therapy Centers	19
	Dental Technology Centers	836
	Hearing Centers	14
	Home Respiratory Care Practices	1
	Nutrition Advisory Organizations	25

2. Current Status of Hospital Beds

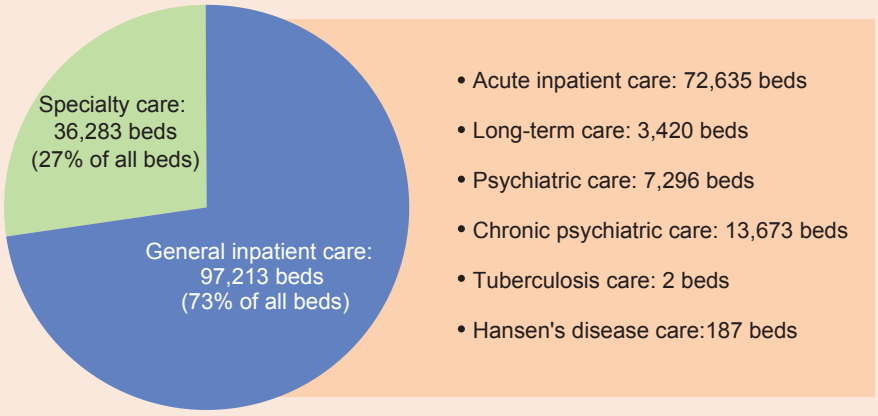
There were 133,335 beds in medical care institutions (including general beds, special beds, specially designated beds and beds in clinics), with general beds for acute care, general beds for chronic care, beds for psychiatric acute care, and beds for psychiatric chronic care included among general beds in hospitals. There were an average of 56.8 beds for every 10,000 people in Taiwan (Figure 4-1).

Section 2 Emergency Health Care and Rescue

The MOHW continued to reinforce development of the national 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 2016. Taiwan currently has 43 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 2016, special incentives were offered in 14 locations to effect these objectives.

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



Note: 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, intensive care beds for psychiatric patients, isolation beds, positive pressure isolation room negative pressure isolation room, beds for bone marrow transplant patients, integrated post-acute care hospital beds, surgery recovery beds, infant beds, hemodialysis beds, peritoneal dialysis beds, etc.

Table 4-2 Number of Hospitals Designated for Emergency Treatment in 2016, by Grade

Emergency Treatment Grade	Severe	Moderate	Ordinary	Total
No. of Institutions	36	82	80	198

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 107 acute and critical care doctors to assist in 25 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 2016, there were approximately 7,503 automated external defibrillators (AEDs) in Taiwan, equivalent to 32.6 AEDs for every 100,000 people. 3,617 locations are designated as "safe locations" (meaning that location has an AED, and that at least 70% of employees there have completed CPR and AED training).

5. In 2016, the MOHW started to raise the quality of emergency pediatric care. Under the plan, remote or non-urban 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 2016, 14 hospitals in 14 cities/counties were participating.

Section 3 Post-acute care

Post-acute care is intermediary between intensive care and long-term basic care. It combines professional teams offering acute care, nursing home services, geriatric day care, and home care to offer a seamless chain of health services. After a patient has completed acute care, and has been evaluated to determine suitability, post-acute care lasting three to six weeks may begin with the patient's informed consent. During the post-acute care period, guidance and arrangements are made for home care. After post-acute care services end, a case manager will handle follow-up procedures. At the end of 2016, 21 MOHW hospitals offered intermediate care and had a total capacity of 357 beds. They cared for 1,172 patients for an average occupancy rate of 43.05% for that year. 775 of the patients, or 66.13%, were discharged home.

The MOHW continued to implement the Post-Acute Care Pilot Program, or PAC Program. Post-acute care initially prioritized stroke patients, but was expanded in September 2015 to include burn patients under the BPAC Program. In 2016, 38 hospital teams and 153 hospitals participated in the PAC Program, including 62 regional hospitals and 91 local hospitals, and 23 large-scale hospitals, including 19 teaching centers, accepted referrals. A total of 4,048 patients were admitted. 87.4% of them experienced an improvement in body function, 87.8% returned home, and 88.8% expressed satisfaction with the services provided. As for the BPAC Program, from launch to the end of 2016, there were 51 accepted patients, 91.7% of whom experienced improvements in body function. Their average Activities of Daily Living scores (ADLs) increased from 61.4 to 79.5 points, and 89.6% of the patients were discharged home.

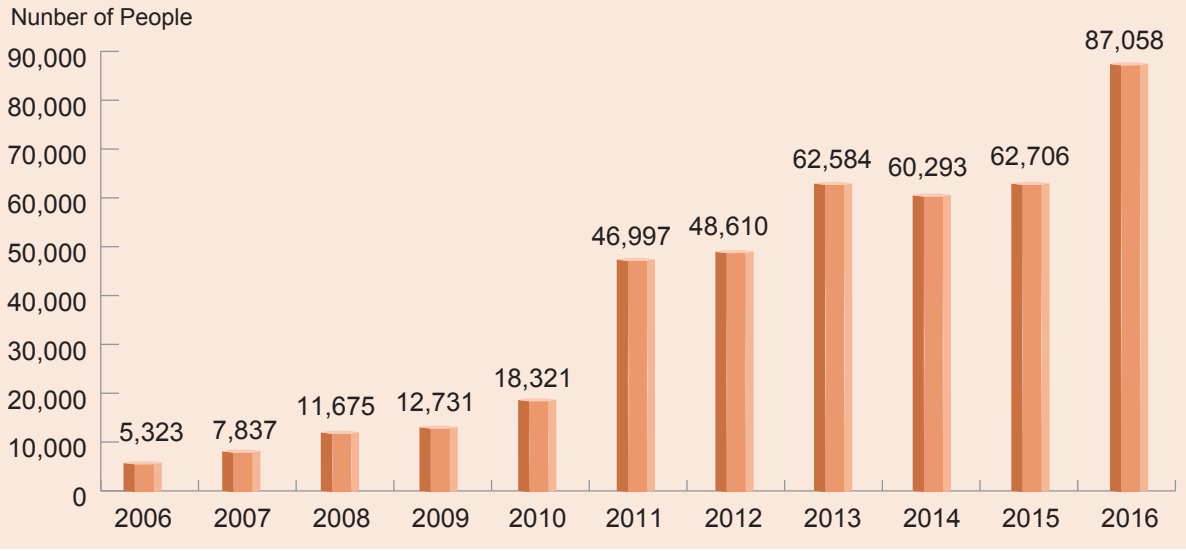
Section 4 Hospice and Palliative Care

1. Implementation of the Hospice Palliative Care Act on June 7, 2000 paved the way for doctors (patients' informed consent) to focus on relieving symptoms, 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 urginging 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 2016, a total of 401,455 people, accounting for 1.7% 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. As of 2016, 62 Taiwanese hospitals provided hospice services to inpatients, 142 hospitals

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



participated in a collaborative hospice care provision program, 101 institutions provided home hospice care, and 210 facilities were involved in community-based hospice care services. In accordance with the needs of each terminally-ill patient, medical teams provide an interconnected network of hospice and palliative care services for inpatient care. outpatient care and home care. In 2016, approximately 43,000 Taiwanese people received end-of-life care, representing a 15% increase compared to 2015. The percentage of cancer patients who received hospice care in the year prior to their deaths rose from 23% in 2010 to 56% in 2015.

Section 5 Oral Health Care

1. Better Dental Care for the Disabled

(1) The MOHW has been promoting "Dental Care Services for People with Special Requirements." In 2016, 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 23 other hospitals. The Plan involves encouraging hospitals to establish special services for patients with special dental needs, to offer referral services, and to offer training for healthcare provider to enhance the overall quality of care for patients with special needs. 32,145 patients received services under this Plan in 2016.

(2) 85 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 every six months for children under the age of six; every three months for children under the age of 12 in low-income households, disabled children, children living in aboriginal (indigenous) districts; and children living on outlying islands or in remote areas. In 2016, topical fluoride

treatment was provided to 1.16 million people, with 83.3% 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 elementary school students, for both first/second-grade students in aboriginal communities, children living on outlying islands, disabled children, and children in low income and lower middle income households. In 2016, 470,000 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 2016, a coverage rate of around 90% of 1.21 million children obtained this service.

3. The MOHW has begun to subsidize dentures for low to medium income seniors since January 1, 2009. The plan offers subsidized dentures to: senior citizens living in low income or lower middle income households; recipients of living allowances for medium to low income seniors; senior citizens receiving living subsidies for medium to low income disabled persons; senior citizens receiving full placement subsidies from any level of government; and senior citizens who quantity for at least 50% subsidized living expenses from any level of government. From 2009 to the end of 2016, more than 46,000 people benefited from this program. Additionally, the MOHW has also provided the subsidies available for denture repair for medium to low income senior citizens since 2013.

Chapter 2 Mental Health and Psychiatric Care

Section 1 Mental Health Promotion

1. In order to enhance awareness and understanding of mental health issues among the general public, in 2016 the MOHW produced a large number of mental health education materials, including the "Mental Health Educational Resources for Furthering the Healthy Development of Infants and Young Children in the 0-6 Age Range," "Thematic Materials for Mental Health Education in Elementary Schools and Junior High Schools," "Mental Health Education Resources for Schoolteachers,"and "Mental Health Education Resources for Patients Suffering from Chronic Diseases, Serious Diseases or Rare Diseases, and their Family Members."

2. In order to improve the mental health of pregnant women, prevent post-natal depression, and strengthen awareness mental health during and after pregnancy among pregnant women and their family members, the MOHW has enforced the recommendations of Articles 12 (Women's health) and 24 (General recommendations) of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). In 2016, the MOHW completed the production of "Films for Use in Mental Health Education Classes for Pregnant Women" and the compilation of "Mental Health Education Resources for Pregnant Women and their Family Members." In addition the MOHW provided funding for two "Education and Training Programs for Physical and Mental Health Care for Pregnant Women." Taiwan aimed to strengthen awareness of pregnant women's mental health among the frontline health professionals, to help them improve their skills, and to enhance their sensitivity to the needs of high-risk groups. Hopefully in this way, the overall level of physical and mental health care provided to Taiwan's pregnant women could demonstrate progress.

3. To enhance the wellbeing and mental health for all, the MOHW has been establishing the mental health networks in all counties and cities. In 2016, the MOHW commissioned 22 county/city government Public Health Bureaus to effect the "Mental Health Network Promotion Pilot Project." The results included establishing mental health promotion task-forces in each county/city, holding network coordination

meetings, sustaining city-wide/county-wide mental health networks maps and relevant health education. The MOHW also promoted the holding of localized, barrier-free spotlight programs (828 spotlight programs were held in 2016, attended by a total of 70,351 people), and helped provide tailor-made psychiatric consulting services in various communities to 12,741 persons. For World Mental Health Day (October 10th), the MOHW organized a range of "Mental Health Month" activities including 36 press conferences, and 753 activities involving 245,868 participants.

4. The MOHW has set up a toll-free, 24-hour suicide prevention hotline (0800-788995). In 2016 it provided expert counseling to 67,773 people, assisted 11,079 potential suicide victims, and directly prevented 449 suicide attempts.

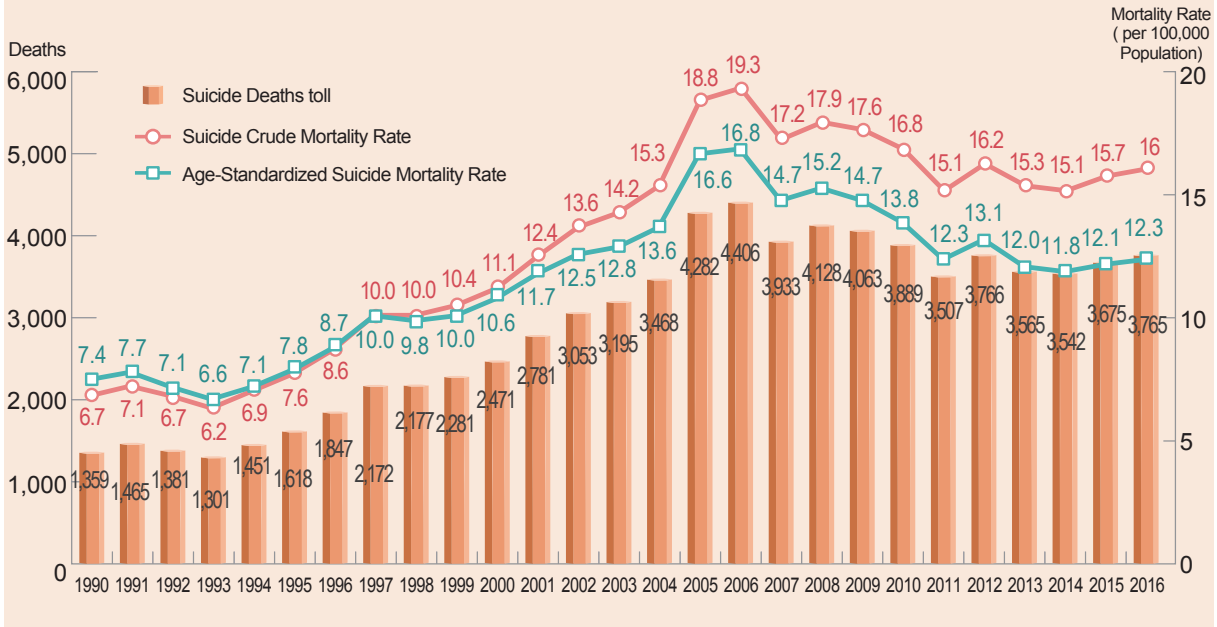
5. In order to strengthen suicide prevention, the MOHW has implemented reporting of all suicide-related cases, arranged outreach visits, helped people with risk of suicide. The MOHW has also coordinated suicide prevention resources. In 2016, Taiwan had 28,996 reported suicide attempts, and authorities made 202,969 outreach visits.

6. In 2016, there were 3,765 suicides in Taiwan, representing a standardized suicide rate of 12.3 people per 100,000 people (figure 4-3). The long-term trend has been falling for the suicide rate, which peaked in 2006. Since then, the standardized suicide rate has fallen by 27%, and for seven 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 combine both central and local government resources to strengthen the social safety net, to promote outreach visits, to provide suicide prevention counseling, and other suicide prevention strategies.

7. In 2016, the MOHW funded the "Psychological First Aid Education and Training Program." In all, 423 people participate in two expert forums and eight psychological first aid classes.

8. The MOHW has worked to educate children and theeir parents about attention deficit hyperactivity disorder (ADHD). In 2016, four "ADHD Education and Training Programs"were conducted.

Figure 4-3 Taiwan's Suicide Deaths and Suicide Mortality Rate, 1990-2016



Section 2 Psychiatric Health Services

1. In order to further enhance the health care services provided to psychiatric patients, the MOHW has developed seven regional psychiatric care networks. Within these networks, designated core hospitals play the following roles: (1) serving as regional psychiatric care units to promote mental health within the region, and to develop the regional psychiatric care network; (2) improving service quality for regional mental health, addiction prevention, treatment and intervention for special groups; (3) arranging education/training programs for health professionals within the regional network.
2. In 2016, Taiwan had 481 psychiatric care institutions. They possess 20,969 beds including 7,296 beds for emergency psychiatric patients and 13,673 beds for chronic psychiatric patients. These figures equate to approximately 8.91 beds for every 10,000 people. There were also 62 daytime psychiatric rehabilitation institutions capable of serving 3,043 persons, 141 psychiatric rehabilitation institutions that offered accommodation (with 5,917 beds), several psychiatric day care centers (capable of serving 6,340 persons), and 41 psychiatric nursing homes (with 3,742 beds).
3. In order to provide quality service to psychiatric patients, the MOHW subsidized county and city governments to recruit 96 outreach associates. These associates made periodic outreach visits based on the severity of the patient's condition. In 2016, 142,193 outreach visits were made to 715,452 patients.
4. Mandatory hospitalizations and mandatory community care for severe patients are carried out in accordance with the "Mental Health Act." In 2016, there were 791 applications (including 725 applications for mandatory hospitalization and 66 applications for mandatory community care).
5. In 2016, the MOHW carried out evaluation inspections of 4 psychiatric medical care institutions (including psychiatric teaching hospitals), 25 psychiatric rehabilitation institutions, and 10 psychiatric nursing homes. Furthermore, occasional follow-up guidance was conducted for 24 institutions. (Table 4-3)

Section 3 Control of Drug Addiction

1. Subsidized alternative therapy for drug addiction was introduced in 2006. As of the end of 2016, a total of 179 institutions throughout Taiwan were providing alternative

Table 4-3 The Number of Psychiatric Care Institutions in Taiwan in 2016, and Evaluation Results

Psychiatric Care Institution Category		No. of Institutions	Total No. of Beds	No. of Institutions Evaluated in 2016	Evaluation Results		
					Outstanding	Acceptable	Not acceptable
Psychiatric hospitals	Non-teaching hospitals	35	20,969	3	0	2	1
	Teaching hospitals	11		1	-	1	0
General hospitals with a psychiatric care department		155		-			
Clinics with a psychiatric care department		280		-			
Psychiatric rehabilitation institutions	Daytime only	62	3,043	3	-	3	0
	With residential accommodation	141	5,917	22	-	18	4
Psychiatric nursing homes		41	3,742	10	-	10	0

therapy, with a cumulative total of 42,722 patients treated. In 2016, on average 8,300 patients received treatment daily. The number of new HIV cases among drug addicts per year has fallen from 2,425 in 2005 to 60 in 2016 (Figure 4-4). And among new alternative therapy patients, 59.51% completed a six-month course of treatment.

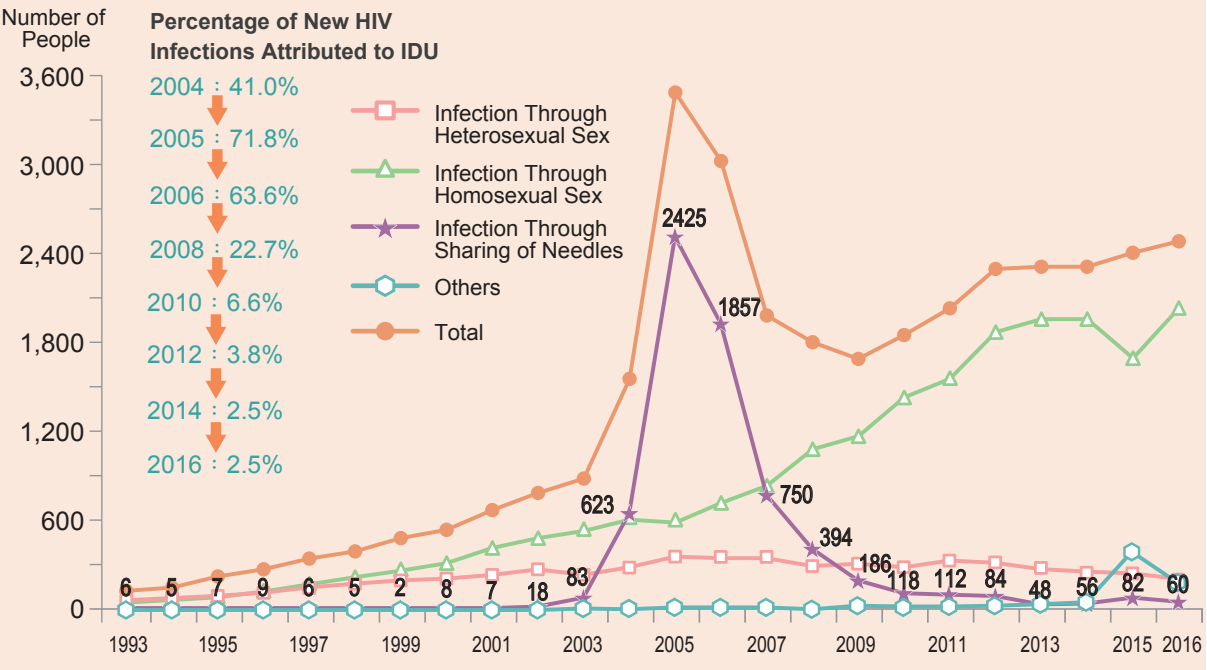
2. As of the end of 2016, Taiwan had 165 designated drug addiction treatment institutions, with a combined staff of 2,495 (including psychiatrists, pharmacists, nurses, clinical psychologists, occupational therapy specialists, social workers, etc.). They provided addiction treatment in the community for drug addicts, emergency services, hospitalization, and post-discharge follow-up, etc. The regional psychiatric care networks' core hospitals were responsible for providing continuing education and training to these personnel to maintain their professional competences.

3. The MOHW launched the "Subsidy Program for the Treatment of Non-Opiate Addicts," in July 2014. As a result, the cost to join the alternative therapy has significantly reduced for addicts, and enhanced their compliance. In 2015, the maximum amount of subsidy available per person per year was increased to NT$25,000. In 2016, 929 people benefited from this 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 2016, 48 drug users received treatment under this program, and 43 staffs completed the necessary training. The MOHW also subsidized eight NGOs to carry out the "Drug Addict Psychological Counseling and Social Rehabilitation Work Plan." Under this program, 192 people obtained assistance in lifestyle counseling; 15,066 persons received psychological support, household support, 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 2016,

Figure 4-4 No. of HIV Infections by Route of Transmission, 1993 - 2016



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

four health institutions offered services at five correctional facilities. They provided 254 addiction treatment clinics that served 6,132 patients, health education for 9,126 inmates, group therapy for 4,658 inmates, 1,355 prisoner release referrals, and 1,485 clinical follow-ups.

6. The MOHW implemented the "Alcohol Addiction Treatment Plan," subsidies covering the cost of treatment services. In 2016, subsidies were provided to help 1,254 people. Moreover, the MOHW provided subsidies to help four hospitals to implement the "Project for the Establishment of a Treatment and Social Rehabilitation Service Model for Problem Drinkers and Alcohol Addicts. This Project brought together a network of agencies: the public health authorities, social affairs agencies, district prosecutors offices, motor vehicle registration offices. They jointly established a mechanism for referring problem drinkers and alcohol addicts to various treatment and social rehabilitation plans that could be tailored meet individual needs while addressing their problems as early as possible. Through the end of 2016, there were 576 referrals, and alcohol addiction treatment was provided to 405 people.

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 2016, Taiwan had 289,174 practicing health professionals including 65,202 physicians (both Western and traditional Chinese medicine doctors and dentists), 33,908 pharmacists, 9,400 medical technologists, 6,164 radiologic technologists, 153,509 registered nurses, 154 midwives, and 2,525 dietitians. Compared to 2006, the number of physicians has increased by 15,148, the number of pharmacists by 6,469, the number of medical technologists by 1,943, the number of medical radiological technologists by 2,112, the number of registered nurses by 44,356, and the number of dietitians by 1,388, while the number of midwives has fallen by 214. The number of practicing medical workers in each category and the number of practicing medical workers for every 10,000 people in the population, as of the end of December 2016, are shown in Table 4-3 in Appendix 1.

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 and 3 dental specialties. Through the end of 2016, 50,920 people received their medical licenses in Taiwan.

3. Taiwan's government-sponsored physician training was suspended in 2009 after achieving its scheduled objectives in about four decades. Simultaneously, the annual number of locally sponsored physicians was increased from between six and nine to 27. To meet additional demands in five specialties and population aging, since 2016,

this program has annually sponsored 100 medical students to become physicians in key specialties.

4. Post-graduate general medical training is offered to strengthen holistic care. In 2016, Taiwan approved 40 teaching hospitals and 90 collaborating hospitals to provide post-graduate year (PGY) training programs. 1,335 medical graduates received training under this scheme.

5. A system of postgraduate clinical training for dentists has been put in place to ensure quality oral health care. As of 2016, Taiwan certified 431 institutions (87 hospitals and 344 clinics) offer this training. 790 dentists received training under this project.

6. Taiwan has been providing the nurse practitioner training since since 2006 to enhance the quality of nursing. The program is divided into internal medicine and surgery tracks. In 2012 the internal medicine track was further subdivided into general internal medicine, pediatric and neurologic subgroups. In 2013, an OB/GYN subgroup was added to the surgery track. As of 2016, 6,414 clinical nurse specialists received licenses under this program (3,439 clinical nurse specialists in internal medicine and 2,975 clinical nurse specialists in surgery).

7. To ensure that newly minted health practitioners can receive superior clinical training, in 2007 the MOHW launched the "Clinical Practitioner Training Program." As of 2016, 2,070 individual training programs at 140 participating hospitals trained 22,808 health workers; 88.3% of medical workers received this training within two years of gaining a license.

8. To create an effective clinical training system for doctors of traditional Chinese medicine, the MOHW has launched the Scheme for the Training of Responsible Physicians in Chinese Medical Care Institutes. In 2016, this scheme assisted 37 teaching hospitals in providing a two-year post-graduate training to 280 new Chinese medicine physicians. The MOHW has also promulgated the "Certification Guidelines in Relation to the Training of Responsible Physicians in Chinese Medical Care Institutions." In 2016, Taiwan trained 462 instructor physicians and 174 instructor pharmacists accordingly. Also in 2016, the MOHW sought a consensus on the specialist physician training of Chinese medicine. In that year, Taiwan subsidized six teaching hospitals that test traditional Chinese medicine doctors for competence, and host their preliminary oral exams.

9. In 2016, as part of the "Project to Enhance the Professional Competence of Traditional Chinese Medicine (TCM) Practitioners,"Taiwan held four TCM-related academic conferences. Taiwan also desired to help TCM institutions to provide multifaceted care. As such, six teaching hospitals established integrated Chinese-Western treatment programs, TCM adult day care, TCM long-term care and TCM drug cessation. These initiatives hopefully would improve the effectiveness of Taiwan's TCM.

Section 3 Creating Employ-Friendly Work Environments

1. To prevent physicians from occupational burnout, and to protect their rights, the MOHW and the Ministry of Labor have jointly planed to apply the Labor Standards Law to all physicians beginning September 1, 2019. Flexible work hours will be insisted in accordance with the provisions of Article 84-1 of the Labor Standards Law. The MOHW has drawn up short-term, medium-term and long-term plans to mitigate the possible impact of applying the Labor Standards Law to physicians. Notably, the MOHW has been promoting ten ancillary measures: implementing the hospitalist system on a trial basis; recruiting additional staffs, formulating guidelines concerning physicians' rights and work hours; modifying medical residency programs to safeguard their quality; implementing new government-sponsored physician training programs; expanding the "Program to Encourage Medical Center Support for the Provision of Medical

Services in Remote Areas;" constructing solid referral systems; reexamining existing laws/regulations; relaxing restrictions on telemedicine; strengthening public health education; and reviewing the cost structure of NHI payments.

2. To reduce malpractice risks, to foster harmonious doctor-patient relationships, and to prevent patients from having to fend for themselves in case of bad medical results, the MOHW has been implementing the "Plan for Encouraging Medical Facilities to Implement Birth-related Dispute Management Pilot Projects" since 2012. The results achieved from these pilot projects have been encouraging, and the MOHW went on to promote the enactment of a "Birth-related Injury Compensation Statute." Their results are outlined below.

(1) By the end of 2016, 294 OB/GYN clinics and hospitals participated in the "Plan for Encouraging Medical Facilities to Implement Birth-related Dispute Management Pilot Projects." 481 birth injury claims were received, of which 464 were processed; around 388 families received compensation totaling NTD366.61 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 two years, 100% of OB/GYN resident physician vacancies were successfully filled.

(2) The "Birth-related Injury Compensation Statute" passed its Third Reading in the Legislative Yuan on December 11, 2015. Taiwanes president formally promulgated the 29-article Statute on December 30, 2015, and the law came into effect on June 30, 2016. As of the end of 2016, 55 applications were received under the new Statute, of which 24 had been resolved. A total of NTD15.9 million in relief funding has been paid out. On the other hand, hospitals and clinics have been required to establish internal risk management mechanisms, and to implement reporting of major birth injuries. Taiwan desires to better analyze malpractice claims' root causes so improvements 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 2016, the number of medical dispute appraisal cases commissioned by the judicial authorities fell by 43%, the number of dispute cases handled by local Public Health Bureaus fell by 27%, the average length of time to complete the appraisal process decreased by 46%, and the average time to resolve a dispute stood at 4.9 months.

3. To address Taiwan's nursing shortages, in May 2012 the MOHW launched a reform plan to retain practicing nurses and encourage nurses who left the profession to return. Achievements include the following:

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

a. Adding more Nurses: at of the end of 2016, 153,509 registered nurses worked in Taiwan, an increase of over 17,000 compared to before nursing reforms were enacted. The turnover rate fell from 13.14% in 2012 to 9.88% in 2016, the lowest rate since 2010. The total vacancy rate fell from 7.2% in 2012 to 5.96% in 2016.

b. Increasing the number of nurses per 10,000 people: it increased from 59.0 in 2012 to 65.2 in 2016.

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

a. Amendment of the Establishment Standards for Medical Institutions in 2013, the Establishment Standards for Medical Institutions was amended to raise the standards for nursing personnel in medical institutions.

b. 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. In 2015, the "average whole-day nurse-patient ratios" for all 114 hospitals evaluated were in line with requirements. All 114 hospitals in 2015 and 151 hospitals in 2016 that applied for evaluations passed.

c. Linking Inpatient Insurance Payments to the Nurse-Patient Ratio: In 2015, a budget of NT$2 billion was allocated to boost inpatient nursing payments, and link inpatient insurance payments to the nurse-patient ratio. The nurse-patient ratio is used as the baseline to determine the average whole-day nurse-patient ratio; assessors then add an additional 9% to 11% to that number to arrive at the proper payouts. 2016 monthly nurse-patient ratios showed that the necessary threshold was achieved on average 94% of the months to necessitate expanding this program.

d. Abolishing the responsibility system: the Article 84-1 of the Labor Standards Act will not apply to nurses anymore starting from January 1, 2014.

e. Any violation of the Labor Standards Act will be included in hospital evaluations. Public health bureaus will include labor inspections at hospitals as key focus areas in their evaluations.

f. Prevention and addressing violence in hospitals: on January 29, 2014, amendments to Articles 24 and 106 of the Medical Care Act were announced. They established the measures that medical institutions must take to protect medical personnel from harm. If a crime has been committed, then the police shall cooperate with prosecutors in investigations. Penalties were also established for the destruction of equipment, obstruction/interference with medical personnel, and if such actions lead to adverse consequences.

(3) Raising Salaries and Benefits

a. Ministry of Labor surveys have shown that during the past four years nurse salaries rose by approximately 8.08% on average.

b. Surveys of Taiwan's hospitals up to 2016 have shown that 97% have offered raises for night shifts.

(4) Implementing the Elite Nurses Program for Remote/Rural Regions:

a. Taiwan's Executive Yuan approved "Elite Nurses Program for Remote/Rural Regions" to train 200 publicly funded nursing students from 2015 to 2018.

b. For the 2015-2016 academic year, 88 students enrolled in the program.

Chapter 4 Health Care Quality

Section 1 Patient Safety and Quality of Medical Care

The MOHW has aimed to establish a patient-friendly environment, a hospital evaluation/accreditation system, annual objectives for healthcare quality and patient safety, and a patient safety reporting system. Significant achievements in 2016 are as follows:

1. The MOHW drew up the "2016-2017 Taiwan Treatment Quality and Patient Safety Goals for Hospitals" (Table 4-4)

2. The Taiwan Patient Safety Reporting System (TPR) has been used to effect a patient safety culture. In 2016, 7,032 healthcare organizations participated in the TPR, and preliminary statistics indicate that around 65,000 cases were reported.

3. The Hospital Accreditation Standards include regulations about a safe hospital

Table 4-4 2016 - 2017 Taiwan Treatment Quality and Patient Safety Goals for Hospitals

Item	Eight Major Performance Objectives	Implementation Strategy
1.	Improving communication between health workers	1. Ensuring the accurate, comprehensive, timely transmission of information 2. Implementing effective risk management and standard operating procedures for patient transportation 3. Implementing timely notification and processing of medical radiation, examination, test and pathology reporting of critical values and other important results 4. Strengthening team communication skills
2.	Managing patient safety in the event of abnormal situations	1. Building an effective patient safety culture, and promoting participation in the Taiwan Patient Safety Reporting System (TPR) 2. Analysis of patient safety incidents and implementation of improvement strategies 3. Formulation of patient safety management plans
3.	Improving surgical safety	1. Implementation of surgical identification procedures and safety auditing operations 2. Enhancement of quality in anesthesia care 3. Inspecting surgical instruments 4. Preventing unnecessary harm to patients during surgery 5. Establishing mechanisms to review unnecessary operations
4.	Preventing patient falls and reducing the degree of injury	1. Implementing fall risk evaluation and preventive measures 2. Providing a safe environment and reducing the severity of injury suffered in falls 3. Implementing post-fall management guidelines and adjustment planning guidelines
5.	Improving safe use of pharmaceuticals	1. Promoting coordinated care drug list 2. Recording patient histories of allergic reactions to drugs and other adverse drug reactions 3. Reducing medication errors and improving the safety of and infusion pumps
6.	Implementing infection control	1. Ensuring consistent, correct hand hygiene 2. Improving antibiotic implementation policies 3. Implementing bundle care to decrease healthcare-associated infections 4. Implementing guideline for disinfection and sterilization in healthcare facilities
7.	Improving intravenous catheter care	1. Implementing a program to reduce catheter-associated infections and injuries 2. Enhancing catheters' safety and quality 3. Strengthening patient-centered collaborative care
8.	Encouraging patients and family members to participate in patient safety tasks	1. Encouraging medical personnel to proactively establish a collaborative relationship with patients and their family members 2. Providing family members with multifaceted ways to participate in the patient's care 3. Encouraging patients' family members to voice safety concerns 4. Proactively providing patients with health safety information, and involving patients in healthcare decisions

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.

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 2016, accreditation had been granted 416 hospitals and 126 teaching hospitals (Tables 4-5 and 4-6).
2. As part of the MOHW's efforts to promote reform of the hospital accreditation system, the accreditation standards applying to regional hospitals and local hospitals have been simplified. The number of articles reduced from 188 to 122 and the number of individual assessment items reduced from 1,297 to 550 (a decrease of 58%). The 12 articles falling under 13 categories (Human Resources) have been retained so they can serve as a benchmark for the regular evaluation and assessment frameworks.
3. Adhering to the principle that only subject any hospital to accreditation review or inspection once a year, the MOHW has worked to streamline every aspect of accreditation, inspection and certification. It has integrated the accreditation and inspection cycles to accommodate each hospital's needs. The number of survey items has been reduced from 40 to 24, a 40% reduction.

Section 3 Improving the Efficiency and Quality of Organ Donations and Transplantations

The world is facing a shortage of available organs for transplantation. As of the end of 2016, over 8,000 patients in Taiwan awaited organ transplantation; however, only about 800 patients annually are able to receive an organ transplant (Figure 4-5).

To encourage organ donation, in 2002 the MOHW established the Taiwan Organ Repository and Sharing System. This measure such has given Taiwan the second highest organ donation rate in Asia, and an organ transplant success rate comparable with that of Western Europe and North America—a testament to the quality of Taiwan's healthcare system. In 2016, the MOHW completed the "Regulations for Approval and Management of Operating Organ-Harvest-Transplant Surgery" as well as the "Regulations for Organization and Operation Management of Organ-Donation-Transplant Hospital Medical Ethics Committee"

Section 4 Promoting Electronic Medical Records (EMR) Adoption

The MOHW has been promoting the adoption of electronic medical records (EMR). As of the

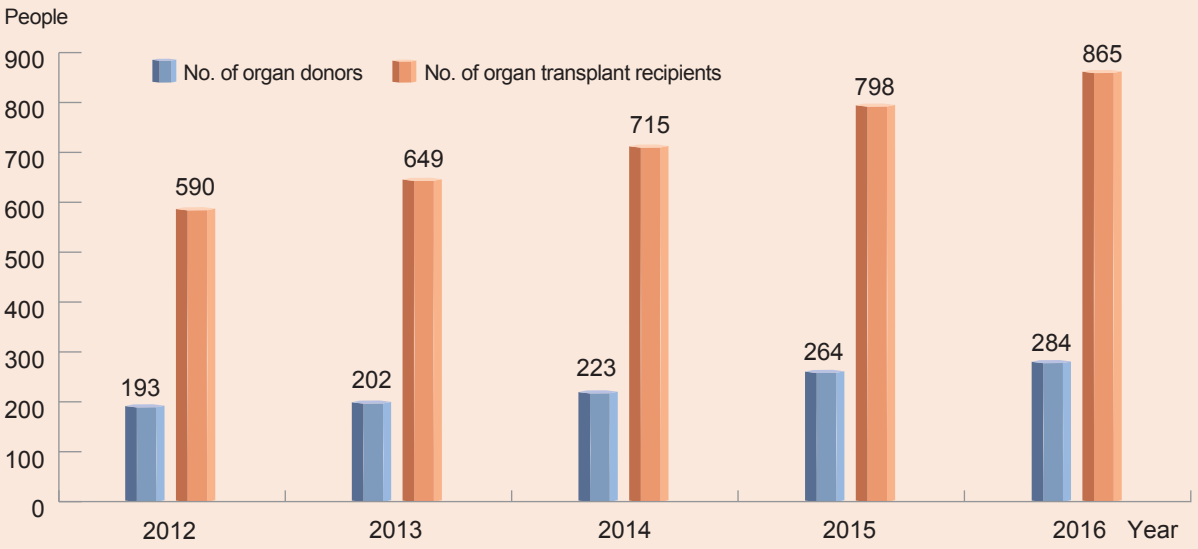
Table 4-5 Hospital Accreditation Results

Accreditation Results	Hospital Accreditation - Excellent				Hospital Accreditation - Qualified	
	Medical Centers	Regional Hospitals Would-be Academic Medical Centers	Regional Hospitals	District Hospitals	Regional Hospitals	District Hospitals
No. of Institutions	19	2	75	38	4	278

Table 4-6 Teaching Hospital Accreditation Results

Accreditation Results	Physicians and Medical Personnel Teaching Hospitals Accredited	Medical Personnel (Non-physicians) Teaching Hospitals Accredited
No. of Institutions	116	10

Figure 4-5 Organ Donation and Organ Transplant Recipients in Taiwan, 2012 - 2016



Source: Ministry of Health and Welfare

end of 2016, all hospitals in Taiwan were linked to the EMR Exchange Center, and the Center was providing EMR exchange services to 402 hospitals and 5,800 clinics throughout Taiwan, as well as to all Public Health Centers. The EMR Exchange Center is able to provide EMR exchange services in four categories: medical image reports, blood test data, discharge summaries, and outpatient medical records. The MOHW continues to educate clinics about the benefits of EMR to facilitate healthcare delivery.

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. Taiwan has developed an Integrated Delivery System (IDS) to improve NHI effectiveness in mountainous regions and in outlying islands. Hospitals dispatch manpower and resources to remote regions to provide fixed and mobile clinics in medical specialties, emergency care and evening hours. These measures have realized the principle of "doctors move, patients stay put." At the end of 2016, 50 mountainous regions and outlying islands enrolled in the plan; 26 commissioned hospitals assisted more than 460,000 people. Residents in villages and townships where the plan is carried out expressed an average satisfaction rate of 95%.
2. A new chemotherapy center opened in the MOHW's Penghu Hospital in October 2015. By reducing the travel burden of patients who previously must travel between Taiwan proper and the outlying islands for treatment, the center has improved healthcare accessibility to Taiwan's rural and remote regions.
3. The MOHW has built and renovated health centers in remote regions and on outlying islands. In 2016, the office building of the Diaoyu health center in Penghu's Baisha Township was rebuilt, and the new Jialan health center was opened in Taitung's Jinfeng Township. The building of a new health center in Taitung's Green Island Township has been progressing smoothly.
4. Establishing Health Information Networks for Remote Regions: To ensure effective medical care provision in remote districts and to enhance the quality of medical care

available to Taiwan's aboriginal (indigenous) communities of outlying islands, the MOHW has been implementing mobile clinics that bring medical care to remote communities. As of the end of 2016, medical information systems along with 359 mobile medical stations were established at 70 health centers in Hsinchu County and 14 other counties. Additionally, to enable residents of remote communities to benefit from teaching hospitals' diagnostic expertise and advisory services, the MOHW has been effectively using the Picture Archiving and Communication System (PACS). In 2016, The agency's Taoyuan Hospital supported medical image analysis in 9,458 cases.

5. Implementing Plan for Improving Health Care Treatment in Areas with Insufficient Resources in 2012: Taiwan provided a special budget and financial guarantees to regional hospitals located in or near underserved areas to provide 24-hour emergency treatment, internal medicine, surgery, OB/GYN, pediatrics, and hospitalization services. At the end of 2016, 85 hospitals participated. In addition, the National Health Insurance Administration announced that it was cutting the 20% copayment requirements for clinical, emergency, and home care services in areas listed annually as lacking sufficient medical resources.

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 of seamless medical care." The agency has strengthened the provision of medical care to underserved regions with support from aeromedical services whenever necessary. Since 2013, the MOHW has been executing the "Plan to Provide Incentives to Encourage Medical Centers to Support Emergency Treatment and Care Services on Outlying Islands and Districts with Insufficient Medical Resources." Therefore, several hospitals in Taiwan proper have partnered up with hospitals in remote regions. Taipei Veterans' General Hospital has been supporting Kinmen Hospital, Kaohsiung Chang Gung Memorial Hospital and Chi Mei Medical Center have been supporting Penghu Hospital, and Far Eastern Memorial Hospital and Wan Fang Hospital have been supporting critical care physician resources at Lienchiang County Hospital.

1. In 2012 the MOHW established the Aeromedical Service Review Mechanism to supervise medical evacuations. In accordance with the "National Aeromedical Approval Center Standard Operating Procedures for Emergency Medical Evacuation from Outlying Islands," Taiwan provides emergency medical consultations on a 24-hours-a-day basis, evaluates the necessity of providing aeromedical through coordination of aircraft and Coast Guard Administration vessels on an individual basis. Prior to the establishment of the National Aeromedical Approval Center, the average number of aeromedical service provision per month was 43.18. Since the Center's establishment, this figure has fallen steadily; in 2016, the monthly average dropped to 15.08 instances, representing a decline of 65.08%.

2. In accordance with the provisions of the Emergency Medical Care Law, and the Regulations Governing Management of Emergency Helicopters, if the case is deemed necessary, then assistance will immediately be provided to effect emergency evacuation to Taiwan proper for treatment. If sufficient aircraft are unavailable due to other constraints, then assistance can be secured from the National Airborne Service Corps or from the Ministry of National Defense. In 2016, there were 181 air evacuations, representing a decrease of 23.31% compared to 2015. The opening of a cardiac catheterization room at Penghu Hospital on December 4, 2013 reduced the percentage

of patients requiring aeromedical services from 51% of cardiac emergency patients to 1%. The reduction in the need for air evacuation has saved the healthcare system much needed resources that could then be used for improvements in other areas.

3. In accordance with the provisions of the "Regulations Governing the Subsidization of Transportation Expenses for Inhabitants of Mountainous Districts and Outlying Islands Requiring Treatment for Serious or Emergency Illnesses or Injuries," persons deemed stable enough to arrange their own travel, subsidies are provided to cover half of the expenses of air (or sea) transportation for up to four times yearly. If a physician confirms the necessity for continued treatment, such subsidies can now be provided for up to six journeys. Subsidies are also available to cover the transportation expenses for accompanying medical personnel in cases of aeromedical evacuation.

Section 3 Training and Retaining Staffs

To ensure a more equitable allocation of medical resources in remote districts, since 1969 the MOHW has trained health workers through the "Plan for the Training of Medical Personnel for Aboriginal Communities and Outlying Islands." Through 2016, 949 health workers received training under this program, including 511 doctors and 438 other medical personnel. In 2016, 12 of 14 (85.71%) government-sponsored doctors scheduled to move to remote communities to practice medicine fulfilled their obligation, including five doctors in aboriginal communities, six in Penghu and one in Kinmen. The historic retention rate of these physicians after their required period of service has been approximately 70%. To further encourage medical professionals to stay so these areas benefit from their services, the MOHW subsidizes health workers who want to open practices in underserved areas, and undergo further training. In 2016, the subsidies contributed to 11 new practices and advanced trainings for two health center employees.

Chapter 6 Healthcare for Specially Targeted Groups

Section 1 Healthcare for New Immigrants

1. In line with the prenatal examinations for Taiwanese citizens, recent immigrants who have not yet joined the NHI system can receive subsidies for 10 prenatal examinations, one Group B streptococcus screening, one ultrasound, and two prenatal healthcare guidance. New immigrants and their children are provided with health management cards, which offer guidance in the areas of family planning, breastfeeding, prenatal health, prenatal examinations, and prenatal nutrition. In 2016, the utilization rate for these cards was 99.49%.

2. To protect the reproductive health of new immigrants who have not yet joined the NHI system, since 2011 subsidies for prenatal examinations have been provided to foreign spouses of Taiwanese citizens. In 2016, approximately 12,522 patients received such subsidies valuing around NT$6,014,907.

3. The MOHW has been implementing the "Plan for the Provision of Reproductive Health Interpreters for Foreign Spouses of Taiwanese Citizens." Local county and city Public Health Bureaus train interpreters to assist in the providing reproductive health information. In 2016, 226 health centers in 17 counties and cities participated in this program training 350 interpreters.

4. To provide reproductive health information more effectively to people from diverse backgrounds, in 2016 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.

Section 2 Healthcare for Rare Disease Patients

1. As of 2016, Taiwan has officially identified 215 rare diseases, along with 98 drugs for treating them and 40 nutritional supplements for use in relation to them. Rare diseases have also been formally reclassified as "serious diseases," thereby increasing assistance for these unfortunate patients.
2. A distribution center for nutritional supplements and drugs for treating patients with rare diseases has been established; in 2016, the center supplied drugs and nutritional supplements to rare disease on 1,380 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. In 2016, subsidies were provided on 877 occasions.
3. Taiwan has established 14 medical centers specializing in reproductive genetics counseling centers which specialize in hereditary and rare diseases, reproductive genetics services (including prenatal genetics testing, neonatal screenings, and hereditary disease examinations, and genetics counseling). In addition, a reproductive genetics counseling website has been set up to provide information about hereditary and rare diseases.
4. Strengthening Rare Disease Prevention Education: In 2016, 20 advocacy activities were held for patients, patient groups, businesses, and healthcare institutions.
5. In 2016, in accordance with the "Prevention of Rare Diseases and Orphan Drug Act," the MOHW formulated subsidy methods for international medical cooperation projects for rare diseases; incentives and subsidies for rare disease control; and care and service methods for rare diseases and anomalies associated with rare genetic disease.

Section 3 Groups with Special Health Needs

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

(1) In 1979, while a food manufacturer was processing rice bran oil, polychlorinated biphenyl (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. City and county health departments conducted follow-up visits, health education, and health referrals. 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 second-generation Yu Cheng patients exempt from NHI co-payments 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. A November 16, 2016 amendment revised 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 2016, there were a total of 1,854 registered Yu Cheng patients, including 1,270 first-generation patients and 584 second-generation patients. In 2016, there were a total of 19,173 instances of subsidies being provided to cover Yu Cheng patient outpatient(and emergency) service co-payments, and 111 instances of subsides being provided to cover inpatient co-payments. There were also 5.55 instances of free health examinations being provided to Yu Cheng patients, and 128 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 for Hansen's disease patients to provide high-quality care for these patients.

(2) As of the end of December 2016, five hospitals have been designated to diagnose and treat 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 the highly active antiretroviral therapy (HAART) for free to patients. Highlights of the MOHW's efforts in 2016 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 2016 the MOHW assisted with the handling of seven complaints. Additionally, to guarantee the right to education of HIV patients, in 2016 the MOHW fined National Defense University NTD1 million for expelling a student due to his HIV status. The university has since appealed the fine, and litigation is ongoing.

(2) Health and Care

a. As of the end of 2016, 62 hospitals in Taiwan are designated for the treatment of HIV/AIDS. 92% of new HIV patients receive treatment within three months of diagnosis, with 84% receiving medication; 88% of HIV patients do not go on to develop AIDS.

b. In order to strengthen health self-management among HIV/AIDS patients, in 2007 the MOHW launched an HIV case management plan. In 2016, 60 hospitals designated for the treatment of HIV/AIDS participated in this plan by providing health education and consultation services. The cumulative total of cases is 25,608.

c. Local Public Health Bureaus (and health centers) and case managers have tracked patients to urge them to seek regular treatment. It has also strengthened the provision of consultation, examination and tracking services for partners of HIV/AIDS patients.

d. Subsidies are provided to NGOs that assist with HIV patient care, treatment arrangements, emergency accommodation, and provision of case management services. In 2016, placement was offered in 451 cases, and case management services were provided to 405 patients.

5 Long-Term Care Services

The population in Taiwan is rapidly aging, leading to a steady increase in the number of people in needs of long-term care services. In order to build a comprehensive long-term care system, the MOHW launched the National Ten-year Long-Term Care Plan in 2008 (hereafter referred to as "Long-Term Care Plan 1.0").

With the aging of the population and with the diversification of demand for care services, Taiwan has been faced with the need to provide long-term care for growing numbers of people with physical or cognitive disabilities. Taiwan needs to put in place a wide range of integrated services that extend from family support to home care, community care and residential care, along with the establishment of community-based long-term care service networks. With this in mind, in 2016 the MOHW undertook planning for the National Ten-year Long-Term Care Plan 2.0 (hereafter referred to as "Long-Term Care Plan 2.0"). An integrated community care service network was launched in November 2016, and formal implementation of the Long-Term Care Plan 2.0 began in January 2017, with the aim of meeting the long-term care needs of Taiwan's aging population.

The objectives of the Long-Term Care Plan 2.0 are as follows: At the front end, optimizing the primary preventive function, integrating preventive healthcare, promoting active ageing, and slowing down the determination of cognitive impairment, and enhancing the health and wellbeing of senior citizens and improving their quality of life. At the back end, providing multi-function community-based services, and integrating these services with home-based palliative care to ease the stress suffered by family members and reduce the care burden. In addition to implementing pilot projects and developing innovative services, the MOHW is also working to build a community-based healthcare teams network, and is expanding the scope of service provision to include hospital discharge planning services, home-based medical care, etc. Key work items include increasing the flexibility of existing Long-Term Care Plan 1.0 services, expanding the number of target service recipient categories from 4 to 8, and expanding the number of service items from 8 to 17. For more detailed information, see Table 5-1.

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 January 26, 2017. In order to expand the funding sources for long-term care provision, Article 15 of the Act was revised to add Estate Tax, Gift Tax and Tobacco Tax as designated funding sources for long-term care. In addition, in order to help ensure that existing long-term institutions can continue to operate, Article 22 of the Act has been revised to stipulate that residential long-term care institutions that were established prior to the coming into effect of the Act are exempted from certain juristic person status requirements, except in the case where such an institution expands or relocates. Article 62 of the Act has also been revised, so that long-term care institutions that were authorized to provide long-term care services under other legislation prior to the coming into effect of the Act may continue to operate pursuant to other legislation, and are exempted from the requirement to restructure and obtain a new operating permit within five years of the coming into effect of the Act. The purpose of these revisions is to strengthen the development of the integrated community-based care network provided for by Long-Term Care Plan 2.0.
2. Sub-statutes for which the Long-Term Care Services Act serves as the enabling statute: In line with the coming into effect of the Long-Term Care Services Act on June 3, 2017, a total of one statute and eight sub-statutes have been drawn up with the Long-Term

Table 5-1 Comparison of Target Service groups and Service Items Under Long-Term Care Plan 1.0 and Long-Term Care Plan 2.0

	Long-Term Care Plan 1.0	Long-Term Care Plan 2.0
Target Service Recipients	01.Senior citizens aged over 65 02.Mountain Indigenous people aged over 55 03.Citizens aged over 50 with mental or physical disability 04. Living-alone senior citizens 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:** 05. People with dementia (aged 50 and over) 06. Plain Indigenous people with functional limitations (aged 55-64) 07. Citizens aged under 49 with mental or physical disability 08. Frail senior citizens aged over 65 who only require assistance with Instrumental Activities of Daily Living (IADLs)
Service Items	01. Care services (including home care, day care, and forster careforster care) 02. Transportation services 03. Nutrition meals for the elderly 04. Assistive device purchase/ rental and residential barrier-free environmnt improvements 05. Home nursing care 06. Home/community-based rehabilitation 07. Respite care services 08. 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:** 09. Dementia care services 10. Integrated services for communities in Indigenous districts 11. Small-scale multifunction services 12. Support service centers for family caregivers 13. Integrated community care service networks (with the establishment of integrated community 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

Care Services Act as the enabling statute: (1) Long-Term Care Institutions Statute; (2) Implementation Rules for the Long-Term Care Services Act; (3) Measures Governing Long-Term Care Institution Accreditation; (4) Measures Governing Long-Term Care Service Personnel Training, Certification, Continuing Education and Registration; (5) Measures Governing Incentives to Stimulate the Development of Long-Term Care Service Resources; (6) Standards for the Establishment of Long-Term Care Institutions; (7) Measures Governing the Authorization and Management of Long-Term Care Institution Establishment; 8) Measures Governing Review of Applications by Long-Term Care Institutions to Lease Publicly-owned Real Estate Property; (9) Measures Governing Supplementary Training for Foreigners Employed as Home Carers.

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.

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

1. An intensive care management model will be utilized for the allocation of care manager, while taking into account the disparities between urban and rural areas in terms of workforce availability and service capabilities. In principle, the caseload for each care managerr is 200 recipients, and one supervisor for every seven care managerrs. In addition, in order to strengthen the service provision capabilities of care management personnel, starting from 2017 one administrative assistant will be allocated for every 10 care managerrs and supervisors. The MOHW has already approved the employment of a total of 971 care management personnel at counties and cities throughout Taiwan, up from 618 in 2016 (the total of 971 personnel includes 439 care managers, 73 care management supervisors, and 106 administrative assistants).

2. Adjustment of care manager pay grades: The number of care manager pay grades has been expanded from three to seven (ranging from 280 points/NTD33,908 per month to 376 points/NTD45,534 per month), with the aim of attracting and retaining high-quality personnel.

3. To improve care manager training and respond effectively to the increase in the range of different categories of care recipient and types of care service, the MOHW is considering expanding the scope of training to include policy issues, practical assessment, local cultural diversity, etc., so as to enhance care manager's professional capacity.

Section 3 Service System and Resource Development

1. Constructing the comprehensive community care service system: 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. In 2016, 146 organizations in 20 counties and cities worked together to establish 17 integrated community service centers, 44 hybrid service centers, and 85 neighborhood long-term care stations ("17A-44B-85C").

2. Development and Deployment of Service Resources:

(1) Raising service utilization rates: There has been pronounced growth in long-term care service items since 2008; in the case of day care, forster care, home nursing care, community-based and home-based rehabilitation services and respite care, service provision has increased more than ten-fold (Table 5-2).

(2) Speeding up Resource Deployment:

a. The overall rate of growth in service resources has been highest in the day care sector, where the number of day-care centers has grown 6.6-fold, from 31 centers in 2008 to 205 centers in 2016 (Table 5-3).

b. As of the end of December 2016, the number of institutional care facilities for elderly persons in Taiwan had risen to 1,082 institutions, and the total number of beds available nationwide had reached 61,082 (Table 5-4).

c. As of the end of December 2016, the number of nursing homes in Taiwan had risen to 508 homes, and the total number of beds available in nursing homes nationwide had reached 39,002 (Table 5-5).

Table 5-2 Number of Persons Receiving Long-Term Care Services, 2008 - 2016

Unit: people

Item	2008	2009	2010	2011	2012	2013	2014	2015	2016
Home Care	22,305	22,017	27,800	33,188	37,985	40,677	43,331	45,173	47,134
Day Care (including day care centers for people with dementia)	339	618	785	1,213	1,483	1,832	2,344	3,002	3,663
Forster care	1	11	35	62	110	131	146	200	210
Assistive device purchase/rental and residential barrier-freehandicap-friendly environment improvements(instances)	2,734	4,184	6,112	6,845	6,240	6,817	6,773	7,016	9,663
Nutritious Meals for the Elderly	5,356	4,695	5,267	6,048	5,824	5,714	5,074	5,520	7,279
Transportation Services (instances)	7,232	18,685	21,916	37,436	46,171	51,137	54,284	57,618	59,588
Long-Term Care Institutions	1,875	2,370	2,405	2,755	2,720	2,850	3,127	3,426	4,104
Home Nursing Care	1,690	5,249	9,443	15,194	18,707	21,249	23,933	23,975	22,359
Home-based/ Community-based Rehabilitation	1,765	5,523	9,511	15,439	15,317	21,209	25,583	25,090	27,237
Respite Care	2,250	6,351	9,267	12,296	18,598	32,629	33,356	37,346	46,339

Note: 1. Figures for Assistive device purchase/rental and residential barrier-freehandicap-friendly environment improvements, as well as for transportation services, refer to the cumulative total number of people who received service over the year. Figures for other items indicate the number of people receiving service as of the end of December.
2. Figures for home nursing care, home-based/community-based rehabilitation and respite care services indicate the cumulative number of instances of service provision over the year.
3. Implementation of Assistive device purchase/rental and residential barrier-freehandicap-friendly environment improvements, as well as nutritious meals for the elderly and long-term care institutions, are dependent on the amount of budget allocated by individual county and city governments.

Table 5-3 Number of Institutions Providing Long-Term Care Services, 2008 - 2016

Unit: facility

Item	2008	2009	2010	2011	2012	2013	2014	2015	2016
Home Care	124	127	133	144	149	160	168	173	200
Day Care (including day care centers for people with dementia)	31	39	66	78	90	120	150	178	205
Forster care	4	16	23	16	17	20	22	21	25
Nutritious Meals for the Elderly	166	204	201	159	169	190	209	197	197
Transportation Services	31	42	43	39	43	42	41	41	40
Home Nursing Care	487	495	489	451	478	483	486	493	518
Home-based/ Community-based Rehabilitation	62	88	122	112	111	125	143	143	129
Respite Care	1,390	1,439	1,444	1,052	1,510	1,509	1,549	1,565	1760
Total	2,295	2,450	2,521	2,051	2,567	2,649	2,768	2,812	3,074

Note: Due to the adjustment of county and city governments planning and management of nutrition catering and transportation for the elderly, there is a decrease in the amount in the year of 2011 but not affect the overall service.

Table 5-4 Number of Elderly institutional care facilities and Residents, 2008 – 2016

Year	No. of (Institutions)	Long-term care beds	Nursing care beds	Beds for patients with dementia	Aged home beds	Total (Number of beds)	Actual number of residents (persons)	Occupancy rate (%)
2008	1,043	3,970	41,990	0	7,224	53,184	38,300	72.0%
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%

Source:Department of Statistics, MOHW

Table 5-5 Number of Nursing Homes and Residents, 2008 - 2016

Year	Number of Nursing Homes	Number of beds	Actual number of residents (persons)	Occupancy rate (%)
2008	347	21,461	18,416	85.8%
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%

Source: Data for 2008 – 2012 is from the Department of Statistics, MOHW; data for 2013 – 2016 is from the Department of Nursing and Health Care, MOHW.

3. Improving Long-Term Care Service Evaluation Tools and the Payments and Benefits Systems

To realize the vision of aging in place, the MOHW is building on the foundations established in Long-Term Care Plan 1.0 by formulating a new assessment tools for Long-Term Care Plan 2.0 as well as strategies for reforming the home care payments and benefits systems.

(1) Developing a new type of long-term care needs assessment instrument

a. In line with the expansion of service recipient groups and service items under Long-Term Care Plan 2.0, the MOHW has developed of mature assessment tools that can be used to evaluate the long-term care needs of different groups of service recipient, and to determine the amount of long-term care service payments. The assessment tools cover 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 of primary caregiver.

b. In order to ensure that assessment is standardized and consistent, the MOHW has completed the compilation of an assessment tools utilization handbook, which is used in combination with mobile devices (tablet PCs) to perform assessment; this will help to enhance care managers' professional capacity and sensitivity when assessing the long-term care needs of individual cases, and will help to ensure that people in needs receive appropriate care services.

(2) Packaged payment: To enhance overall service quality, the MOHW has planned the development of client-centered, integrated long-term care services, in which every individual' s long-term care needs are viewed as an integrated whole, rather than providing individual service items on a piecemeal basis. Systemetic reform and the adoption of new forms of information technology will be used to make the payment system fairer and more equitable, and support more efficient budgeting. Service provider management capabilities will be enhanced, with an expansion in long-term care resources, and citizens will be able to receive higher-quality services. The development of the long-term care services sector will be invigorated, ensuring that people receive appropriate care.

4. Care Services for People With Dementia

(1) Achievements in community-based services: To make community-based care services for people with dementia more widely available, the MOHW has provided funding support for the establishment of Community Service Stations for people with dementia. As of 2016, a total of 26 such Service Stations had been established; they had implemented a combined total of 4,323 health promotion activities (attended by 38,206 people), made 8,206 friendly visits, held 931 community awareness-raising activities (attended by 46,559 people), and implemented 1,410 family caregiver training and support group sessions (attended by 15,791 people).

(2) Strengthening community-based service capabilities for people with dementia: To make it easier for people with dementia to obtain care services close at hand, and to reduce the burden placed on family caregivers of people with dementia, Long-Term Care Plan 2.0 incorporates people with dementia who are aged 50 or over within the scope of care provision; to make it possible for people with dementia and their caregivers to obtain appropriate care close at hand, and to strengthen community-based service capabilities for people with dementia, the MOHW is planning to expand the establishment of Community Service Station for Dementia. In addition, in order to meet the care needs of people with dementia caregivers at different stages, the MOHW is implementing an innovative project that involves the establishment of Community-based support center of Dementia in counties and cities throughout Taiwan, to provide guidance and assistance for family caregivers, as well as information services, referrals and other supporting services; the Centers will help to coordinate medical resources and arrange the provision of relevant medical care services, while also promoting dementia health literacy and contributing to a safe and friendly community environment for people with dementia.

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 2016, funding support had been provided for the establishment of 47 Branch Offices, of which 21 were located in indigenous communities.

   Through the establishment of Long-Term Care Management Center Branch Offices, the MOHW aims to provide localized long-term care services, develop care management models and integrated long-term care networks that are suited to local conditions, and expand the long-term care resources available to individual communities, so as to facilitate the ongoing development of long-term care services in remote and disadvantaged districts.

Chapter 2 Workforce Development

Section 1 Care Worker Workforce

1. Improving pay levels: To encourage Taiwanese citizens to take up careers in the area of long term care services, and to improve care service personnel retention rates, besides providing supplementary pay for those care workers engaged in providing services to people with dementia (reflecting the special demands of providing care to persons with dementia) and supplementary pay for care workers who hold care worker vocational qualifications, the MOHW has also arranged for the provision of supplementary payments to compensate for the reduction in overtime pay resulting from the introduction of the new "One Fixed Day Off and One Flexible Rest Day" in Labor Standard Law, and for an increase in transportation subsidies for care workers working in remote districts. In addition, the MOHW has undertaken planning for a new home care service payment and reimbursement scheme, with the target of ensuring that care workers' monthly pay averages NTD32,000, so as to improve the actual amount of compensation that care workers receive.

2. Strengthening workforce cultivation: Recognizing the fact that many care service recipients are suffering from various forms of disabilities, home care and day-care units have been incorporated the introduction of disability into the care worker training curriculum, and consideration is being given to revising care worker training program content to include multi-level specialist classes in these areas, in order to meet the diversified needs for care.

3. Promoting collaboration and exchange between the private sector and universities: To cultivate the long-term care professionals that Taiwan needs and ensure that the private sector and universities can work together to create synergy through collaboration, universities are being encouraged to revise and adjust their curriculum modules, and to incorporate practical, hands-on training, so as to facilitate effective collaboration between universities and service providers.

4. Strengthening career development: Besides encouraging the promotion of care workers to care supervisor positions, starting from 2016 the MOHW has been promoting the implementation of the Care Worker Practical Instructor program, whereby care workers can be promoted to Care Worker Practical Instructors who visit homes to provide family caregivers with advice and guidance on care-giving techniques, thereby creating a more diversified range of career opportunities for care workers. Planning has also been undertaken for the provision of guidance to help experienced care workers take up

managerial positions at care providers, or set up their own care businesses as "care bosses."

5. Enhancing care workers' professional image: On November 29, 2016, the MOHW held a Care Worker Experience Sharing Event, supported by the production of a short film and the effective utilization of various promotional channels, to give the general public a better understanding of the importance of care services and of the high level of professional expertise required, so as to enhance the professional image of care workers and attract more people from different age groups into the profession.

Section 2 Social Workers and Medical Professional Workforce

Social workers specializing in long-term care provision play a key role in building a comprehensive long-term care system. To ensure that the long-term care service workforce cultivation program is consistent, ongoing and comprehensive, the MOHW has completed planning for various different categories of long-term care workforce training courses, classified into three levels: Level I (basic courses), Level II (advanced courses), and Level III (integrated courses). On July 12, 2013, the MOHW promulgated a new Level II curriculum for long-term care social worker training, and notified municipal, county and city governments of the new curriculum, asking them to spread awareness of and proactively promote it.

Given that difficulty in recruiting and retaining long-term care workforce is a common problem all over the world, it is anticipated, on the basis of workforce availability forecasts, that during the period of 2016 – 2026 Taiwan will experience shortages of nursing staff, physicals therapists and occupational therapists, and that these shortage will become more pronounced over time. To expand the availability of long-term care workforce and encourage more people with the necessary skills to develop careers in long-term care, the MOHW has been working together with local government authorities and medical sector professional organizations to expand the scope of workforce cultivation initiatives.

The state of cultivation of the various categories of long-term care social workers and related medical professions is shown in Table 5-6.

Table 5-6 Number of Long-Term Care Social Workers and Related Medical professions Receiving Training Over the Period of 2011 - 2016

Unit: people

Type	Level Ⅰ	Level Ⅱ	Level Ⅲ	Total
Social workers	2,213	1,373	0	3,586
Physicians	3,528	4,137	517	8,182
Nursing staff	14,087	10,235	2,769	27,091
Physical therapists	1,268	887	432	2,587
Occupational therapists	821	257	199	1,277
Pharmacists	1,443	630	333	2,406
Nutritionists	836	433	309	1,578
Respiratory therapists	347	182	119	648
Other medical personnel	532	128	31	691
Total	25,075	18,262	4,709	48,046

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 care-givers. 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 Communication

(1) Long-Term Care Plan 2.0 policy presentations: Over the period August – November 2016, Long-Term Care Plan 2.0 policy presentations were held in counties and cities throughout Taiwan, providing an opportunity to listen to the suggestions of individual county and city governments, local elected officials, community leaders, experts, academics, local service providers, representatives of civic organizations, etc., which will provide a useful reference for the implementation of Long-Term Care Plan 2.0. A total of 22 presentations were held around the country, with approximately 7,000 people attending.

(2) Constructing the comprehensive community care service system consensus-building activity: On November 6, 2016, a group of approximately 150 people, including representatives of the nine county and city governments that have agreed to implement the integrated community care system on a trial basis, as well as members of the "ABC Service Teams," attended a consensus-building activity at which they engaged in in-depth discussion of the already-launched long-term care "ABC" operation model, with the aim of strengthening consensus, developing practical approaches, and providing a reference for the extension of this service model in the future.

(3) Policy communication forum: In order to encourage more community organizations to establish class "C" neighborhood long-term care stations, four Long-Term Care Plan 2.0 and Community-based Long-Term Care System Forums were held in different parts of the country. In addition, in order to canvas the views of people living in indigenous communities regarding their experience of service usage, and develop a better understanding of their needs and views regarding the Long-Term Care Plan 2.0 and Community-based Long-Term Care System, a further five Forums were held in indigenous communities in different parts of the country.

2. Promotion Activities

(1) Online voting activity to choose a logo for long-term care service: With the aim of making it easier for members of the public to recognize long-term care service facilities in their neighborhood, a total of four service facility logo designs were created and uploaded onto the MOHW's long-term care Facebook page. Through the combination of an online voting activity open to all Taiwanese citizens and evaluation by a panel of experts, one of the four logo designs was chosen to serve as a logo to be placed in an obvious location on all long-term care service facilities. The online voting activity, which took place between October 6 and October 20, 2016, attracted over 17,000 participants.

(2) Long-Term care service facility signage activity: To ensure that citizens who need to use long-term care service facilities are aware of their existence, can find them, and can use them, the MOHW has been working together with county and city governments to arrange for the hanging and posting of proper signage on buildings that house long-term care service facilities. As shown in Figure 5, signage installation has been completed at nearly 1,800 individual service facilities.

Figure 5
Long-Term Care Service Facility Signage

3. Communication Via the Mass Media

(1) Long-Term Care Plan 2.0 Scheduled Press Conferences: Over the period of September – December 2016, a total of 12 scheduled Long-Term Care Plan 2.0 press conferences were held, with the aim of using media reports on Long-Term Care Plan 2.0 to enhance the general public's understanding of Long-Term Care Plan 2.0, and strengthen their awareness of long-term care issues. In addition, live-streamed content on the MOHW's Facebook page was viewed over 60,000 times, reaching over 220,000 people.

(2) Advertising and promotion in print media: Advertisements and articles relating to Long-Term Care Plan 2.0 were published in newspapers, journals and magazines, and brochures presenting an overview of Long-term Care Plan 2.0 were printed and distributed to relevant organizations (in addition, large quantities of these brochures were distributed to county and city government long-Term care management centers so that members of the public could access them easily).

(3) TV broadcasts and outdoor advertising: Two Long-Term Care Plan 2.0 promotional films were made (one presenting a general introduction to Long-Term Care Plan 2.0, and one providing more detailed information). The Department of Information Services, Executive Yuan arranged for these films to be shown as a public service on six TV channels: CTV, CTS, TTV, FTV, Hakka TV and TITV. Copies of these films were also distributed to government agencies at all levels and to MOHW subordinate agencies, etc., to be shown on the video walls in waiting rooms, etc.

(4) Promotion using online media: Various types of Long-Term Care Plan 2.0 communication materials and promotional films have been posted on the Long-Term Care Policy Topics section of the MOHW website and on the MOHW's Facebook page; the relevant section of the MOHW's Facebook page has over 40,000 Facebook followers.

(5) Long-Term Care Hotline (412-8080): The MOHW has established a Long-Term Care Hotline (412-8080) to arrange help in cases where families have elderly relatives who are no longer able to look after themselves because of age, illness or disability. The Hotline operatives will put callers in touch with their local county/city long-Term care management center, which can provide them with relevant information.

Section 2 Service Quality

In 2016, a total of 134 elderly welfare institutions 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 private-sector organizations, and non-profit elderly welfare institutions. As regards the accreditation evaluation results, 16 institutions (11.9% of the total) were rated as Outstanding, 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).

In order to enhance the quality of care services provided at nursing homes, nursing home accreditation evaluation has been performed in accordance with the Nursing Personnel Act and the Regulations Governing Accreditation of Nursing Homes. Over the period of 2014 – 2016, a total of 489 nursing homes have completed accreditation evaluation, of which 466 (95.30% of the total) were found to be in conformity with requirements, and 23 (4.70%) were non-conforming.

In 2016, a total of 149 nursing homes underwent accreditation evaluation, of which 133 (89.3% of the total) were found to be in conformity with requirements, and 16 (10.7%) were found to be non-conforming (i.e. rated either C or D). For details of the accreditation evaluation results, see Table 5-8.

Table 5-7 2016 Elderly Welfare Accreditation Results

Level	The number of elderly welfare institutions	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	

Table 5-8 2016 Nursing Home Accreditation Results

Level	The Number of the nursing homes	Percentage(%)	Passing rate(%)
Excellent	13	8.7	89.3
A	35	23.5	
B	85	57.1	
C	12	8.0	
D	4	2.7	
Total	149	100.0	

6 Communicable Disease Control

Managing communicable diseases requires disease surveillance, outbreak investigation, 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 Taiwanese people.

Chapter 1 Overview of 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 contagious disease prevention and control. In 2016, 1 new regulation was formulated and amendments were made to 13 regulations and ordinances (including legally-binding announcements), as shown in Table 6-1.

2. Administrative Framework for Communicable Disease Control

   The Centers for Disease Control, Ministry of Health and Welfare are responsible for the formulation and review of communicable disease control policy; and, have established 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

   The Centers for Disease Control (CDC) are responsible for laboratory testing and research relating communicable diseases in Taiwan and have established a comprehensive service network for the inspection of communicable diseases.

   Besides 12 CDC laboratories, there are 272 certified institutions, 1 appointed RG4 institution for communicable disease testing, 8 contracted laboratories for enterovirus/influenza testing, and 8 contracted laboratories for tuberculosis testing.

   Furthermore, 9 institutions have been designated as testing centers for reported cases of Zika. Meanwhile, the "Guidelines for the collection of specimens for the communicable diseases" and the "Quality Management Plan for transportation of specimens of general communicable diseases" have been formulated to ensure the quality and safety of the 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 information from central and local government agencies and other institutions. The collected information serves a reference to support comprehensive outbreak response efforts. 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

Table 6-1 List of Revised Regulations Issued in Relation to Communicable Diseases, 2016

Date of Amendment	Name of Regulation / Legal Order	Objective of Amendment
January 22 February 2,April 1 ,May 27	Categories of Communicable Diseases and Prevention Measures for Category IV and V Communicable Diseases	4 revisions were made: 1. Inclusion of Zika as a Category II Communicable Disease, and subsequent reclassification as a Category V Communicable Disease. 2. Inclusion of congenital syphilis as a Category III Communicable Disease. 3. Revision of the specified corpse disposal measures for novel influenza A virus infections (a Category V Communicable Disease).
April 1	Implementation Regulations Governing Materials for Communicable Disease Control and Establishment of Resources	The revision dictates that the local competent authority will determine what constitutes the appropriate level of stockpiled disease prevention material for the local healthcare facilities is.
April 13	List of notifiable infectious diseases under Article 19 of the Emergency Medical Care Law.	Revision of the list of communicable diseases.
April 26	Regulations Governing Incentives for the Control of Communicable Diseases	The provision of the Regulations stipulating that people who voluntarily report themselves to the competent authorities for dengue fever screening, and are confirmed to have contracted dengue fever can obtain a monetary reward was deleted.
July 6	Implementation Rules for the Communicable Disease Control Act	Revisions were made to achieve a higher level of integration among the different provisions of the Communicable Disease Control Act, the interpretations of the Act, and practical needs.
July 7	Regulations on Implementation of Communicable Disease Surveillance and Alert Systems	The case reporting regulations for the communicable disease surveillance and alert systems, and populous institution surveillance and alert system were revised.
July 8	Regulations Governing Implementation and Inspection of Infection Control Measures in Long-term Care Institutions	1. Formulated in accordance with the scope of authorization specified in Paragraph 3, Article 33 of the Communicable Disease Control Act. 2. The Regulations stipulated that long-term care organizations (institutions) and places are required to collaborate with the competent authority on infection control matters
July 19	1. Regulations Governing Operation of the Communicable Disease Control Network 2. Regulations Governing Inspection and Implementation of Infection Control Measures in Healthcare Institutions 3. Regulations Governing Reporting by Medical Personnel upon Detection of HIV Infections	The term "infection control" was replaced with the term "infection management."
November 2	Centers for Disease Control, MOHW Fee Standards for Biological Products	The scope of application of the Fee Standards, the categories of biological products covered by them, the biological products supply list, and the amount of fees charged were revised.
November 22	Regulations Governing Management of the Health Examination of Employed Aliens	In response to the revision of Article 52 of the Employment Services Act, which was promulgated on November 3, 2016, the section of the Regulations governing the timing of Category 2 Alien Health Inspections was revised.
November 30	Regulations Governing Subsidies for Treatment Expenses of HIV-infected Persons	Category 3 Aliens residing legally in Taiwan were made eligible for subsidies for HIV treatment expenses.
December 13	Regulations Governing Handling of Biological Hazards	Revisions were made to better manage biological hazards in line with the implementation of Taiwan's hazardous materials policies.

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 CECC. Taiwan is divided into six regional communicable disease medical networks and each is headed by a director and a deputy director. When 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 2016 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

Figure 6-1 National Response Framework for Communicable Disease Control

Central	National Health Command Center (Established at Taiwan CDC) ↑ Command ↓	1. A platform for prompt consolidation and analysis of epidemic information 2. Diversified communication system for real-time information on the epidemic situation. 3. IHR Focal Point facilitate exchange of domestic and foreign epidemic data 4. Depending on the domestic and foreign 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 Southern: 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. The CDCMN consists of six regions. 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 government health bureau	1. Conducting local communicable disease control efforts. 2. Local officials shall establish local epidemic command centers depending on the epidemic situation

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 are also collected from NHI databases and from death records. Varied systems are used to gather and analyze information relating to domestic and international outbreak situations to better monitor outbreak.

2. Integration of Disease Reporting Systems: In 2016, cross-ministerial checking of data began to materialize with integration of disease data 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. These integration efforts hopefully will enhance the overall effectiveness of disease surveillance.

3. Investigation of Outbreaks: authorities must examine a sudden unexplained rise in the incidence of a disease. In 2016, the MOHW investigated 668 suspected disease clusters.

Chapter 2 Control of Major/ Emerging Communicable Diseases

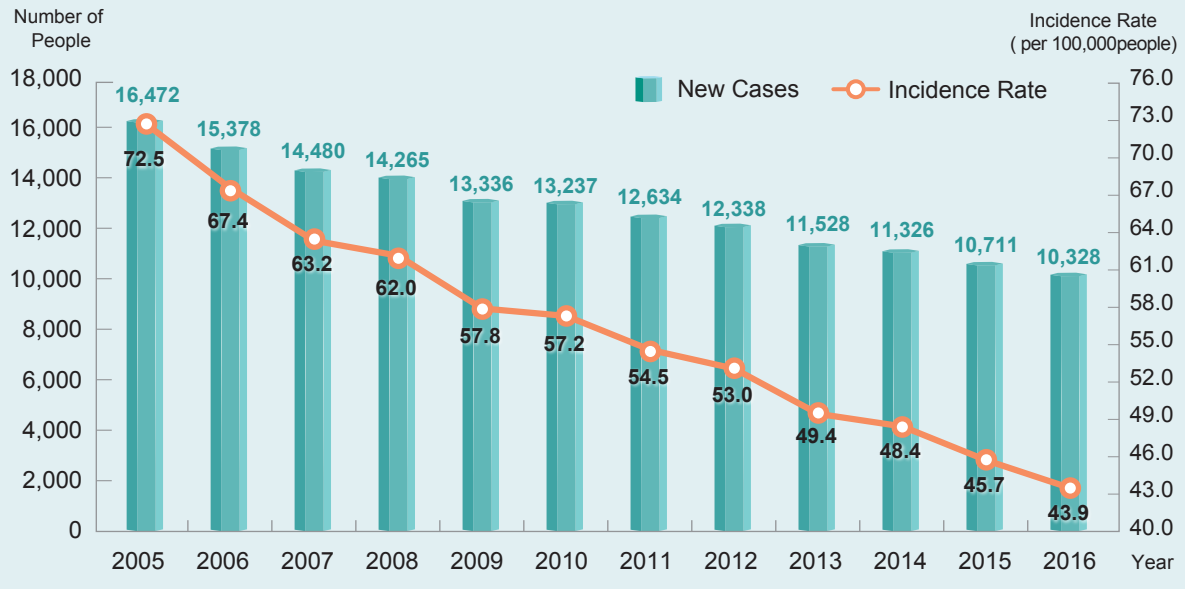
Section 1 Tuberculosis

Since 2006, the MOHW has been implementing the National Mobilization Plan to Halve TB within 10 Years. In 2016, the MOHW began implementing the First-stage Plan to help the WHO to Eradicate Tuberculosis by 2035. The MOHW has introduced new diagnostic techniques, new drugs, and the Short-Course Tuberculosis Treatment program that has succeeded in boosting the scope of coverage of latent tuberculosis infection treatment. The results achieved, are outlined below:

1. In 2016, the number of confirmed cases of tuberculosis was 10,328, representing a national TB incidence rate of 43.9 cases per 100,000 people. Since 2005, the incidence rate has fall of 40% (Figure 6-2) indicating currently Taiwan has an effective TB control strategy.

2. More than 98% of the patients who tested positive for TB have participated in the Directly Observed Treatment, Short-course (DOTS) program.

Figure 6-2 Reported TB Cases, 2005 - 2016



Source: Centers for Disease Control, MOHW

3. From 2014, patients treated under a dedicated medical treatment and care system for multidrug resistant TB (MDR-TB) had a 24-month treatment success rate of 73.9%.

4. Improved transmission investigation has led to an average of 10 transmissions investigated for each confirmed TB case.

5. A Latent TB Infection Treatment (LTBI) Program has been implemented in conjunction with the Directly Observed Preventive Therapy (DOPT) program; In 2016, the number of people undergoing LTBI testing doubled compared to 2015; and 6,739 people, about 70% of those tested, began an LTBI treatment program.

6. To actively identify TB cases, the MOHW has been conducting nationwide TB screening via mobile chest X-ray vans leading to 332 diagnosed cases in 2016.

7. Routine HIV screening is provided for TB patients aged between 15 and 49. In 2016, the HIV detection rate among this target group was 94%.

8. A MOHW delegation attended the 47th Union World Conference on Lung Health in the U.K., with a member of the delegation chairing the panel discussion on tuberculosis treatment.

9. Taiwan hosted the APEC Conference on Prevention, Control and Care for MDR-TB, and Supply of 2nd-Line Anti-TB Drugs, which provided an opportunity for exchange with other Asia-Pacific Economic Cooperation (APEC) members that may contribute to TB-prevention efforts.

Section 2 Communicable Disease of the Enteric Tract

1. Enterovirus

   There were 33 cases of severe enterovirus infection in 2016, including 1 death. The death rate was 3.0%, lower than the 10-year average.

2. Hepatitis A

   There were 1,133 confirmed cases of Hepatitis A in 2016 (including 80 imported cases and 1,053 indigenous cases); this was the highest total in recent years (Figure 6-3). 59% of the infected persons were also infected with HIV, syphilis or gonorrhea; homosexual activity represented the main risk factor. To help keep this disease under control, in 2016 the MOHW launched a new Hepatitis A vaccination program aiming to inoculate that all people in high-risk groups, including people who are have been in contact with people infected with Hepatitis A, HIV, syphilis and/or gonorrhea.

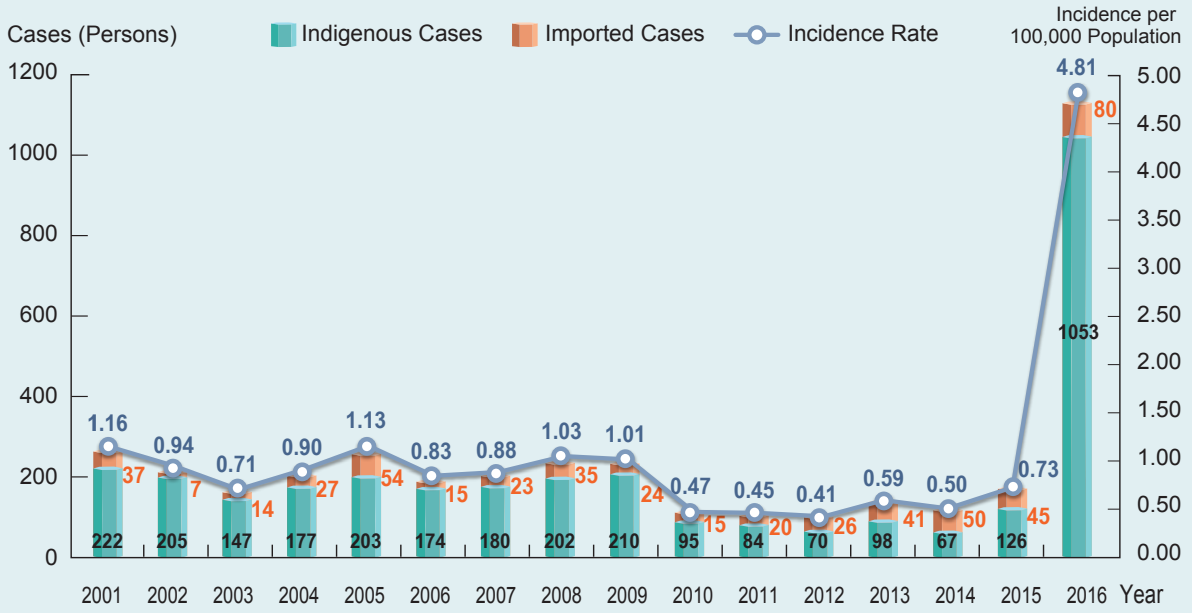
Section 3 Vector-borne Communicable Diseases

1. Dengue Fever

   In 2016, there were 743 confirmed cases of dengue fever, including 380 indigenous cases and 4 deaths. From May onwards, there were only 8 indigenous cases reported during the summer months--the lowest figure in 10 years. In other words, the MOHW's prevention measures appeared to be effective. 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:

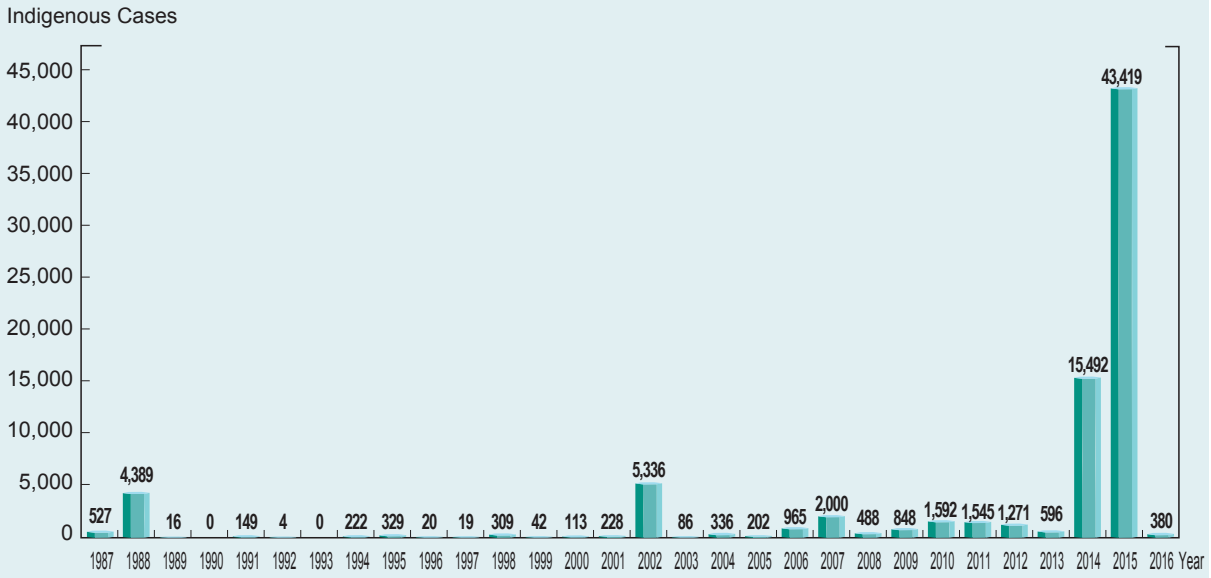
(1) Every month, the Ministers of the MOHW and the Environmental Protection Administration (EPA) attend the Executive Yuan Coordination Meeting Regarding the Prevention of Major Mosquito-borne Communicable Diseases. This meeting intends to strengthen communication between the central government and local government agencies concerning the prevention of vector-borne communicable diseases.

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



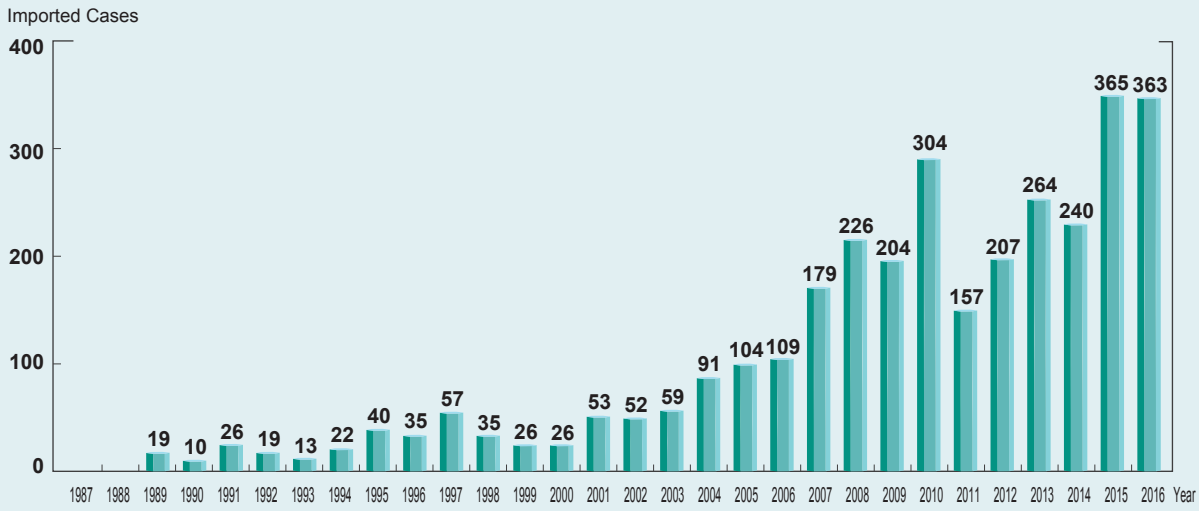
Source: Centers for Disease Control, MOHW

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



Source: Centers for Disease Control, MOHW

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



Source: Centers for Disease Control, MOHW

(2) The restrictions on application of the dengue fever NS1 antigen test have been relaxed to strengthen identification of dengue cases. The test is now available to all patients regardless of the severity of the disease symptoms and their residence.

(3) The National Mosquito-borne Diseases Control Research Center was established to develop new technology for the prevention of mosquito-borne diseases.

2. Zika Virus Disease

In February 2016, the World Health Organization (WHO) announced that Zika virus disease constituted a Public Health Emergency of International Concern (PHEIC). Taiwan responded immediately by setting up activating the Central Epidemic Command Center (CECC). Thanks to the implementation of effective strategies in terms of epidemic prevention resource preparedness, border quarantine control, health education, strengthening of healthcare and laboratory testing capacities, elimination of vector breeding sites and vector-borne disease control effort review, Taiwan achieved impressive results in Zika prevention. Following the first imported case in January 2016, there were only 13 more imported cases throughout 2016, none of which led to the spread of the disease within Taiwan.

Section 4 Communicable Diseases Transmitted by Blood or Body Fluids

1. HIV/AIDS

Between 1984 and the end of 2016, there were a cumulative total of 33,423 reported cases of HIV among Taiwanese nationals. Of those infected, 15,418 developed full-blown AIDS, which led to 5,569 deaths. In 2016, there were 2,396 new infections, 93.8% of which contracted the disease through sex. 84.9% of whom were men who became infected through homosexual sex. The main prevention strategies implemented in 2016 and their results are outlined below:

(1) In order to reinforce HIV prevention efforts targeting male homosexuals, the MOHW has continued to commission the operation of five community centers for homosexuals,

which provide special clinics, and testing services. Additionally, social media are being used to provide health advices that may reach around 10,000 people every month. Public opinion surveys have shown that over 80% of people aged 15-49 now have an accurate understanding of HIV prevention.

(2) The MOHW has been implementing the "Intravenous Drug User HIV Prevention Plan." 159 medical care institutions throughout Taiwan have been providing substitution therapy. The MOHW has commissioned 41 medical care institutions to implement the "Free, Anonymous HIV Screening and Consultation Plan." In September 2016, the MOHW began implementation of a new AIDS testing service whereby citizens can undertake oral-swab testing at home. 81 implementation stations and 23 automated service machines have been providing the oral-swab testing kits in 9 counties and cities. 4,812 people were tested. 2,249 of which reported the test results that returned 1% positive.

(3) In order to prevent vertical transmission of HIV, the MOHW implements a universal HIV screening program for pregnant women, and provides pre-exposure prophylaxis (PrEP). In 2016, the screening program detected six new HIV cases (past results are shown in Figure 6-6), but no vertical transmission case.

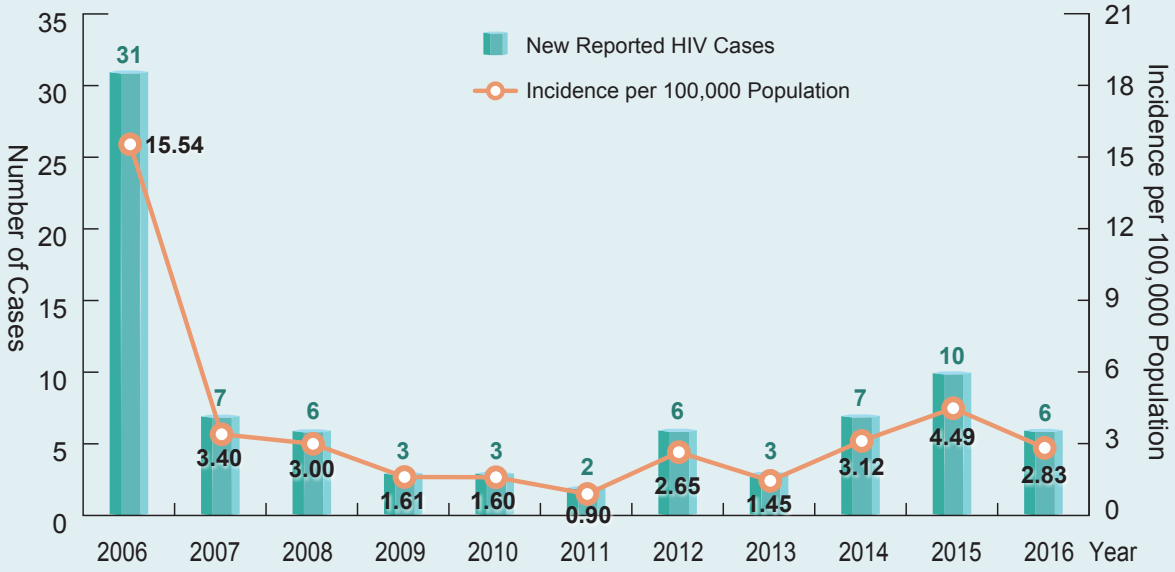
2. Hepatitis B and C

The numbers of confirmed cases of Acute Hepatitis B and Acute Hepatitis C in 2016 were 118 cases and 207 cases 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 Prevention

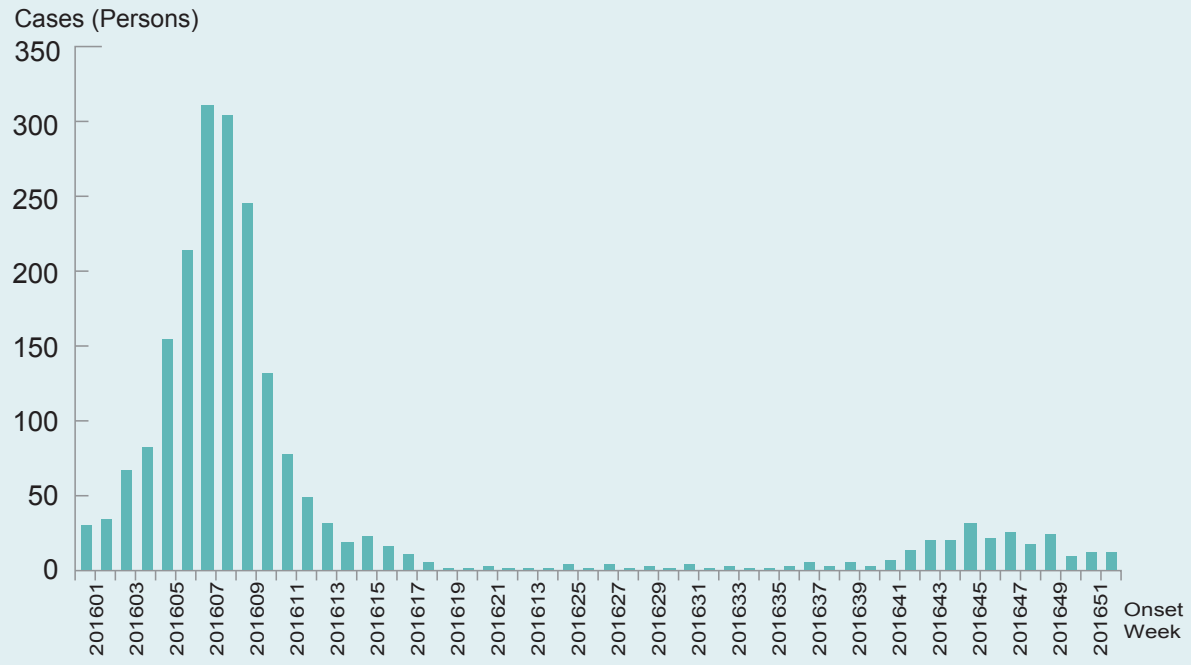
1. In 2016 there were 2,084 confirmed cases of influenza-related complications that resulted in 426 deaths--a mortality rate of 20.4%. The change in the number of flu cases over time is shown in Figure 6-7.

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



Source: Centers for Disease Control, MOHW

Figure 6-7 Confirmed Cases of Severe Complicated Influenza in 2016



Source: Centers for Disease Control, MOHW

2. An annual influenza vaccination program is launched in every October. Eight categories of people including preschool children aged over 6 months are covered. In December 2016, the coverage was expanded to include all citizens aged 6 months and older. The MOHW subsidizes the cost of vaccinations for all categories except group vaccinations in schools. In 2016, the MOHW purchased 6 million units of influenza vaccine, and completed all vaccinations within two and a half months. The percentage of Taiwan's population that received the influenza vaccination rose from 13% in 2015 to 27.4% in 2016.
3. In accordance with the Strategic Plan for Responding to Peak Periods for Influenza, the MOHW implemented rigorous monitoring of the infection rate. MOHW strengthens the quality of medical care available for acute cases, and ensures that resources can be deployed effectively. The agency has increased the number of locations at which subsidized immunization is available to over 3,700, and has increased the number people eligible for subsidized influenza antivirals.

Section 6 Control of Emerging Infectious Diseases

1. The MOHW completed the construction of hard and soft infrastructure for responding to major emerging infectious diseases. These efforts include the establishment of an emergency operation center to direct the operations of the command center. The MOHW has also referenced the rapid risk assessment guidelines formulated by the WHO and by the European Centre for Disease Prevention and Control (ECDC) to analyze how emerging infectious diseases in other parts of the world may impact Taiwan in order to ensure proactive actions.
2. In order to realize the MOHW's vision of "One Health" coordinated communicable

disease prevention, Taiwan has been working actively to secure participation in the Global Health Security Agenda (GHSA). The MOHW commissioned the Johns Hopkins University Center for Health Security (formerly the UPMC Center for Health Security) to conduct an external assessment of Taiwan's public health threat response capabilities using the WHO's Joint External Evaluation Tool (JEE Tool). Out of the 48 indicators covered by the assessment, Taiwan received a "Green Light" rating for 42 indicators, indicating Taiwan's public health threat response capabilities may be considered 90% effective. Taiwan thus became the 8th country in the world to undergo evaluation using the JEE Tool. Taiwan's results were announced to the international community at the Assessing Countries' Global Health Security Capabilities - An International Public Health Symposium held in the U.S., demonstrating our national capacity to tackle infectious diseases does meet the international standards.

3. Maintaining the core capacity requirements of the International Health Regulations (IHR) at designated ports of entry: On the basis of two external assessments of Taiwan's "Plan for the Establishment of IHR Designated Port of Entry Core Capacity Requirements," the MOHW has formulated a "Plan for Maintaining the IHR Designated Port of Entry Core Capacity Requirements" and submitted it to Taiwan's Executive Yuan for approval. Taiwan aims to maintain the core capacity requirements of all the 7 IHR Designated Ports of Entry, and improve the capabilities for monitoring emerging infectious diseases and risk assessment.

4. The MOHW held a conference on responses to suspected bio-terrorism incidents. Besides tabletop simulations and early-warning drills, the MOHW has put in place a bio-terrorism incident field communications system, and has formulated plans for the medium-term and long-term replacement of existing equipment.

5. Establishing an international exchange network and boosting Taiwan's international visibility

(1) Representatives from the MOHW were invited to attend the 2016 NCT CBRNe Asia Pacific conference in South Korea and the 2016 Third Nikkei Asian Conference on Communicable Disease in Japan as speakers and panel discussion participants.

(2) The MOHW arranged for communicable disease prevention personnel to participate in training in public health data analysis, influenza virus surveillance, vaccine manufacturing/storage standards, and communicable disease prevention preparedness systems in the U.S.

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

   In 2016, 25,227,784 people entered Taiwan. Of these, 25,286 were identified as symptomatic by the non-contact infrared thermometer diagnostic stations operated by the Centers for Disease Control (MOHW) at Taiwan's airports and seaports. Of those, 164 people were later confirmed to be infected with a notifiable communicable disease.

2. Prevention of Travel-Related Communicable Diseases

   Special travel clinics provide counseling to travelers regarding appropriate vaccines and preventive medication. In 2016, travel clinics at 26 contracted hospitals provided services to 20,063 patients.

Chapter 3 Communicable Disease Preparedness and Response, and Infection Control

The MOHW's Centers for Disease Control (CDC) 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 trainings and drills are also conducted to enhance preparedness.

Section 1 Pandemic Influenza Preparedness and Response

Pandemic influenza preparedness efforts are carried out pursuant to Phase III of the National Influenza Pandemic Preparedness Plan.

1. Stockpiling innovative epidemic prevention materials and enhancing the stockpile efficiency

(1) The MOHW has established a Level III Inventory Management System for anti-epidemic supplies: protective clothing, N95 masks, surgical masks, etc. In order to enhance the efficacy of stockpiled materials, the MOHW has established a central protective equipment circulation/replacement mechanism.

(2) Maintain 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 (from December 1 to March 31 of the following year).

(3) The MOHW continued to implement the voluntary vaccination program for A/H5N1. This effort has helped 6,604 people get vaccinated.

2. An inter-ministerial emergency response mechanism was established to better respond to an avian influenza outbreak in Taiwan.

(1) Utilizing the "Executive Yuan Coordination Meeting for the Prevention of Avian Influenza and Other Major Zoonotic Communicable

Figure 6-8 The Communicable Disease Control Medical Network

Region	Designated Hospital
North	Sinwu Branch, Taoyuan General Hospital, MOHW (34 isolation beds)

Region	Designated Hospital
Central	Taichung Hospital, MOHW (20 isolation beds)

Region	Designated Hospital
South	Tainan Hospital, MOHW (22 isolation beds)

Region	Designated Hospital
Taipei	Heping Fuyou Branch, Taipei City Hospital (29 isolation beds)

Region	Designated Hospital
East	Hualien Hospital, MOHW (7 isolation beds)

Region	Designated Hospital
Kaohsiung and Pingtung	PIngtung Hospital (9 isolation beds)

Note: In 2016, the total number of isolation hospitals was 134. In each region, there is one Designated Hospital and one Supporting Hospital, with supporting manpower allocated accordingly.

Diseases" as an inter-ministerial platform, the MOHW, the Council of Agriculture, the Coast Guard Administration and the Customs Administration have coordinated their efforts in combating avian influenza.

(2) The MOHW has been closely monitoring possible mutations in the avian influenza virus and the risk of poultry-to-human transmission. The MOHW has also supervised the culling of infected birds and the health surveillance of poultry farm workers by the local health authorities. No instances of new human infection were reported.

3. The MOHW has continued to monitor influenza viruses' 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 U.S. to provide a reference for vaccine strain selection.

Section 2 Nosocomial Infection Control and Laboratory Biosafety Management

1. In 2016, the MOHW established an antibiotic resistance management and reporting system. To monitor microorganisms that have resistance to antibiotics, the MOHW has also introduced a new "Statistical Data Analysis Reporting System for Laboratory Reporting of Clinical Isolate Antibiotic Susceptibility" and a feedback function. These measures have been implemented to facilitate effective use of the surveillance data, promote appropriate use of antibiotics and ensure implementation of appropriate infection control measures.

2. The MOHW has implemented infection control inspections targeting hospitals at the regional level and above. All of the 326 hospitals inspected were found to pass the inspection criteria. Furthermore, 297 long-term care institutions were also inspected, and 99.3% of them passed the inspection criteria.

3. The MOHW has continued to implement a diversified range of surveillance mechanisms with respect to drug-resistant microorganisms. These mechanisms have succeeded in detecting important drug-resistant strains such as Carbapenem-resistant Enterobacteriaceae (CRE) and Vancomycin-intermediate/resistant *Staphylococcus aureus* (VISA/VRSA).

4. The MOHW has continued to implement the national-level "Plan for Improving Care Quality in Invasive Medical Procedures." The MOHW has established a plan management center, and has designated 7 regional hospitals to cover the entire Taiwan. 45 additional hospitals were invited to participate in the plan. These hospitals have collaborated to implement care bundles invasive medical devices such as urinary catheters and CPAP devices. The participating hospitals have succeeded in reducing the incidence of device-related infections by over 10%.

5. Biosafety management

(1) Biosafety inspections were carried out at 19 biosafety level 3 (BSL-3) laboratories, one biosafety level 4 (BSL-4) laboratory, and 1 Animal Biosafety Level 3 (ABSL-3) laboratories.

(2) Hoping to strengthen laboratories' self-directed management capabilities,

guidance was provided to 12 high-protection laboratories and 21 laboratories related to biotechnology industry regarding the adoption of new laboratory biohazard management systems.

(3) 440 Taiwanese institutions that stockpiled or used Level 2 or above infectious agents. (Table 6-2)

Section 3 Research and Laboratory Testing

1. In 2016, the number of specimens sent to the diagnostic center for testing was

Table 6-2 Type and Number of Establishments in Taiwan with Biosafety Committees and Designated Biosafety Personnel

Type \ Category	Government Agencies	Medical Institutions	Academic Research Institutions	Other	Total
Biosafety Committee	19	146	56	213	434
Designated Biosafety Personnel	0	0	0	6	6

105,251. Of those, 10,360 were found to contain a pathogen or tested positive for a related antibody, yielding a positive rate of 9.8%.

2. The MOHW monitored or tested for 4,680 insect-borne infectious diseases, and successfully identified 13 imported Zika cases, thereby helping to stem the spread of the Zika in Taiwan.
3. The MOHW introduced 8 new emerging disease pathogen testing methods.
4. The MOHW has continued to monitor food-borne diseases via PulseNet Taiwan, which has successfully identified a cluster outbreak Salmonella anatum infections and traced its origin to pigs and poultries. The MOHW also collaborated with the U.S. and South Korea on transnational comparison of cholera strains as part of its international disease prevention efforts.
5. The MOHW implemented the community-based enterovirus/respiratory virus surveillance and provided reference for early warning systems, prevention efforts, laboratory testing agents and vaccine developments.
6. The MOHW completed technology transfer for the NS1 rapid antigen test for dengue fever, and helped participating companies apply for in vitro diagnostic device licensing.
7. The MOHW successfully developed a pneumonia pathogen testing kit, which can identify 24 different respiratory tract pathogens in a single test.
8. The MOHW conducted an epidemiological survey of Salmonella infections. The investigation showed that consumers who purchased eggs that were sold separately had a 2.5 times greater risk of contracting Salmonella than those who did not. This study thus provided scientific evidence supporting the agricultural authorities' promotion of proper egg packaging.
9. The MOHW has continued to monitor clusters of norovirus cases. Through the establishment of norovirus strain data, the MOHW discovered a link to between the new GII.2 strain and a pronounced increase in the severity of infection clusters in 2016.
10. The MOHW organized a Zika Virus Testing and Diagnosis International Training Camp. Specialists from 12 countries (including Japan and Australia) were invited to participate in the training to promote communicable disease prevention within the Asia-Pacific region.

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 gradually implement the new immunization policy.

The government currently provides 9 types of free routine vaccinations for youngsters. These vaccinations protect against 14 different diseases. Children living in remote mountainous regions and other high-risk areas also receive free vaccinations against Hepatitis A. The immunization schedule is shown in Table 6-3 below.

The Centers for Disease Control (CDC) established the National Immunization Information System to monitor and track the immunization status of infants and young children. Children's routine vaccination coverage surpassed 96%, and booster rate surpassed

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

Age	Vaccine
Within 24 hours of birth	• HBIG 1[1]
	• Hep B 1
1 month	• Hep B 2
2 months	• DTap-Hib-IPV 1 (5-in-1) • PCV 1
4 months	• DTap-Hib-IPV 2 (5-in-1) • PCV 2
5 months	• BCG 1 (this vaccination should be given within 5 - 8 months of birth)
6 months	• Hep B 3 • DTap-Hib-IPV 3 (5-in-1)
6 months to elementary school age	• Influenza
12 months	• MMR 1 • Varicella 1
12 - 15 months	• PCV 3
1 year and 3 months	• JE 1
1 year and 6 months[3]	• DTaP-IPV-Hib 4 (5-in-1)
2 year and 3 months	• JE 2
Between 5 years and 1st grade in elementary school	• Tdap-IPV 1 • MMR 2 • JE 3(provided to children who completed three courses of inactivated vaccine)

Notes: If a mother is a hepatitis B carrier (HBeAg positive), then her baby should be given one dose of HBIG shortly after birth, and not later than 24 hours after birth.

93% (see Figure 6-9). In 2016, 94.3% of children under age 3 received all recommended vaccinations. The high immunization rate demonstrated both the capacity and convenience of Taiwan's public health system.

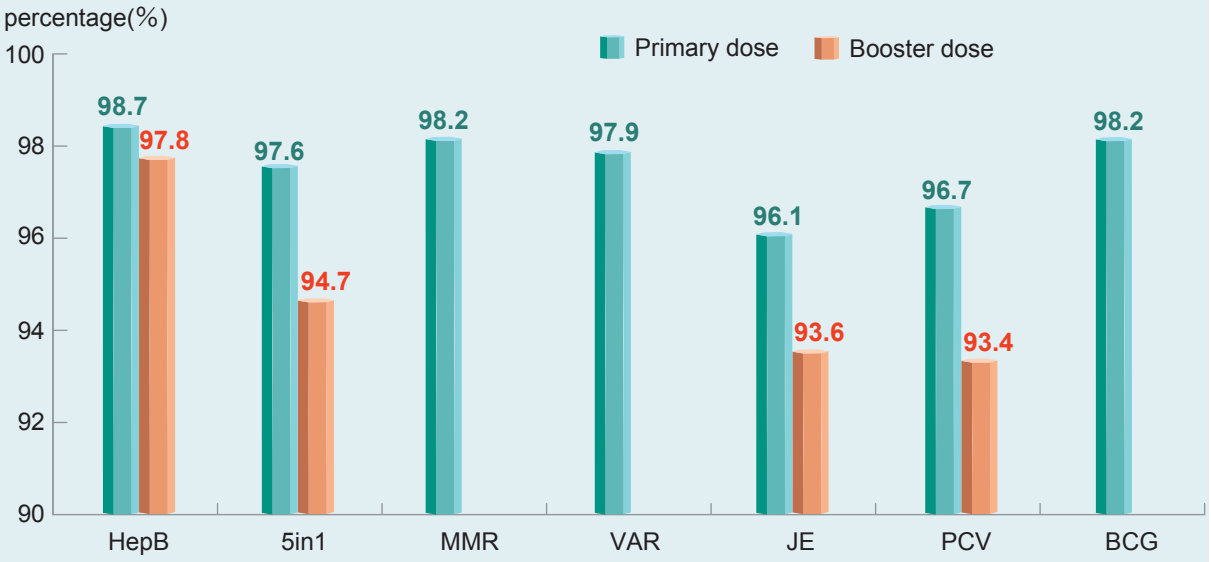
To deal with the untoward side effects of immunizations, the government has established a review mechanism to enable victims to receive the assistance they are legally entitled to.

Section 2 Development and Manufacture of Antiserums/ Vaccines

The results obtained in 2016 in the production of BCG vaccines and of snake venom antiserums were as follows:

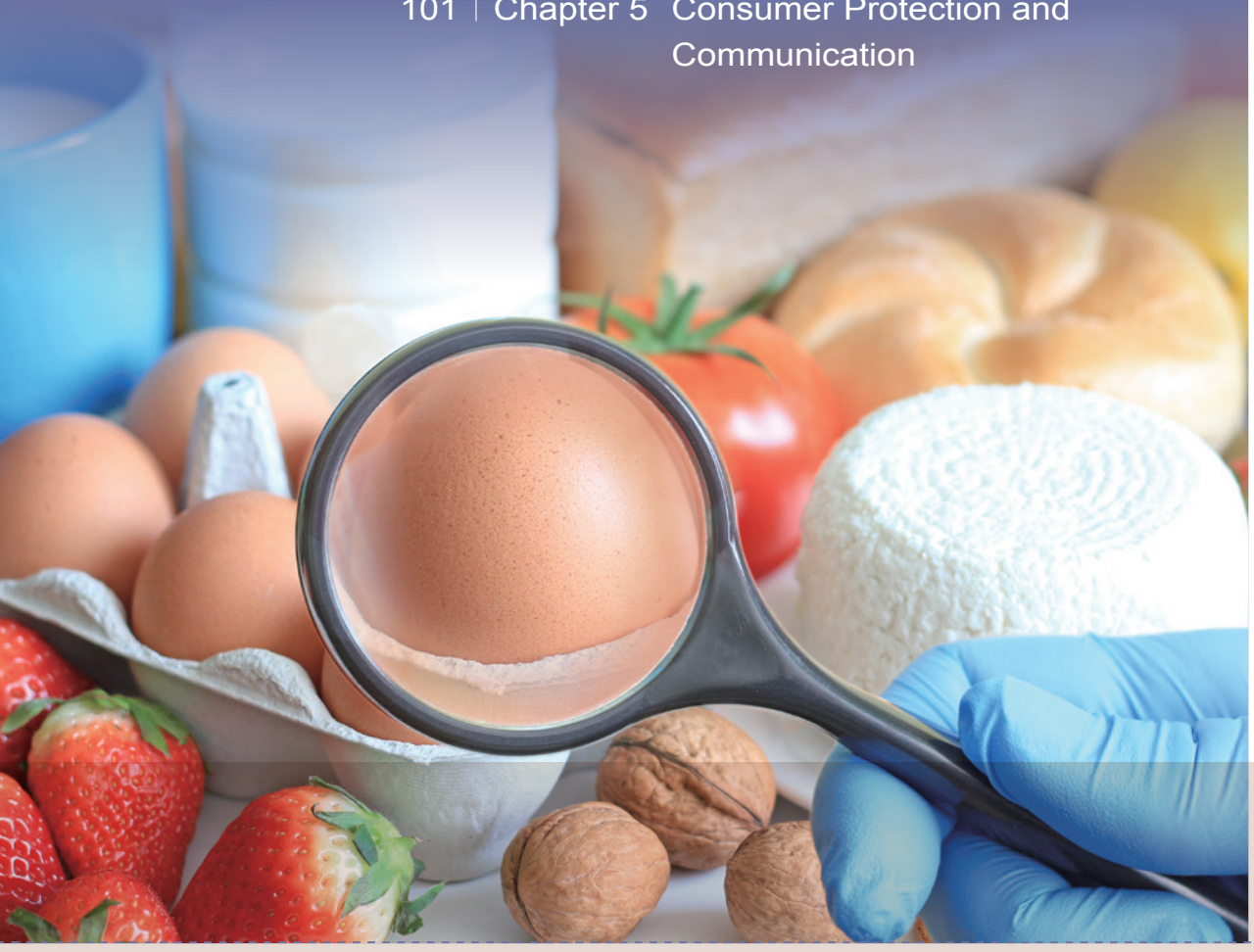
1. As the former National Horse Farm for antiserum production was becoming decrepit, all horses have been relocated to a state-of-the-art facility, thereby reducing the risk of antiserum supply disruption.
2. The total production of snake antivenoms from hyperimmunized horses was 352.8 kilograms.
3. The production of snake antivenoms outsourced to the National Health Research Institutes (NHRI) totaled 5,400 vials.
4. 524,584 doses of BCG vaccines and antivenoms are available for use in Taiwan.

Figure 6-9 Immunization Coverage Rates for Children, 2016



Source: National Immunization Information System, December 2016
Note: Hep B: Hepatitis B vaccine;
5-in-1: Diphtheria, tetanus, pertussis, Haemophilus B, and polio vaccines (DTaP-IPV-Hib);
MMR: Measles, mumps and rubella combined vaccine;
VAR: Varicella vaccine; JE: Japanese encephalitis.
PCV: Pneumococcal conjugate vaccine
BCG: Bacille Calmette-Guerin vaccine

7 Management of Food and Drugs



Taiwan Food and Drug Administration (TFDA) works to protect the health of consumers. To achieve this goal, the agency had key working points in 2016: bolstering legal standards and review mechanisms; supervising food businesses; establishing detailed supply chain monitoring; strengthening national laboratory capacity and capability; setting up risk management systems; and proactively bolstering consumer protection and communication channels. TFDA aims to create an environment where consumers have confidence in the safety of foods and medicines.

Chapter 1 Management of Food

In 2016, TFDA launched the five-point food safety policy. It relies on industrial self-regulation, government oversight, and civic participation to jointly ensure food safety. It advances food safety management by raising management capabilities of food enterprises.

Section 1 Food Regulatory Standards and Product Reviews

1. In order to build a comprehensive food safety system, the TFDA amended the Act Governing Food Safety and Sanitation (AGFSS) as described in Table 7-1.

Table 7-1 Amendments to Food Safety and Sanitation Management Regulations and Standards, 2016

Date	Name/Overview		Objective of Revision
April 21	Food businesses shall enact food safety monitoring plan and mandatorily conduct test and meet the minimum testing cycle and other relevant matters.		Requiring 17 categories of food businesses shall enact food safety monitoring plan, and mandatory testing.
May 19	Enact Article 49-2 of the "Act Governing Food Safety and Sanitation," which details confiscating illegally acquired profits and property assets of food businesses as penalties.		Establishes that food businesses with a registered factory and capitalization of NTD100 million or above that violate the provisions specified in Paragraph 1 or 4 of Article 15 or Article 16, or perform the actions described from Article 44 to Article 48-1 causing detriment of human health, shall have their acquired assets or property interests forfeited or confiscated.
December 26	Regulations governing administration of reuse of restaurant waste.		Rules for handling and reusing restaurant waste.
January-December	Names and Other Label Regulations	Regulation governing the warning label of prepackaged foods co-mingled with toys.	Establishing standards for names, label claims, and nutrition labels for some products.
		General names of food additives.	
		Food additives shall significantly label registration number of product.	
		Food utensils, containers or packaging items required for labeling.	
		Regulations of labeling requirements for special dietary foods for patients.	
		Regulations governing the product names and labeling of chocolate.	
January-December	"Standards for Pesticide Residue Limits in Food," "Standards for Veterinary Drug Residue Limits in Food," "Standards for Specification, Scope, Application and Limitation of Food Additives," and "Sanitation Standards for Food"		Stipulation: maximum residue limits for 121 pesticides in 651 items; usage, limits and standards for food additives in 797 items; and five new sanitation standards for food.

2. Review and registration of specific food products. The number of registered products is shown in Table 7-2.

Section 2 Food Management at the Source

1. Taiwan has required that high-risk food businesses shall meet the Regulation on Food safety control system (HACCP). Through the end of 2016, 67 boxed meal factory and 73 restaurants in international tourism hotels completed HACCP-level inspections.

2. Border Inspection of Imported Food

(1) TFDA has continued to strengthen import food management on border inspections via the stipulations of customs commodity codes with food related requirements according to Article 30 of the Act Governing Food Safety and Sanitation. Dated to December 31, 2016, import products belonging to 2,489 customs commodity codes are required to apply for import food inspections to TFDA if the products are destined for food purposes.

(2) To raise the efficiency of food import inspections, in August 2016 an amendment was made to「Guidelines for Inspection of Imported Foods and Related Products」. In 2016, Taiwan conducted inspections approximately 675,000 foods and related products, an increase of 60.49% compared to 2011. Products that failed to conform to the import requirements were either returned or destroyed.

3. Managemant of food additives: through the end of 2016, 3,000 food additive businesses completed registration, and registered 140,000 food additive products.

Section 3 Monitoring the Food Safety Chain

1. The TFDA regularly conducts post-market monitoring of food in concert with local health bureaus to strengthen food oversight. The 2016 results are shown in Table 7-3. Local health bureaus performs follow-up investigation of products that failed testing.

2. Special inspections project

(1) Special inspections are conducted on key items. They include items with frequent violations, with high risk, and of high concern. In 2016, there were 47 special inspections, and three special inspections of the Executive Yuan Joint Task Force.

(2) To enhance monitoring of high-risk products, expanded inspections were conducted on orange datlilies, dehydrated foods, and liquid egg. Authorities also stepped up sanitation inspections of night market stands including the cleanliness/safety of the food ingredients and sauces they use. In 2016, the compliance rate of orange datlilies and dehydrated foods increased compared to the previous year. The average compliance rate of liquid egg and of night market stands stood at 85.7%.

Table 7-2 Number of Registered Special Food Products, 2016

Category		Permits Issued
Imported foods in tablet or capsule form		7,367
Health foods		339
Food additives		6,590
Genetically modified foods		118
Specific Dietary Foods	Formulas for certain diseases	180
	Infant and follow-up formula	144
Domestic vitamin products in tablet or capsule form		1,875
Vacuum-packed ready-to-eat soybean food		157
Total		16,770

Table 7-3 Results of Post-Market Surveillance of food, 2016

Surveillance items	Results		
	Samples taken	Conforming cases	Compliance (%)
-Agricultural chemical residues	3,341	2,978	89.1
-Veterinary drug residues	2,278	2,246	98.6
-Mycotoxins	515	502	97.5
-Heavy metals	601	598	99.5

Section 4 Food Safety and Sanitation Management

1. From 2010 to 2016, more than 16,000 food services passed hygiene management assessment and rating.
2. In 2015, the TFDA announced that it had newly added registration requirements for manufacturers, processors and retailers of food utensils, containers, packaging and cleansers. By the end of 2016, more than 420,000 food businesses completed registration.
3. In 2016, five new categories of food businesses (including those producing agricultural, and vegetable products, noodles, bean noodles products; along with five categories of food import businesses including those importing agricultural, and vegetable products, meat processing food) became subject to enact food safety monitoring plan and mandatory inspections. A total of 23 categories of food businesses are included.
4. In 2016, the TFDA announced additional categories including edible vinegar, egg products, and baby or infant food products to the food traceability management systems. 22 categories of food business are included.

Section 5 Food Sanitation and Safety Management System Certification

1. In 2016, the TFDA announced the "Accreditation of Certification Body and Sanitation and Safety Control of Food Businesses of Certification Regulations" as well as food sanitation and safety management system accreditation and certification fees regulations. It also established the Food Safety Accreditation and Certification System (FACS) to improve accreditation and certification efficiency.
2. 469 food businesses in 10 categories passed second tier quality management certification, including manufacturers of designated canned foods, food additives, dairy products, and special nutrient foods, as well as manufactures of edible oil, flour, starch, salt, sugar and soy sauce with a capital scem above NT$ 30 million.

Chapter 2 Regulating Drugs

Drug regulation mean to ensure public health. With this goal in mind, the TFDA had made necessary reforms to accelerate inspection, registration and review. Taiwan intends to manage drugs at source, and to suppress illegal drugs. Creation of a sound management environment ensures safe use of drugs and puts consumers' minds at ease.

Section 1 Drug Regulations & Standards and Product Approval

1. To meet domestic needs and international standards, the TFDA has performed periodic reviews of drug regulations. Related amendments from 2016 are described in Table 7-4.
2. Inspecting and Registering Drugs: in 2016, 309 new domestic clinical trial applications, 178 clinical trial reports for drugs, and 136 new drug applications received approval. The TFDA also released the Medicine Scan APP to provide easily accessible information

Table 7-4 Amendments to Regulations Governing Drug Management, 2016

Date	Name/Overview	Objective of Revision
January 21	"Judgment Guidelines for Combination Drugs"	Assisting drug businesses in determining whether innovative combination drugs should be classified as a drug product or a medical device while facilitating effective review and management.
March 8	Inserts and packaging for non-prescription western medicine drugs, along with implementation plans	Establishing standards for inserts and packaging of non-prescription medicine drugs that take into account general reading habits, visual impairments, and needs of the elderlies.
April 6	Announcing an amendment to the "Regulations for Registration of Medicinal Products"	Amending articles to address supporting documents of factory registration, conditions for the outer packaging of imported drugs, drug items subject to a bridging study, and required dossiers for active pharmaceutical ingredients.
July 11	"Regulations for Drug Shortage Management"	Establishing regulations for reporting, registration, special case approval to manufacture or import, review procedures, approval standards, and other matters pertaining to drug shortage management.
August 1	Amending the streamlined review for new drug registration	Establishing streamlined review and approval procedures for drugs that have been approved by at least two of the following organizations: the US Food and Drug Administration, the European Medicines Agency, and the Japanese Ministry of Health, Labour and Welfare; that are determined to not have any significant ethnic variations, and that are found to meet relevant regulations.
September 6	Regulations governing the trace and track system for medicinal products	Requiring the distributors and manufacturers with the medicinal products which categorized and announced by the central competent health authority, shall establish their own information system for tracing the source and tracking the flow of the medicinal products.
September 8	Methods for special case approval, manufacture, and import of designated drugs	Establishing special application procedures to manufacture or import drugs that have not been approved yet but are needed for life-threatening or severely impairing diseases that Taiwan does not have suitable drugs or alternative methods for prevention, diagnosis or treatment, or in order to respond to a public health emergency.
October 26	Amending the "Guidelines on the Review of New Drugs"	Revising the "Guidelines on the Review of New Drugs" to indicate that overly complicated or abstract language in the warnings or precautions should instead be written in layman's terms.
December 14	Starting from January 1, 2017, applicants with rejected generic drug applications could be entitled to partial refunds	Establishing procedures to reject applications with severely flawed generic drug review, registration, administrative and technical data forms, and to provide partial refunds.

on pill inserts, packaging, identification, etc.

Section 2 Management Drug-related Issues

1. All modern pharmaceutical manufacturers in Taiwan were compliant with the PIC/S(Pharmaceutical inspection Co-operation Scheme) GMP Guide by 2015. At the end of 2016, there were 127 qualified domestic manufacturers and 936 authorized overseas manufacturers.
2. Starting from 2016, all manufacturers of pharmaceutical preparations were required to only use active pharmaceutical ingredients that adhere to GMP standards

and have a registered source. Compliance was 100%. By the end of 2016, there were 243 items made by 24 qualified domestic manufacturers that adhered to GMP standards. 1,681 GMP permits were also issued for imports.

Section 3 Supply Chain Monitoring for Drugs

1. In February 2016, the TFDA announced the implementation items and schedule of the "Good Manufacturing Practice (Part III: Distribution)." At the end of 2016, 233 companies applied for Good Distribution Practice inspections.
2. Drug Quality Monitoring

(1) There were 869 suspected defective drug products and 52 suspected therapeutic inequivalence cases were reported and 646 drug quality(recall) alerts around the world were monitored.

(2) In 2016, the TFDA completed lot release for 396 batches, 12,688,690 doses of biologics.

(3) In 2016, TFDA completed post-market surveillance for cardiovascular drugs, antipyretic analgesics, and antibiotics, a total of 88 samples were taken for testing and with conformity rate of 94.3%.

3. The "Joint Task Force of anti-Counterfeit Drugs" is assembled in 2010 and conducted an average of 1,500 inspections monthly. The violation rate was sharp dropped from 27.2% in 2002 to 1.22% in 2016 (Figure 7-1).

Section 4 Management of Drug Safety

1. The format of the new drug periodic safety update report has been revised on Jan 13, 2016 to strengthen safety monitoring of new drugs and comply with the international standard.
2. In 2016, there were 196 drug injury relief applications, and the relief was given in 107 cases. The rate of payments was 58%. Payouts totaled NTD17,765,304.

Section 5 Management of Controlled Drugs

1. The Controlled Drugs Act aims to prevent drug abuse. An Amendment to it in 2016 is described in Table 7-5.
2. As the end of 2016, there were 15,413 institutions registered to handle controlled drugs, and 52,757 people licensed to prescribe controlled drugs.
3. In 2016, a total of 17,145 on-site inspection were conducted, and 2.6% of them were found violating the regulations. Violators all received relevant penalties.
4. The TFDA regularly collects and analyzes

Figure 7-1 The Violation rate of Illegal Drugs in 2010-2016, Oct.

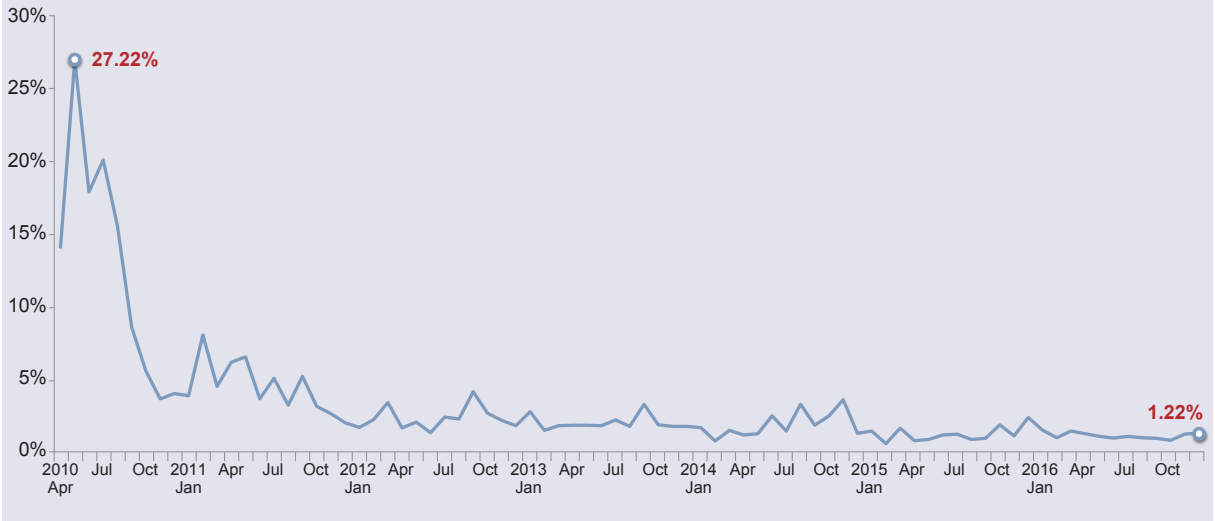


Table 7-5 The Amendment to the Schedules of Controlled Drugs, 2016

Date	Schedule	Name of controlled drug(s)	Explanation
March 25	III	3,4-methylenedioxy-N-ethylcathinone, Ethylone	A Central nervous system stimulant which has a similar effect with MDMA, and no known medical use.
March 25	III	2-(3-methoxyphenyl)-2-(ethylamino) cyclohexanone、Methoxetamine, (MEX)	A ketamine analog which induces drug dependence and conscious disturbance.
March 25	III	Chloromethcathinone (CMC), including 2-Chloromethcathinone (2-CMC), 3-Chloromethcathinone (3-CMC) and 4-Chloromethcathinone (4-CMC)	Central nervous system stimulant that has no known medical use.
March 25	III	Bromomethcathinone (BMC), including 2-Bromomethcathinone (2-BMC), 3-Bromomethcathinone (3-BMC) and 4-Bromomethcathinone (4-BMC)	Central nervous system stimulant that has no known medical use.

data on domestic drug abuse trends, and provides this information to the drug prevention agencies. It hosts seed instructors training, and established eight anti-drug education resource centers. They cooperate with 61 outreach points to strengthen the drug abuse prevention network.

Section 6 Management of Chinese Medicine

1. In 2016, 43 manufacturers were inspected in accordance with the Regulations of Medicament Manufacturer Inspection. The compliance rate was 100%.
2. There were 16 kinds of traditional Chinese medicine materials compulsory for border inspections, such as Jujube fruit, Astragalus Root. In 2016, 3,643 cases passed inspections, with a total weight of 13,174 tons. All kind of imported goods met the abnormal substances standards.
3. In 2016, MOHW announced the limits of traditional Chinese medicine materials regarding sulfur dioxide, aflatoxins, and heavy metals.
4. In 2016, among 355 inspections of traditional Chinese medicine materials for abnormal substances, the compliance rate was 90.1%. Among 272 inspections of traditional Chinese medicine preparations, the compliance rate was 98.9%.

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, as well as to guarantee the health and safety of public.

Section 1 Medical Device and Cosmetics Regulation Standards and Product Review

1. Regulatory Environment and International. Regulatory Harmonization, announcements in 2016 are arranged in Table 7-6.
2. In 2016, a total of 143 cases of registration review for innovative medical devices with no similar products were completed, an increase of 16% over 2015. Development of 56 domestic preclinical testing guidance documents were completed , 918 medical device international standards and 110 product guidance for medical devices were recognized to enhance review consistency and transparency. The registration data are shown in Table 7-7.
3. Establishing a comprehensive medical devices and cosmetics consultation/

Table 7-6 Important amendments and revisions to regulations governing medical devices and cosmetics in 2016

Date	Name/Overview	Objective of revision
January 18	Announcing product guidances for three medical devices guidance that contain ancillary medicinal substances	Three medicated medical devices pre-clinical testing guidance for products, including hyaluronic acid dermal implants, percutaneous transluminal coronary angioplasty balloon catheter and wound dressing have been provided.
February 19	Establish "Cosmetics must not contain Estradiol, Estrone, and Ethinyl estradiol"	Starting from May 1, 2016, any cosmetics containing Estradiol, Estrone and Ethinyl estradiol must not be sold, supplied, intended for sales or supplied for presentation.
April 1	"Baby wipes" are subject to management as cosmetics	The baby wipes shall comply with the regulations for the "Statute for Control of Cosmetic Hygiene" starting from June 1, 2017.
June 30	"Cosmetics must not contain Antihistamine"	Starting from January 1, 2017, any cosmetics containing Antihistamine must not be sold, supplied, intended for sales or supplied for presentation.
July 1	Announcing that four items are subject to the declarations of pre-clinical testing conformity for medical devices	For application of registration and market approval, to declare that medical devices can use the declaration of pre-clinical testing conformity for medical devices in place of pre-clinical testing and quality control conducted by the original manufacturer.
November 9	Announced the ban on Animal Testing for Cosmetics	Add "Except one of the special conditions which have been approved by central competent authorities, the safety assessments/tests of cosmetic finished products as well as ingredients on animal models are not allowed in Taiwan.

Table 7-7 Statistics of Medical Devices and Cosmetics Applications for Reviews as of 2016

Items	Medical devices		Cosmetics	
	Medical devices registration	Medical devices advertisement	Medicated cosmetics registration	Cosmetics advertisemen
Number of received applications	5,451	334	1,484	1,645
Number of closures	5,118	329	1,508	1,622
Valid Licenses: 43,328 for medical devices (an increase of 2,487 compared to 2015), 15,759 for medicated cosmetics				

counseling networks that answering questions from every sector of society in a timely way. The TFDA posted a FAQ section for the platform on its website.

4. A guidance mechanism for domestic manufacturers of innovative medical devices was implemented, and successfully assisted 2 domestic medical devices to gain approvals for a "blood glucose monitoring system" and a "carcinogen methylation detection kit", and 2 high-end medical devices entering clinical trials.

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 2016, valid GMP compliance letters for domestically made medical devices were 669 items; valid quality system documentation compliance letters for imported medical devices were 3,800 items and, valid voluntary cosmetic GMP 40 manufacturers.

2. At the end of 2016, there were 1,759 registered cosmetics, in cosmetic products notification portal, an increase of 592 over 2015.

Section 3 Quality Chain Monitoring of Medical Devices and Cosmetics

1. Results of quality monitoring for medical devices and cosmetics are shown in Table 7-8. Nonconforming products were officially reported to the local health bureau for further administrative handling.
2. The TFDA conducted joint inspections with local health departments, to supervise product labeling on medical devices and cosmetics. Results are shown in Table 7-9.

Section 4 Safety Management of Medical Devices and Cosmetics

1. In 2016, submissions to the Taiwan National Adverse Drug Reactions Reporting System included 3,429 reports of defective medical devices and 427 reports of adverse reactions to medical devices (Figure 7-2). The TFDA, which actively monitors medical device 2,044 safety vigilance information from Taiwan and overseas, translated and issued 70 alerts online for reference by all sectors of society.
2. In 2016, there were 54 reports of adverse events for cosmetics, 196 safety alerts monitored, and 161 consumers "red and green light alerts."

Chapter 4 National Laboratories and Risk Management

Taiwan has continued to enhance national laboratories in line with international trends. A key task intends to boost testing technology and its collaboration with administrative management. The TFDA also promoted risk and crisis management mechanisms. By building a comprehensive management system for food and drug safety, it has reduced risks and hazards while lowering the potential impact of accidents.

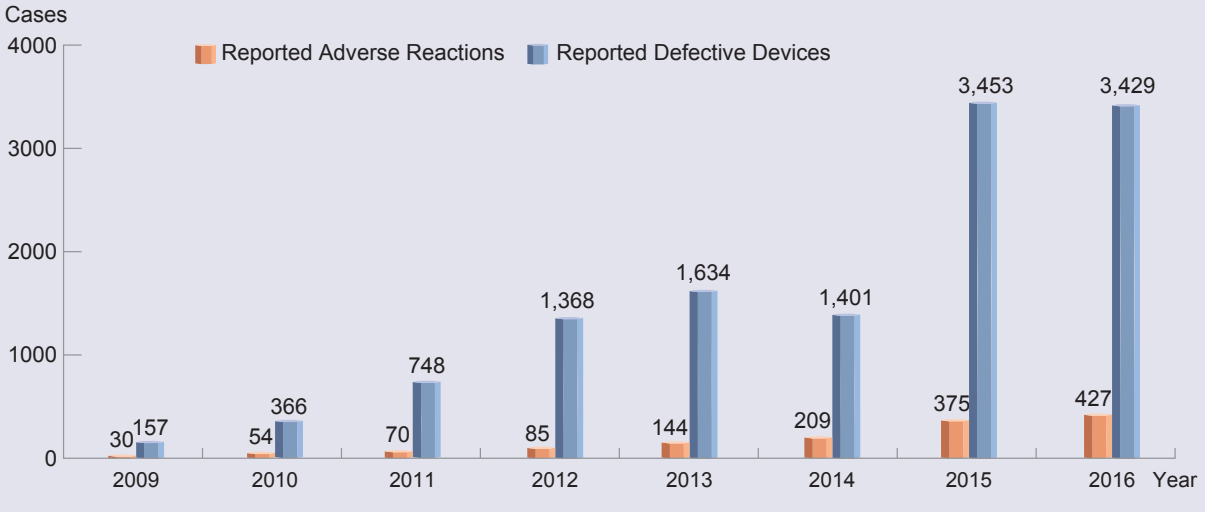
Table 7-8 Results of Medical Devices and Cosmetics Surveillance in 2016

Name of Project	Total Cases	Inspection items			
		Quality		Package Labeling	
		Number meeting standards	Rate meeting standards (%)	Number meeting standards	Rate meeting standards (%)
Post-market surveillance of color additives leaching test for color contact lenses	28	28	100.0	28	100.0
Quality examination of medical gloves on the market	20	17	85.0	18	90.0
Sterility surveillance of the medical gauze and cotton balls	78	78	100.0	63	80.8
Sterility surveillance of acupuncture needles	56	56	100.0	44	78.6
A study investigating the detection capacity of a molecular diagnostic kit for high-risk HPV 16/18	11	11	100.0	9	81.8
Medical devices, total	193	190	98.4	162	83.9
Post-market surveillance study on preservatives of cosmetic products in Taiwan	152	150	98.7	111	73.0
Annual microbiological survey of cosmetics in Taiwan's market	177	174	98.3	174	98.3
Cosmetics, total	329	324	98.5	285	86.6

Table 7-9 Statistical Analysis of Medical Device and Cosmetic Joint Inspection Data, 2016

Product name	Number of inspected counties/ cities	Number of inspected stores/ street vendors	Labeling		
			Inspected number	Number meeting standards	Rate meeting standards (%)
Endosseous implant (dental)	9	50	41	23	56.1
Non-sterile ultrasound gel	9		29	24	82.8
Static electric therapy apparatus	7	41	25	17	68.0
Medical devices, total	25	91	95	64	67.4
Teeth whitening cosmetics	7	57	30	19	63.3
Perming agents			39	26	66.7
Wet wipes containing moisturizing agents			65	52	80.0
Cosmetics, total	7	57	134	97	72.4

Figure 7-2 Reported Defective Medical Devices and Adverse Reactions to Medical Devices, by Year



Section 1 Missions and Functions of National Laboratories

1. Fast, accurate testing methods were developed for various products, so that the TFDA is ready to respond to emerging incidents. Press releases and news reports might dispel concerns among the general public. In 2016, the TFDA tested 7,618 cases, and completed 86,600 testing items, including inspection, registration, and reviewing product application purposes; lot release testing for biologics; customs inspection of condoms; and inspection of sudden emerging incidents. The TFDA has also assisted prosecutors, police officers, investigators, judicial officers, and customs agencies in performing tests, and in providing technical support to local health bureau.
2. The TFDA has procured new equipment to expand testing capacity, then provided technical documents for public use. In 2016, it announced 22 test methods and recommended 38 test methods for food products, and 8 recommend test methods for cosmetics.

Section 2 Risk Management and Crisis Management Mechanisms

1. Taiwan established the Risk Management and Crisis Management Taskforce Group to reduce risks while lowering the likely impact of any incident. Taiwan also incorporated risk and crisis management into everyday operations and decision making.
2. In 2016, following public hearings on radiation-contaminated Japanese food imports, the TFDA launched a Level 3 response and command center to conduct related reviews, and implement crisis management mechanisms.

Section 3 Local and Private Laboratory Accreditation and Management

1. By using the Integrated Laboratory Testing Systems of Health Bureaus to coordinate and guide distribution of testing items, the TFDA increased the rate of independent testing by local health bureaus to 85%. At the end of 2016, there were 755 items that passed MOHW laboratory accreditation, for a passage rate of 91.7%.
2. Domestic testing capacity increased with the rising number of private accredited institutions and the items they test. In 2016, 115 institutions could test 1,425 items, an increase of 12.5% compared to 2015 (Figures 7-3, 7-4). Satisfaction rate toward testing capacity was 84.6%.
3. Indonesian authorities recognize laboratory testing by three TFDA-accredited institutions, without the need for on-site inspections, which further lends credibility to Taiwan's accredited system.

Chapter 5 Consumer Protection and Communication

Besides traditional media outlets, the TFDA conveys safety education and administrative news through emerging communications technologies such as the Internet. It has thus established new modes to effectively communicate policies.

Section 1 Keeping Consumers Informed

1. "TFDA Articles" is established in 2016 and releases food and drug information. In addition, "Rumor buster" and "TFDA

Figure 7-3 TFDA-accredited testing institutions, by Year

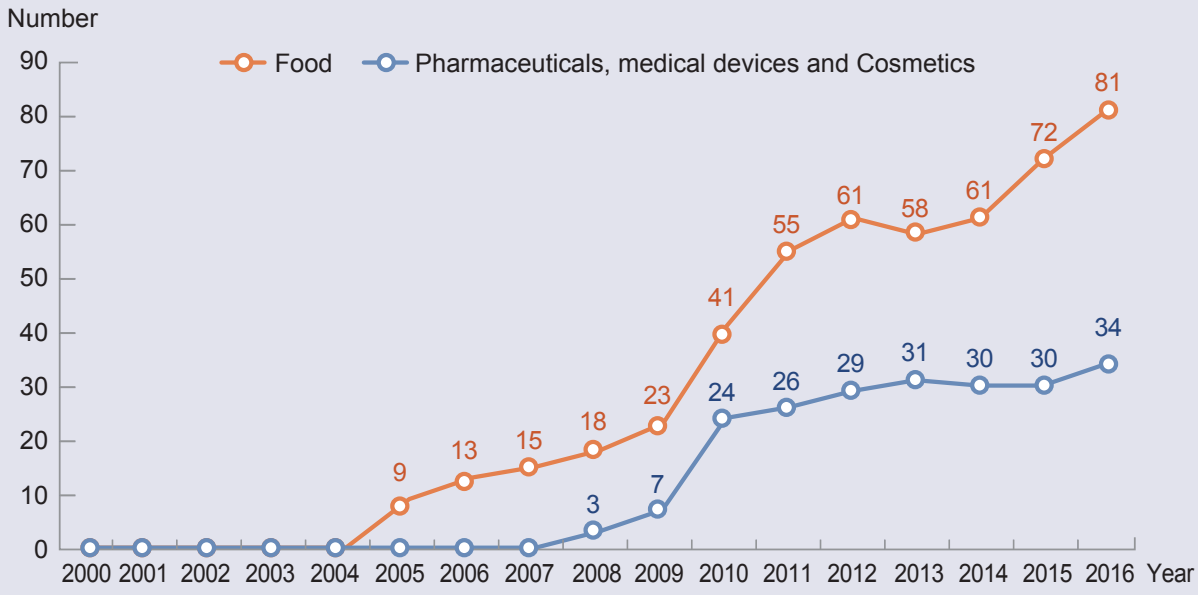
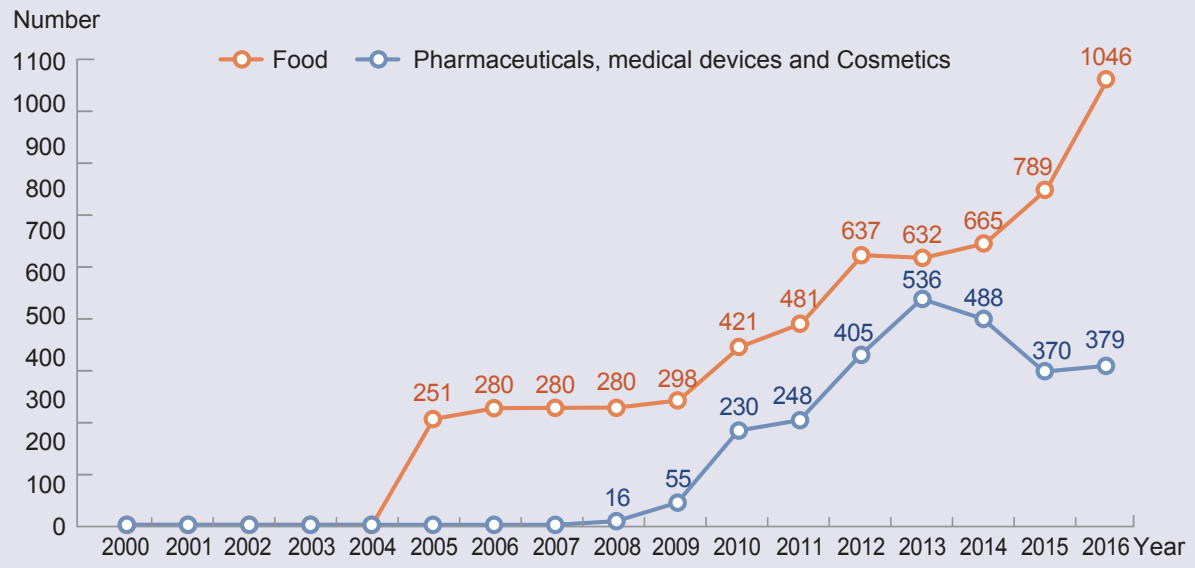


Figure 7-4 Accredited Items of TFDA-accredited testing institutions, by Year



Advisory" also open online submission function for the public to submit answers. From April 2016 to date, total of 400 articles have been published. The accumulative page view has reached up to 182,744 times.

2. "TFDA Facebook" releases the most updated food and drug information and accumulates up to 56,000 fans.

3. "TFDA Rumor Buster" clarifies all fasified rumors online relating to food, drugs, medical devices and cosmetics. Total of 254 articles have been published to date, the page view has reached up to 1,350,000 times. Additionally, more than 1,050 news reports have been forwarded by the mass media.

Section 2 Consumer Communication and Campaigns

1. 1919 National Food Safety Hotline is the first cross-departmental single-counter public convenience service hotline. Since the initiation of 1919 Hotline on December 4, 2015, by the end of December 2016, the service capacity was about 60,000 telephone calls, and the satisfaction rate was up to 80%.

2. Combine civil sources and volunteers to help the government safeguard food safety. In 2016, food sanitation volunteers completed 37,394 food labeling inspections and 38,371 hours of food advertisement surveillance. Additionally, food sanitation volunteers promoted food safety on working places, campus and communities.

3. In order to help food safety concepts take root, the TFDA published a special food safety knowledge column in major national newspapers, and compiled a food safety book for children.

4. The TFDA cooperated with 33 NGOs to hold 2,461 drug prevention activities.

5. In order to create a supportive environment, Taiwan has established 22 resource centers for drug use, and 465 community drug use inquiry stations.

8 National Health Insurance and National Pension

In order to guarantee income security for individuals and families who face financial crises owing to birth and old age, sickness and death, injury and disability, loss of daily functions and unemployment, the government has adopted social insurance to build a safety net based on the principles of self-sufficiency, mutual help, and risk sharing. This section describes key parts of that social safety net: National Health Insurance (NHI) and National Pension (NP).

Chapter 1 National Health Insurance

Section 1 Status of National Health Insurance

Taiwan's National Health Insurance (NHI) system was established with the aim of enhancing the health of all of Taiwan's citizens. After many years of hard work, the NHI has begun to attract global attention for its success in making medical care "universal, affordable , convenient, and highly satisfactory". Public support for the NHI has remained consistently strong at around 80%, and every year several hundred foreign visitors come to Taiwan to learn about the NHI system.

By the end of 2016, total enrollment in NHI was 23,815,000 persons and the enrollment rate exceeded 99.7%. Approximately 92.8% of the nation's medical care institutions have contracted with the National Health Insurance Administration (NHIA) under NHI, demonstrating the high accessibility of health care.

A public hearing on hierarchically integrated health care, held on October 20, 2016

A road race to celebrate the 21st anniversary of NHI, held on November 5, 2016

The main sources of NHI's revenues are the premiums paid by the insured, their employers, and the government. A small portion of revenues comes from other sources, including Public Welfare Lottery Surplus and Welfare Surcharge on Tobacco Products. At the end of 2016, the cumulative surplus of NHI was NTD 247.4 billion, showing that financial status of NHI was in good shape.

Section 2 Access to Health Care Through Universal Coverage

In 2016, there were 361.54 million outpatient visits and 3.32 million hospital admissions. The average usage per person was 15.4 clinical visits (including Western and Chinese medicine clinics and dental clinics) and 0.14 hospital stays as well as an average length of hospitalization of 1.3 days.

At the end of 2016, there were 27,995 NHI-contracted health care institutions, including 20,857 contracted hospitals and clinics that accounted for 92.8% of the total health care providers. Insured persons can receive suitable care wherever and wherever they choose.

Since June 2016, the MOHW has begun examining ways to strengthen implementation

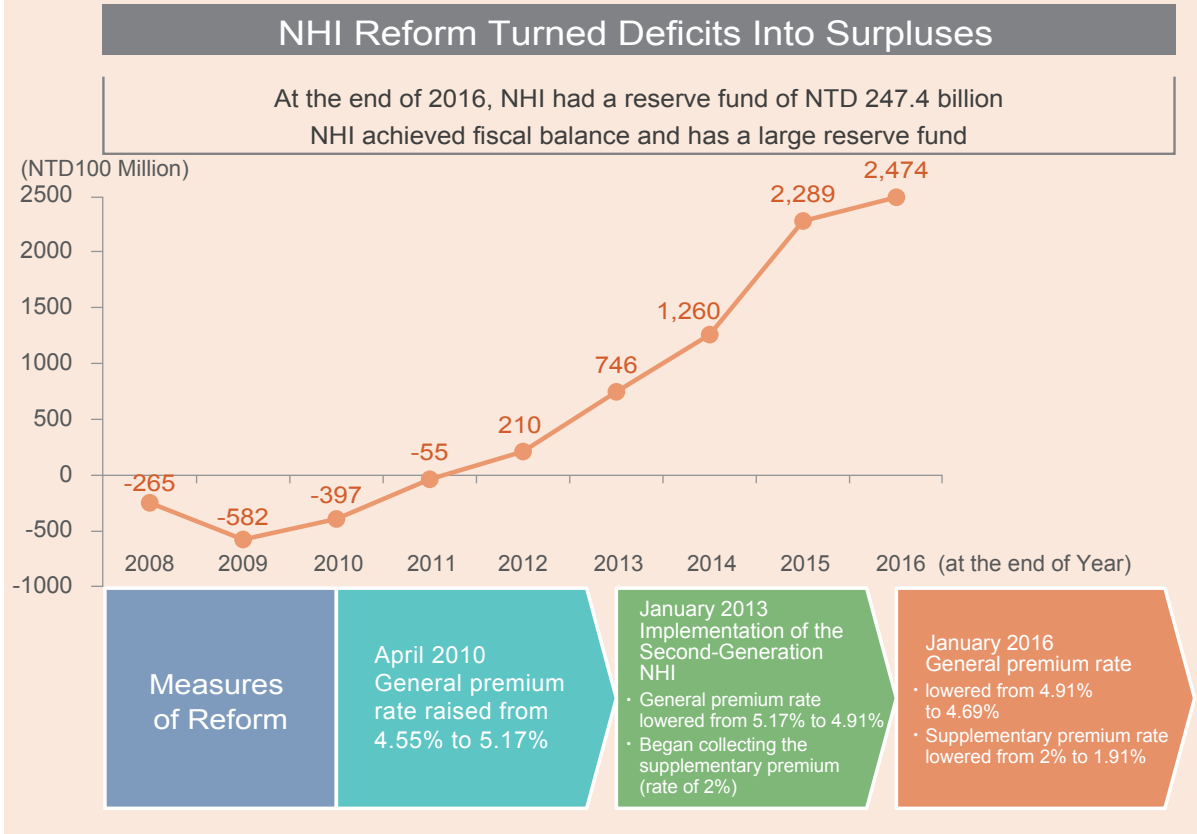
of the referral system. The MOHW formulates six key policies and related ancillary measures, and began to gradually implement them, with the aim of encouraging members of the public to seek medical treatment at local clinics (rather than going directly to hospital for even minor ailments). If a physician decides that a patient needs specialist treatment, the physician can assist in referring the patient to an appropriate hospital or clinic. In this way, larger hospitals will be able to focus on treating serious medical conditions and undertaking medical research, while smaller hospitals and local clinics will act as the provider of primary care.

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

Since the Second-Generation NHI has expanded the premium base that includes an additional premium on supplementary income and a higher share of payments by the government, the collection of premiums has become more equitable, conforming more closely to the principle that people should contribute according to their means, and there has been a pronounced improvement in the fiscal status of the NHI (Fig. 8-1). Responding to society's needs, starting from 2016 the MOHW raised the minimum single-payment deduction for income from professional practice, stock earnings, interest earnings and rental earnings from NTD5,000 to NTD20,000; the MOHW also stepped up auditing and monitoring of supplementary premiums relating to capital gains. The total amount of supplementary premiums collected in 2016 was approximately NTD43.9 billion.

In the spirit of the Second-Generation NHI commitment to balance expenditures and

Figure 8-1 Reserve Fund, Before and After Implementation of the Second-Generation NHI



revenues, the National Health Insurance Committee set up new mechanisms to sustain fiscal balance, and reviewed the 2016 NHI premium rate accordingly, since January1, 2016, the general premium rate be lowered from 4.91% to 4.69% and the supplementary premium rate be lowered from 2% to 1.91%. The MOHW is continuing to review the mechanism for balancing expenditures and revenues, with the aim of maintaining the fiscal status of the NHI over the long term.

NHI Plan ushered in fiscal balance. However, because of factors such as the aging population and advances in medical technology, the NHI will continue to face financial pressure in the long run. The MOHW will continue to promote reform of the NHI's finances, implementing system review and exploring avenues for creating a more stable financing system, so as to safeguard the long-term financial health of the NHI and ensure that the financial burdens relating to the NHI are more fairly and appropriately allocated.

Section 4 Promotion of Diverse Payment Systems

The NHI payment system is primarily based on fee-for-service model. Problems with this model include proliferation of unnecessary examinations, tests, treatments, and surgeries, which not only cause excessive growth of health care expenditure but also impact the quality of care. Since July 2002, the NHIA has introduced different payment systems based on the principle of global budget, such as case payments and pay-for-performance, in order to shape diagnosis and treatment behaviors and improve health care quality. Also, to achieve more efficient use of health resources and increase the comparability of treatment quality among different hospitals, the Taiwan Diagnosis Related Groups (Tw-DRGs) system came into effect on January 1, 2010. This was followed by the second stage of the Tw-DRGs system, which began on July 1, 2014.

In 2001, the MOHW launched the "Guidance Program Targeting NHI Insured Persons Who Make Excessively Frequent Outpatient Visits." In 2013, the scope of coverage of the Program was expanded to include the approximately 47,000 people who had made at least 90 outpatient visits in the previous year, to help them develop a more appropriate plan towards seeking medical care. In the case of insured persons who had already been receiving guidance for a year without any significant improvement in their behavior, where the reviewing physician determined that the insured person's behavior in this regard was abnormal, the person in question could be restricted to only being able to seek medical treatment at one specific hospital (this restriction does not apply to the case of emergency treatment); the NHI would not cover the cost of treatment sought at another hospital by an insured person falling into this category. As regards to the effectiveness of the guidance provision, with regard to insured persons who had made at least 90 outpatient visits in 2015 and who had received guidance in 2016, there was an average fall of 20% in the number of outpatient visits made after receiving guidance, and this led to a reduction in related medical expenditure of approximately NTD560 million.

To enhance the accessibility of medical care for insured persons who find it difficult to leave the house to visit the doctor because of disability or because of the special nature of their medical condition, on February 15, 2016 the MOHW launched a "Home Medical Care Integration Plan" to improve the current service model, under which different types of home medical care service are provided in a somewhat fragmented manner. By the end of December 2016, a total of 106 care teams were participating in this project, with 803 individual hospitals and clinics, and a cumulative total of 7,675 care recipients.

In order to increase Taiwan's citizens' access to new drugs, and ensure that they can make

use of suitable new treatments as early as possible, with respect to new drugs that are launched in Taiwan before they are launched in other country, in 2013 and 2014 the MOHW formulated measures to encourage effective NHI payment price-setting with respect to new drugs that contain new components. On December 6, 2016, the scope of application of these measures was broadened to include not only new drugs with new components, but also all new drugs with clinical value (including drugs with enhanced effectiveness, drugs that can reduce unwanted reactions, and drugs that lower drug-resistance).

Section 5 Information Transparency to Raise Quality

In order to improve health care quality, the NHIA releases NHI treatment information on its website. Users have access to data on performance of contracted health institutions, payment ranges, and more. Implementation of the Second-Generation NHI led to the release of even more valuable treatment data. For example, financial reports issued by each hospital, the status of each hospital's medical treatment services (number of beds, reported number of inpatients and outpatients, and treatment points), average nurse-patient ratio, and the quality of medical treatment data. From this information, the general public has access to an overview of every hospital's performance. The public release of major infractions encouraged institutions that operate under the NHI system to further improve quality.

To increase the information transparency for self-paid medical devices, , the NHIA established a price comparison website in 2014 that allows patients to have sufficient information on self-payment variations among different institutions for medical devices (such as drug-eluting stents, manmade crystals with purported special functions, and ceramic joints), to protect their rights as a consumer.

Section 6 Care for the Disadvantaged in Remote Regions

1. Subsidies for the Economically Disadvantaged

(1) Besides NHI premium subsidies, the right to treatment for economically disadvantaged patients is guaranteed through relief fund loans, payment by installments, and charity donation referrals. Assistance offered in 2016 is described in Table 8-1.

Table 8-1 NHI Premium Payment Assistance Measures, 2016

Item	Beneficiaries	Total Assisted	Total Contribution
Premium Subsidies	Low-income households, lower-middle-income households, near-poor households, unemployed veterans, unemployed laborers and their families, disabled persons, unemployed indigenous peoples under the age of 20 or 55 above	3.218 million persons	NTD 26.15 billion
Relief Fund Loans	People who qualify as facing "economic difficulties"	2,339 cases	NTD 170 million
Payment by Installments	People unable to pay their premium arrears at one time	91,000 cases	NTD2.639 billion
Charity Donation Referrals	People unable to pay their premiums	8,489 cases	NTD25.78 million

(2) Medical or Health care Assistance: To live up to the universal value of health equality, the MOHW implemented a plan to disentangle those of premium arrears from block list on June 7, 2016. In other words, the plan opened the door for the unlocking of all NHI cards. People only needed to enroll in NHI to qualify for coverage.

(3) Use of Feedback from Public Welfare Lottery to Reduce the Financial Burden of Health Care for the Disadvantaged: Assistance provided in 2016 included payment of NHI premium arrears and fees associated with treatment. Assistance was provided 70,000 cases of people, with approximately NTD284 million in total.

2. Care for People in Indigenous or Remote Regions and Areas with Insufficient Medical Resources

(1) Plan for Improving Health Care in Indigenous or Remote Regions via Integrated Delivery Systems Plan (IDS): In November 1999, the NHIA launched IDS to mitigate problems of insufficient medical care resources in indigenous or remote regions and outlying islands. By 2016, there were 26 contracted clinics and hospitals participating in a total of 50 regions. They served more than 460,000 people and achieved average overall satisfaction rate of 95%.

(2) Plan for Improving Health Care in Areas with Insufficient Resources: Implementation of this plan began in 2012 through the provision of a special budget and point value guarantees. Regional hospitals located in or near areas with insufficient resources were encouraged to provide 24-hour emergency treatment, internal medicine, surgery, OB/GYN, pediatrics, and hospitalization. At the end of 2016, there were 85 hospitals participating. In addition, the NHIA announced plans to cut the 20% copayment for clinical, emergency, and home care services in areas listed in annual reviews as lacking sufficient medical resources.

3. Care for Patients with Major Illness and Injury or Rare Diseases

(1) Beneficiaries who hold a Major Illness/Injury Certificate are exempt from payment of expenses when receiving treatment for issues related to the illness or injury. At the end of December 2016, there were more than 950,000 certificates granted (covering more than 890,000 people, or about 3.7% of NHI beneficiaries). Related treatment fees exceeded NTD181.3 billion in 2016 (accounting for 27.4% of total health care expenditures).

(2) 'Rare diseases' announced by the MOHW, are included in the catastrophic disease list of the NHI. Patients who are eligible for a Major Illness/Injury Certificate, are exempted from co-payments, and drugs designated by the MOHW as necessary for the treatment of rare diseases are fully covered by NHI. At the end of December 2016, there were 10,525 certified rare disease patients.

Section 7 Using Technology to Increase Efficiency

Taiwan is one of the few countries in Asia that uses an IC card for access to insurance. Besides inproving administrative efficiency, NHI card records of major illness and injury provide indication for drug allergies and medical history (including prescriptions, testing, and examinations). Cardholders can indicate their willingness to donate organs and register for hospice and palliative care along with do-not-resuscitate orders.

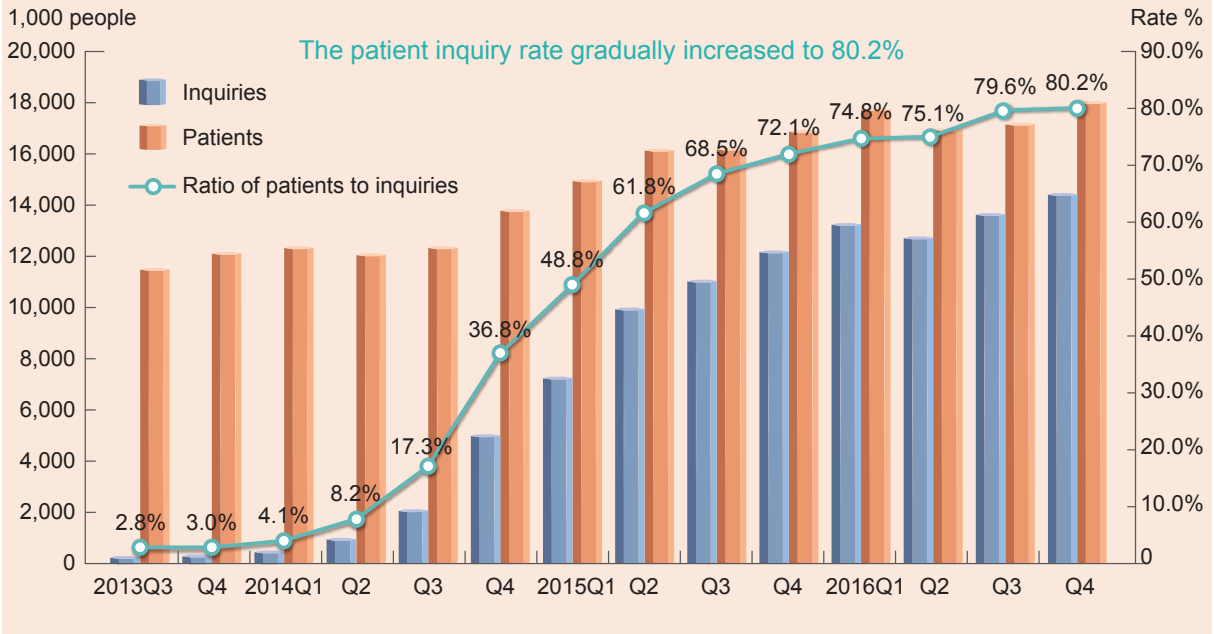
In order to implement e-government policy and diversify services, the MOHW updated its network OS by building a multi-certificate online underwriting platform in January 2006. By the end of December 2016, more than 162,000 group insurance applicants had used the system. Each month there were approximately 1.34 million online applications made to update information, accounting for more than 72% of such information update.

Through March 2017, the online system was used nearly 15.58 million times to apply for withholding information from 2016, accounting for 90% of all such records.

In 2013, the NHIA established the NHI Pharma Cloud system, which physicians and pharmacists can use to check patient medication records. This prevents duplicate prescription and misuse of drugs and minimizes the risk of unfavorable drug interactions. In 2016, the NHIA continued to improve the system's functions by expanding it to become the new "National Health Insurance Cloud Health System." The new system contains seven types of records: medications (western medicine), drug allergies, designated controlled medication use, designated coagulation factor medication use, examinations (and testing), surgeries, and dental treatment and surgery. By the end of December 2016, there were already 22,708 hospitals and clinics that were using the system. The system is used to search 23 million times per month. The system is used in approximately 80.2% of patient visits (Figure 8-2). Closer analysis of prescriptions entered into the Pharma Cloud system shows the drugs to lower blood pressure, blood lipids, and blood sugar as well as sedatives, antipsychotics, and antidepressants overlap of similar drugs prescribed by different clinics or hospitals is decrease. These results show that Pharma Cloud effectively reduced duplicate prescriptions and lowered drug risks.

In order to improve the general public's control over personal health and health care, people with a registered NHI card or Citizen Digital Certificate only need to pass authentication to check and download data on outpatient and inpatient visits, including western medicine, Chinese medicine, dental clinics, hospitalization, drug usage, surgery, allergies, test (examination) results, images or pathology examinations, discharge records, organ donor and hospice/palliative care intentions, adult preventive health, and immunizations. My Health Bank can also be used to see NHI card status and records as well as insurance fee and premium records. By the end of 2016, there have been 270,000 persons making 1,920,000 inquiries to the system.

Figure 8-2 Use of the National Health Insurance Cloud Health System (including the NHI Pharma Cloud system)



Chapter 2 National Pension

Taiwan's National Pension (NP) 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. The NP system has become an indispensable part of the nation's social safety net and a key milestone on the road to comprehensive social security. Establishment of NP marked the start of a new era for Taiwan, in which all citizens were covered by social insurances and the elderly could be assured of basic economic security.

Section 1 Status of NP

1. There were 3,425,214 insured persons of NP in December 2016. Data on the different categories of insured persons are shown in Table 8-2.
2. Insurance Premium Rate: 8% (the premium is calculated based on the monthly insurance amount and insurance premium rate)
3. Insurance Premium Subsidies: In principle, the government will subsidy 40% (NTD585 monthly) of NP insurance premiums for each insured person. For middle-low income insured persons or disabled insured persons with mild or medium disability, the government will subsidy 55% (NTD805) or 70% (NTD1,024) of the premiums. For low-income households insured persons or disabled insured persons with a severe or extremely disability, the government will subsidy 100% (NTD1,463) of the premiums.
4. Monthly Insurance Amount: NTD18,282.
5. Premium Payment Rate of the Insured: From the establishment of NP insurance to December 2016, receivable premiums of insured persons were more than NTD257.2 billion and more than NTD143.9 billion was received. The payment rate of the insured was 56%.
6. Benefit Payments

(1) Insurance Payments: Include old age pension payments, maternity payments, mental/physical disability pension payments, funeral payments, and surviving family pension payments.

Table 8-2 Insured Persons and Ratios of NP, December 2016

Classification	Insured Persons	Ratio (%)
General Insured Persons	2,943,026	85.9
Low-Income Households	74,178	2.2
Persons with Severe or Extremely Severe Disability	95,282	2.8
Persons with Medium Disability	75,801	2.2
Persons with Mild Disability	63,574	1.9
Middle-low income persons (income less than 1.5-fold minimum cost of living)	124,584	3.6
Middle-low income persons (income less than 2-fold minimum cost of living)	48,769	1.4
Total	3,425,214	100.0

(2) Other Payments: Include old age basic guaranteed pension payments, mental/physical disability basic guaranteed pension payments, and aboriginal pension payments.

(3) NP benefit payments are described in Table 8-3.

7. Financial Status of the National Pension Insurance Fund: At the end of December 2016, the accumulated value of the fund was NTD250.41 billion. The fund aims to build a diverse investment portfolio. Major holdings include domestic bank deposits (12.3%), domestic and foreign debt securities (31.5%), and equity securities (46.6%). The portfolio should balance risk and returns.

8. In 2016,there were 791,022 citizens who already claimed the old-age pension benefit, or 96.5% of those over age 65 who qualified (819,963). The high coverage rate means that the NP system has provided a basic living standard assurance for older citizens.

Section 2 NP System Reform and Important Results

1. In order to make NP fairer and more rational, an amendment was made on November 30, 2016, by revising Article 16 of the "National Pension Act" which is stated: "In case the insurer issues the payments, the premium that should be paid by the insured persons and has not been overdue, and the interest imposed for overdue payment of premium should be deducted from the payments, and be calculated into the insurance periods."

2. In response to various concerns related to the NP system, the following improvement efforts and achievements were made:

Table 8-3 NP Benefit Recipients and Payments, 2016

Payment Type		Recipients (People)	2016 Payment Amounts (NTD1,000s)
Insurance Payments	Old Age Pension Payments	791,022	33,394,964
	Maternity Payments	21,668	691,498
	Mental/Physical Disability Pension Payments	6,383	287,071
	Funeral Payments	16,693	1,524,805
	Surviving Family Pension Payments	72,838	3,279,651
	Subtotal	908,604	39,177,989
Other Payments	Old Age Basic Guaranteed Pension Payments	652,187	29,090,121
	Mental/Physical Disability Basic Guaranteed Pension Payments	21,132	1,241,670
	Aboriginal Pension Payments	38,089	1,631,539
	Subtotal	711,408	31,963,330
Total		1620,012	71,141,319

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.

(1) The MOHW has continued to collect a wide range of recommendations and opinions on NP, and held a meeting in April 2016 where experts, scholars, NGOs, and related agencies met to discuss the national pension system. Discussion included coverage and payment conditions as well as premium collection in order to make NP fairer and more rational.

(2) To strengthen investments of the National Pension Insurance Fund, the MOHW continues to oversee the Bureau of Labor Funds (BLF) to follow the investment policies and to draft 2016 yearly utilization plans,and encourage diversersified investment portfolios to improve the performance of the National Pension Insurance Fund. At the end of 2016, total earnings were NTD9.947 billion and the annualized rate of return was 4.3%, which exceeded the forecast of 4%.

(3) To raise the NP premium payment rate, the MOHW continues to oversee the Bureau of Labor Insurance(BLI) to undertake systematic collection of premiums from citizens in arrears (including the insured persons and those who already withdrew from NP) using a combination of overdue bills and informational pamphlets. In 2016, more than NTD4.4 billion in arrears was collected.

(4) To improve the accuracy rate for the administration of NP benefit, the MOHW has urged the BLI to improve databases and auditing mechanism, and to improve audits and oversights of electronic media information. In 2016, there were 1,986 overpayment cases, a decrease of 6.2% compared to that in 2015. The overpayment amount in 2016 was NTD16.42 million, a decrease of 11.1% compared to that in 2015.

(5) To improve the NP premium payment rate, the MOHW cooperated with the Council of Indigenous Peoples, the BLI, and local governments to formulated a plan for increasing the payment rate of the insured persons. In 2016, besides using diverse channels to disseminate NP information, local governments visited citizens who owed premiums, totally visited 227,591 people. There were 37,023 promotional events with total attendance of 3,191,776 people and 11,060 local "seed" instructors were trained.

(6) In order to create a more sound pension system in the country, the Office of the President has set up the National Pension Reform Committee. Between June 2016 and January 2017, the committee met 20 times, and held four district forums and one national conference. With the committee making NP system the long-term reform objective, the MOHW will follow the national pension reform schedule to improve the NP System in the future.

9 Social Welfare

Globalization, urbanization, low birth rates, and population aging have weakened the caring capacity of families. In order to ensure appropriate care for disadvantaged groups, 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 advances the rights, well-being, and benefits of all people while providing suitable care for disadvantaged groups. Its visions are guaranteed rights, supportive families, a friendly society, and progress for all.

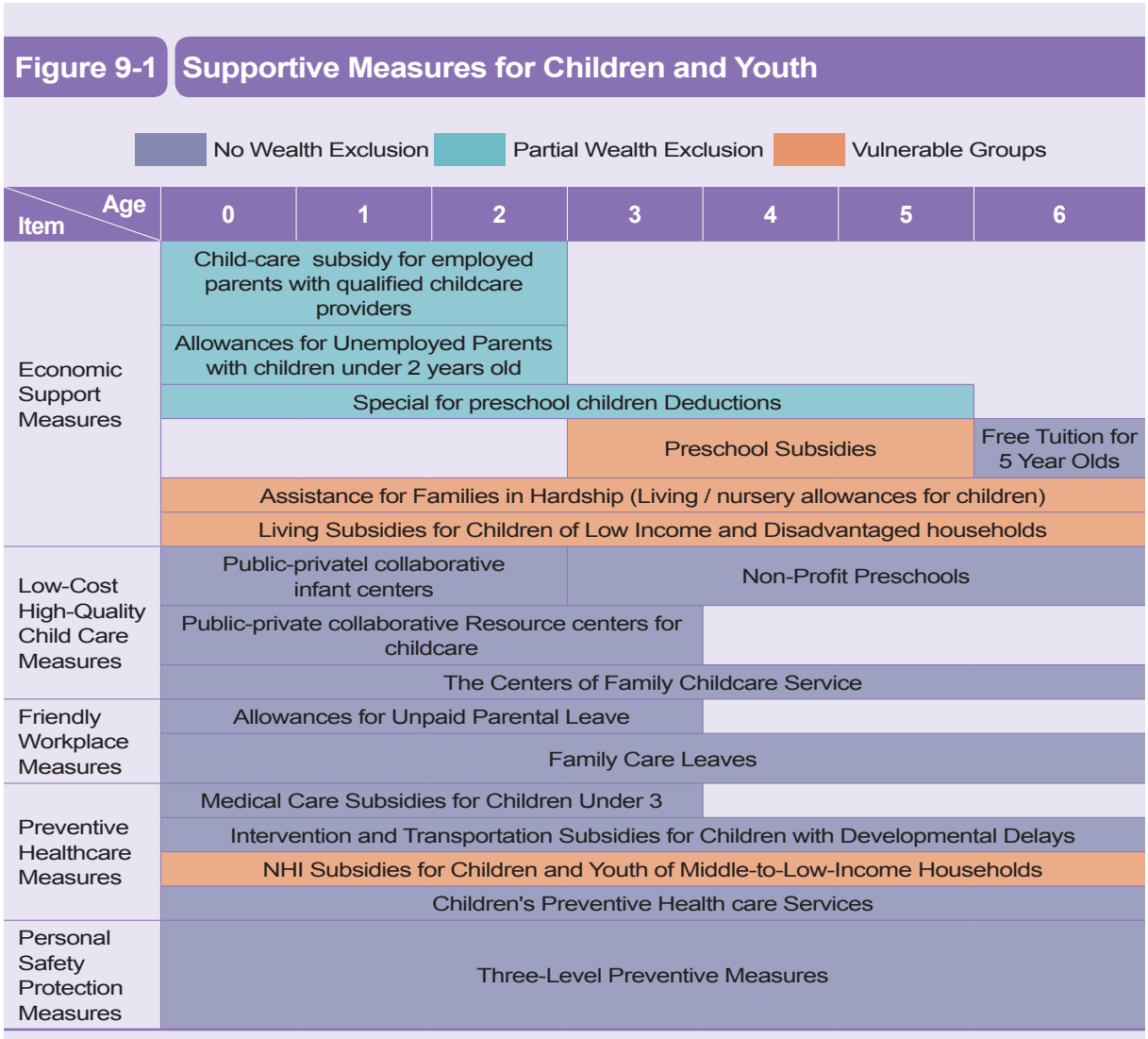
Chapter 1 Children and Youth Welfare

At the end of 2016, Taiwan had 39,872,02 children and youth, accounting for just 16.9% of the total population. In order to ease the impact of low birth rate, the SFAA worked with related agencies to promote supportive measures for children and youth, in accordance with the Population Policy White Paper (approved by the Executive Yuan in 2013). (Figure 9-1) At the same time, in order to promote the Implementation Act of the Convention on the Rights of the Child,the SFAA completed examination of legal cases in 2016 and issued the first national report on the Convention on the Rights of the Child by reviewing the status of children and youth rights in Taiwan.

Section 1 Subsidies for Children and Youth

1. Allowances for Unemployed Parents with Children Under 2 Years Old: Monthly allowances of NTD2,500 - 5,000 are available for families with a marginal tax

Figure 9-1 Supportive Measures for Children and Youth



rate under 20% within the past one year and with at least one parent who did not work due to childrearing responsibility. In 2016, there were 263,520 children who benefitted (accounting for 63.8% of all children under age 2). Total subsidies were NTD5,193,370,000.

2. Emergency Living Assistance for Children and Youth from Disadvantaged Families: Families with children and facing hardship, high risk, or economic difficulties will be qualified for monthly emergency relief assistance payments of NTD3,000 per person. In 2016, 4,532 families with 6,916 children and youth were assisted and total payment was NTD124,190,000.

3. NHI Subsidies for Children and Youth of Middle-to-Low-Income Families: In 2016, there were 1,523,453 payments totaling more than NTD919,460,000.

4. Health Care Subsidies for Children Under 3 Years Old: In 2016, these subsidies provided free treatment 15,117,905 times and reduced the financial burden on families by more than NTD1,919,150,000.

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 7,635 recipients of subsidies totaling more than NTD61,980,000.

Section 2 Protecting the Interests and Rights of Children and Youth

1. Building Platforms for the Welfare and Rights of Children and Youth: Both the Executive Yuan and the MOHW established task force group to promote the welfare and rights of children and youth. The group conducted coordination, research, reviews, and consultation for children and youth welfare policies and implemented the Convention on the Rights of the Child.

2. A Safety Plan to Prevent Accidents and Injuries Among Children and Youth: The Children and Youth Safety Implementation Plan was formulated to promote individuals, homes, transportation facilities, campuses, recreational facilities, waters, workplaces, and internet safety for children and youth. Also, the Promotional Committee for Children and Youth Accidental Injury Prevention meets regularly to discuss performance and evaluation of various agencies in implementing nine major objectives. Its purpose is to provide safe and worry-free environments for children and youth.

3. Protecting the Rights of Children and Youth Without Household Registration (Stateless): In 2016, the MOHW regularly follows up on children and youth without household registration or who are stateless and guarantees their right to education, daily support, and medical care. There were 138 registered cases, 15 of which were closed and 123 which were still in progress.

4. Promoting the Rights, Development, and Social Participation of Children and Youth

(1) In 2016, events advocating the rights of children and youth are carried out in cooperation with local governments and 63 NGOs with total attendance of 96,150.

(2) To promote Taiwan Girl's Day on October 11and the theme of "technology and gender equality" in 2016, the SFAA held a promotional press conference and a series of online activities. It urged society to continue to heed the rights of girls and end the oppression that arises from gender stereotyping, in order to foster a friendly society that supports the growth and development of young women in diversity.

(3) In 2016, the SFAA subsidized children and youth empowerment work camps. Assistance was offered to local governments and NGOs to cultivate children and youth representatives who could foster greater social participation and free expression among their peers with total attendance of 9,696.

Section 3 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 2016, there were 121 placement institutions (Table 9-1).

(2) In 2016, subsidies for institutional professional fees, facilities and equipment, after-school program, and welfare services, totaled NTD53,552,562.

2. Joint Accreditation of Institutional Placement and Institutional Carefor Children and Youth: Based on Item 2, Article 84 of "The Protection of Children and Youths Welfare and Rights Act," placement institutions shall be regularly accredited. In the most recent accreditation in 2014 and 2015, there were 117 institutions evaluated, with those institutions that rated fair or poor designated for re-evaluation in 2017 (Table 9-2).

3. Promoting Foster Care: Guideline is developed and provided to local governments and NGOs which are commissioned to provide foster care. In 2016, there were 1,299 households registered to serve as foster care homes, 278 reserve foster care homes, and 1,662 children and youth receiving foster care (Table 9-3).

4. Building a National Case Management System for Children in Foster Care: The MOHW developed a national case management system for placement and follow-up of children and youth placed in foster care. The system, which includes utilization procedures and regulations, helps local government authorities and national placement organizations oversee the cases . In 2016, the SFAA revised the numeric fields of the system forms and expanded service fee subsidies. The changes made administration more efficient for government authorities at all levels and improved the control environment.

Table 9-1 Institutions Specializing in the Placement and Education of Children and Youth, 2012-2016

Year		2012	2013	2014	2015	2016
Number of Institutions		123	126	124	122	121
Approved Number of Beds		4,816	4,985	4,991	5,004	5,094
Children	Males	1,858	1,842	1,818	1,771	1,702
	Females	1,691	1,700	1,683	1,704	1,617

Source: SFAA

Table 9-2 Accreditation Results for Institutions Specializing in the Placement and Education of Children and Youth, 2014 and 2015

Rating	Taipei Evaluations (2014)	Joint Central Government Evaluations (2015)	Subtotal (Institutions)	Ratio (%)
Outstanding	8	27	35	29.9
Excellent	6	49	55	47.1
Good	2	17	19	16.2
Fair	0	6	6	5.1
Poor	0	2	2	1.7
Subtotal	16	101	117	100.0

Source: SFAA, Department of Social Welfare (Taipei City Government)

Table 9-3 Foster Care Homes and Children, 2012-2016

Year		2012	2013	2014	2015	2016
Families (Households)		1,248	1,275	1,289	1,326	1,299
Children	Boys	927	899	847	804	786
	Girls	908	905	896	858	836

Source: SFAA

Chapter 2 Welfare for Women and Family Support

Social and economic changes over the past decade led the Social Welfare Promotion Committee of the Executive Yuan to issue the following objective proposals at its 23rd meeting on May 26, 2015: (1) develop holistic care and support systems for families, (2) advance economic security and caregiver-friendly workplaces to promote family-work balance, (3) promote domestic violence prevention and residential justice for harmonious families, (4) strengthen family education and gender equality for better domestic relationships, and (5) advocate family values and respect for diversity to bring families together. Included as part of these objectives were 33 policies and 98 action measures to be implemented starting in 2016.

Section 1 Women's Welfare

Social services for women are aimed to empower women from women's standpoint. Key achievements 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. In 2016, these services were offered 6,464 times.
2. By strengthening capacity of 25 women's welfare centers, the MOHW linked government and private resources to improve welfare, rights, legal and learning services for women. In 2016, the centers provided services for 3,676,699 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 2016, there were 47 domestic organizations used its facilities. The center also welcomed 86 domestic organizations and foreign guests, and 17,000 visits made to the center.
4. In 2016, the SFAA empowered local governments to provide women's welfare services. It selected nine cities and counties to conduct guidance plans: New Taipei, Tainan, Changhua, Pingtung, Keelung, Yilan, Hualien, Taitung, and Penghu. Expert oversight teams evaluated local government needs, diagnosed problems then gradually customized women's welfare services according to local characteristics. The SFAA also helped local governments build long-term service oversight mechanisms.

Section 2 Services for Disadvantaged Families

1. Services for Single-Parent Families

(1) In 2016, 13 single parent service centers consolidated local welfare resources and NGOs held 36 support groups and welfare promotion activities for single parents.

(2) Single parents are encouraged to advance their education as part of an empowerment plan. In 2016, 221 single parents (male-to-female ratio of 1:21.1) received subsidized tuition, miscellaneous school fees, course credit fees, and child care fees so they could attend college or university, high school or vocational school.

(3) In 2016, there were 108 family (social) welfare service centers that provided integrated and preventive services.

2. Welfare for Families with Foreign Spouses: In 2016, 35 service centers for families with foreign spouses provided case management to 10,389 families and 79 community service stations implemented 89 programs.

3. Community Care for Children and Youths from Disadvantaged Families: In 2016, NGOs were subsidized to conduct 49 related programs offamily visits, after-school child care, and parental education for disadvantaged families with children or youths to 743,739 people.

4. Intervention for Children and Youths from High-Risk Families: In 2016, the SFAA subsidized 79 NGOs that employed 220 social workers for home visits. The social workers visited 27,758 households, served 11,182 cases, and assisted 18,648 children and youths. The reported recurrence rate was lowered to 9%.

Section 3 Childcare and Early Intervention Services

1. Childcare subsidies for employed parents with qualified child-care providers: Parents (or guardians) who both work, or single-parent families in which the parent works, were qualified for subsidies of NTD2,000 - 5,000 each month for children under 2 years of age who go to daycare. In 2016, there were 83,893 children who benefited from a total of NTD1,486,196,848 in subsidies.

2. Childcare Services

(1) At the end of 2016, there were 71 center of family childcare service that oversaw 52,010 childcare providers (including relative care) caring for 43,873 children under the age of 2 (Figure 9-2). Among registered childcare providers, 21,169, or 87.3%, had a technician certificate for childcare providers.

(2) At the end of 2016, there were 808 infant centers cared for 19,750 children (Figure 9-3), consisting of 710 private infant centers that cared for 15,149 children and 98 public-privately collaborative infant centers that cared for 4,601 children.

(3) Community-Based Family Support includes 111 public-privately collaborative resource centers for childcare that had provided child care consultations, parental education, and other services approximately 4.69 million times.

3. Early Intervention for Children with Developmental Delay

(1) Local governments are supervised to set 28 reporting and referral centers. In 2016, 21,747 children with developmental delay are reported and the nationwide reporting rate was 10.6%.(Figure 9-4)

(2) In 2016, local governments are supervised to set 55 case management centers, and local governments helped developmentally delayed children apply for 47,562 intervention subsidies worth a total of NTD356,481,080 (Figure 9-5).

(3) In 2016, local governments were guided in offering home-based services to 1,505 children. Furthermore, 10 local governments promoted community-based intervention services in 49 townships and villages with insufficient early intervention resources.

Figure 9-2 Family Childcare Providers and Children

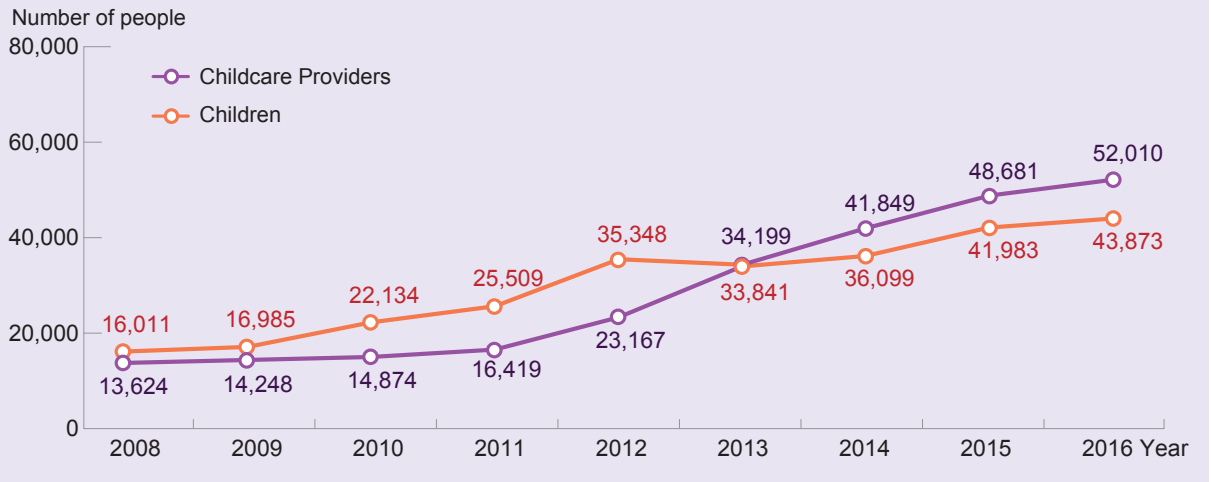


Figure 9-3 Volume of Infant Centers and Children

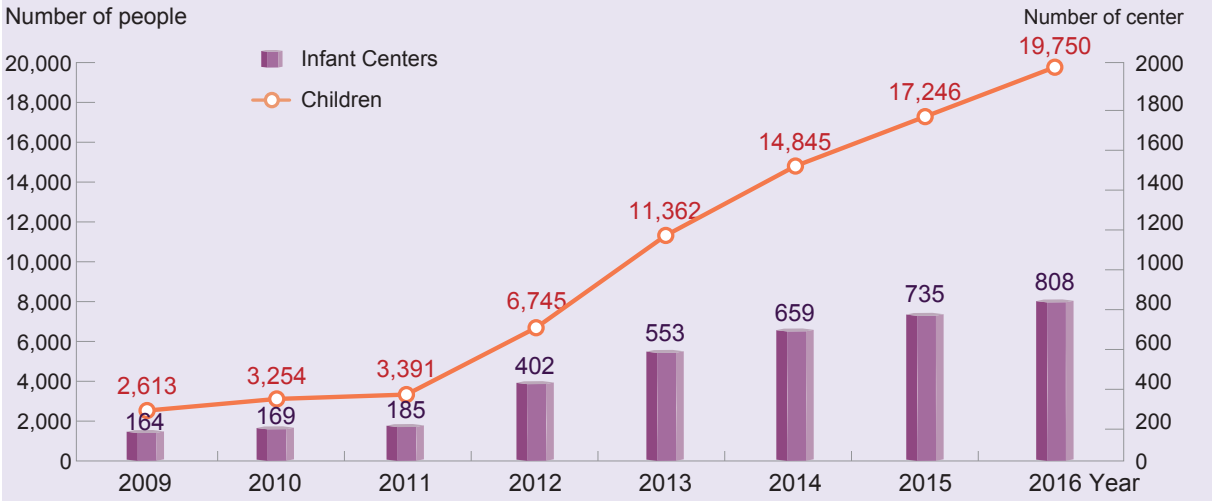


Figure 9-4 National Reporting Rate of Developmentally Delayed Children, by Year

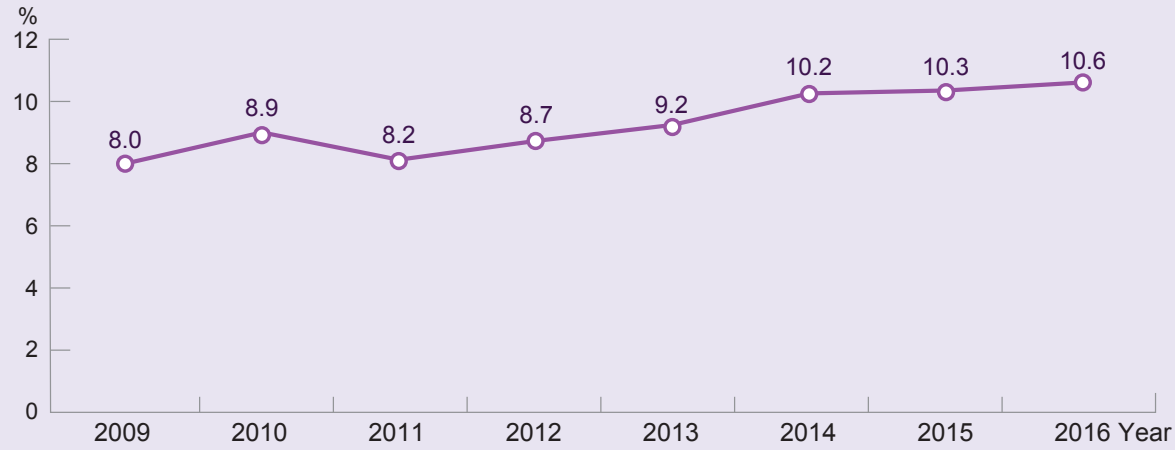
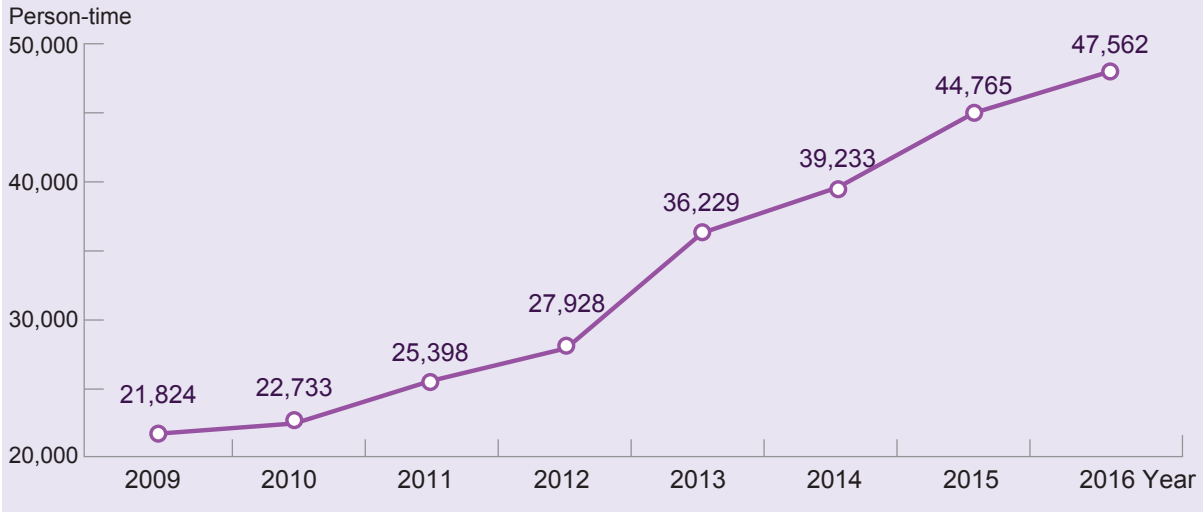


Figure 9-5 Subsidies for Early Intervention, by Year



Section 4 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 2016, there were nine approved institutions (with 13 service stations). These institutions matched 293 children with adoptive parents in 2015 (125 were adopted domestically and 168 overseas).
2. Assistance for Families in Special Hardship: In 2016, 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 20,616 families receiving these benefits for a total of 127,966 times, with total subsidies exceeding NTD430,740,000.
3. Support for Pregnant Teens

(1) A teen pregnancy hotline (0800-25-7085) and website (http//www.257085.org.tw) provide assistance and consultation to minors who became pregnant. In 2016, there were 760 calls to the hotline, 65,588 visits to the website, and 555 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 2016, these services were used 2,944 times.

Chapter 3 Welfare for the Elderly

At the end of 2016, there were 3,106,105 elderly people in Taiwan, accounting for 13.2% of the population. Becoming an aging society in 1993, the MOHW adopted a three-pronged policy approach focused on economic security, health promotion, and long term care. Measures that meet the psychological, social, educational, and leisure needs of elderly people contribute to age-friendly environments conducive to health, safety, and lifelong learning in order to sustain the vitality, dignity, and autonomy of elder people.

Section 1 Income Security for the Elderly

1. Monthly living allowances of NTD3,731or NTD7,463 are offered to guarantee the economic security and basic living standard of lower-middle-income elder people. In 2016, there were 128,188 elder people who received a total of more than NTD10,207,090,000 in subsidies.
2. Monthly special care allowances worth NTD5,000 were offered to lower-middle-income caregivers who sacrificed employment to care for an elderly family member. In 2016, there were 9,448 such allowances worth a total of NTD47,450,000.
3. In order to help elder people enjoy greater economic security by turning their property into monthly income, a pilot reverse mortgage mechanism was launched on March 1, 2013. After recognizing that similar schemes abroad rely heavily on financial products, an amendment to the "Senior Citizens Welfare Act" was made on December 9, 2015 to encourage financial regulators to urge banking institutions to offer commercial reverse mortgage loans; Taiwan Cooperative Bank, Taiwan Business Bank, Land Bank of Taiwan, and Bank of Taiwan have already been offering this service.

Section 2 Health Care for Elder people

1. In order to reduce the economic barrier to health care due to NHI premiums and co-payments for elder people with economic difficulties, premiums are fully subsidized for lower-middle-income elderly persons aged 70 and above. In 2016, these subsidies were provided to 933,189 people.
2. Daily subsidies of NTD1,800, with an annual limit of NTD216,000, are offered to pay the attendant care during hospitalization for lower-middle-income elder people who are in the care of MOHW-commissioned institutional care facilities. In 2016, four institutions received these subsidies to care for a total of 104 people.

Section 3 Care for Elder people

1. In recognition of the contributions Dr. George Mackay made to the poor in Taiwan, starting from June 1, 2011, Mackay Project was launched for foreigners living in Taiwan. The Project offers Alien Permanent Resident Certificates from the National Immigration Agency to foreigners who met the following qualifications: had lived in Taiwan at least 20 years, were physically located in Taiwan for at least 183 days each of those years, at least 65 years old, and were formally recognized for long-term dedication or special contributions to Taiwan by MOI. They will enjoy the discounts just like all Taiwanese elderly citizens for discounted public transit. At the end of 2016, a total of 257 foreigners were qualified.
2. Ongoing efforts to improve care for living alone elder people, including a 24-hour emergency assistance network. A center for tracking missing elderly had found 1,316 out of 2,221 reported missing people since the end of 2016.
3. A subsidized, private elderly consultation center operates 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.
4. Measures to protect the physical and mental health of disabled elderly people include home care and day care. Since 2008, the government has also subsidized equipment, staff, and operating costs that provide in-home bathing services. At the end of 2016, there were 24 bathing vehicles operating in 18 cities and counties. They had provided more than 233,128 baths.
5. A inter-departmental cooperation among local governments, experts, and NGOs led to drafting and implementation of the second phase of a plan for age-friendly care services for elder people. The second phase introduced 84 action measures to achieve healthy aging, aging in place, smart aging, active aging, and continuing education.
6. Following encouragement from the SFAA, local governments cooperated with village offices and community organizations to establish 2,674 community care stations (Figure 9-6). Volunteer staff contributed through home visits, phone calls, referrals, food services, and health promotion activities to assist more than 240,000 people.

Section 4 Social Participation by Elder people

1. In 2016, variety of services and activities are available for seniors. Besides curriculum specialized for elderlys, retirement preparation workshop, seminars, health lectures, sporting events, croquet competitions, and singing contests, elder people 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 people to leave the home and be more active. There were 247,499 elder people who benefitted.
2. In 2016, mobile tours of culture, health, and leisure for seniors were made possible by the subsidized purchase of 18 multi-functional 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 6,326 tours with total attendance of 277,619 seniors.
3. For Double Ninth Festival, or Senior Citizens' Day, the SFAA held a fairy tale themed festival that was attended by close to 700 families and more than 2,000 people. Nationwide activities centered on care and

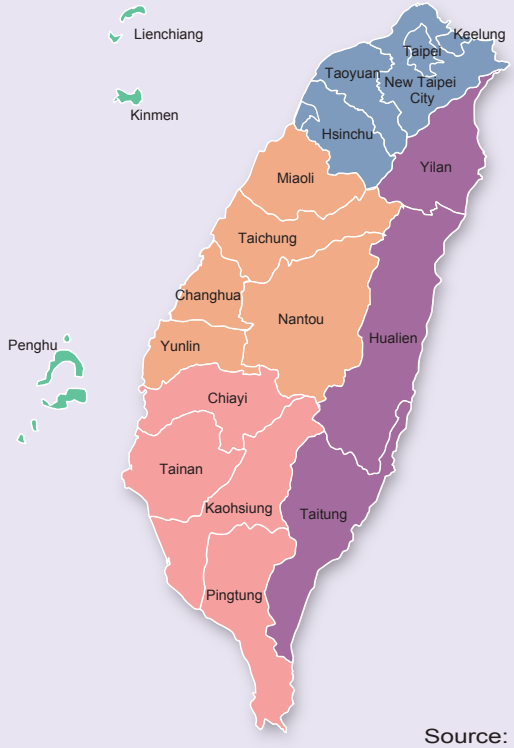
In 2016, the second Golden Community Care Stations Award Ceremony was held

Figure 9-6 Distribution of Nationwide Community Care Points

Central Region	
Miaoli	96
Taichung	306
Nantou	103
Changhua	153
Yunlin	73

Outlying Islands	
Kinmen	19
Lienchiang	5
Penghu	27

Southern Region	
Chiayi County	93
Chiayi City	22
Tainan	350
Kaohsiung	264
Pingtung	228



Northern Region	
Keelung	72
Taipei	91
New Taipei	262
Taoyuan	210
Hsinchu County	49
Hsinchu City	38

Eastern Region	
Yilan	82
Hualien	69
Taitung	62

Source: Social and Family Affairs Administration, MOHW

respect for elders are aimed to promote active aging and generational harmony while encouraging youths to join their elders in celebrating Senior Citizens' Day.

Chapter 4 Welfare for Persons with Disabilities

In response to the growing number of persons with disabilities, individual needs, and diverse international trends, the MOHW has adopted a new system for assessing the needs of people with disabilities. The system, which is based on the WHO's International Classification of Functioning, Disability and Health, was implemented in 2012 and is used to determine services and support to provide. At the end of 2016, there were 1,170,199 persons with disabilities in Taiwan, accounting for 4.9% of the population. Taiwan's welfare policy for persons with disabilities is based on actual needs as well as the "People with Disabilities Rights Protection Act" and a white paper on protecting the rights of people with disabilities. After being assessed by the new mechanisms , the disability policy is aimed to ensure economic security, diverse continuity of services, accessible environments, and opportunities for social participation for persons with disabilities.

Section 1 Rights Protection for Persons with Disabilities

1. A major milestone for persons with disabilities was reached in 2006 when the United Nations passed the Convention on the Rights of Persons with Disabilities (CRPD). A legal basis for the CRPD was established in Taiwan when the "Act to Implement the Convention on the Rights of Persons with Disabilities" was announced by Presidential Order on August 20, 2014, and enacted on the International Day of Persons with Disabilities later that year on December 3. Acting in accordance with CRPD implementation plans, which were approved by the Executive Yuan's

Committee for the Promotion of the Rights of Persons with Disabilities, the MOHW began to draft state report and reviewing laws and regulation, conducting education and training and compiling teaching materials in order to ensure fulfilling the CRPD's requirements.

2. A new system for assessing the needs of people with disabilities was formally enacted on July 11, 2012. It adopted the WHO's International Classification of Functioning, Disability, and Health (ICF), in particular its use of body structures and functions, activities and social participation, as well as its reliance on professional assessment teams. A single entry was also created for people to receive a range of personalized and diverse welfare services. In 2016, there were 367,614 people who applied for disability identification, with 335,238 people qualified and 347,075 who underwent needs assessment.

Section 2 Income Security for Persons with Disabilities

1. In 2015, persons with disabilities with qualifying household income and assets receive monthly living subsidies of NTD3,628, NTD4,872, or NTD8,499. There were 351,195 recipients in benefit each month on average, and the total amount was NTD21,307,790,000.
2. Day care and residential care subsidies for persons with disabilities exceeded NTD8,025,150,000 in 2016 and benefitted an average of 42,214 recipients each month.

Section 3 Daily Care for Persons with Disabilities

1. Personalized Care for Persons with Disabilities (Home and Community Care): Services to improve living quality and social participation chances among persons with disabilities include home care, supportive service for independent life, daily living reconstruction, day care, home-based care services, and residence/housing in community. More than NTD2,020,330,000 was spent to benefit a record of 5,774,581 recipients.
2. Home Support for Persons with Disabilities: Temporary/respite 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. More than NTD714,630,000 was spent for a record of 2,812,481 recipients.
3. Localizing and Downsizing of Care Institutions: At the end of 2016, there were 272 welfare institutions for persons with disabilities with a total of 22,607 beds and 18,687 patients. Primary services included day care, art education, work activities, and inpatient care. The MOHW also helped the institutions to downsize and integrate with 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 from the central to local government level. Three centers were established for multifunctional assistive devices, orthotics/prosthetics & mobility assistive devices, and communication & information assistive devices. These centers provided consultations, education and training, website maintenance, exhibitions, and promotional activities. In 2016, there were 27 assistive device centers across Taiwan to provide assessments and consultations for people in need of devices as well as promotion and maintenance services.
3. Persons with disabilities continued to receive subsidies to cover assistive devices. In 2016, more than NTD783,230,000 was spent on a record of 86,369 subsidies.
4. In order to assist persons with disabilities, the elderly, and others with mobility issues caused by stairs, assistance is provided to local governments in installing stair climbers for persons with disabilities. Proceeds from the public welfare lottery subsidized programs to provide stair climbers to residents in need of assistance in five cities: New Taipei, Taichung, Tainan, Taoyuan, and Keelung.

5. In 2016, the government provides subsidies for health, rehabilitation, and assistive device center plans to 12 hospital. It provides assistive device consultations, assessment, and customized design, so persons with disabilities can enjoy independent and autonomous lives with more than NTD5,628,000 on subsidies record of 94,675 recipients.

6. A comprehensive plan for subsidizing medical assistive devices to persons with disabilities was implemented on July 11, 2012. By the end of 2016, there were 35,308 payments (68% to males, 32% to females) totaling NTD239,647,388.

Section 5 Social Participation for Persons with Disabilities

1. In 2016, 508 cases of subsidies, totaling NTD12,990,000, were made available to NGOs that hold leisure, entertainment, training, and other activities for persons with disabilities, establishing barrier-free web pages, and facilities, and equipment used by persons with disabilities.

2. On November 26, 2016, holding activities to commemorate International Day of Persons with Disabilities, a special ceremony to present 20th Golden Eagle Awards to outstanding person with disabilities.

3. Subsidies and certifications are offered to qualified guide dog training and advocacy programs. In 2016, there were 37 in-service guide dogs and 140 puppies in training.

4. Measures were taken to provide parking for persons with disabilities and to identify qualified users including establishment of 18,283 designated parking lots, distribution of special license plates, and issue of more than 350,000 disability parking permits.

5. In 2016, there were 1,892 of "Rehabus" vehicles in Taiwan (Figure 9-7) and total ridership of 3,773,160, to enhance social participation for persons with disabilities.

6. In 2016, local governments were guided on establishing channels for sign language interpretation and setting standards for service scope and procedures. There were 337 certified sign language interpreters.

Figure 9-7 Number of "Rehabus" Vehicles, 2008 - 2016

10 Social Assistance and Social Work

Taiwan's social assistance operates under the principles of "active care, needs-centered, and self-sufficiency." The government conducted regular review and revision of social assistance regulation, along with unemployment benefits and the welfare system, to ensure that people receive the help they need.

Chapter 1 Social Assistance

Section 1 Current Status of Social Assistance

Before the amendment to the "Public Assistance Act" on December 29, 2010, the majority of social assistance went to people with the lowest incomes. Less help was given to other low-income population, such as near-poor or working poor, that did not qualify for social assistance due to work ability, family assets, or assistance from other family members. In order to reduce the occurrence of the working poor and to further self-sufficiency among beneficiaries, the poverty line was lifted to cover lower-middle-income households. To include more low-income population, the poverty line calculation methods have been adjusted based on the disposal income ratio method to be in line with current practices in most European Union and OECD nations. By sychronizing the poverty line with international standards, the program now fulfills its goal to gurantee minimum living standard for the poor.

Based on the revised calculation methods, the poverty line for low-income households in Taiwan rose from NTD9,829 to NTD10,244. The poverty line for the past five years is shown in Table 10-1. At the end of 2016, cities and counties had evaluated and approved for 145,176 low-income households (with 331,776 people) and 119,081 lower-middle-income households (358,161 people). A total of 689,973 disadvantaged people were included, with an increase of 149,820 households, or 153% (413,809 people), compared to those in June 2011 (Figure 10-1).

According to the 2013 Report on the Living Condition Survey of Low-Income and Lower-Middle-Income Family, the five main reasons for poverty among low-income and lower-middle-income households were: low income, unstable income, lack of employable person among household members, a high ratio of dependent person within household members, and prolonged illness among breadwinners (Figure 10-2).

Section 2 Living Support

Living support for low-income households is an important part of social assistance. Ongoing financial assistance is provided when at least two conditions are met: the average household monthly income per person falls below the lowest living cost index and the total household assets do not exceed the poverty line announced by the central and local authorities in the year of application. To guarantee the rights and benefits of the disadvantaged, an amendment in 2015 to the "Public Assistance Act" stipulated that living support shall be adjusted every four years based on the growth rate of the consumer price index. According to the 2013 Report on the Low-Income and Lower-Middle-Income Family Living Condition Survey, the leading social assistance measures in order of importance to low-income and lower-middle-income households were: family living assistance, NHI subsidies, miscellaneous school expense subsidies, and living assistance for the disabled persons (Figure 10-3), which means important measures in public

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

(NTD)

Region / Year	Taiwan	Taipei	Kaohsiung	New Taipei	Taichung	Tainan	Taoyuan	Fujian Province	
								Kinmen	Lienchiang
2012	10,244	14,794	11,890	11,832	10,303	10,244	-	8,798	
2013	10,244	14,794	11,890	11,832	11,066	10,244	-	8,798	
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	

Figure 10-1 Beneficiaries after Revision of Social Assistance Regulations

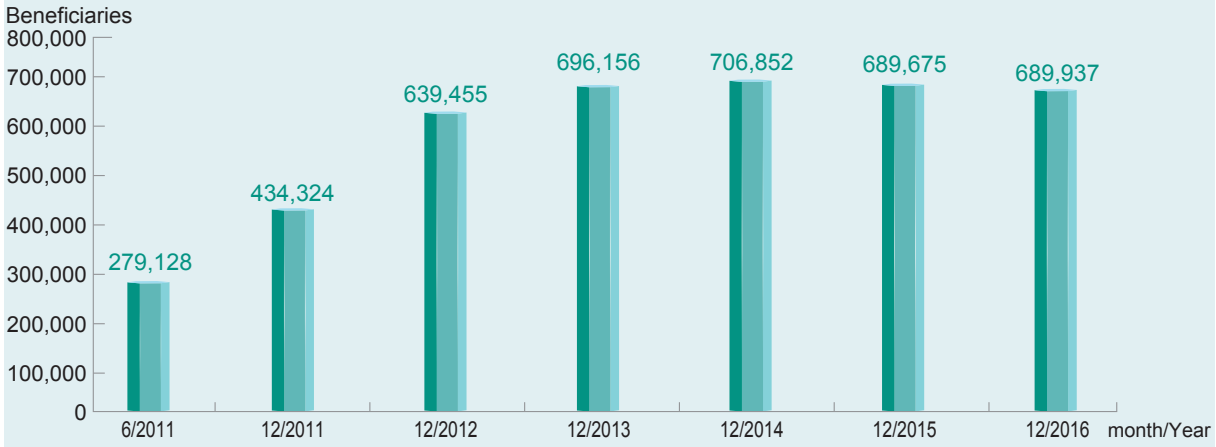
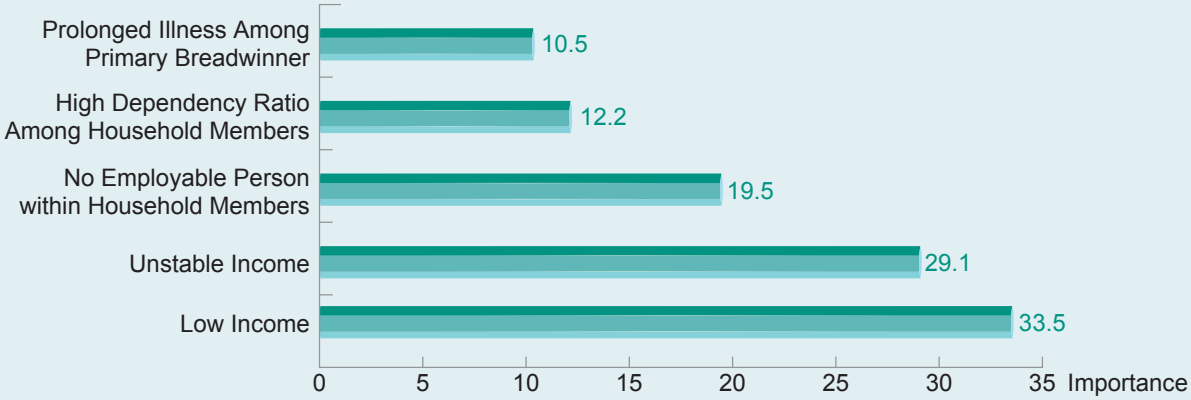
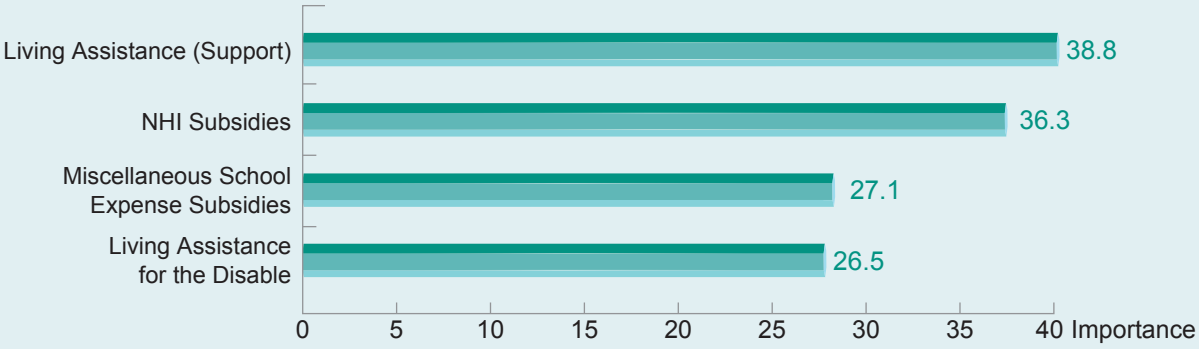


Figure 10-2 Five Leading Causes of Poverty among Low-Income and Lower-Middle-Income Households



Note: Importance = leading cause x 1 + 2nd leading cause x 2/3 + 3rd leading cause x 1/3

Figure 10-3 Importance of Social Assistance Measures Provided to Low-Income and Lower-Middle-Income Households



Note: Importance = most important x 1 + 2nd most important x 2/3 + 3rd most important x 1/3

social assistance for low-income households were mostly long-term in nature.

Local governments offer family living support, student and child living assistance, and related relief measures to low-income households. According to Article 12 of the "Public Assistance Act," members of low-income households who are elderly, pregnant for three months or longer, or disabled can qualify for an additional subsidy that is no more than 40% of the original amount in cash. In order to prevent welfare payments from discouraging the recipient's willingness to work, Article 8 of the act states that the amount of assistance granted by the government under this act or other acts shall not exceed the current year's minimun wage. Highlights of key living support measures provided to low-income households in 2016 are illustrated in Table 10-2.

Besides cash payments, based on needs local governments must provide additional benefits, such as nutritional supplements for pregnant women and infants (including nutritional subsidies for newborns of single mothers), birth subsidies, prioritized placement in social housing, rent subsidies, subsidies for basic repairment of a residence, loan interest subsidies for the purchase or building of a residence, student meal subsidies, and subsidies for hospitalization of the injured or sick. These measures guarantee that the basic needs of low-income and lower-middle-income households are met.

Section 3 Medical Subsidies

In accordance with Articles 18 and 19 of the "Public Assistance Act,' medical subsidies offered to low-income and lower-middle-income households include the following:

1. NHI Premium Subsidies: Article 19 of the "Public Assistance Act" states that "the insurance premium for low-income households to cover NHI shall be paid from the budget of the central competent authority. As for the NHI premium for lower-middle-income households , 50% shall be paid by the central authority. Those who meet the subsidy conditions in other acts that have common provisions as this act shall not receive subsidies from both legal provisions." In 2016, NHI premium subsidies is totaled NTD6,820,990,000.
2. Co-payment Fee Subsidies: In order to reduce the health care burden faced by low-income households, Article 49 of the "National Health Insurance Act" states 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." In 2016, subsidies for these expenses (including outpatient and hospitalization fees) totaled NTD1,582,070,000.
3. Subsidies for Medical Care Not Covered by NHI: In order to meet the health care needs of low-income and lower-middle-income households, local governments established laws and regulations governing subsidy standards for medical care fees. In 2016, there were 4,779 subsidies totaling NTD122,610,000.

Section 4 Workfare and Poverty Reduction

In order to promote self-sufficiency among low-income and lower-middle-income households, Article 15 of the "Public Assistance Act" states: "For persons of low-income and lower-middle-

Table 10-2 Key Living Support Measures Provided to Low-Income Households, 2016

Subsidy Item	No. of Subsidies	Total Subsidy Amount (NTD)
Family Living Support	1,177,215	NTD6,158,955,063
Student Living Support	633,747	NTD3,813,416,024
Workfare Programs	20,855	NTD347,977,911
Holiday Bonus	731,159	NTD594,642,013

income households who are employable, municipality and county (city) authorities should, according to needs, provide or make referrals to employment services, vocational training, or workfare programs to help them to be self-sufficient." Government agencies at each level provide employment services in accordance with this regulation. Based on needs, they also provide career counseling, loan interest support for establishing careers, subsidies for transportation in job seeking, temporary childcare or allowances for daycare during the job seeking or vocational training period, and other employment services and subsidies. Participants in vocational training programs can apply for special living allowances to help pay for family expenses during their schooling period.

In order to promote autonomy of low-income households, the MOHW promulgated implementation methods on June 6, 2016 in order to aid people to overcome impoverishment and become self-reliant. The MOHW will continue to supervise implementation by municipal and county (city) governments. Each local government uses social resources to develop self-sufficiency education, employment investment, and asset accumulation models based on the needs of low-income households. The MOHW encourages local governments to initiate pilot projects aimed at fostering greater self-sufficiency among the poor. In 2016, there were 27 subsidized projects and NTD31,158,000 in subsidies by local governments and NGOs to help people become self-sufficient and out of poverty.

Section 5 Emergency Relief

1. The "Public Assistance Act" provides timely assistance to people who are impoverished due to misfortune or other emergency situations. After the intervention of municipal or county (city) authorities, if the beneficiary is still impoverished, the MOHW can approve and grant extra assistance.
2. The "Immediate Care" Plan delivering emergency relief was initiated in response to cases of impoverishment resulting from an accident befalling a family's primary financial provider. Assistance is granted following home visits and confirmation by the local neighborhood office, private charitable organizations, and the local township (village/city/district) office.
3. Related achievements in 2016 are described in Table 10-3.

Section 6 The Plan of Children Future Education and Development Accounts

Adopting social investment approach, intervention strategies for poor households are aimed to encourage self-reliance. With this spirit in mind, the MOHW drafted a plan to create children future education and development accounts for children and youths, which the Executive Yuan has approved on November 22, 2016. The plan is a cooperative effort between the government and poor households. Qualified households will deposit up to NTD15,000 each year into a special account with a matching amount from the government. The plan encourages long-term savings (18 years) by poor households while offering complementary measures, such as training on financial management and household management. It increases the opportunities for higher education and career development for children of disadvantaged families, thereby breaking the cycle of poverty. For children without reliable support and of families unable to save money,

Table 10-3 Emergency Relief in 2016

Type		Beneficiaries (People)	Relief Payment Amount (NTD)
Emergency Relief from Municipal and County (City) Authorities		35,900	NTD223,191,601
from MOHW	Emergency Relief	1,096	NTD13,255,000
	"Immediate Care" Emergency Relief	12,400	NTD274,700,000

the government coordinates with NGOs, of which social workers provide guidance in the process to minimize potential risks they face.

Chapter 2 Assistance for the Homeless

Shelter and support for homeless people is administered in a three-staged model of emergency, transition, and stabilization to ensure their basic human rights. The regional differences are taken into account to develop local program to help the homeless people start over a new life.

Section 1 Analysis of Homeless Issue

According to the data from local governments, there were 2,556 homeless people registered for assistance at the end of 2016, more than 70% of whom in urban areas such as Taipei, New Taipei, Taoyuan, Taichung, Tainan, and Kaohsiung. Six cities and counties had fewer than 50 homeless people. There were no registered homeless persons in islands such as Kinmen, Lienchiang, or Penghu. The data shows a significant gap between different localities, with most homeless people concentrated in six municipalities of highly urbanized areas.

According to the 2013 MOHW Survey on the Living Conditions of Homeless Persons, 92.1% of the homeless were male. Most were between 45 and 65 years of age. The average age of homeless persons in non-urban areas tended to be higher than those in urban areas. As for education, 72.1% had education level less than junior high school. Most were single, with 47.4% never married and 46.9% divorced, separated, or widowed. There were many reasons why the homeless ended up on the streets. By the accounts of homeless people who were interviewed, the main reasons were loss of employment, insufficient money to pay rent, living alone with nobody to depend on, and poor family relations.

Section 2 Assistance Measures for Homeless Persons

Assistance for the homeless is provided in accordance with Article 17 of the "Public Assistance Act." Local governments should consider the number of homeless persons in their jurisdiction as well as assistance scale and needs when formulating related regulations or measures to ensure the rights of the homeless. Measures are as follows:

1. Shelters for Homeless People: Most municipal and county (city) governments have full-time staff in charge of shelters for homeless people. Their tasks include working with the homeless persons to reconnect with their family and friends, assisting those without home to return to, those wondering around the streets, or those who are unwilling to accept institutional placement. They also provide temporary placement (such as homeless shelters) for short-term habitation. There were 10 public homeless shelters, including seven that were privately operated.
2. Living Maintenance: In order to ensure a basic living standard for the homeless, the governments and commisioned NGOs work together to provide outreach services, and basic living maintenance, such as hot meals, showers, barber services, clean clothes, sleeping bags, and health care. To encourage local governments to aid the homeless, the MOHW has budgeted funds to subsidize assistance measures carried out by municipal and county (city) governments.
3. Employment Assistance Program: In cooperation with the government authority of labor affairs, vocational training is provided to homeless persons with the ability and motive to work. All homeless person s are carefully assessed before referred to relevant units to seek job opportunities. For example, work is provided to relieve poverty and cultivate good habits. Counseling makes the homeless more self-reliant, paving the way for them to return to their families and re-integrate into society.
4. Care in the Bitter Cold: On November 10, 2014, the MOHW issued a plan to improve care for the vulnerable when the weather is bitter cold and during the Lunar New Year holiday period. Whenever the Central Weather Bureau issues a bitter cold weather warning for temperatures below 10° C, local governments and NGOs jointly offer care to ensure the homeless access to hot meals,

blankets and clothes as well as information on temporary shelters.

5. Results: In 2016, local governments assisted homeless persons 339,449 times by offering outreach services (308,612 times), assistance returning to family (289 times), Lunar New Year holiday assistance (11,086 times), referral to welfare services (5,940 times), referral to employment services (2,832 times), assistance with housing rental (341 times), placement (2,962 times), and other services (7,269 times).

Chapter 3 Disaster Relief

An increase in extreme weather events in recent years has led to higher frequency of disasters and therefore a greater focus on disaster relief. Efforts are constantly made in preventing and preparing for disasters as well as response and restoration after disasters hit. Reviews and improvements are made by social administration. For disaster relief, the primary duties of the MOHW's Department of Social Assistance and Social Work are to provide emergency shelter and temporary accommodation, to prepare necessary living supplies, and to reassure and care for victims in the suffering areas. Preparation is the focus before disasters strike, so that effective responses can take place when disasters occur.

Section 1 Sheltering and Supply Preparations for Disaster

1. In the flooding and typhoon season, local governments must be ready to respond by providing temporary accommodation, social assistance, and special protection measures for disadvantaged groups, in accordance with the "Disaster Prevention and Protection Act.", There were 5,609 shelters for disaster victims nationwide that had a total capacity to serve 1,970,637 people in 2016.
2. In response to challenges posed by climate changes, the MOHW strengthened disaster preparation and response among social administration departments.The MOHW held disaster relief forums, seminars, two joint meetings, and three professional research and study activities. Total attendance at these events was 1,106 in 2016.
3. The MOHW established "regional alliance for timely assistance" and "one worker to one case" models for social administration workers. Local governments are separated into five geographic areas, cities and counties in each area assist with each other when disasters occur. Depending on the type of disaster, special social work models are developed. For example, following the incidence of Formosa Fun Coast powder explosion, the "one worker to one case" model was used to assign social work responsibility. Together, these measures include on-time relief and assistance, trauma recovery, psychological support, and needs surveys.
4. In order to ensure effective sheltering and accommodation, emergency relief supplies, and volunteer mobilization, an directive revised four administrative regulations on August 4, 2016 relating to: 1. Principles of disaster relief processes to aid victims, 2. Disaster relief supply adjustments, 3. Procedural guidelines for government agencies to cooperate with NGOs on social administration and disaster prevention and protection, and 4. Guidelines and models for stockpiling emergency relief supplies to assist with natural disaster responses at the local level in high-risk zones (remote villages and indigenous communities).
5. In accordance with an amendment to the "Disaster Prevention and Protection Act" on October 13, 2016, the MOHW announced procedures for handling entrepreneurial loans and interest subsidies for low-income households in disaster suffering areas. The initiative was retroactively implemented to August 6, 2015.

Section 2 Post-Disaster Condolence Payments

1. When major natural disasters occur, following instruction from the Executive Yuan or the Central Emergency Operation Center (if convened), the MOHW will instruct local governments to confirm the numbers of casualties including deaths, missing, and injured persons. It then instructs senior officials to begin issuing condolence payments.

2. After checking related documentation, municipality or county (city) governments distribute post-disaster condolence payments to qualified people. Families of the dead or missing receive NTD200,000 while those who were severely injured receive NTD100,000. The MOHW also provides consolation payments and the Relieve Disaster Foundation uses donations to increase payment amounts. Standards used by the MOHW and the Foundation to give consolation payments to the dead, missing, and severely injured include the following:

(1) Condolence Payments for Deaths: NTD600,000 (MOHW NTD200,000, foundation NTD400,000)

(2) Condolence Payments for the Missing: NTD600,000 (MOHW NTD200,000, foundation NTD400,000)

(3) Condolence Payments for Major Injuries: NTD150,000 (MOHW NTD50,000, foundation NTD100,000)

3. Condolence Payments in 2016: After a major earthquake struck Tainan on February 6, 2016, the MOHW provided a total of NTD23 million in condolences to the families of 115 people who died and to two people who suffered major injuries. The MOHW also provided a total of NTD250,000 to the family of one victim who died and to one person who suffered major injuries during Typhoon Nepartak; and a total of NTD600,000 to the families of three victims who died during Typhoon Megi.

4. Post-disaster Assistance for the Tainan Quake:

(1) Distribution of Condolence Payments and Relief Assistance: After the Tainan earthquake struck on February 6, 2016, the MOHW accompanied the President and the Cabinet Chief on visits to victims and family of victims at Sin-lau Hospital, National Cheng Kung University Hospital, and the Tainan Mortuary Services Office. The MOHW oversaw the distribution of condolence payments by the Tainan City government to families of the dead and the seriously injured. At the end of December 2016, the MOHW and the Relieve Disaster Foundation had distributed condolence payments to the families of 115 victims who died and to two persons who suffered major injuries.

(2) Activating Social Work and Volunteer Services: After the earthquake struck, the Tainan City government rapidly deployed social workers and volunteers. The MOHW helped match neighboring cities and counties with social service organizations to provide additional support and manpower. Services included home visits to victims and their families, welfare consultations, needs assessments, linking of inter-departmental resources, and referral assistance. The MOHW oversaw the Tainan City government's social worker assignments, which were based on the principle of "one social worker to one family." The social workers analyzed needs and referred households to suitable resources.

Chapter 4 Social Work

Section 1 Social Work System

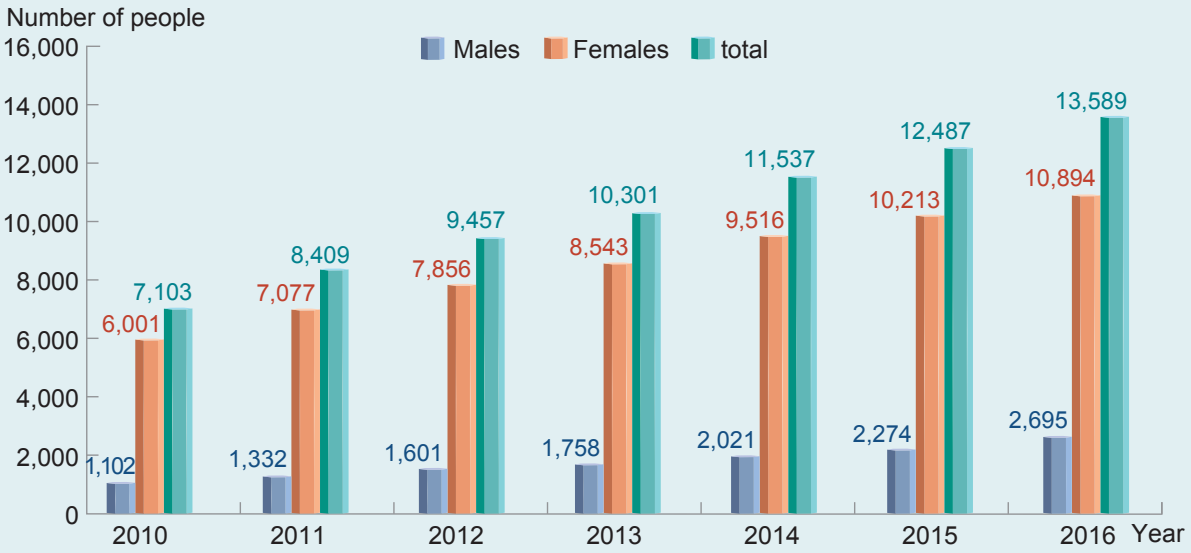
Countries around the world are implementing social work professional systems. By the end of December 2016, there were 10,021 people in Taiwan with social work license, 5,613 professional social workers, and 13,589 social workers assigned to social welfare tasks in public and private agencies (Figure 10-4). On average, there was one social worker for every 1,693 people.

The following measures have been conducted to enhance a social work professional system:

1. Education and Examination

(1) Examination systems and college education play a major role in the professional development of social workers. Therefore, in 2013, in conjunction with the Ministry of Examination's analysis of professional competencefor national examination, the MOHW completed analysis of professional competenceof government social workers and social work departments. It examined work content, required knowledge and technical skills, work-related education and experience needs, and other topics. The MOHW then asked the Ministry of Education

Figure 10-4 Social Workers Assigned to Social Welfare Tasks in Public and Private Agencies, 2010-2015



Source: Ministry of Health and Welfare

to encourage schools to adjust courses based on social worker examinations. The changes will cultivate outstanding front-line social workers.

(2) Since years of practices can waive certain subjects from the social work examination by the Ministry of Examination, the MOHW held 68 committee meetings had conducted secondary reviews of 10,651 social work applications by December 2016.

(3) The second national examination for specialist social workers was completed in May 2016. A total of 201 social workers passed (with passing rate of 71.4%), 63 specialized in medical care; 50 in mental health; 56 in children, youth, women, and family; 17 in age and aging ; and 15 in disability.

2. Professional Training

(1) In order to meet practitioners' needs and reduce the incidence of repeated training, the MOHW planned comprehensive basic training and advanced training focused on specific areas. These courses were part of a social worker professional training plan that balances both accumulation of professional knowledge and development of the social work profession in Taiwan.

(2) In accordance with revisions to regulations for continuing education and professional licensing of social workers as well as regulations for the distribution, selection, review, and continuing education of specialist social workers, the MOHW raises professional knowledge and service quality of social workers by completing standards for continuing education. In accordance with updated regulations governing continuing education and professional licensing of social workers, review and certification of 2,639 continuing education cases took place in 2016.

3. Protection of Social Workers' Rights

(1) A reasonable and friendly working environment is needed to encourage social workers to remain in their position for an extended period of time. The MOHW, the Executive Yuan's Directorate-General of Personnel Administration, and the Ministry of Civil Service therefore researched on the issue of necessary adjustments to social workers' position grades as well as forms and amounts of professional allowance. Professionally certified social workers in government with practical work experience

can benefit first via transfers, in order to reduce their attrition rate.

(2) To improve working conditions for social workers in private sector, the 2016 the guidelines governing social welfare subsidies were revised to increase subsidies for social workers with certificates. The MOHW requested that local governments ensure that employers adhere to the rights for private social workers guaranteed in the "Labor Standards Act." These steps were taken to protect the rights of social workers.

Section 2 Augmenting the Social Work Workforce

Throughout Taiwan, local governments face social worker shortages. On September 14, 2010, the Executive Yuan therefore approved a plan for local governments to increase deployment and use of social workers. The plan has added 1,462 social workers from 2011 to 2016, and is expected to add another 394 social workers between 2017 and 2025. Until 2025, the total number of social workers in public agencies was forecast to increase from 1,590 to 3,052. The increase of social workers hopefully will lower the case load to allow front-line social workers provide better quality of investigations and support for clients in needs of protective services. More than 60% of public social workers were in formal full-time position to ensure their promotion and reasonable salary. By creating a system that encourages long-term experience in specialized areas, the professional capacity of social workers will be able to improve.

Starting in 2011, the central government also provided a 40% subsidy to add 366 contracted social workers whose primary responsibility is to provide direct services related to youth protection, prevention of domestic violence and sexual assault, and social assistance for the disabled, older people, and women.

By the end of 2016, 1,067 formal social workers had been added, which accounted for 71.6% of total target number in the Executive Yuan plan. Local governments had 3,061 social workers, an increase of 1,471 with a 92.5% increase, in comparison with that before implementation of the Executive Yuan plan. The population per social worker decreased from 14,549 people to 7,514 people, which would lead to better service quality.

In 2014, a national social worker database has been established in order to improve the management of social worker resources. Online review of continuing education for social workers started in June 2015, while online review of continuing education for specialized social workers was added in July 2016.

Section 3 Occupational Safety of Social Workers

Protection of occupational safety for social workers falls under the scope of the "Social Worker Act," the "Protection of Children and Youths Welfare and Rights Act," the "Domestic Violence Protection Act," and other related laws and regulations respectively. To strengthen occupational safety of social workers, the Executive Yuan approved a social worker professional safety program on April 1, 2015 to create friendly work environments through safe employment, security services, and stable management. Measures include the following:

1. A measurement scale on high-risk and general risk work by social workers was completed and additional allowances were offered based on risk. Subsides for performing high-risk task benefitted 3,645 people in 2015 and 4,153 people in 2016. By the end of 2016, accumulated subsidies were NTD39,288,800.
2. The MOHW sought funding from the 2016 public welfare lottery to provide NTD15.77 million in subsidies to support the plan for guaranteeing the personal safety of social workers and improving their professional capacity. By the end of December 2016, subsidies provided in 41 cases totaled NTD7,396,065.
3. The MOHW compiled a social worker safety handbook that has become a mandatory part of training for frontline social workers.

Chapter 5 Welfare Resources Network

Section 1 Community Development

1. Community development in Taiwan is based on a civil association model in accordance

with the "Regulations on Community Development Work ." Community based construction and social welfare are community based and focus on three major areas: public facilities, welfare production, and moral ethics. The goal is to improve community welfare.

2. An important part of community development involves using social forces to promote community welfare. Subsidies are offered for communities to issue publications and hold activities that consolidate community awareness. Bringing people together promotes interaction within communities and improves quality of life. Achievements include the following:

(1) Establishment of Community Activity Centers: At the end of 2016, Taiwan was home to 3,846 community activity centers that provide space for community development associations to hold meetings; for local children, women, and older people to engage in activities; and for residents to rest or gather.

(2) Building Community-Based Welfare : The MOHW conducts flagship plans, community manpower cultivation, disaster prevention and preparation advocacy, and community proposal cultivation. In 2016, subsidies provided in 145 cases totaled NTD15,546,800.

(3) National Demonstration Activities: There were two national demonstration activities in 2016 based on the themes of community customs & entertainment (attendance of 3,109) and community-based social welfare (attendance of 1,454).

(4) Conducting Community Development Accreditation: In 2016, community development accreditation was carried out in 13 city and county governments in southern Taiwan and community development associations within their jurisdictions. Seven municipalities and counties (cities) were named outstanding: Taipei, New Taipei, Taoyuan, Taichung, Nantou, Hualien, and Kinmen. Six counties (cities) were named excellent: Yilan, Miaoli, Hsinchu County, Lienchiang, Keelung, and Hsinchu City. Community development associations in Kengzi, in Taoyuan's Luzhu District, and 30 other areas earned superb, outstanding, or excellent marks or individual category honors. A total of 779 people attended events held to honor these communities.

Section 2 Charity Donations Destined for Social Welfare Funds

In order to manage charitable fundraising and to ensure proper use of resources, on May 17, 2006, the government announced the "Charity Donations Destined for Social Welfare Funds Implementation Regulations." The regulations cover social welfare activities, educational and cultural affairs, social charity, international humanity rescue, and other programs recognized by central government agencies. In 2016, there were 372 permits issued to 442 groups, with total funds collected surpassing NTD2,452,095,366.

Each year an accounting agency audits MOHW-approved charity fundraising cases in order to improve financial accountability and effectiveness of public donations. In 2016, there were 96 audits, comprising 25 cases in 2015, and 44 cases in 2014, 18 ongoing cases for major international and domestic disasters, and nine cases of special concern to related competent authorities.

Special seminars were held to increase professional knowledge of those who carry out charitable fundraising initiatives, to improve capabilities of charitable organizations, and to familiarize organizations with related laws and regulations. In 2016, there were two such seminars with total attendance of 177 people.

Section 3 Promoting Volunteerism

In order to integrate with NOGs' capacity, encourage people to help one another, and fully develop volunteerism, the "Volunteer Service Act" was enacted on January 20, 2001. The act designates the definition and scope of volunteerism, responsibilities of competent authorities and related units, rights and obligations of volunteers, and measures to advance volunteering. Better integration of social worker resources facilitates deployment of volunteers.

In order to advance volunteer service development, the MOHW established an integrated national volunteer service information platform and a system for managing supplies and volunteers during major disasters. It conducted volunteer service appraisals, surveys, and research; managed education, training, observation, and awards; and raised volunteer capacity, service quality, and effectiveness. In a 2016, 9,955 volunteers were awarded.

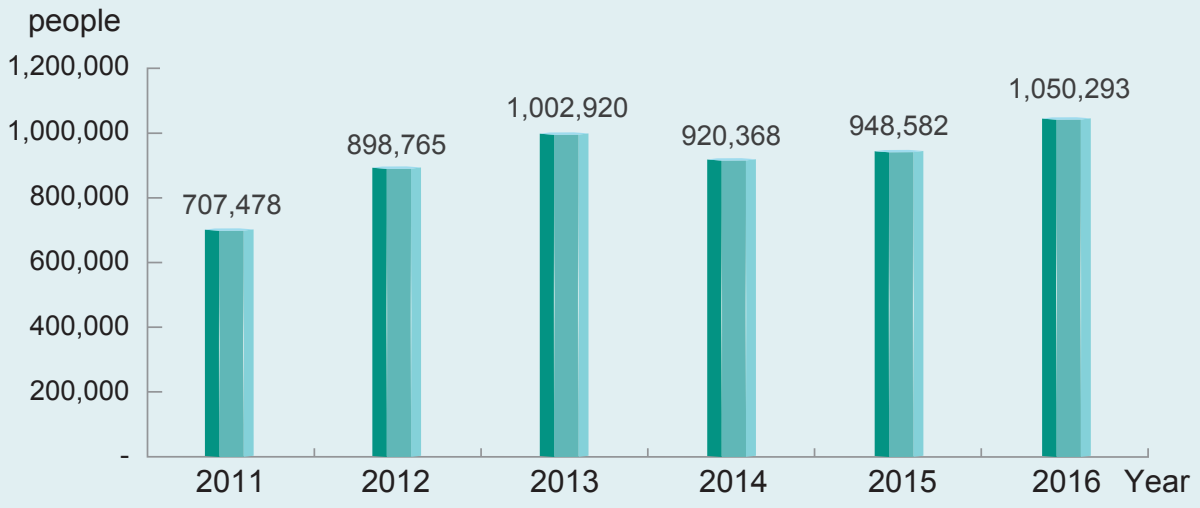
Total volunteers nationwide increased from 707,478 in 2011 to 1,050,293 in 2016 (Figure 10-5). There were 358,294 male volunteers (34%) and 691,999 female volunteers (66%), for a male-to-female ratio of approximately 3:7. In terms of service fields, education had the highest number of volunteers at 441,861, followed by health and welfare with 345,772 volunteers, environmental protection with 163,328 volunteers.

In terms of age, young adults led the way with 240,888 volunteers (23%) between 18 and 29. There were 191,998 elderly volunteers (18%) who were 65 or above. Volunteers assisted people 644,408,229 times in 2016 and worked 94,931,380 hours, equivalent to the working hours of 45,640 full-time workers.

Section 4 1957 welfare consulting hotline

In order to assist families and individuals facing hardships, the MOHW launched the 1957 welfare consulting hotline. The toll-free hotline, which is open year-round, provides access to a single channel for welfare consultations, reporting, and referrals. Operation of the welfare consultation hotline was commissioned to the Taiwan Fund for Children and Families in 2016. The Fund employs 35 professional social workers (including one administrator) who, from the hours of 8 am to 10 pm, offer daily consultations and assistance to people facing hardships or in need of welfare. When responders receive a call that requires reporting or referral, they use the system to notify local social welfare departments. After accepting the case, the departments dispatch social workers for visits or related services. A hotline knowledge bank was also created that consolidates welfare and safety network resources for the public to use. In 2016, there were 81,101 calls, with 714 cases reported to municipal or county [city] governments.

Figure 10-5 Number of Volunteers, 2011-2016



Source: Ministry of Health and Welfare

11 Sexual Violence Prevention and Protective Services

Gender-based violence refers to any form of violence that results from gender inequality. Common forms of gender-based violence include intimate partner violence, sexual assault, and sexual harassment. Other forms of violence and abuses of children and youths, the elderly, and the disabled, which all represent seriously threat and harm to the life and health of victims. To eradicate gender-based violence and the terror it brings to life requires a multi-faceted approach: national laws, inter-departmental cooperation mechanisms, protective measures for victims, treatment and guidance for offenders, and preventive education.

Chapter 1 Prevention of Gender-based violence

Section 1 Inter-Departmental Network Integration Mechanism

1. Constructing the Inter-departmental Communication Platform: In 2016, five group meetings and preliminary meetings that aimed to prevent domestic violence and sexual assault were convened and suggested ways to improve multi-disciplinary coordination and intervention strategies, including strengthening violence prevention guidance for non-cohabiting intimate partners, strengthening legal protection of victims of sexual assault, and preventing recidivism among offenders.
2. Gender-based Violence Prevention and Protection Consensus Camp: The May 2016 camp was joined by workers involved in the prevention of domestic violence, sexual assault, and sexual harassment; participants include those who assist with the disabled, protection of children and youths, and workers for sexual exploitation against children and youths; local and central protection network staff responsible for offender intervention; and NGOs. A total of 150 participants participated in the discussion of key topics and the future direction for protective services.
3. The Third Annual Purple Ribbon Awards: On November 2016, the third annual Purple Ribbon Awards were held to honor workers who made outstanding contributions in protecting against gender-based violence. There were 15 award recipients from the protective services field, including social administration, police administration, health care, education, and judicature. Winners who shared their experiences not only provided first-hand information and assessments that led to new protective service ideas but also promoted professional values and understanding among protective network members.

Section 2 Reporting System and Information Platform

1. The MOHW implements legally-mandated reporting, and has established a nationwide protective services information system and case handling process monitoring system under the "eCare" initiative; the MOHW has introduced a case follow-up management mechanism and established an information-sharing platform for protective services network workers.
2. The MOHW has established the 113 Protection Hotline. In 2016, the Hotline handled 25,069 reports, of which the largest share (9,838 reports) related to child protection, followed by domestic violence (9,595), violence involving other family members (4,118), senior citizen protection cases (891), and sexual assault (627) (Fig. 11-1).
3. Development of diversified reporting channels: In 2016, the combined total number of cases in domestic violence, sexual assault, child protection and senior citizen protection reports made through the various channels, including the "E-Care" program, the 113 Protection Hotline, online consultation services and the 113 Protection Hotline text-messaging service, etc., came to 158,756 reports (of which 137,825 were made through the "E-Care" program, 19,824 through the 113 Protection Hotline, 900 through the online consultation services, and 207 through the 113 Protection Hotline text-messaging service).

Figure 11-1 Case Number of the 113 Protection Hotline, 2008-2016

Section 3 Promoting Prevention of Gender-Based Violence

1. Taiwan Against Gender-Based Violence (TAGV) Website and TAGV Newsletter: By 2016, the TAGV website contained 18,195 volumes of data and had exceeded 2.41 million hits and fourteen issues of the TAGV newsletter had been published. Website users can browse the multi-media section to search for videos. The videos can be uploaded onto social media sites to further promote the prevention of violence.
2. Implementation of the "Violence Prevention Community-based Primary Prevention Promotion Plan": Subsidies were provided to help community organizations implement localized gender-based violence prevention education. In 2016, subsidies were provided for 26 projects in 21 counties and cities, with 132 communities participating. A total of 840 training sessions were held, with more than 600,000 people benefiting from these activities.
3. Implementation of the "Gender-based violence Prevention Touring Forum Program": Making use of commercial movies to enhance accessibility to the general public, forums led by experts were held following the movie, with the aim of promoting gender equality awareness and gender-based violence prevention awareness. In 2016, a total of 420 sessions were held, with around 45,000 people participating.
4. Implementation of the "Competition for Outstanding Masters and Doctoral Theses on Gender-based violence Prevention and Protective Services": To encourage graduate students at universities throughout Taiwan to undertake research on topics relating to gender-based violence prevention and protective services, a "Competition for Outstanding Masters and Doctoral Theses on Gender-based violence Prevention and Protective Services " was held in 2016. The scope of thesis topics included domestic violence, sexual assault and sexual harassment prevention, protection of children, teenagers, senior citizens and people with disabilities, and prevention of sexual transactions involving minors, etc. Six theses received awards (including 1 doctoral thesis and 5 masters theses).

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

1. "Plan for Strengthening Local Government Social Worker Assignment and Career Development": The MOHW has continued to provide subsidies to help local government authorities expand the availability of social workers for protective services . In 2016, a total of more than NTD146 million in

subsidies was provided to assist in the maintenance of 508 protective social workers specializing in protective services for children, teenagers, victims of domestic violence, and victims of sexual assault.

2. Implementation of the "Protective Social WorkerWorkforce Auditing Plan": In 2016, the "Protective Social Worker Workforce Auditing Plan" was implemented in every municipality, city and county in Taiwan, and the audit results were reported to the MOHW. In addition, revisions were made to the "Standards Governing Protective Social Worker Qualifications and Scope of Occupational Responsibilities," with local government authorities being required to implement training in accordance with the protective social worker training implementation plans specified by the MOHW, and to accurately record the names of all personnel undergoing training in the Social Worker Human Resources Management System.

3. Increasing the number of protective social workers: According to the statistics compiled by individual municipal, city and county governments regarding the number of protective social workers specialized in protective services for children, teenagers, victims of domestic violence, and victims of sexual assault in 2016, the total number of social workers engaged in protective services in the public sector was calculated to be 966. Adding the 590 social workers employed by private-sector organizations commissioned to implement protective services, there are 1,556 social workers in the protective services, which meets the estimated target for a reasonable number of protective social workers.

Chapter 2 Prevention of Domestic Violence

Section 1 Status of Domestic Violence Services

The "Domestic Violence Prevention Act" was promulgated on June 24, 1998. There are approximately 100,000 domestic violence cases every year. In 2016, intimate partner violence had the greatest number of reported cases, with women accounting for 84.3% of all victims. The next was violence between other family members, with women accounting for 57.7% of all victims, then abuse toward children and youths, with boys accounting for a majority of victims (54.5%). For elder abuse, a majority of victims were women (60.9%). (Figure 11-2)

In 2016, municipality and county (city) governments provided protection more than 1.29 million times and paid more than NTD577,720,000 to defray costs associated with emergency shelter, emergency living assistance, psychological rehabilitation, health care, legal fees, and other services.

Section 2 Diverse Intervention for Victims of Domestic Violence

1. Funding for collaboration with NGOs by Local Governments: Social welfare subsidies and revenue from the public welfare lottery have been used to help local government authorities and NGOs implement various types of domestic violence prevention work. The individual projects are outlined below:

(1) "Shelter Services for Victims of Domestic Violence": Nationwide, there are short-, medium- and long-term shelter programs providing a total of 369 beds in 2016; this included beds in 1 state-owned, state-run facility, 9 state-owned facilities the operation of which had been outsourced to the private sector, 15 special project facilities, and 1 individual cases facility, as well as hotels providing contracted services. Besides the funding provided by local government authorities, the MOHW also provides additional funding support for NGOs providing shelter services for domestic violence victims. In 2016, a total of NTD7 million was provided for 10 projects, providing shelter services on 20,000 occasions.

(2) Implementation of a project to arrange the establishment of domestic violence service centers near courts: The MOHW has provided funding support to local government

Figure 11-2 Reported Victims of Domestic Violence by Gender, 2016

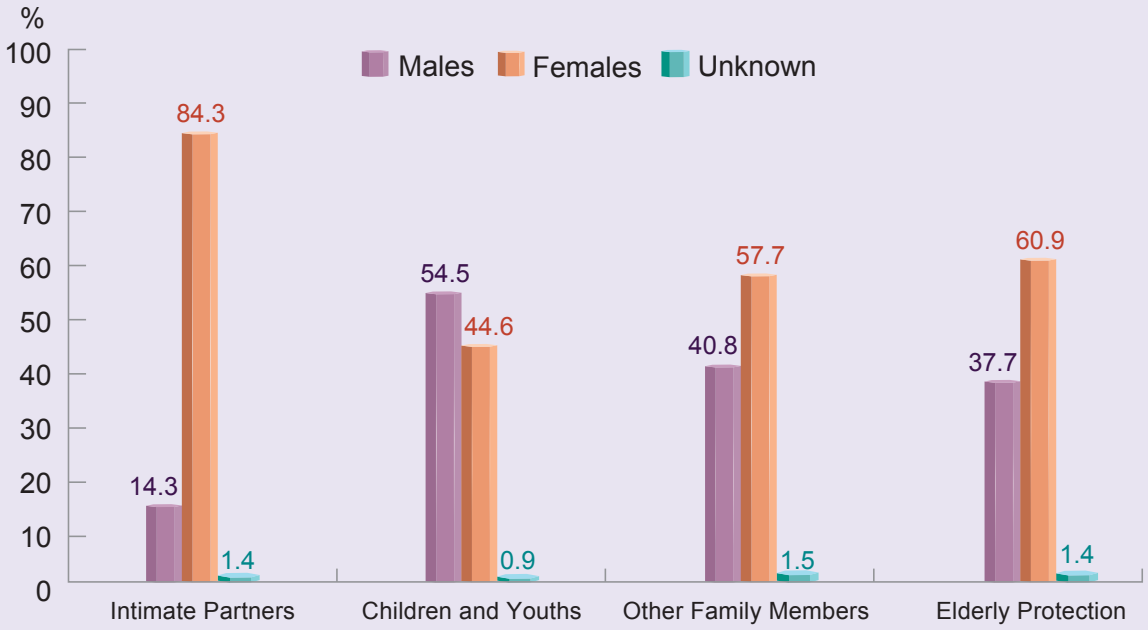


Table 11 Domestic Violence Protective Assistance Incidents and Monetary Amounts, by Year

Item/Year	2012	2013	2014	2015	2016
Protective Assistance Incidents	915,844	988,586	1,127,784	1,196,998	1,295,786
Protective Assistance Monetary Amounts (NTD)	391,164,159	468,542,425	533,561,364	576,498,676	577,721,960

authorities to establish 19 domestic violence service centers by NGOs, to be located in the vicinity of regional courthouses; the service centers will provide legal advice, escort victims to court, and provide shelter services, etc. In 2016, the total amount of funding provided was NTD4.5 million, and services were provided on 120,000 occasions.

(3) Provision of guidance and intervention for children and young people who have witnessed domestic violence: The MOHW has helped local government authorities to collaborate with professional organizations on the provision of services for children and young people who have been witnesses to domestic violence. In 2016, a total of NTD9 million was provided for 13 projects, and services were provided on 14,197 occasions.

(4) "Project to Provide Services to Victims of Domestic Violence in Indigenous Communities": The MOHW has helped local government authorities to collaborate with NGOs on the provision of protective services for victims of domestic violence in indigenous communities. In 2016, NTD6.3 million was provided for 8 projects, and services were provided on over 80,000 occasions.

(5) "Project to Provide Services to Victims of Domestic Violence in Households that Include new immigrants": The MOHW has helped local government authorities

collaborate with gender-based violence on the provision of protective services for victims of domestic violence in households that include ‘New Immigrants'." In 2016, NTD1.3 million in subsidies was provided, and a "New Immigrant Personal Safety Protection Plan" was implemented in collaboration with the Foreign Spouse Assistance Fund, with funding of NTD7 million, which provided services on over 60,000 occasions.

(6) Implementation of "one-stop" domestic violence intervention services projects: The MOHW has helped local government authorities to collaborate with NGOs on the development of "one-stop" domestic violence intervention services that are focused on victims' needs (and which must provide at least three types of services, such as follow-up guidance services, services for children and teenagers who have witnessed domestic violence, services to help victims of domestic violence find employment, services to help victims become independent, etc.). In 2016, financial support totaling NTD27 million was provided for 12 projects in 10 counties and cities, with a total of 4,850 new cases being taken on; protective services for victims were provided on 51,900 occasions; related services were provided for 812 children and teenagers who had been witnessed of domestic violence (with services provided on 11,367 occasions); assistance to help victims secure employment was provided for 103 victims (with services provided on 3,322 occasions).

2. Promoting the Domestic Violence Safety and Protection Network Plan:

(1) Convened regular review meetings to survey the state of each municipality and county (city) government's implementation of the Domestic Violence Safety and Protection Network Plan and investigate systematic problems that central administrations face.

(2) By December 2016, the Taiwan Intimate Partner Violence Danger Assessment (TIPVDA) was being applied to 94.3% of reported domestic violence cases.

(3) A multi-faceted evaluation index was developed for removal of high-risk cases from the Domestic Violence Safety and Protection Network. Network members use the index to evaluate risk factors of high-risk cases in order to determine whether removal is appropriate. Cities of New Taipei, Taichung, Yunlin, Kaohsiung, Pingtung, and Hualien were selected as the sites of a trial plan from November 2015 to April 2016.

Section 3 Intervention for Domestic Violence Offenders

1. Advocating Civil Protection Orders in Offender Intervention Plans and Advising Local Governments on Plan Implementation: In 2016, intervention was provided to 4,036 people, 1,358 of whom already completed the program. The intervention rate was 100%, excluding offenders who died, were incarcerated, or had protection orders cancelled.

2. Preventive Services for Offenders of Domestic Violence

(1) The 0800-013-999 male hotline was established in 2004 to consult men in domestic conflicts and reduce the risk of violence. In 2016, the hotline received 20,133 calls and provided services on 18,259 calls, including 8,874 in-depth discussions and 9,365 general consultations.

(2) Surplus from the public welfare lottery provides subsidy to domestic violence offender prevention plans, which are co-handled by local governments and NGOs to provide direct guidance for offenders, case management, follow-up, and professional training. In 2016, there were 25 plans subsidized, with total subsidies of NTD25.42 million and services provided 24,621 times.

(3) Formulation and Promulgation of Treatment Regulations for Domestic Violence Offenders: In accordance with an amendment to the "Domestic Violence Prevention Act," the MOHW announced planning standards for treatment of domestic violence offenders in May 2016. It followed with guidelines for parenting educational

assistance of domestic violence offenders as well as qualification and training course standards for instructors in August 2016.

Section 4 Quality of Domestic Violence Prevention and Education

1. Strengthening Cooperation Mechanisms for the Domestic Violence Prevention Network: In 2016, three meetings were convened to discuss 17 serious domestic violence cases, in which violence had resulted in serious injury or death. Discussion was focused on the state of operations of the domestic violence prevention network and recommendations to improve inter-disciplinary coordination and intervention strategies.
2. Development of Victim Assessment Guidelines: In order to improve the professionalism and knowledge of social workers who handle domestic violence cases, the MOHW completed the development of new assessment and intervention guidelines for victims of intimate partner violence and new assessment and guidelines for children and youths who witnessed domestic violence in 2016.
3. Categories and Treatment Models for Elder Abuse of Direct Relatives: In 2016, the MOHW commissioned the National Taipei University of Nursing and Health Services to post on the MOHW website research reports relating to problem types and corresponding analysis and treatment models of abuse of elderly persons by younger lineal relatives. This information was also passed to local social welfare departments and domestic violence centers to be used as a reference for professional training.
4. Strengthening the Professional Knowledge of Domestic Violence Prevention Workers: In 2016, to further advance domestic violence prevention, the MOHW conducted preliminary training of social workers and held administrative seminars with 555 people from public and private sectors.
5. Improving Professional Capacity of Elderly Protection Workers: The MOHW and professional organizations joined to hold preliminary and advanced training and case seminars on topics related to protection of the elderly. Total attendance at the training sessions was 219 in 2016.
6. Professional Treatment Training: In 2016, the Psychiatry and Medicine Network Regional Guidance Plan made education and training of health workers who provide professional treatment for sexual assault offenders a core annual training for hospitals. One foundational and four advanced courses were held with a total attendance of 307 people.
7. Editing the "Treatment of Domestic Violence and Sexual Assault Offenders – Handbook for Administrative Officials and Health Workers": In order to improve the sensitivity and capabilities of health workers for domestic violence and sexual assault cases, as well as the professional capacity and service quality of administrative officials, the MOHW made additions and revisions to this handbook.

Chapter 3 Prevention of Sexual Assault and Sexual Harassment

Section 1 Status of Sexual Assault Services

1. Following enactment of the "Sexual Assault Crime Prevention Act" on January 22, 1997, there have been approximately 13,000 cases of suspected sexual assault reported each year. In 2016, there were 8,000 reported victims of sexual assault. Details of these acts are as follows:

(1) About 83% of the victims were women, and 54% were between the ages of 12 and 18. About 83% of the suspects were male, 34% were between the ages of 12 and 24, and 12% were either confirmed or suspected of being disabled.

(2) There were 73% of sexual assaults committed by an acquaintance of the victim, 5% by a stranger, and the remaining cases by unknown or other offenders. Intimate

partner sexual assault, such as that between a current or former spouse, fiancé/fiancée, or current or former boyfriend/girlfriend, was most common (29% of cases). It was followed by unclear or other at 22% and friends (family friends, general friends, online friends, or neighbors) at 19% (Figure 11-3).

(3) Domestic violence and sexual assault prevention centers operated by municipal and county (city) governments provided protection and support services to sexual assault victims, including shelters, reporting and escort during investigation, financial support, injury diagnosis and treatment, legal support, psychological counseling, and school transfers and enrollment. In 2016, the centers assisted people 218,854 times and spent more than NTD124,200,000 to support victims.

2. The "Sexual Harassment Prevention Act" was enacted on February 5, 2006.A total of 680 sexual harassment complaint cases were investigated in 2016. Details of these acts follow:

(1) In 2016, a total of 680 sexual harassment complaint cases were investigated (519 tenable, 125 untenable, and 36 others). Most of the cases were investigated by police departments (81.7%), followed by the agency or organization affiliated with the offender (17.9%). The total number of cases increased by 4.45% compared to the 651 cases investigated in 2015 (430 tenable, 95 untenable, and 126 others).

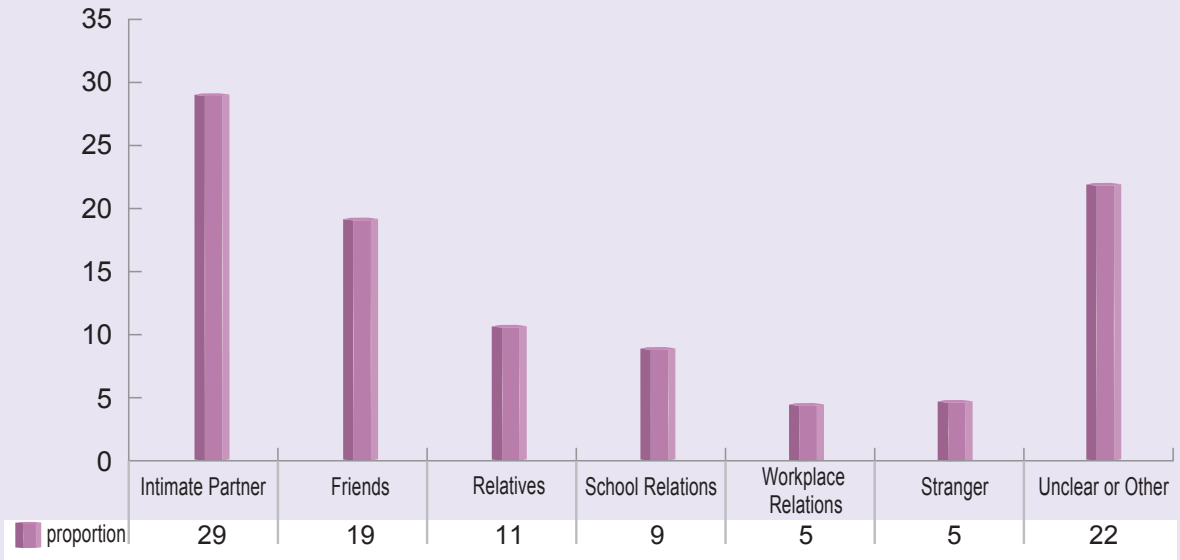
(2) Around 95% of the victims were women and 91% of the offenders were men.

(3) The two major types of relationships were strangers at 75% followed by colleagues at 6%.

(4) The most common place of infraction was public areas at 39% followed by "through technological equipment" (such as the internet, cell phone text messages, etc.) at 19%.

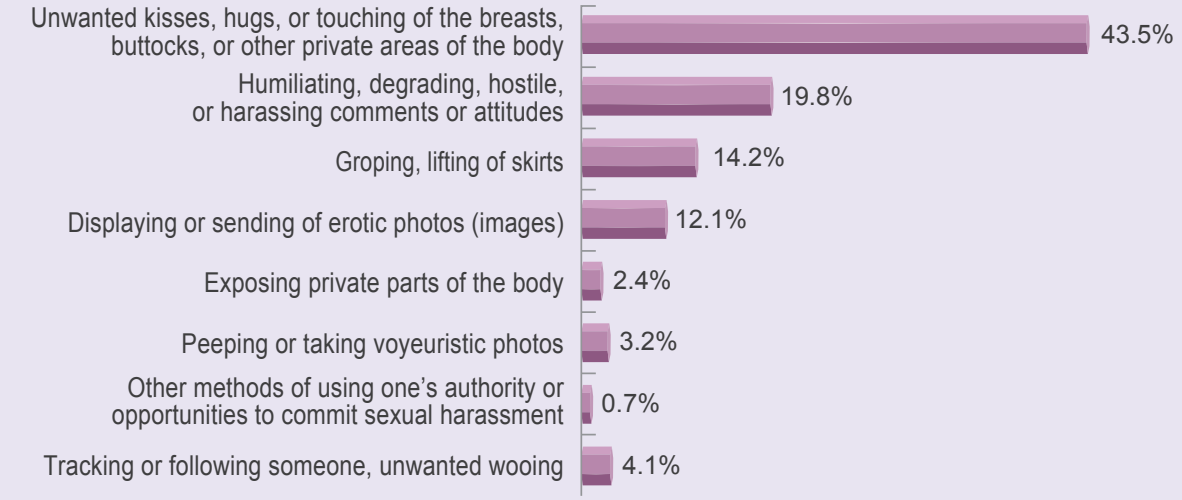
(5) The main type of complaint, accounting for 43.5% of the total, involved "unwanted kisses, hugs, or touching of the breasts, buttocks, or other private areas of the body." This was followed by "humiliating, degrading, hostile, or harassing comments or attitudes" at 19.8% (Figure 11-4).

Figure 11-3 Relationships Between the Victims and Offenders of Sexual Assaults



Source: Ministry of Health and Welfare

Figure 11-4 Types of Sexual Harassment Behaviors, 2016



Source: Ministry of Health and Welfare

Section 2 Diverse Intervention for Victims of Sexual Assault and Sexual Harassment

1. Protection and Assistance for Victims of Sexual Assault: The MOHW has established standards for services and subsidies in sexual assault cases. In accordance with regulations, it guides protection centers in providing emergency assistance, health diagnoses and treatment, examinations and evidence gathering, emergency placement, psychological therapy, and legal consultations. In 2015, domestic violence and sexual assault prevention centers operated by municipal and county (city) governments assisted people more than 210,000 times and spent more than NTD100 million to support victims.
2. Strengthening Sexual Assault Prevention Among Men and People with Learning Disabilities: By fostering inter-disciplinary communication and effective training, a sexual assault case management resource center program enabled use of professional resources to improve interventions for men and people with learning disabilities who were victims of sexual assault. The program also advanced prevention policies and planning. In 2016, it served 144 people and held 21 promotional events and classes as well as four interdisciplinary research forums.
3. Improving Evidence Collection and Testing Quality in Cases of Sexual Assault: In 2016, samples were collected and tested from 3,490 victims of sexual assault. In 1,835 cases, the samples were sent to the Criminal Investigation Bureau for further testing and collection of evidence.
4. Relieving Victims of Sexual Assault from Repeated Statements Program: Coordination of police, public prosecutors, social workers, and medical teams increased the quality of questioning and prevented victims from being asked to repeat their experience. In 2016, the reduction in repeated questioning was applied to 1,611 cases. District prosecutors investigated 4,656 cases of sexual assault in 2016 and issued indictments in 1,965 cases, for an indictment rate of 42%. In 1,844 of the cases, the court found the defendant guilty, for a conviction rate of 87.1%.

5. Competitive Plan for Creating Sexual Harassment Prevention Systems: In 2016, the MOHW subsidized 67 professional training sessions in 11 cities and counties as well as legal and psychological consultations for 1,358 victims. Publicity efforts reached people more than 280,000 times and on-site checks examined sexual harassment prevention at 2,572 locations.

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 2016, 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).
2. Community intervention is provided for sexual assault offenders. In 2016, a total of 6,754 offenders underwent therapy and counseling, including 1,806 offenders who completed intervention and 4,081 who were still undergoing intervention. There were six offenders referred for compulsory therapy, 511 who did not complete therapy due to explained excuses, and 350 punished for failure to show.

Section 4 Quality of Prevention and Education on Sexual Assault and Sexual Harassment

1. Review Meetings for Major Sexual Assault Cases: In 2016, nine issues relating to major sexual assault cases were discussed during two meetings. They included municipality and county (city) government joint meetings to discuss people released from prison who are not subject to protective measures but pose a medium-to-high-risk of recidivism, Ministry of Education and local government tracking of the review mechanisms for outsourced transit vehicles and school buses used by schools of all levels, and Ministry of Justice reporting of sexual assault cases under prosecution to centers for prevention of domestic violence and sexual assault.
2. Sexual Assault and Sexual Harassment Prevention Advanced Professional Training: In 2016, the MOHW conducted 10 foundational and special topic courses on sexual assault prevention. Content included the trauma and recovery process, legal protection for victims, and physical/mental response and household intervention for victims of incest, and 500 people attend training. In order to increase the professional capacity of officials and investigators who undertake sexual harassment cases, the MOHW conducted 10 professional training sessions. Total attendance was 590 in 2016.
3. Scheduling Control for Child Sexual Assault Cases: Using the National Domestic Violence, Sexual Assault, and Children-Juvenile Protection Information System, social workers received regular reminders of the legal processing period for child protection cases they oversaw.
4. Promoting Community and Campus Prevention Education: Social welfare subsidies from the public welfare lottery are used to help local governments join NGOs in carrying out sexual harassment prevention advocacy and education plans. In 2016, the MOWH subsidized 12 plans (11 put forward by counties and cities and one by an NGO), benefitting 20,857 people. Additional subsidies were provided for seven plans proposed by the Taoyuan City government, Tainan City government, Miaoli County government, Chiayi County government, Yilan County government and NGOs. These plans brought sexual assault prevention education into rural villages while encouraging victims to report sexual assault cases. More than 5,000 people benefitted.
5. Making On-line Digital Course Materials to Strengthen Work Capacity: In 2016, the MOHW completed digital study materials based on two topics: "getting to know sexual assault offenders" and "sexual assault investigation procedures and techniques."

These materials were posted on the local administration e-learning center website to help front-line practitioners understand why offenders carry out crimes and related treatment methods. The tools have improved professional working knowledge and capacity.

6. Professional Treatment Training: In 2016, the Psychiatry and Medicine Network Regional Guidance Plan made education and training of health workers who treat sexual assault offenders a core annual training item for hospitals. Total attendance at one foundational and 10 advanced classes was 405 people.

Chapter 4 Children and Youth Protection

Section 1 Protection of Children and Youths

1. Mandatory Reporting System: In 2016, municipal and county (city) governments assisted 9,470 abused children and youths, including 4,160 males (44%) and 5,310 females (56%). There was a 1.4% reduction compared to 2015, when there were 9,604 abused children and youths.

2. Promoting Children and Youth Protection Family Intervention and Parenting Educational Assistance: In children and youth protection cases, local governments provided parenting educational assistance to 11,530 people in 2016. Additionally, 22,943 people were connected to household support and welfare services. These efforts improved family function, and prevent child and youth victims from repeated abuse.

3. Supervising Children and Youth Protection by Municipal and County (City) Governments: The MOHW urged local governments to continue to strengthen cooperation between health and medical care, judicial, police administration, and education agencies, while improving the sensitivity and risk assessment and handling capacity of social workers. Additionally, in 2016, officials held three children and youth severe abuse incident prevention task force meetings in which they reviewed a total of 28 severe cases.

4. Improving Professional Training and Practical Seminars for Social Workers Specializing in Children and Youth Protection: In February 2016, two beginner training seminars were held and attended by 98 people. Another 152 social workers and supervisors attended three national case conferences on safety assessment for child protection; and a children and youth protective services and family at high-risk of neglect and abuse services consensus camp, joined by 182 participants.

5. Children and Youth Protection Professional Development and R&D: In 2016, the MOHW carried out several children and youth protection initiatives. It conducted early experimental planning for structured risk assessment decision-making models. It built tools to predict the risk of victims being subjected to repeat abuse. To improve education, it created safety analysis digital learning materials, published a supervisor work handbook, and updated a family intervention plan handbook.

Section 2 Children and Youth Sexual Transaction Prevention

1. In line with promulgation of the "Child and Youth Sexual Exploitation Prevention Act," on January 1, 2017, the MOHW revised the "Enforcement Rules of the Child and Youth Sexual Exploitation Prevention Act" on December 13, 2016, and related guidance and education methods for offenders on January 4, 2017.

2. Implementation Results:

(1) Aid to Victims from Judicial Officials and Police: In 2016, emergency shelter was offered to 326 people, including placement of 321 people in short-term shelters.

(2) Victims Placed in Transitional Schools (Total of Five Schools) on Second Ruling by the Court: In 2016, 315 students were placed in transitional schools.

(3) Victims Placed in Welfare Institutions on Second Ruling by the Court: In 2016, 19 institutions provided placement services 170 times.

(4) Follow-Up and Assistance for Victims: In 2016, services were provided to 507 victims.

3. Child and Youth Sexual Transaction Prevention Oversight Committee: Two oversight committee meetings in order to review performance by related agencies and discuss improvement strategies.

4. Child and Youth Sexual Transaction Prevention Activities: In 2016, the MOHW worked with NGOs to hold research and study activities, consensus camps, a 24-hour assessment indicator workshop, and information management system education and training. Total attendance at these events was 550.

5. Production of Educational Materials and Multi-media Promotion: Using the themes of "putting an end to juvenile pornography and prevention of sexual exploitation of children," and "the promotion of internet safety for children and youths," 30-second short promotional films, which was played between August and October 2016 at 25 Taiwan Railways and Kuo-Kuang bus stations, aired 7,840 times (for a total of 235,200 seconds). The MOHW also filmed "Warmth," which was based on a true story. "Warmth" DVDs were distributed nationwide to junior and senior (vocational) high schools and correctional facilities for educational and advocacy purposes.

Section 3 Internet Safety Mechanisms for Children and Youths

1. Guiding Municipal and County (City) Governments on Using iWIN for Case Assignment: In 2016, two meetings were convened to discuss iWIN's assignment of cases relating to children and youth violations. Resolutions required iWIN to build a database for domestic false domain registrations, to define what it means to harm the physical or mental health of children, to set standards for evaluation order of iWIN case assignment, and procedures and principles for police to report transfers to social administration officials for those suspected of violating Articles 29 and 33 of the prevention act. Of the 6,785 complaints filed, 93% involved pornography or obscenity, including 4,142 which had foreign IP addresses and 1,433 which had domestic IP addresses. Social administration agencies were assigned to 985 cases.

2. Children and Youth Internet Safety Project Development Plan: In order to have a basis for future policy planning and legal amendments, the MOHW gathers information from Taiwan and abroad on internet content, rules governing internet institutions, and online app rating management.

12 Research, Development, and International Cooperation

Chapter 1 Science and Technology Research in Health and Welfare

In 2016, the MOHW's budget for technology development was NTD4,655,656,000 (Figure 12-1), an amount that accounted for 2.34% of the MOHW's total budget. Funding primarily intended for task-oriented empirical research in communicable disease preparedness, for research of the pharmaceutical/healthcare industry and for biomedical technology research. The agency funded 881 projects or research grants. The percentage of technology research that translated into practical application was 63.27%. Furthermore in 2016, the MOHW commissioned the National Health Research Institutes (NHRI) to compile the "White paper on 2015–2025 Health and Welfare Technology Policy". It details forward-looking recommendations and strategies based on science and the experience of other countries, and provides a reference for the formulation of MOHW's technology policy over the next ten years.

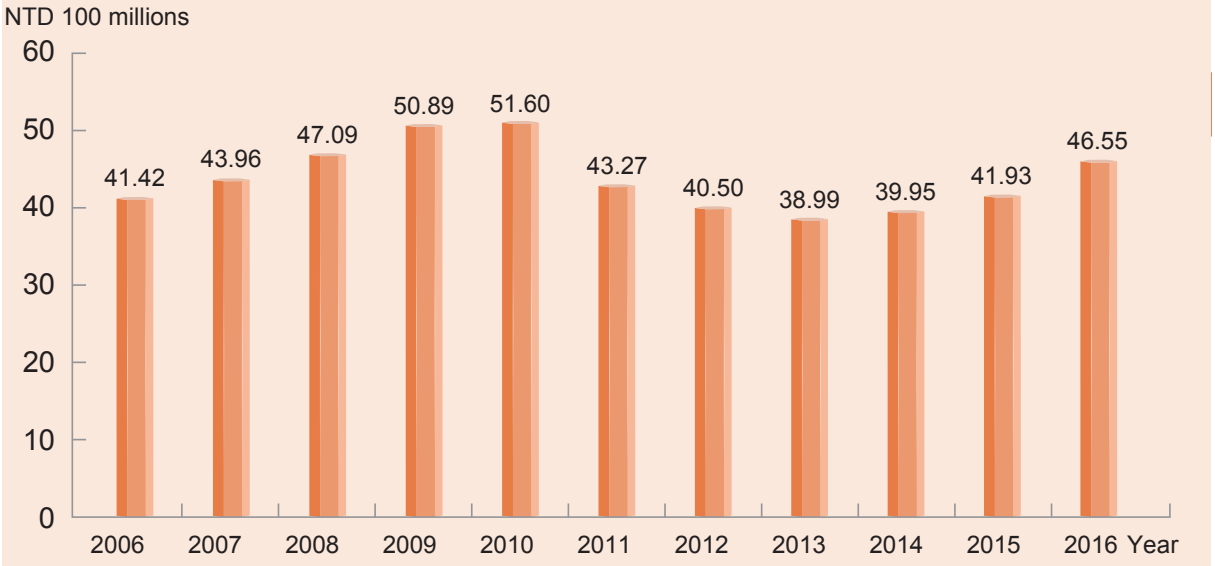
Section 1 Mission-Oriented Empirical Policy Research

1. Communicable Disease Preparedness

(1) Taiwan analyzed the incidence of the four main causes of foodborne diseases (norovirus, rotavirus, salmonella, and campylobacter), to provide a reference for the formulation of foodborne disease prevention strategies. Additionally, a cross-ministerial mechanism was established for prompt joint response along with establishing a common foodborne pathogen genetic database platform, a GIS-based early warning system and an automated reporting system for laboratories.

(2) Research has shown that treating latent tuberculosis infection using a short-course therapy 3HP (that combines Isoniazid and Rifapentine) do not pose more hepatotoxicity than the current standard nine-month course of treatment using Isoniazid; and that the patient compliance rate for 3HP is higher than for the current standard treatment.

Figure 12-1 Annual Trends of R&D Budget



Source: Ministry of Health and Welfare

Tracked vehicle equipped with a liquid spraying device

Unmanned aerial vehicle multi-axis drone

These tuberculosis reports have been made available to clinicians, and the MOHW currently recommends the use of 3HP over the standard treatment.

(3) The National Mosquito-borne Diseases Control Research Center, established by the MOHW, has already succeeded in developing unmanned vehicles (tracked vehicles and drones) for investigating mosquito-breeding grounds in urban areas, devising new types of equipment for attracting and capturing mosquitoes, and creating a new geospatial information system that works with big data to monitor disease-outbreak and early-warning systems and to support disease-prevention systems at both the national and local levels.

2. Public Health Promotion

(1) Under the Taiwan Birth Cohort Study program, the MOHW has continued to maintain a large-scale birth cohort database covering the entire Taiwan. Likewise, the Nutrition and Health Survey in Taiwan (NAHSIT) has been used to update representative national data. Accumulated data covering several years have been used as a reference for individual counties and cities so they could formulate health policies accordingly.

(2) The MOHW completed the establishment of Healthy Aging indicators for Taiwan, along with Age-friendly Cities indicators; the MOHW has also compiled a health literacy questionnaire for health service users and health service providers in Taiwan; the agency also established social platform and mobile application for elder. Moreover, the Healthy Aging database was completed, along with the planning and deployment of related decision-making support systems; the MOHW has continued to build and maintain four key thematic databases: "Disability," "Healthcare Utilization and Expenditure," "Healthy Life Expectancy," and "Age-friendly Environments."

3. Food and Drug Administration

(1) Food Testing Overview

a. TFDA strengthen the testing capacity by establishing the new generation testing method and database, using screening test kits, as the number of food colorant detected by the testing method from 8 to 46.

b. TFDA has developed the testing methods to analyze the lutein in capsules/tablets and the benzene in oil products, these methods have been successfully used in food safety incidents.

c. Information and communications technology (ICT) has been used to establish 83 types of visualization dashboard in 22 categories and related statistical indicators to strengthen risk assessment and inspection capabilities.

(2) Development of Drug Technology Research

The MOHW formulated 9 sets of draft regulations for high-end, high-value pharmaceuticals products and medical devices, completed clinical trial safety evaluation for 372 pharmaceuticals products, and developed 16 sets of testing methods for pharmaceuticals and cosmetics products. The agency has therefore been spearheading the development of the pharmaceutical industry, and hasten drugs to market.

(3) Development and Promotion of Traditional Chinese Medicine and Pharmacy

a. The MOHW compiled and revised traditional Chinese medicine materials quality specifications, published the Second Edition of Taiwan Herbal Pharmacopeia English-language version, added commonly used traditional Chinese medicine preparations and Taiwan's unique varieties of Chinese herbal medicines specifications, and the establishment of online inquiry system.

b. The MOHW completed pre-clinical animal testing on the use of Xuefu Zhuyu Decoction with Astralagus Polysaccharide to ease the symptoms of metabolic syndrome and Alzheimer's disease; in addition, research of Chinese body constitution and pattern differentiation was performed on 400 patients with Type 2 Diabetes.

4. Health Care System Advances

(1) Digital IC Technology: at the end of 2016, 64 health centers and 172 health rooms in aboriginal villages and on outlying islands had broadband speeds of at least 12M.

(2) Long-term care Geographic Information Systems, LTC-GIS formally began operation on January 1, 2016. This portal site makes it possible for the public go online to check for information about long-term care institutions including service provider details, the different categories of long-term care available, service provider reputation, etc.

(3) The MOHW has undertaken data collection and analysis with respect to four different of LTC service types including home care, community care, nursing home, and mix type of home care-community care. The agency hopes to develop Taiwan's first operational guideline of care plans and triggers.

5. Comprehensively strengthening the NHI system

(1) The MOHW has expanded the "My Health Bank" program, the NHI digital payments and collections system, the system for inter-departmental data sharing, and other measures intended to provide enhanced convenience for the general public. The agency has developed a NHI premium monitoring module, and enhanced the open-access data availability while continuing to police NHI data security.

(2) The MOHW has evaluated the effectiveness of regional medical care integration, the family doctor care system and the post-acute care services system. The MOHW has proposed a strategy for the improvement of the cloud-based NHI information search system, and has established the ICD-10-CM/PCS quality indicators and psychiatric health care quality indicators. The MOHW also has examined the evaluation of new diagnostic technologies and the timeliness with which new drugs are covered under the NHI. Lastly, Taiwan has enhanced the efficiency

for evaluating new types of special medical materials.

(3) The MOHW has studied the healthcare systems in other countries, and the empirical NHI data from Taiwan to anticipate the future impact of an aging population on the financial health of Taiwan's NHI system. As a result, the MOHW has suggested some possible solutions to this issue in the long-term.

6. Better Mental and Oral Health Monitoring

(1) The MOHW has set up the "Wellbeing mental health learning platform," which intends to help people in different age groups and different communities to search for mental health-related resources and services.

(2) Taiwan has completed oral health survey for adults and elders. The results have shown that the prevalence of periodontitis tooth decay was 98.6%; the prevalence of periodontitis was 80.48%.

7. Sexual Violence Prevention and Victim Protective Services

(1) In 2016, gender violence prevention metrics were completed for social administration, medical treatment, healthcare, police administration, education, and legal affairs. A survey on public attitudes towards gender-based violence was completed too.

(2) Taiwan has established 10 key evaluation indicators for child and youth protection covering physical abuse, sexual abuse, supervisory neglect, nutritional neglect, sanitary neglect, residential environment neglect, medical care neglect, psychological abuse, reporting of other categories of abuse/neglect, and reporting in cases where the abuser is a non-family member.

8. Improvements to Disaster Relief Systems

In 2016, Taiwan completed the development of an integrated system for emergency relief information. The system; which combines central and local emergency relief data, and vertically and horizontally links township/ county (city) hall and MOHW emergency relief data; expedites data retrieval procedures while improving relief efficiency.

9. Improvements to Welfare Services for the Elderlies

Taiwan has reviewed the diversified community-based care station service model, along with research on the outlook for this model. Through analyzing the elderly service users of the community-based care stations, the MOHW has studied the results achieved under this model to serve as a basis to promote innovative new services.

Section 2 Innovation and Translational Research Development

1. Technology Transfer and Licensing

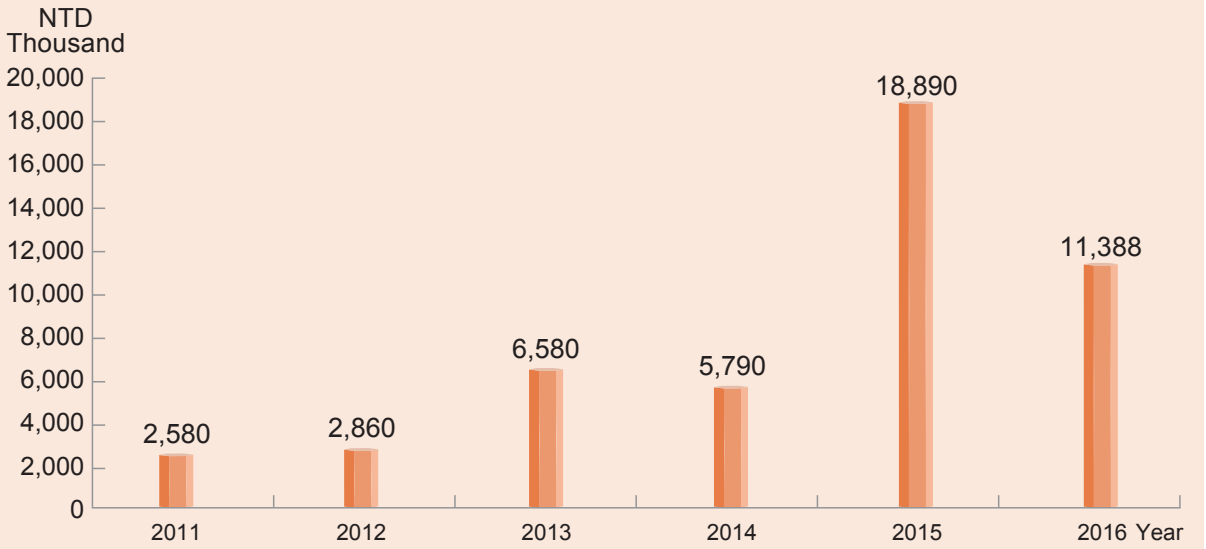
In 2016, ten cases of technology transfers were granted, earning total revenues of NTD11,388,850 R&D (Figure 12-2).

2. Biomedical Technology R&D

(1) Taiwan has improved or established various methods for rapid diagnosis and disease monitoring. They including a Mycobacterium identification method, a rapid testing method for Hantavirus antibodies, and a testing method for clinically important yeasts and related fungi. Taiwan has also developed testing kits for severe pneumonia, encephalitis and emerging pathogens. Lastly, an isothermal testing methods for detecting the Zika virus and the Chikungunya virus has become available.

(2) Inactivated EV71vaccine, the first vaccine developed in Taiwan for children, received silver medal in the pharmaceuticals category at the 2016 Drug Research and Development Science and Technology Awards, jointly organized by the MOHW and the MOEA.

Figure 12-2 Annual Trends of R&D Revenue



(3) In collaboration with eight medical centers, including Taipei Veterans General Hospital and National Cheng Kung University Hospital, the MOHW has completed Phase III clinical trials for ONIVYDETM, a new drug for the treatment of pancreatic cancer. The therapy of combining ONIVYDETM with 5-Fluorouracil/leucovorin has been listed on the 2016 U.S. National Comprehensive Cancer Network site as a Category I chemotherapy option in second-line guidelines for the treatment of pancreatic cancer.

3. Promoting the Second Phase (2014-2017) of the Cancer Research Project. (Figure 12-3)

(1) Taiwanese studies have shown that, for Taiwanese breast cancer patients whose cancers have spread to 1–3 lymph nodes, radiotherapy after surgery has achieved a higher overall survival rate and a higher cancer-free survival rate than has been achieved under the existing treatment guidelines (which recommend that radiotherapy should not be performed after surgery).

(2) Over the period 2014–2016, a community-based stomach cancer screening model was implemented in Changhua County, and a hospital-based stomach cancer screening model was implemented in Chiayi City. Among the 16,225 subjects for whom data were collected in 2016, the Helicobacter pylori infection rate was 36.8%; the first-line therapy eradication rate was 90.7%. Preliminary results show that treatment to eradicate Helicobacter pylori infection can reduce the occurrence of chronic gastritis and peptic ulcers.

(3) Analysis using NHI databases have shown that chronic hepatitis B patients who have been treated with antiviral drugs have a much lower incidence of liver cancer; treatment results were particularly good in patients under age 40, and those without cirrhosis.

4. To Promote Innovation and Competitiveness of Clinical Trials Project

(1) In 2016, a multinational, multi-institutional review board (IRB) review was completed

Figure 12-3 Clinical Trial Centers and Cancer Centers

Cancer Research Centers

Koo Foundation Sun Yat-Sen Cancer Center
Tri-Service General Hospital
Chung Shan Medical University Hospital
Taichung Veterans General Hospital
Kaohsiung Medical University Hospital
Kaohsiung Chang Gung Memorial Hospital

Integrated Cancer Research Centers

National Health Research Institutes

Cancer Research Centers and Clinical Trial Centers

National Taiwan University Hospital
Taipei Medical University
Taipei Veterans General Hospital
Linkou Chang Gung Memorial Hospital
China Medical University Hospital
National Cheng Kung University Hospital

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

in 149 cases, with an average review period of 9.4 days/case. Moreover, the Center for Drug Evaluation (CDE) built the Taiwan Clinical Trials platform acting as an one stop shop to help Taiwan attract more clinical trials.

(2) The clinical trials resulted in the following: bismuth quadruple therapy was superior to 14-day triple therapy in the first-line treatment of Helicobacter pylori infection. The use of Pembrolizumab to treat recurrent or metastatic head and neck has been approved by the U.S. FDA. In Taiwan, the NHI has already approved coverage for Cilostazol, a new drug that prevent stroke recurrence in a certain type of stroke. Besides, atrial fibrillation treatment guidelines have been published and made available to medical institutions.

Section 3 Health and Welfare Data Analysis and Statistical Applications

1. Management of Data Statistical Applications

The Health and Welfare Data Science Center became operational in 2011. The center aims to enhance the quality of public health decision-making, and to expand academic research. In 2016, it

continued to strengthen information security management, to develop the Big Data application management review mechanism, and to establish remote virtual desktop infrastructure for each individual research sub-center.

2. Service Content and Volume

(1) In December 2016, 78 database categories were open for application.

(2) To balance regional research needs, nine research sub-centers have been established. They are located at Taipei Medical University, National Taiwan University, Kaohsiung Medical University, Chang Gung University, National Yang Ming University, Tzu Chi University, the Academia Sinica, the National Health Research Institutes, and National Cheng Kung University. In 2016, these sub-centers not only continued to strengthen the management mechanisms of the individual institution, they also hosted research symposiums.

(3) The service volume rose from 58 cases in 2011 to 501 cases in 2016, for an average annual growth rate of 54%. During the same period, the number of work days rose from 676 in 2011 to 6,752 in 2016, for an average annual growth rate of 58%.

Chapter 2 International Cooperation

In response to globalization, Taiwan actively cooperates with the international community in health matters and emergency humanitarian assistance. WHA has invited Taiwan as an observer in order to share her health experiences and achievements.

Section 1 Participation in International Organizations

1. World Health Organization

Taiwan participated in the 69th WHA as an observer from May 23-28 in Geneva, Switzerland. Former Health Minister Lin Tzou-Yien led a Taiwan delegation to observe and speak at the plenary meeting on Taiwan's impressive achievements in the areas of health care and communicable disease control. Minister Lin stressed Taiwan's desire to regularly participate in WHO meetings and activities. Taiwan's delegates attended technical meetings during the assembly, and spoke on a record 30 technical topics in six major categories. Taiwan also engaged in bilateral talks with 59 nations and international organizations, including the United States, the European Union, and Japan to advance mutual and multilateral health cooperation.

In May 2016, former Health Minister Lin spoke at the plenary meeting of the 69th WHA.

The Sixth APEC High-Level Meeting on Health and the Economy (August 2015)

2. Asia-Pacific Economic Cooperation (APEC)

Deputy Health Minister Ho Chi-Kung led a delegation to the Sixth APEC High-Level Meeting on Health and the Economy on August 21-22, 2016, in Lima, Peru. Minister Ho discussed Taiwan's efforts to integrate health care and social welfare to better respond to future health and economic challenges.

Section 2 International Exchanges and Assistance

1. International Cooperation and Exchanges

(1) International participation are shown in Table 12-1.

a. Participation in International Conferences

a) In May 2016, the MOHW sent a delegation to Geneva, Switzerland to attend the Sixth Trilateral Meeting of the Government Chief Nursing and Midwifery Officers, National Nursing Associations and International Regulators. The conference was jointly sponsored by the International Council Nurses, International Confederation of Midwives, and WHO. Topics included professional development and the future of nursing and midwifery, the WHO global strategy on human resources for health, and sustainable development goals.

b) In May 2016, the MOHW sent a delegation to Switzerland to attend the 72nd Committee on the Rights of the Child. The delegation studied reports and reviews from the United Kingdom and other nations.

c) In June 17-19, 2016, the MOHW sent a delegation to attend the 38th Asia Pacific Dental Congress in Hong Kong. The theme of the congress was "Advancing Dentistry with Modern Science and Technology." The conference provided an opportunity for a multinational exchange in oral public health in the Asia-Pacific region and its health policy trends.

d) In September 2016, the MOHW sent a delegation to attend 2016 Social Enterprise World Forum in Hong Kong. Five delegates spoke at the forum to foster greater interaction between Taiwan's social enterprise workers and the international community. By sharing information and resources, they enhanced Taiwan's visibility on the international stage.

e) In September 28-30, 2016, the MOHW sent a delegation to Austria to attend the 19th European Health Forum Gastein, which was based on the theme "Demographics & Diversity in Europe-New Solutions for Health." The delegation held a parallel forum to discuss Taiwan's achievements in building age-friendly environments and in active ageing.

b. International Conferences

a) International Training Workshop on Zika Laboratory Diagnosis: From April 13-15, 2016, the MOHW, the Ministry of Foreign Affairs, and the American Institute in Taiwan jointly held the first series of training courses on testing and diagnosis

Table 12-1 International Participation, 2016

MOHW's Participation	2016
Participation in international conferences and research	67 events
Hosting international conferences	43 events
Foreign visitors	683 visitors from 53 countries

International Training Workshop on Zika Laboratory Diagnosis (April 2016)

Taiwan-US Health and Welfare Policy Symposium (June 2016)

of the Zika virus in the Asia Pacific and Southeast Asia regions. Participants from 12 nations, including Australia, joined the multilateral event to work together toward reducing the threat of communicable diseases.

b) 2016 Taiwan-US Health and Welfare Policy Symposium: the symposium, held on June 15 and 16 in Taipei, was based on the theme "Realigning Health and Well-Being: Unlocking the Power of Resistance." In attendance were seven US health officials and experts together with nearly 250 local health officers. Major topics included future development challenges and bilateral health policy achievements.

c) APEC Conference on Prevention, Control and Care for MDR-TB: the conference, held on June 29 and 30, 2016, in Taipei, was attended by guests from 14 nations, including the United States and Taiwan. Local experts discussed Taiwan's experiences on preventing, controlling and caring for MDR-TB to contribute to disease prevention in Asia.

d) 13th Taiwan-Japan Bilateral Symposium: the symposium, held on September 6 and 7, 2016, at the Taiwan CDC, was attended by a 14-person delegation from Japan's National Institute of Infectious Diseases led by Director-General Ichiro Kurane, and by 85 Taiwanese experts and scholars. Discussions focused on acute respiratory infections, TB, drug-resistant infections, and epidemiology surveys. The two sides also presented bilateral cooperation plans and achievements.

e) 2016 International Symposium on Quality Control of TCM: from September 24-25, 2016, nine experts from six countries in Europe, North America, and the Asia-Pacific region attended the Taichung symposium. They discussed quality control of traditional Chinese medicine in their countries and the compilation of pharmacopeia. Approximately 300 people participated.

f) The 2016 Global Health Forum in Taiwan: the forum was held on October 23-24, 2016. The forum featured fifteen deputy health ministers, 69 distinguished health officials and foreign health experts from 29 countries and had a total attendance of 1,224 people. After many years of existence, the forum has developed into a powerful platform to discuss international medical care and health topics.

g) APEC Seminar on the International Cooperation Experiences in Addressing Trade and Regulatory Issues of Medical Products: the seminar, held on October 24, 2016, was attended by approximately 150 people. Health officials from the

The Global Health Forum in Taiwan (October 2016)

Philippines, Malaysia, Japan, Vietnam, and other countries spoke on topics ranging from free trade to international cooperation on oversight and regulations. Taiwanese representatives from industrial, government, academic, and research institutions gained a better understanding of regulatory developments and trends in nations included in Taiwan's New Southbound Policy. The event also promoted cooperation in medicine and health between Taiwan, APEC, and the New Southbound Policy nations.

h) 1st Asian Summit for the Prevention and Treatment of Gender-Based Violence and the 5th Women and Children Protection Network– Promises and Actions Centered on the Victims Awards Ceremony and Seminar: from October 26-28, 2016, representatives of the UN, and public/private institutions from Macao, Japan, Malaysia, Mainland China, Hong Kong, and Taiwan discussed the current status of gender violence prevention, strategies, and models. They used these events to build a platform for information exchange that

1st Asian Summit for the Prevention and Treatment of Gender-Based Violence (October 2016)

Convention on the Rights of the Child – 1st CRC National Report Press Conference & International Conference (November 2016)

will be used to develop more effective working models.

i) Convention on the Rights of the Child–1st CRC National Report Press Conference & International Conference: on November 17-18, 2016, Taiwan released its first CRC national report. Child rights experts from the Netherlands, Norway, Thailand, and Cambodia joined to discuss their experiences promoting children's rights. 471 people attended the conference.

c. Visits by Foreign Guests: 683 foreign guests from 53 countries visited in 2015. They shared information on health and welfare policy, drugs, food, healthcare, technology, and bilateral cooperation (Figure 12-4).

(2) International Cooperation

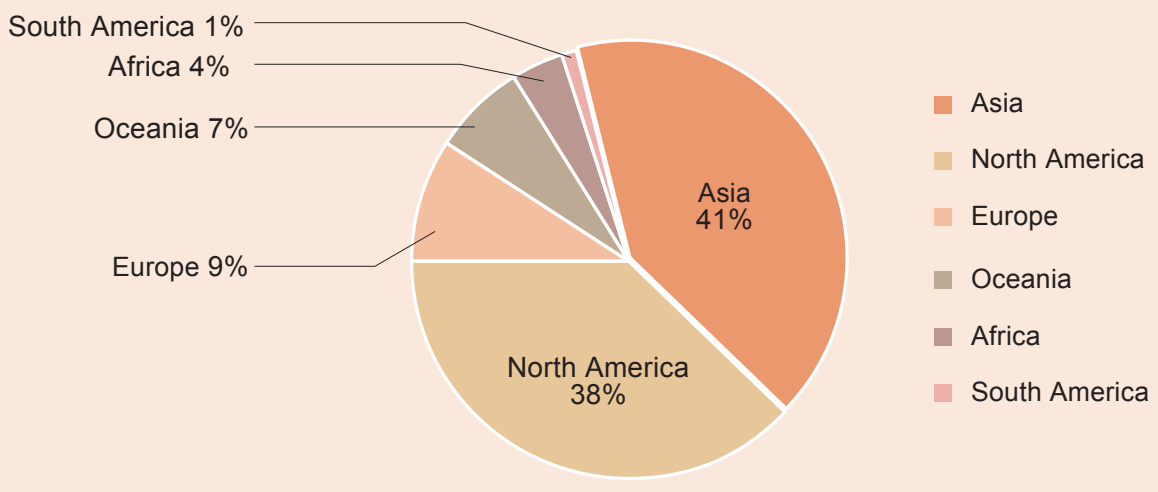
a. Taiwan International Health Action (Taiwan IHA), an emergency medical aid platform jointly established by the MOHW and the Ministry of Foreign Affairs (MOFA), held Taiwan IHA 10th Anniversary Event and Photo Exhibition on Taiwan's International Medical Assistance and Humanitarian Aid, on November 29, 2016. Attendees included Association of Medical Doctors of Asia (AMDA), Médecins Sans Frontières, and domestic participants of international disaster medicine and humanitarian aid.

b. The National Eye Bank of Taiwan and America's SightLife Signed a Memorandum of Cooperation: it aims for the advancement of Taiwan's corneal transplant technique, and to ensure that Taiwan's National Eye Bank would meet international standards. The MOHW, National Eye Bank of Taiwan, and SightLife signed a memorandum of cooperation on November 7, 2016. SightLife will help the National Eye Bank of Taiwan acquire international certification, provide corneas for research purposes, and offer professional training. This cooperation will definitely improve Taiwan's transplant quality.

2. International Medical Aid

Facing global climatic change and the resulting disasters, Taiwan is fully devoted to providing international health assistance.

Figure 12-4 Foreign Visitors by Region of Origin, 2016



Taiwan has demonstrated its compassionate side to the international community through playing an important role in humanitarian efforts.

(1) Humanitarian Assistance

a. Taiwan's Contributions to the Haiti Earthquake Rebuilding Plan: the MOHW carried out three public health subprojects planned by the MOFA: the Taiwan Health Promotion Center Project, the Medical Equipment Donation Project, and the Epidemic Prevention Project.

b. TaiwanIHA: since its founding in 2006, Taiwan IHA has already executed 24 humanitarian medical aid missions. In May 8-12, 2016, TaiwanIHA, the Association of Medical Doctors of Asia (AMDA), the Noordhoff Craniofacial Foundation, and Chang Gung Hospital jointly assembled a mobile medical team that carried out 23 cleft lip and palate surgeries at two hospitals in Parepare and Barru, South Sulawesi, Indonesia. The team also provided post-surgical care, and shared surgical experiences/techniques with local doctors.

c. Indonesia Haze: in response to the dangers haze posed to the people in Sumatra and Kalimantan, the Taiwan IHA together with the Ministry of Foreign Affairs asked the MOHW's Taipei Hospital to purchase 6,000 N95 masks. On April 21, 2016, Taiwan's representative to Indonesia, Chang Liang-Jen, donated these masks to the Indonesian Red Cross Society to alleviate the suffering of people affected by the haze.

(2) Medical Assistance

a. Global Medical Instruments Support & Service Program (GMISS): the MOHW gathered used medical instruments from hospitals throughout Taiwan, and donated them to ally countries. In 2016, Soloman Islands, Haiti, Paraguay, Mongolia, Kiribati, Tuvalu and Nauru received these donations from Taiwan.

TaiwanIHA team physician provided Cleft palate surgery for local patient in April 2016.

b. The Taiwan International Healthcare Training Center (TIHTC) has promoted foreign relations by training health care workers in countries lacking medical resources. In 2016, Taiwan helped train 141 foreign healthcare personnel from 27 countries.

c. 2016 National Health Cooperation Program in Africa: the MOHW assisted African nations in public health, with tropical medicine, with e-health, in HIV prevention and health worker training, etc.

d. In 2016, the MOHW continued a cooperative effort with the MOFA by commissioning eight hospitals to implement the Medical Cooperation Program in Six Pacific Allied Countries. The Taiwan Medical Program and Mobile Medical Mission took place in Palau, Kiribati, Nauru, and Tuvalu. The Taiwan Health Center Plan took place in the Marshall Islands and Solomon Islands. The Mobile Medical Mission Plan took place in the Republic of Fiji and Papua New Guinea. All programs were fully funded by the MOFA.

Section 3 Internationalization of Health Care

1. Developmental Background of Healthcare Industry: promoting the internationalization of Taiwan medical services raises the country's profile rendering the quality of her healthcare industry apparent worldwide. This spotlight

will in turn enliven the industry to enhance its competitiveness.

2. Development Goals of Health Care Internationalization

(1) The MOHW has guided hospitals on developing distinct strengths and features to build their own healthcare brand, and provide diversified healthcare services. By cooperating with businesses inside and outside the industry, new innovative business strategies would spark further development in health care.

(2) Promoting internationalization of healthcare industry has given impetus to the further development of the biomedical, pharmaceutical, medical device, information technology, and health maintenance industries.

3. Internationalization of Medical Services (Table 12-2)

(1) The Taiwan Task Force for Medical Travel, established to provide a platform for information exchange and dissemination, has advised 63 hospitals on being internationally competitive.

2) Recently Taiwan has loosened the entry requirements for mainland Chinese citizens with the purpose of medical tourism. 59 Taiwanese hospitals could apply to perform health examinations and cosmetic medical care for mainland Chinese citizens.

(3) In conjunction with the Overseas Community Affairs Council, the MOHW conducted a special program for overseas Taiwanese to apply to visit Taiwan for health examinations, cosmetic medical services, and medical treatments. From 2012 to May 16, 2016, 365 groups containing 5,500 people applied to enter through this program.

Table 12-2 International Health Care Promotion Results

	2009	2008	2010	2011	2012	2013	2014	2015	2016
Total	89,507	68,545	110,664	109,133	173,311	231,164	259,674	305,045	279,281
Outpatient	78,553	63,388	96,850	92,931	115,569	123,107	174,342	208,198	216,343
Inpatient	1,818	1,102	2,157	3,105	3,845	4,293	6,078	6,970	7,249
Cosmetics	3,902	1,072	3,125	3,254	5,822	10,627	4,308	4,874	4,523
Health Examinations	5,234	2,983	8,532	9,843	48,075	93,137	74,946	85,003	51,166
Output Value (NTD 100 million)	34.33	20.29	41.49	54.14	96.23	136.48	141.35	158.96	139.58

Appendices

Appendix 1 Health and Welfare Indicators

Table 1 Population Indicators

Year	Total Population	Population Structure			Crude Birth Rate	Crude Death Rate	Natural Increase Rate	Total Fertility Rate		Population Density
		0-14 years	15-64 years	65 years & above					Adolescent Pregnancy	
	1,000s	%	%	%	‰	‰	‰	Per Woman	‰	People/Km^2
2006	22,877	18.1	71.9	10.0	9.0	6.0	3.0	1.1	7	632
2007	22,958	17.6	72.2	10.2	8.9	6.2	2.8	1.1	6	634
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

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

Table 2 Life Expectancy and Mortality Rate

Year	Life Expectancy at Birth			Under-Five Mortality Rate	Adult Mortality Rate (Aged 15-60 Years)
	Both Sexes	Male	Female		
	Years	Years	Years	Probability of Dying by Age 5 Per 1,000 Live Births	Probability of Dying Between 15 and 60 Years of Age Per 1,000 Population
2006	77.9	74.9	81.4	6.6	112.8
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

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

Table 3 National Health Expenditure

Year	GDP Per Capita		National Health Expenditure(NHE)		Public Sector Ratio	NHE as a share of GDP	NHE Per Cpaita	
	NTD	USD	NTD Millions	USD Millions	%	%	NTD	USD
2005	532,001	16,532	747,305	23,223	57.3	6.2	32,878	1,022
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	6.3	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	1,001,897	32,990	59.1	6.2	42,809	1,410
2015	714,277	22,384	1,029,182	32,253	59.7	6.1	43,864	1,375

Source: Directorate-General of Budget, Accounting and Statistics, Ministry of Health and Welfare, R.O.C.(Taiwan)

Table 4-1 Institutions of Health Facilities

Year	Medical Care Institutions											
		Hospitals							Clinics			
			Western Medicine			Chinese Medicine				Western Medicine	Chinese Medicine	Dentistry
				Public	Private		Public	Private				
	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units
2006	19,682	547	523	79	444	24	1	23	19,135	10,064	3,006	6,065
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

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

Table 4-2 Beds of Health Facilities

Year	Beds							Beds Per 10,000 Population				
		Hospitals					Clinics		Hospitals			Clinics
			Public	Private	Acute Care Beds					Acute Care Beds		
						Acute General Beds					Acute General Beds	
	Beds	Beds	Beds	Beds	Beds	Beds	Beds	Beds	Beds	Beds	Beds	Beds
2006	148,962	131,152	44,076	87,076	79,005	72,932	17,810	65.1	57.3	34.5	31.9	7.8
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

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

Table 4-3 Health Workforce

Year	Health Workforce										
		Physicians	Chinese Medicine Doctors	Dentists	Pharmacists (Assistants)	Medical Technologists (Assistants)	Medical Radiation Technologists (Assistants)	Nurses (Assistants)	Midwives (Assistants)	Dieticians	Others
	People	People	People	People	People	People	People	People	People	People	People
2006	206,959	34,899	4,743	10,412	27,412	7,457	4,052	109,153	368	1,137	7,326
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

Source: Ministry of Health and Welfare, R.O.C.(Taiwan)
Note: Others include dental assistants, physical therapists, occupational therapists, clinical psychologists, counseling psychologists, respiratory therapists, speech therapists, auditory therapists and dental technicians.

Table 4-4 Density of Health Workforce (Per 10,000 Population)

Year	Health Workforce (Per 10,000 Population)										
		Physicians	Chinese Medicine Doctors	Dentists	Pharmacists (Assistants)	Medical Technologists (Assistants)	Medical Radiation Technologists (Assistants)	Nurses (Assistants)	Midwives (Assistants)	Dieticians	Others
	People	People	People	People	People	People	People	People	People	People	People
2006	90.5	15.3	2.1	4.6	12.0	3.3	1.8	47.7	0.2	0.5	3.2
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

Source: Ministry of Health and Welfare, R.O.C.(Taiwan)
Note: Others include dental assistants, physical therapists, occupational therapists, clinical psychologists, counseling psychologists, respiratory therapists, speech therapists, auditory therapists and dental technicians.

Table 4-5 Institutions of Nursing Facilities

Year	Nursing Institutions			
	General Nursing Homes	Psychiatric Nursing Homes	Home Care	Postpartum Nursing Care
	Institutions	Institutions	Institutions	Institutions
2006	310	-	479	46
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

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

Table 4-6 Beds of Nursing Facilities

Year	Nursing Institutions		
	General Nursing Homes	Psychiatric Nursing Homes	Postpartum Nursing Care
	Beds	Beds	Beds
2006	18,701	-	1,536
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

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

Table 5 Infectious Diseases

Year	Confirmed Cases							
	Cholera	Diphtheria	Japanese Encephalitis	Hansen's Disease	Malaria	Measles	Meningococcal Meningitis	Mumps
	People	People	People	People	People	People	People	People
2006	1	-	29	11	26	4	13	971
2007	-	-	37	12	13	10	20	1,208
2008	1	-	17	8	18	16	19	1,145
2009	3	-	18	7	11	48	2	1,068
2010	5	-	33	5	21	12	7	1,125
2011	3	-	22	5	17	33	5	1,171
2012	5	-	32	13	12	9	6	1,061
2013	7	-	16	7	13	8	6	1,170
2014	4	-	18	9	19	26	3	880
2015	10	-	30	16	8	29	3	773
2016	9	-	23	10	13	14	8	616

Source: Centers for Disease Control, Ministry of Health and Welfare, R.O.C.(Taiwan)
Notes: 1. Mumps and tetanus were reported cases
2. All cases of malaria were imported
3. Since 2008, leprosy has been referred to as Hansen's disease

Table 5 Infectious Diseases (Cont'd)

Year	Confirmed Cases							
	Pertussis	Poliomyelitis	Congenital Rubella Syndrome	Rubella	Neonatal Tetanus	Tetanus	Tuberculosis	Yellow Fever
	People	People	People	People	People	People	People	People
2006	14	-	-	6	…	14	15,378	-
2007	41	-	1	54	-	10	14,480	-
2008	41	-	1	33	-	18	14,265	-
2009	90	-	-	23	-	12	13,336	-
2010	61	-	-	21	-	12	13,237	-
2011	77	-	-	60	-	10	12,634	-
2012	54	-	-	12	-	17	12,338	-
2013	51	-	-	7	-	24	11,528	-
2014	78	-	-	7	-	9	11,326	-
2015	70	-	-	7	-	12	10,711	-
2016	17	-	-	4	-	14	10,328	-

Source: Centers for Disease Control, Ministry of Health and Welfare, R.O.C.(Taiwan)
Notes: 1. Mumps and tetanus were reported cases
2. All cases of malaria were imported
3. Since 2008, leprosy has been referred to as Hansen's disease

Table 6 Food and Pharmaceutical Affairs

Year	Incidents of Food Poisoning Outbreaks			Number of Pharmaceutical Firms			
	Number of Outbreaks	Number of Cases	Number of Deaths		Pharmacies	Dealers of Drugs or Medical Devices	Manufacturers of Drugs or Medical Devices
				Units	Units	Units	Units
2006	265	4,401	-	57,976	7,397	49,580	999
2007	248	3,231	-	59,061	7,381	50,633	1,047
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

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

Table 7-1 Major Causes of Death

Year	Infant Mortality Rate	All Causes of Death		Major Causes of Death									
				Malignant Neoplasms		Heart Diseases		Cerebrovascular Diseases		Pneumonia		Diabetes Mellitus	
	Per 1000 Live Births	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population
2006	4.6	135,071	495.4	37,998	139.3	12,283	43.8	12,596	44.7	5,396	18.9	9,690	34.9
2007	4.7	139,376	491.6	40,306	142.6	13,003	44.4	12,875	43.8	5,895	19.6	10,231	35.5
2008	4.6	142,283	484.3	38,913	133.7	15,726	51.7	10,663	35.0	8,661	27.5	8,036	26.9
2009	4.0	142,240	466.7	39,918	132.5	15,094	47.7	10,383	32.8	8,358	25.3	8,230	26.6
2010	4.2	144,709	455.6	41,046	131.6	15,675	47.4	10,134	30.6	8,909	25.6	8,211	25.3
2011	4.2	152,030	462.4	42,559	132.2	16,513	47.9	10,823	31.3	9,047	24.8	9,081	26.9
2012	3.7	153,823	450.6	43,665	131.3	17,121	47.9	11,061	30.8	9,314	24.4	9,281	26.5
2013	3.9	154,374	435.3	44,791	130.4	17,694	47.7	11,313	30.3	9,042	22.5	9,438	25.8
2014	3.6	162,886	443.5	46,093	130.2	19,399	50.2	11,733	30.4	10,353	24.7	9,846	26.0
2015	4.1	163,574	431.5	46,829	128.0	19,202	48.1	11,169	27.9	10,761	24.6	9,530	24.3
2016	3.9	172,418	439.4	47,760	126.8	20,812	50.3	11,846	28.6	12,212	26.9	9,960	24.5

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

Notes: 1. The standardized mortality rate is based on the WHO standard world population age structure for 2000.
2. Began using the International Classification of Diseases (ICD-10) as a standard diagnostic tool in 2008.

Table 7-1 Major Causes of Death (Cont'd)

Year	Major Causes of Death											
	Accidents and Adverse Effects		Chronic Lower Respiratory Diseases		Chronic Liver Disease and Cirrhosis		Hypertensive Diseases		Nephritis, Nephrotic Syndrome and Nephrosis		Intentional Self-Harm (Suicide)	
	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population
2006	8,011	31.9	4,969	17.2	5,049	18.6	1,816	6.4	4,712	16.8	4,406	16.8
2007	7,130	27.9	4,914	16.2	5,160	18.4	1,977	6.6	5,099	17.3	3,933	14.7
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

Source: Ministry of Health and Welfare, R.O.C.(Taiwan)
Notes: 1. The standardized mortality rate is based on the WHO standard world population age structure for 2000.
2. Began using the International Classification of Diseases (ICD-10) as a standard diagnostic tool in 2008.

Table 7-2 Major Causes of Cancer Death

Year	Major Causes of Cancer Death									
	Cancers of Liver and Intrahepatic Bile Ducts		Cancers of Trachea, Bronchus and Lung		Cancers of Colon, Rectum and Anus		Cancer of Breast (Female)		Cancer of Prostate	
	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Female Population	Number of Deaths	Standardized Mortality Rate Per 100,000 Male Population
2006	7,415	27.6	7,479	27.0	4,284	15.5	1,439	10.6	957	6.6
2007	7,809	28.1	7,993	27.9	4,470	15.6	1,552	11.1	1,003	6.7
2008	7,651	26.8	7,777	26.3	4,266	14.4	1,541	10.7	892	5.7
2009	7,759	26.2	7,951	25.9	4,531	14.8	1,589	10.6	936	5.9
2010	7,744	25.2	8,194	25.8	4,676	14.6	1,706	11.0	1,021	6.1
2011	8,022	25.3	8,541	26.0	4,921	15.0	1,852	11.6	1,096	6.4
2012	8,116	24.7	8,587	25.4	5,131	14.9	1,912	11.6	1,187	6.7
2013	8,217	24.2	8,854	25.3	5,265	14.9	1,962	11.6	1,207	6.6
2014	8,178	23.3	9,167	25.3	5,603	15.3	2,071	11.9	1,218	6.5
2015	8,258	22.8	9,232	24.7	5,687	14.9	2,141	12.0	1,231	6.4
2016	8,353	22.2	9,372	24.4	5,772	14.6	2,176	11.8	1,347	6.8

Source: Ministry of Health and Welfare, R.O.C.(Taiwan)
Notes: 1. The standardized mortality rate is based on the WHO standard world population age structure for 2000.
2. Began using the International Classification of Diseases (ICD-10) as a standard diagnostic tool in 2008.

Table 8 Social Insurance

Year	National Health Insurance						
	Beneficiaries	Coverage	Health Care Utilzation				
			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	%	No.	No.	Points	Points	Days
2006	22,484	···	14.0	13.0	959	52,417	9.9
2007	22,803	···	14.0	13.1	985	53,027	10.0
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	15.2	13.7	1,197	58,662	9.7
2015	23,737	99.7	15.1	13.9	1,229	59,076	9.5
2016	23,815	99.7	15.3	14.1	1,267	61,458	9.7

Source: National Health Insurance Administration, R.O.C.(Taiwan)

Notes: 1. Data comes from 2nd-generation storage system of NHIA(Updated on September 28, 2017)
2. Commission cases excluded.
3. When calculating visits per beneficiary/100 beneficiaries, the average number of NHI beneficiaries in February, May, August and November isused the number of the beneficiaries of the current year.
4. Outpatient visits exclude cases to home nursing care and communityPsychiatric rehabilitation, medical examination referrals commissioned by medical institutions,refillable prescriptions for patients with chronic illnesses, pathology centers, delivery institutions and supplementary claims. Other cases seeking medical attention in which the case report was split in accordance with the regulations are also excluded.
5. Not Included in Outpatient Numbers (Listed as Zero): Residential care and community mental rehabilitation, referrals commissioned by other hospitals, repeat prescriptions for chronic disease patients, pathology centers, delivery institutions, medical order fee supplementary reports, etc.
6. Inpatient cases exclude cases to supplementary claims. Other cases seeking medical attention in which the case report was split in accordance with regulations are also excluded.
7. The length of hospitalized stay is equivalent to the sum of acute and chronic bed days.

Table 8 Social Insurance (Cont'd)

Year	National Pension								
	Insured	As a Share of Aged 25-64 years	General Population	Low-Income Households	Income Below Designated Threshold		Disabled Persons		
					1st	2nd	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
2006	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-
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

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

Note: 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 reach 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 1.5 times of the average monthly consumption per person in the Taiwan area.

Table 9 Social Assistance

Year	Low-Income Households				Middle-to-Low-Income Households			
	Number of Households	As a Share of Total Households	People	As a Share of Total Population	Number of Households	As a Share of Total Households	People	As a Share of Total Population
	Households	%	People	%	Households	%	People	%
2006	89,900	1.2	218,166	1.0	-	-	-	-
2007	90,682	1.2	220,990	1.0	-	-	-	-
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

Source: Ministry of Health and Welfare, R.O.C.(Taiwan)
Note: Implementation of the new "Public Assistance Act" on July 1, 2011, eased standards for inclusion and added middle-to-low-income households.

Table 9 Social Assistance (Cont'd)

Year	Medical Subsidies		Nursing Care Assistance for Middle-to-Low-Income Households		Disaster Aid	Emergency Aid	
	Person-Times	NTD10,000s	Person-Times	NTD10,000s	NTD10,000s	Person-Times	NTD10,000s
2006	5,326	5,681	5,148	10,200	8,422	37,094	21,596
2007	5,734	6,154	5,854	10,965	13,255	46,666	26,845
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

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

Table 10 Social Welfare

Year	Children and Youths Welfare (0-17 Years)						Elderly Welfare (65 Years & Above)					
	Number of People	As a Share of Total Population	Family Foster Care		Living Support for Disadvantaged Children and Youths		Number of People	As a Share of Total Population	Living Allowance Subsidies for Low-Middle Income Elderly People		Special Care Allowances for Middle-to-Low-Income Elderly People	
			Number of People	Amount	Person-Times	Amount			Approved, as of End of Year	Amount	Person-Times	Amount
	People	%	People	NTD10,000s	Person-Times	NTD10,000s	People	%	People	NTD10,000s	Person-Times	NTD10,000s
2006	5,107,181	22.3	2,031	43,861	906,194	172,393	2,287,029	10.0	140,544	867,302	7,123	3,287
2007	5,002,123	21.8	1,941	44,529	820,487	126,308	2,343,092	10.2	134,644	846,696	6,429	3,032
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	1,406,033	281,434	2,808,690	12.0	122,423	938,459	9,077	4,555
2015	4,043,357	17.2	1,662	42,342	1,390,203	278,290	2,938,579	12.5	124,490	963,091	9,470	4,753
2016	3,987,202	16.9	1,622	42,533	1,386,790	287,381	3,106,105	13.2	128,188	1,020,710	9,448	4,746

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

Table 10 Social Welfare (Cont.1)

Year	Family Support			Welfare for Women			
	Single-Parent Cases Accepted by Halfway Homes	Assistance for Families in Hardship		Women's Welfare Service Centers	Halfway Homes and Protective Centers for Women		
					Institutions	People Accepted	Cases Accepted
	Person-Times	Person-Times	NTD10,000s	Number	Number	People	Person-Times
2006	…	98,858	24,220	63	40	385	1,924
2007	1,444	103,612	28,547	75	37	330	1,902
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	139,513	42,978	72	58	464	3,178
2015	662	133,370	42,012	74	60	496	3,206
2016	542	127,966	43,075	82	64	486	3,076

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

Table 10 Social Welfare (Cont'd)

Year	Disabled Persons										
	Number of People	Ratios of Disabled Persons			As a Share of Total Population	Living Subsidies		Subsidies for Day Care and Residential Care		Subsidies for Auxiliary Appliances	
		0-17 Years	18-64 Years	65 Years & Above							
	People	%	%	%	%	Person-Times	NTD10,000s	People, as of End of year	NTD10,000s	Person-Times	NTD10,000s
2006	981,015	6.4	57.9	35.7	4.3	3,474,205	1,412,015	23,771	353,576	50,817	52,470
2007	1,020,760	6.2	57.4	36.4	4.4	3,635,680	1,472,416	25,529	396,277	53,243	53,931
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	4.6	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	4,179,802	2,042,821	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	40.0	5.0	4,214,338	2,130,780	43,300	802,516	86,369	78,220

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

Table 11 Protective Services

Year	Domestic Violence Incidents			Sexual Assault Incidents			Children and Youths Protective Services
	Reported Victims	Protection Assistance for Victims		Reported Victims	Protection Assistance for Victims		Children and Youths Subjected to Abuse
	People	Person-Times	NTD10,000s	People	Person-Times	NTD10,000s	People
2006	63,274	285,171	13,825	5,638	48,462	4,925	10,093
2007	68,421	330,606	19,886	6,530	72,090	5,319	13,566
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	1,295,812	57,772	8,141	218,852	12,421	9,461

Source: Ministry of Health and Welfare; Municipal, County (City) Governments

Table 12 International Comparisons

Country	Population				
	Crude Birth Rate	Crude Death Rate	Natural Increase Rate	Total Fertility Rate	Dependency Ratio
	2016	2016	2016	2016	2016
	‰	‰	‰	Per Woman	%
R.O.C.(Taiwan)	9	7	2	1.2	36
Japan	8	10	-2	1.5	67
Republic of Korea	9	5	4	1.2	39
United States	12	8	4	1.8	52
Canada	11	8	3	1.6	47
United Kingdom	12	9	3	1.8	54
Germany	9	11	-2	1.5	52
France	12	9	3	1.9	56
Australia	13	7	6	1.8	52
New Zealand	13	7	6	2.0	54

Source: Ministry of the Interior, R.O.C.(Taiwan); 2016 World Population Data Sheet, Population Reference Bureau

Table 12 International Comparisons (Cont.1)

Country	Life Expectancy and Mortality Rate			
	Life Expectancy at Birth			Neonatal Mortality Rate
	Both Sexes	Male	Female	
	2015	2015	2015	2015
	Years	Years	Years	Per 1000 Live Births
R.O.C.(Taiwan)	80.2	77.0	83.6	2.5
Japan	83.7	80.5	86.8	0.9
Republic of Korea	82.3	78.8	85.5	1.6
United States	79.3	76.9	81.6	3.6
Canada	82.2	80.2	84.1	3.2
United Kingdom	81.2	79.4	83.0	2.4
Germany	81.0	78.7	83.4	2.1
France	82.4	79.4	85.4	2.2
Australia	82.8	80.9	84.8	2.2
New Zealand	81.6	80.0	83.3	3.1

Source: Ministry of the Interior, Ministry of Health and Welfare, R.O.C.(Taiwan); 2016 World Health Statistics.

Table 12 International Comparisons (Cont'd)

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
	2014	2014	2014	2014
	%	%	USD PPPs	USD PPPs
R.O.C.(Taiwan)	5.9	62.2	2,715	1,689
Japan	11.4	84.6	4,152	3,512
Republic of Korea	7.1	56.5	2,361	1,334
United States	16.6	49.3	9,024	4,448
Canada	10.0	70.7	4,492	3,175
United Kingdom	9.9	79.6	3,971	3,160
Germany	11.0	84.6	5,119	4,332
France	11.1	78.7	4,367	3,435
Australia	9.0	66.6	4,207	2,804
New Zealand	9.4	79.6	3,537	2,817

Source: Ministry of Health and Welfare, R.O.C.(Taiwan), 2016 OECD Health Data
Note: A System of Health Accounts released by OECD recently, health expenditure and financing are based on current health expenditure to compile health care indicators.

Appendix 2 Notifiable Diseases Statistics

Table 1 Number of Confirmed Cases of Acute Notifiable Disease, 2016

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	14	5	9
	Dengue Fever	743	380	363
	Meningococcal Meningitis	8	8	0
	Paratyphoid Fever	6	3	3
	Poliomyelitis	0	0	0
	Acute Flaccid Paralysis (Note 3)	41	41	0
	Shigellosis	225	116	109
	Amoebiasis	314	148	166
	Malaria	13	0	13

Table 1 Number of Confirmed Cases of Acute Notifiable Disease, 2016(Cont)

Category	Disease	Total	Indigenous Case	Imported Case
II	Measles	14	6	8
	Acute Hepatitis A	1,133	1,053	80
	Enterohaemorrhagic Escherichia coli Infection	0	0	0
	Hantavirus Hemorrhagic Fever with Renal Syndrome	4	4	0
	Hantavirus Pulmonary Syndrome (HPS)	0	0	0
	Cholera	9	9	0
	Rubella	4	1	3
	Chikungunya Fever	14	0	14
	West Nile Fever	0	0	0
	Epidemic Typhus Fever	0	0	0
	Anthrax	0	0	0
III	Pertussis	17	17	0
	Tetanus(Note 4)	14	-	-
	Japanese Encephalitis	23	23	0
	Congenital Rubella Syndrome	0	0	0
	Acute Hepatitis B	118	111	7
	Acute Hepatitis C	207	204	3
	Acute Hepatitis D	2	2	0
	Acute Hepatitis E	16	11	5
	Acute Hepatitis Unspecified	0	0	0
	Mumps (Note 4)	616	-	-
	Legionnaires' Disease	114	111	3
III	Invasive Haemophilus Influenzae Type b (Hib) Infection	14	14	0
	Neonatal Tetanus	0	0	0
	Enteroviruses Infection with Severe Complications	33	33	0
IV	Herpesvirus B Infection	0	0	0
	Leptospirosis	130	129	1
	Melioidosis	55	54	1
	Botulism	6	6	0
	Invasive Pneumococcal Disease	592	591	1
	Q Fever	45	43	2
	Endemic Typhus	13	13	0
	Lyme Disease	2	0	2
	Tularemia	0	0	0
	Scrub Typhus	488	483	5
	Complicated Varicella	40	40	0
	Toxoplasmosis	10	10	0
	Complicated Influenza	2,084	2,081	3
	Brucellosis	0	0	0

Table 1 Number of Confirmed Cases of Acute Notifiable Disease, 2016(Cont)

Category	Disease	Total	Indigenous Case	Imported Case
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	0	0	0
	Zika virus infection	13	0	13

Notes:
1. Date of Download: Data were downloaded on May 1, 2017.
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 implementation of the Eradication Program for Measles, Congenital Rubella Syndrome, Poliomyelitis, and Neonatal Tetanus in 1992.
4. Tetanus and mumpsare cases reported by the physician without laboratory testing of specimens.

Table 2 Number of Confirmed Cases of Chronic Notifiable Disease, 2016

Categories	Diseases	Number of Confirmed Notifiable
II	Multidrug-Resistant Tuberculosis (MDR-TB)	112
III	Tuberculosis	10,328
	Syphilis	8,725
	Congenital syphilis	1
	Gonorrhea	4,469
	Human Immunodeficiency Virus Infection	2,396
	Acquired Immunodeficiency Syndrome （AIDS）	1,412
	Hansen's Disease	10
IV	Creutzfeldt-Jakob Disease	0

Notes:
1. Date of Download: Data were downloaded on May 1, 2017.
2. Caseloads of MDR-TB were calculated based on the registration date by the Taiwan CDC. Tuberculosis caseloads were based on the notification date. Other chronic notifiable diseases were analyzed based on the diagnosis date.

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