2014

Taiwan Health and Welfare Report







# Foreword

For many years, the annual *Taiwan Public Health Report* was published by the Department of Health to help readers understand the dedicated service and hard work of the nation's health agencies. Following the Ministry of Health and Welfare's establishment in 2013, this publication has become the *Taiwan Health and Welfare Report*. The report now covers the administration of social welfare services as well as health in its 11 chapters detailing administrative practices and accomplishments in 2013.

In particular, "Friendly Environments Supportive to Health" discusses health promotion policies targeting pregnant women, babies, children, adolescents, middle-aged and elderly citizens, women and other groups. Also covered is how health promotion policies are revised using empirical data obtained from health surveys, investigations and research.

Another chapter, "Health Care," describes establishment of a comprehensive community care network, including localization and categorization of resources. Through integration of local medical organizations with social welfare institutions, educational institutions and community groups, basic medical organizations can play a greater role in public health affairs. Benefits from this integration include provision of better and more holistic local medical care.

HIV/AIDS patients' immune deficiencies create greater risks of TB infection. In June 2013 the Ministry introduced a set of integrated management principles governing management of HIV/TB to respond to this challenge by regularly analyzing disease trends and adding routine HIV tests for TB patients aged 15-49. With this support, physicians can better conduct comprehensive evaluations needed to provide appropriate treatment and care.

In the area of pandemic influenza preparedness and response, an H7N9 influenza outbreak in mainland China quickly led to this disease being declared a Category 5 notifiable disease. In May 2013 the sale of live poultry was banned in traditional markets and an auditing mechanism was established to eradicate potential pathways for transmission of avian influenza.

Following a spate of food safety incidents, an amendment to the Act Governing Food Safety and Sanitation was promulgated in June 2013. This made food enterprises responsible for implementing self-management systems and mandated tracing of product supply sources and distribution channels. It also increased fines for violations.

Faced with limited resources and pressing medical care needs, in 2011 Taiwan completed the legislative amendments required to make the National Health Insurance sustainable. The

resulting second-generation National Health Insurance implemented on January 1, 2013, added a supplementary premium and lowered general premium rates from 5.17% to 4.91%, decreasing the burden faced by beneficiaries who earn a regular salary.

To protect the rights of the physically and mentally disabled, Taiwan announced regulations governing disability assessment in July 2012.

As for social work policies, besides planning more professional systems, plans are under way to increase human resources in this area. Between 2011 and 2016 an estimated 1,462 additional social workers will strengthen inspections and improve service quality in the areas of domestic violence prevention, child protection, sexual assault response, and services for disadvantaged families.

This report's chapter on "Prevention of Violence and Protective Services" discusses the Ministry's planning in many critical areas. These include prevention of domestic violence, sexual assault, and sexual harassment; protection of the elderly, the disabled, and adolescents; and prevention of child abuse and youth sexual transactions. Because these important social issues were brought under the umbrella of the MOHW, organizational restructuring has led to combined

social and health policies. This paved the way for a better distribution

of responsibilities and a new age of resource integration.

Looking back to the events of 2013, although the MOHW faced many difficulties and challenges, it was able to formulate responses through joint efforts and research. The measures it introduced turned crises into opportunities. I hope this annual report effectively describes our work and achievements of the past year, and I look forward to any helpful comments and criticisms that it provokes.

Minister of Health and Welfare

Been-Huang Chiang

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# **Health and Welfare Policies**

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Confronted by population structural challenges brought by aging and a low birth rate as well as an increase in new immigrants, it is critical that the government consolidate long-term care (LTC) services, health care and welfare for the elderly, childrearing, women's rights, and social insurance and assistance. Resources will only be sufficient if they are distributed more efficiently and a full survey is taken of related policies to ensure they are suited to the future.

### Chapter 1 Administrative Goals

#### Section 1 2013 Administrative Goals

Administrative goals of the Ministry of Health and Welfare (MOHW) in 2013 were based on administrative guidelines determined by the Executive Yuan. They combined goals of the former Department of Health and Department of Social Affairs of the Ministry of the Interior and were established to meet current social conditions and future development needs. Highlights are as follows:

- 1. Improved Health and the Medical Care to Guarantee Citizens' Right to Medical Care: Strengthen primary health care system functions to foster balanced allocation of medical care and resources; advance mental health by improving psychiatric disease prevention and care services; popularize the LTC services network while boosting associated manpower resources; improve the nursing work environment while raising nurses' professional capabilities and care services; assist disadvantaged groups while promoting care for the elderly who live alone, integrated geriatric clinics, and community care services for dementia; promote establishment of an electronic medical records (EMR) system that can facilitate communication between the nation's hospitals.
- Implementation of Comprehensive Disease Control to Prevent Disease Threats: Build a complete disease prevention monitoring system to strengthen warning and emergency response mechanisms while increasing international

- cooperation and exchanges in disease prevention; effectively use disease prevention resources including the expanded use of immunizations to raise immunity; implement communicable disease control by conducting disease prevention measures and research plans that improve quality of policy.
- 3. Building Friendly Health Support Environments to Promote Full Citizen Participation: Improve the care environment for women and childbirth while strengthening promotion of health among children and adolescents; build supportive, age-friendly environments that promote active aging; expand cancer screenings to increase the screening rates for major forms of cancer; foster healthy lifestyle modes focused on individuals, families and society; build safe communities and healthy cities, hospitals, schools and workplaces; offer medical care subsidies for patients afflicted with rare diseases or oil disease; expand health promotion among indigenous peoples and new immigrants.
- 4. Strengthening of Food and Pharmaceutical Management to Safeguard Health: Strengthen food, pharmaceutical and cosmetics management and risk assessment systems, including enhancement of the food and drug ingredients management, source management, and distribution inspections needed to restore trust in Taiwan-made food and pharmaceutical products; promote cross-departmental cooperation to suppress illegal pharmaceuticals and tainted food products, enhance monitoring of food and pharmaceutical advertisements, and reduce pharmaceutical abuse; build a pharmaceutical review mechanism that is consistent with international trends, simplifies pharmaceutical review procedures, and monitors management and safety of pharmaceutical manufacturing.
- Provision of Sustainable National Health Insurance and Long-term Care Insurance: Implement a fair financing system and link revenues and expenditures, thereby guaranteeing stable

finances to ensure the right to treatment of disadvantaged groups; reach agreement on annual budget and distribution methods for dental, Chinese medicine, and Western medicine departments, strengthen the National Health Insurance (NHI) dispute review mechanism; plan and implement an LTC insurance system.

- 6. Assistance to Disadvantaged Groups Through Better Social Welfare: Ensure the livelihood of the disadvantaged groups while expanding the range of assistance offered; implement new instruments for identifying disabled persons and evaluating their needs; build a friendly social environment for the elderly and disabled; actively care for families in special circumstances; continue making improvements to National Pension Insurance to include those facing economic uncertainty; build a friendly child care environment that includes tools for managing nannies and child care providers who can support family care.
- 7. Formulation of Science and Technology Research Policies to Aid Pharmaceutical and Biotechnology Development: Promote health and welfare technological research that is mission-directed driven and aids in the formation of empirically based health policies; conduct innovative translational medical research to bridge gaps between clinical and fundamental science; build an environment advantageous to development of the medical and health industries in order to accelerate development of the biomedical technology industry; promote and improve added-value applications and cloud services for managing health and welfare data.
- 8. Advance International Exchange and Cooperation: Participate in international health organizations, the World Health Assembly and technical meetings while hosting APEC meetings; promote international medical support missions and train health workers; develop bilateral health cooperation and exchange partnerships while hosting international health forums; build cooperation mechanisms across the Taiwan Strait.

#### Section 2 Gender Policies

In response to United Nations advocacy of gender mainstreaming, the MOHW implemented a plan covering gender awareness training, gender data, gender analysis, gender budgeting, and gender impact assessments. Several actions were taken in 2013. Three mid-to-long-term plans and six Acts led to the completion of gender impact assessment procedures. Gender data indicators were updated, announced, and passed to MOHW units for analysis and incorporation into administrative and policy decisions. Topics and analysis on the MOHW website were expanded to include gender data related to NHI in 2012, causes of death in 2012, centenarians in 2013, cancer deaths in comparison to Organization for Economic Co-operation and Development nations in 2010, and individual medical fees in 2012. Gender mainstreaming education and training combined with organizational learning enhanced gender awareness among MOHW staff. Also, by encouraging gender awareness topics to be incorporated into budgetary discussions, the MOHW expanded the scope for inclusion of women's rights and benefits planning in future budgets.

# Chapter 2 Health and Welfare Organization

In accordance with Executive Yuan restructuring, the MOHW was formally established on July 23, 2013, by merging 21 agencies and missionoriented units under the Department of Health, as well as five affiliated agencies, together with the Ministry of the Interior's Department of Social Affairs, Children's Bureau, Domestic Violence and Sexual Assault Prevention Committee, and National Pension Supervisory Commission, as well as the Ministry of Education's National Research Institute of Chinese Medicine. The MOHW consists of eight departments, six administrative departments, seven mission-oriented units, and six affiliated level three agencies (institutes). It oversees 26 hospitals and 13 social welfare institutions (see Figure 1-1).

#### Figure 1-1 Organization chart (MOHW)

#### Ministry of Health and Welfare (MOHW)

Department of Planning

Department of Social Insurance

Department of Social Assistance and Social Work

Department of Protective Services

Department of Nursing and Health Care

**Department of Medical Affairs** 

Department of Mental and Oral Health

Department of Chinese Medicine and Pharmacy

Department of Secretarial Affairs

Department of Personnel

Department of Civil Service Ethics

Department of Accounting

Department of Statistics

Department of Information Management

Legal Affairs Committee

Hospital and Social Welfare Organization Administration Commission

National Health Insurance Dispute Mediation Committee

Health & Welfare Workers Training Center

Office of International Cooperation

National Pension Supervisory Com-

National Health Insurance Committee National Research Institute of Chinese Medicine

Social and Family Affairs Administration

Centers for Disease Control

Food and Drug Administration

Health Promotion Administration

National Health Insurance Administration

Northern Region Senion Citizen's Home Central Region Senion Citizen's Home Eastern Region Senion Citizen's Home Penghu Senion Citizen's Home Changhua Nursing Home

Adolescents' Home

Nantou Education and Nursing Institution Yunlin Education and Nursing Institution Tainan Education and Nursing Institution

Northern Region Children's Home Central Region Children's Home Southern Region Children's Home

Keelung Hospital Taipei Hospital Taoyuan General Hospital

Miaoli General Hospital Feng Yuan Hospital

Taichung Hospital Nantou Hospital

Changhua Hospital

Chia-Yi Hostital

Puzi Hospital Sinying Hospital

Tainan Hospital Cishan hospital

Pingtung Hospital

Taitung Hospital Hualien Hospital

Penghu Hospital Kinmen Hospital

Yuli Hospital

Taoyuan Psychiatric Center Bali Psychiatric Center Tsaotun Psychiatric Center

Jianan Psychiatric Center

Lo-Sheng Sanatorium and Hospital

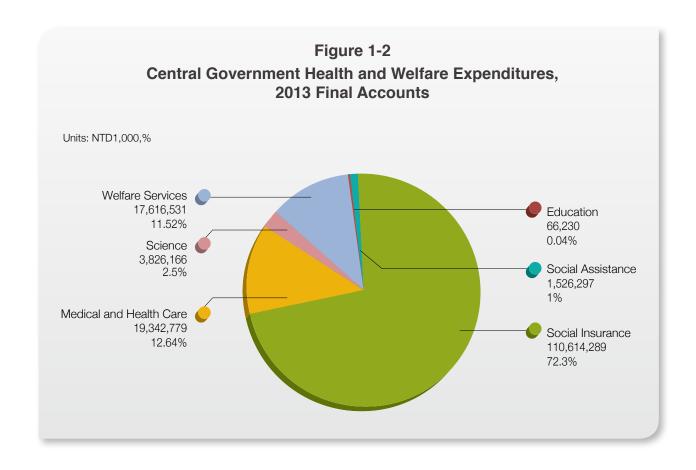
Chest Hospital

Hengchun Tourism Hospital

Establishment of the MOHW led to increases in staff (from 10,845 to 12,178) and budget (from NTD75.6 billion to NTD161.6 billion). Responsibilities spread across health care, preventive health, disease control, food hygiene, welfare services, social assistance, and social insurance.

## **Chapter 3 Health and Welfare Budget**

Final accounts from 2013 showed health expenditures of NTD152,992,292,000, comprising NTD110,614,289,000 for social insurance (72.3%), NTD19,342,779,000 for medical and health care (12.64%), NTD3,826,166,000 for science (2.5%), NTD17,616,531,000 for welfare services (11.52%), NTD66,230,000 for education (0.04%), and NTD1,526,297,000 for social assistance (1%), as illustrated in Figure 1-2.





## **Health and Welfare Indicators**

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Taiwan's annual growth in average life expectancy over the past half century can be attributed to many factors, including rising incomes, an improved living environment and nutrition, advances in medicine and hygiene, and improved health care. But these positive changes have been accompanied by new challenges. As baby boomers grow old greater attention must be paid to health and disease problems among the elderly. Population aging, intensified by the low birth rate, is impacting the rate of economic growth as well as national health expenditure (NHE) needs. In the following chapters, these topics will be examined by looking at important health and welfare indicators, including population indicators, vital indicators, NHE, and international comparisons.

**Chapter 1 Population Indicators** 

Section 1 Population Structure

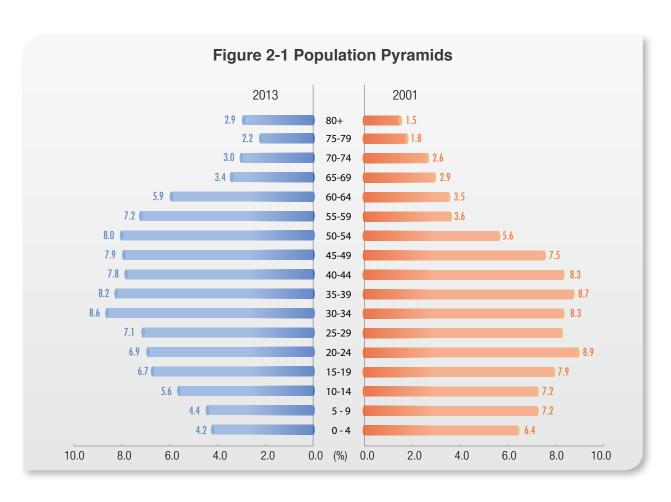
At the end of 2013, Taiwan had a registered population of 23.37 million, consisting of 11.68 million

males and 11.69 million females. While the female population exceeded the male population for the first time, the sex ratio (ratio of males to females by 100) was 100. Annual population growth was 2.47‰.

The population density at the end of 2013 was 646 people per km<sup>2</sup>. The densest city was Taipei, at 9,884 people per km<sup>2</sup>, followed by Chiayi City, at 4,513 people per km<sup>2</sup>. The least dense jurisdictions were on the east coast: Hualien and Taitung counties, at 72 people per km<sup>2</sup> and 64 people per km<sup>2</sup>, respectively.

The gradually declining birth rate caused the proportion of the population aged 14 and younger to drop between 2001 and 2013 and the proportion of the population aged 65 and older to increase during the same period, as illustrated in Figure 2-1.

Historic age structure data show that the percentage of the population aged 65 and older reached 7% in 1993, making Taiwan an aged society. The percentage of the population aged 14 and younger dropped from 20.8% in 2001 to 14.3% in 2013.



Appendices

During the same time period, the proportion of the population aged 65 and older increased from 8.8% to 11.5%. Aging of the population was becoming increasingly evident, as illustrated in Figure 2-2 and Table 2-1.

The age dependency ratio, or the ratio of dependents (people aged 14 and younger or 65 and older) to the working-age population (those aged 15-64), fell from 42.1% in 2001 to 34.9% in 2013. The decline can be attributed to the rapid decrease in the age dependency ratio, young, (the

ratio of dependents aged 14 and younger to the population aged 15-64) and the steady increase in the age dependency ratio, old, (ratio of population aged 65 and older to the population aged 15-64).

#### Section 2 Birth and Death

Changes in social values led to annual decreases in the fertility rate, with the crude birth rate (live births per 1,000 people) falling from 11.7‰ in 2001 to 8.5‰ in 2013. The crude mortality rate (total number of deaths per 1,000 people) rose slightly from 5.7‰ in

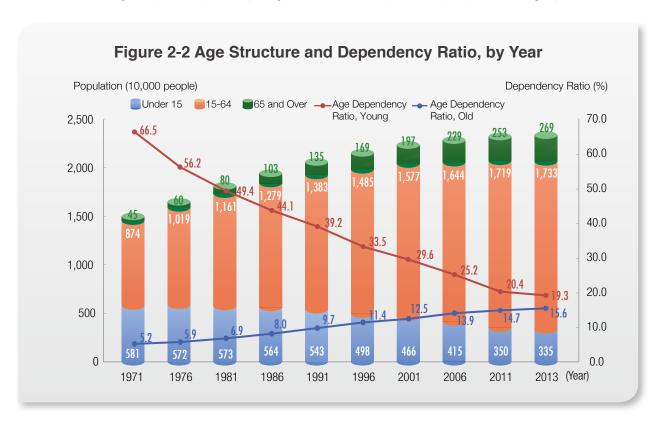


Table 2-1 Age Structure and Dependency Ratio, by Year

	Total -	Po	pulation Structι	ıre	Depende	ncy Ratio
Year	Population	Under 15 15~64 65 and Over		65 and Over	Age Dependency Ratio, Young	Age Dependency Ratio, Old
	per 1,000 People	%	%	%	%	%
1981	18,194	31.63	63.96	4.41	49.45	6.90
1991	20,606	26.34	67.13	6.53	39.23	9.73
2001	22,406	20.81	70.39	8.81	29.56	12.51
2011	23,225	15.08	74.04	10.89	20.37	14.70
2013	23,374	14.32	74.15	11.53	19.31	15.55

Source: Ministry of the interior

2001 to 6.7‰ in 2013. The rate of natural increase, expressed per 1,000 people, (crude birth rate minus crude mortality rate) fell to a record low of 0.9‰ in 2010 before rising to 3.2‰ in 2012 then retreating to 1.9‰ in 2013 (see Figure 2-3).

same period, life expectancy at birth increased by 1.9 years to 76.7, and for females it increased by 3 years to 83.3. The higher increase for females caused the life expectancy gap between the sexes to widen (see Figure 2-4 and Table 2, Appendix 1).

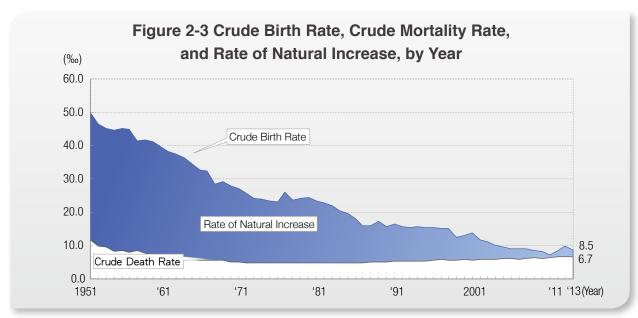
#### Section 3 Life Expectancy

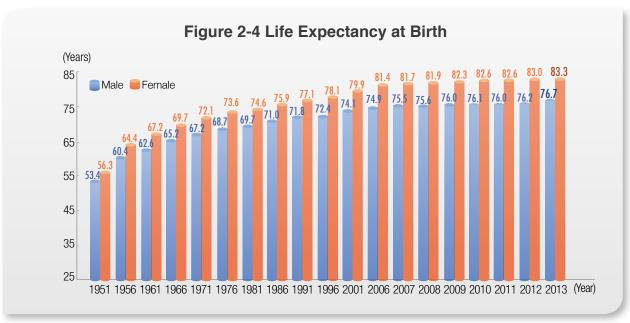
According to estimates from the Ministry of the Interior, the life expectancy at birth for both sexes was 79.9 in 2013, an increase of 2.5 years compared to 10 years earlier. For males in the

#### Chapter 2 Vital Indicators

#### Section 1 10 Leading Causes of Death

Economic transformation along with improvements to





quality of life, health and hygiene have led to dramatic changes in the leading causes of death. In 1952, acute and communicable diseases took the most lives in Taiwan; today, malignant neoplasms, cardiovascular disease, and accidents are the main culprits.

There were 154,374 deaths in 2013. The standardized mortality rate (based on the WHO standard world population age structure for 2000) was 435.3 people per 100,000 population, a decrease of 3.4% compared to 2012 and a decrease of 18.2% compared to 2003.

In 2013, the 10 leading causes of death were: 1. Malignant neoplasms, 2. Diseases of heart (except hypertensive diseases), 3. Cerebrovascular diseases, 4. Diabetes mellitus, 5. Pneumonia, 6. Accidents and adverse effects, 7. Chronic lower respiratory diseases, 8. Hypertensive diseases, 9. Chronic liver disease and cirrhosis, and 10. Nephritis, nephrotic syndrome and nephrosis (see Figure 2-5).

### Section 2 Cancer Incidence and Causes of Cancer Deaths

#### 1. Cancer Incidence

According to 2011 cancer registry data, the crude incidence rates of cancer for males and females were 446.2 and 351.6 people per 100,000

population, respectively. If adjustments are made based on the WHO-constructed standard world population age structure from 2000, the age-standardized incidence rates for males and females drop to 339.4 and 255.0 people per 100,000 population, respectively. The 10 leading cancers for males and females are shown in Table 2-2.

#### 2. Causes of Cancer Deaths

In 2013, there were 44,791 cancer deaths, accounting for 29.0% of total deaths. If adjustment is made based on the standard world population age structure from 2000, the standardized cancer mortality rate in 2013 was 130.4 per 100,000 people – a slight decrease of 0.7% compared to 2012 and a drop of 8.9% compared to 2003.

The 10 leading causes of cancer death in 2013 were: 1. Cancers of trachea, bronchus and lung, 2. Cancers of liver and intrahepatic bile ducts, 3. Cancers of colon, rectum, and anus, 4. Cancer of breast (female), 5. Cancer of oral cavity, 6. Cancer of prostate, 7. Cancer of stomach, 8. Cancer of pancreas, 9. Cancer of oesophagus, and 10. Cancers of the cervix uteri and uterus, part unspecified. Compared to 2003, lung cancer, oral cavity cancer, prostate cancer, pancreatic cancer, and oesophageal cancer moved up the list while stomach cancer and cancers of the cervix uteri moved down (see Figure 2-6).

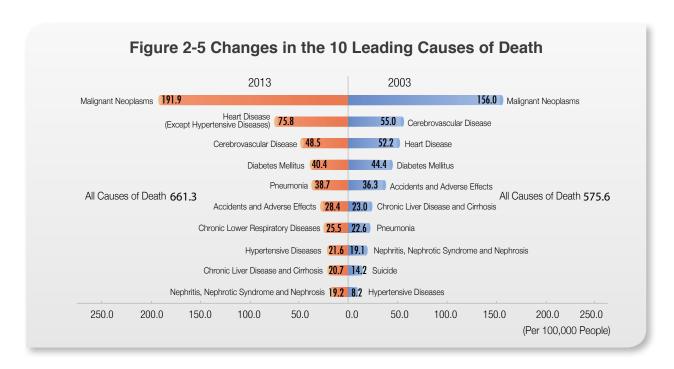
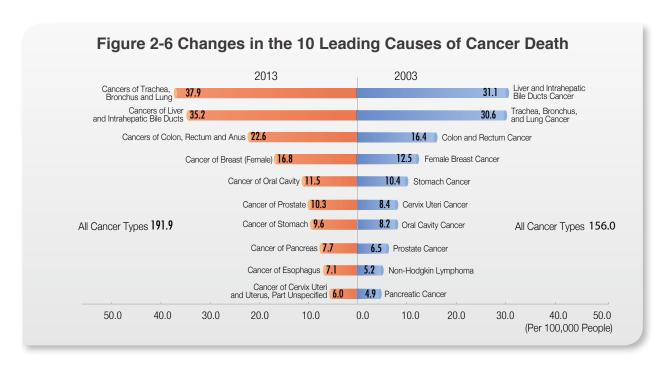


Table 2-2 Incidence of 10 Leading Cancers, 2011

		Male		F	emale	
Rank	Site	No. of Site No. of Incidence R		Site	No. of	Age-Standardized Incidence Rate
		Cases	(per 100,000 People)		40,717 10,056 5,947 4,121	(per 100,000 People)
	All Cancers	51,965	339.4	All Cancers	40,717	255
1	Colorectal	8,140	52.6	Female Breast	10,056	64.3
2	Liver and Intrahepatic Bile Ducts	7,920	52	Colorectal	5,947	35.7
3	Lungs, Bronchus and Trachea	6,938	44.2	Lungs, Bronchus and Trachea	4,121	24.8
4	Oral Cavity, Oropharynx and Hypopharynx	6,308	41.5	Liver and Intrahepatic Bile Ducts	3,372	20.4
5	Prostate	4,628	29.7	Thyroid	1,954	13.5
6	Stomach	2,430	15.2	Corpus Uteri	1,722	10.9
7	Esophagus	2,063	13.3	Cervix Uteri	1,673	10.5
8	Skin	1,590	9.9	Stomach	1,394	8.3
9	Bladder	1,389	8.7	Ovary, Fallopian Tube and Broad Ligament	1,240	8.3
10	Nasopharynx	1,123	8.5	Skin	1,395	8.1

Notes: 1. Ranked from highest to lowest age-standardized incidence rate.

- 2. The age-standardized incidence rate is based on the standard world population age structure in 2000.
- 3. Source: 2011 cancer registry data, Health Promotion Administration, MOHW



#### Section 3 Infant and Neonatal Mortality Rates

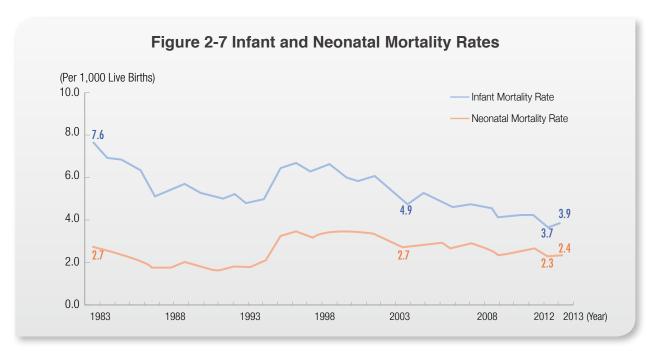
Advances in public health led to general declines in both the infant mortality rate (number of deaths of infants younger than 1 year old in a given year per 1,000 live births in the same year) and the neonatal mortality rate (number of deaths of infants younger than 4 weeks old in a given year per 1,000 live births in the same year), apart from a slight increase in 1995 attributed to a new birth reporting system. In 2013, the neonatal mortality rate had declined to

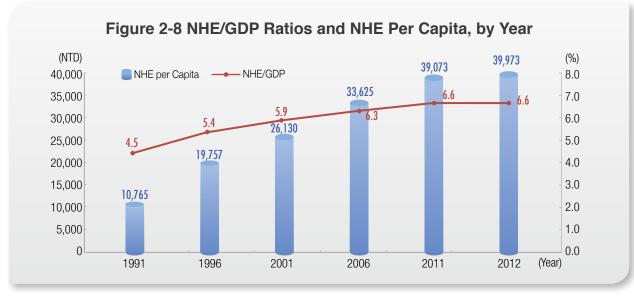
2.4 per 1,000 live births, compared to 2.7 deaths per 1,000 live births in 1983. Over the same period, the infant mortality rate dropped from 7.6 to 3.9 per 1,000 live births (see Figure 2-7).

## **Chapter 3 National Health Expenditures**

Good health care, a basic need in modern society and a measure of a country's advancement, comes at a cost. Health care spending in Taiwan rose by 17.3% in 1995 after it implemented NHI in March of that year, exceeding growth in national income over the same period and contributing to sustained subsequent increases in health care costs as a percentage of GDP.

NHE per capita has steadily risen since 1991, with total NHE reaching NTD930.2 billion in 2012. Increases in recent years can be attributed to several factors, including the expansion of international medicine, development of biomedicine and technology, and rapid population aging. When NHI was implemented in 1995, NHE as a percentage of GDP rose to 5.3%, compared to 4.9% in 1994, and by 2012 it had reached 6.6%. NHE per capita rose from NTD10,765 in 1991 to NTD39,973 in 2012, equivalent to an average annual increase of 6.4% (see Figure 2-8).





### **Chapter 4 International Comparisons**

#### Section 1 Life Expectancy

According to the 2014 World Health Statistics report, in 2012 average life expectancy for males at birth in major developed countries was 75 or greater, with Australia the highest at 81. Taiwan was 76, similar to Japan's level in 1990. Life expectancy for males in Taiwan increased by 5 years between 1990 and 2012.

Average life expectancy for females at birth in major developed countries in 2012 was 81 or greater, led by Japan at 87, which was followed by South Korea, France and Australia at 85. Taiwan was 83. Life expectancy for females in Taiwan increased by 6 years between 1990 and 2012 (See Table 2-3).

#### Section 2 Rate of Natural Increase

As indicated by the 2013 Population Reference Bureau, the global population in 2013 totaled 7.137 billion. The world's population was projected to reach approximately 9.727 billion by 2050, a rise of 36%. Though the rate of demographic transition

was generally on the rise, populations in certain countries registered negative growth and the rate of demographic transition continued to fall (see Table 2-4).

The global total fertility rate in 2013 (the average number of live births for a woman over her lifetime) was 2.5. Fertility rates in the Asian countries listed were below average, indicating that Asia has become a low-fertility rate region. The worldwide birth rate stood at 20 per 1,000 population and the mortality rate at 8 per 1,000 population. Japan and Germany were noted for having fertility rates lower than their mortality rates. In general, demographic structures in developed countries were trending toward lower fertility rates and lower mortality rates (see Table 2-4).

#### Section 3 Dependency Ratio

According to the latest World Bank data, among major nations in 2012 Japan had the highest dependency ratio, at 60%, followed by France at 55.6%, and the United Kingdom at 53.1%. Taiwan's ratio of 34.7% was relatively low. Historic population data show that the dependency ratio in Taiwan fell by 57.3% between 1960 and 2011, a change primarily attributed to a significant decrease in the age dependency ratio, young (see Table 2-5).

Table 2-3 Life Expectancy at Birth in Major Developed Countries

(Units:age)

	Both	Sex	Ma	ale	Fen	nale
	1990	2012	1990	2012	1990	2012
Taiwan	74	80	71	76	77	83
Japan	79	84	76	80	82	87
South Korea	72	81	68	78	76	85
United States	75	79	72	76	79	81
Canada	77	82	74	80	80	84
United Kingdom	76	81	73	79	79	83
Germany	76	81	72	78	79	83
France	78	82	73	79	82	85
Australia	77	83	74	81	80	85
New Zealand	75	82	73	80	78	84

Source: WHOSIS 2014

**Table 2-4 Population Status of Major Countries, 2013** 

	2013 Population	Population (Milli	n Forecast ons)	Population as	Population as   Fertility Rate		Crude Death Rate (‰)	Rate of Natural	
	(Millions)	2025	2050	Multiple of 2013	(per woman)	Rate (‰)	11410 (700)	Increase (%)	
Global	7,137.0	8,095.0	9,727.0	1.4	2.5	20	8	1.2	
Taiwan	23.4	23.7	21.0	0.9	1.3	10	7	0.3	
Japan	127.3	120.7	97.1	0.8	1.4	8	10	-0.2	
South Korea	50.2	52.0	48.1	1.0	1.3	10	5	0.4	
United States	316.2	346.4	399.8	1.3	1.9	13	8	0.5	
Canada	35.3	39.7	48.4	1.4	1.6	11	7	0.4	
United Kingdom	64.1	69.8	78.8	1.2	2.0	13	9	0.4	
Germany	80.6	80.0	76.2	0.9	1.4	8	11	-0.2	
France	63.9	67.3	72.3	1.1	2.0	13	9	0.4	
Australia	23.1	27.1	34.2	1.5	1.9	13	6	0.7	
New Zealand	4.5	5.0	5.7	1.3	2.0	14	7	0.7	

Source: 2013 World population Data Sheet, Population Reference Bureau

#### **Table 2-5 Dependency Ratios of Major Countries**

(Units:%)

	1960	1970	1980	1990	2000	2005	2010	2011	2012
Taiwan	92.0	74.2	57.3	49.9	42.3	40.0	35.9	35.1	34.7
Japan	56.0	45.3	48.4	43.4	46.6	50.7	56.9	58.4	60.0
South Korea	80.7	83.3	60.7	44.1	39.5	39.6	37.6	37.3	37.1
United States	66.5	61.4	51.3	51.9	50.9	48.9	49.0	49.4	49.8
Canada	70.7	61.6	47.4	46.9	46.5	44.5	44.1	44.6	45.3
United Kingdom	54.0	59.0	56.1	53.2	53.4	51.3	51.9	52.4	53.1
Germany	48.3	58.4	51.8	45.1	46.9	49.9	52.0	52.1	52.1
France	61.1	60.4	57.1	51.5	53.7	53.7	54.2	54.8	55.6
Australia	63.4	59.4	53.6	49.5	49.6	48.6	47.9	48.4	49.1
New Zealand	71.0	67.3	58.6	52.3	52.7	50.5	50.4	50.7	51.3

Source: The World Bank

Note: Age dependency ratio = People aged 14 and younger + people aged 65 and older/ People aged 15-64

#### Section 4 Health Expenditures

Taiwan's NHE per capita at purchasing power parity was US\$2,479 in 2011 — lower than the OECD median of US\$3,213. If ranked among OECD member states Taiwan would have been 23rd. GDP per capita in Taiwan was US\$37,403 — higher than the OECD median of US\$35,395, and ranked

15th when compared to OECD member states. Generally, higher GDP per capita is accompanied by higher NHE per capita. In 2011, NHE accounted for a 6.6% share of Taiwan's GDP, a relatively low amount that was 2.5 percentage points below the OECD median and which would have placed Taiwan 32nd among OECD states (see Table 2-6).

Table 2-6 Comparisons of NHE Per Capita and GDP Per Capita Between Taiwan and OECD Member States, 2011

Ranking	Country – Ranked by NHE per Capita	NHE per Capita (PPP \$)	GDP per Capita (PPP \$)	NHE/GDP (%)
	Median	3,213	35,395	9.1
1	United States	8,508	48,113	17.7
2	Norway	5,669	61,060	9.3
3	Switzerland	5,643	51,227	11.0
4	Netherlands	5,099	42,716	11.9
5	Austria	4,546	42,186	10.8
6	Canada	4,522	40,449	11.2
7	Germany	4,495	39,662	11.3
8	Denmark	4,448	40,933	10.9
9	Luxembourg	4,246	88,781	6.6
10	France	4,118	35,395	11.6
11	Belgium	4,061	38,629	10.5
12	Sweden	3,925	41,461	9.5
13	Australia <sup>2010</sup>	3,800	42,468	8.9
14	Ireland	3,700	41,548	8.9
15	United Kingdom	3,405	36,158	9.4
16	Finland	3,374	37,479	9.0
17	Iceland	3,305	36,611	9.0
18	Japan <sup>2010</sup>	3,213	33,508	9.6
19	New Zealand	3,182	30,942	10.3
20	Spain	3,072	33,045	9.3
21	Italy	3,012	32,648	9.2
22	Portugal	2,619	25,588	10.2
23	Taiwan	2,479	37,403	6.6
24	Slovenia	2,421	27,351	8.9
25	Greece	2,361	25,859	9.1
26	Israel	2,239	28,958	7.7
27	Korea	2,198	29,833	7.4
28	Czech Republic	1,966	26,209	7.5
29	Slovak Republic	1,915	24,112	7.9
30	Hungary	1,689	21,409	7.9
31	Chile	1,568	20,855	7.5
32	Poland	1,452	21,138	6.9
33	Estonia	1,303	21,998	5.9
34	Mexico <sup>2010</sup>	977	15,807	6.2
35	Turkey <sup>2008</sup>	906	14,910	6.1

Source: 2013 OECD Health Data



# Friendly Environments Supportive to Health

- Chapter 1 Healthy Birth and Growth
- 24 Chapter 2 Healthy Living
- Chapter 3 Healthy Ageing
- Chapter 4 Health Communication and Surveillance



The Health Promotion Administration (HPA) of the Ministry has taken several steps in order to achieve "Health for All," as advocated by the WHO. Besides planning health promotion policies that benefit a diverse range of citizens - including pregnant women, infants and toddlers, children, adolescents, middle-aged adults, and the elderly - it committed to the "Health in All Policies" initiative, which seeks to take into account health implications of all decisions. In accordance with the 2012 World Health Assembly "25 by 25" objective (to reduce preventable deaths due to noncommunicable diseases by 25% by 2025), the HPA incorporated the nine global targets and 25 indicators that comprise the noncommunicable diseases global monitoring framework into its polices. The overall goal is to improve health at the individual, community, national, and global levels.

## **Chapter 1 Healthy Birth and Growth**

#### Section 1 Maternal Health

#### 1. Prenatal Examinations

- Pregnant women are offered 10 prenatal exams. In 2013, this benefit was used 1.77 million times and achieved an average usage rate of 94.3%.
- 2) Since April 15, 2012, a NTD500 subsidy toward group B streptococcus screenings has been available for pregnant women. In 2013, the screening rate was 93.3%, with 20.1% of those screened testing positive.
- 3) Subsidies covering prenatal karyotype tests and genetic tests for mothers at high risk of having a child with a genetic disease are available. Of 48,764 subsidized cases in 2013, there was a 95% success rate of uncovering abnormalities.

#### 2. Sex Ratio at Birth

A task force formed in 2010 was responsible for building mechanisms to monitor the sex ratio at birth. By using census data from local health bureaus it provided guidance to health institutions that provide birthing services and prenatal examinations. The results were positive:

Taiwan's sex ratio at birth dropped from 1.090 in 2010 to 1.078 in 2013.

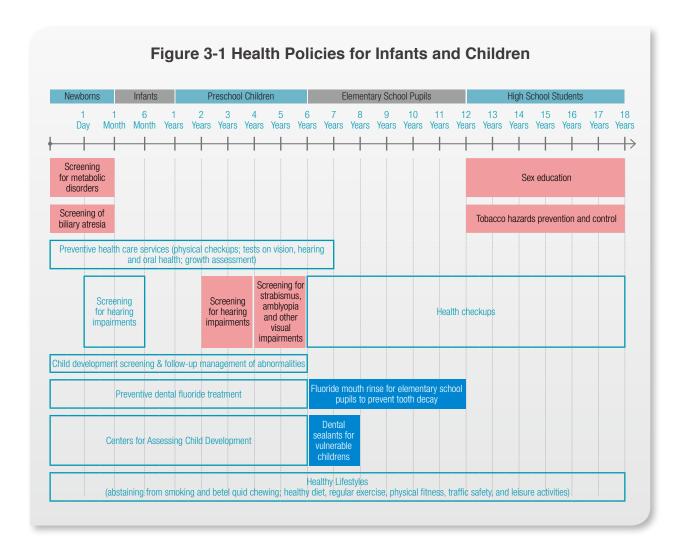
- The newly established Pregnant Women Care Center offers preconception, prenatal, and postnatal health information via a free hotline, an app and a website.
- 4. Following promulgation of the "Public Breastfeeding Act" on November 24, 2010, a total of 1,969 public locations established breastfeeding rooms by the end of 2013. Continuation of the Baby-friendly Hospital Accreditation program led to accreditation of 176 hospitals in 2013 and total coverage reaching 79.2% of all births. These initiatives boosted the exclusive breastfeeding rate under 6 months of age to 48.7%.

### Section 2 Health Promotion for Infants, Toddlers and Children

For children suspected of developmental delays to receive timely assessment and intervention, screenings are provided for newborns and the Centers for Assessing Child Development were established. Other measures include seven rounds of children's preventive healthcare and health education; oral, vision and hearing health maintenance for children; and a program to promote sexual health among adolescents (see Figure 3-1).

- 1. In 2013, 195,251 infants were screened for 11 genetic metabolic disorders, for a coverage rate of over 99%.
- Newborn hearing impairment screening was offered to all infants no more than 3 months of age. In 2013, 190,003 infants were screened, for a coverage rate of 97.3%.
- 3. In July 2013, the MOHW began providing two health guidance classes to parents of infants under 1 year of age, covering topics such as prevention of Sudden Infant Death Syndrome(SIDS), oral cleaning and primary teeth care. The coverage rate was approximately 70%.

- 4. By the end of 2013, 45 Centers for Assessing Child Development were established in 22 cities and counties. In 2013, a total of 14,190 developmentally delayed children have been diagnosed.
- 5. Cross-departmental units continued to encourage screening services to preschool children aged 4-5 detection of strabismus, amblyopia and vision. In 2013, the screening rate was 94.3%, with 98.7% of suspected abnormalities referred for treatment.
- 6. Starting from June 2013 the MOHW expanded subsidized fluoride gel applications to twice annually for children under 6 years of age and four times annually for disabled children and children under 12 years of age from disadvantaged families, aboriginal regions or remote regions. This benefit was used 669,250 times in 2013, with
- 73% of children 3 or 4 years of age treated at least once. Another program, used 8,089 times in 2013, continued to offer dental sealant treatment on permanent molars to first and second graders who were disabled, from mountainous indigenous areas or outlying islands, or from low or mid-to-low income households.
- 7. Preventive healthcare services for children under 7 years of age were approximate 1,170,000 children use of this service, the average utilization rate was 82.1% in 2013.
- 8. Adolescent sexual knowledge and information related to preventive care and reproductive health was offered via websites, online video, and school-based classes and promotions. These services contributed to a reduction in unplanned pregnancies.



### **Chapter 2 Healthy Living**

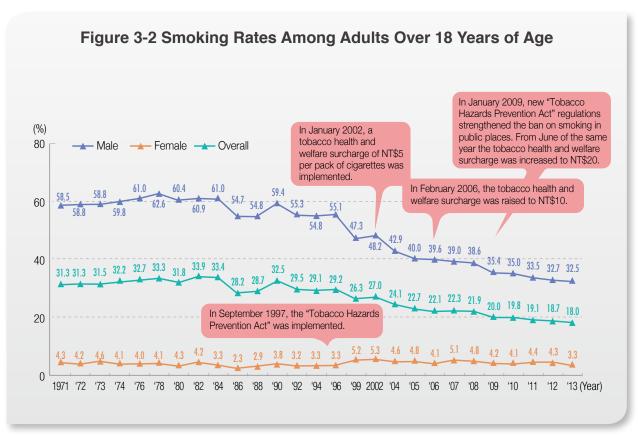
### Section 1 Tobacco and Betel Quid Hazards Prevention and Control

#### 1. Tobacco Control

A drop in the smoking rate among adults aged 18 and over from 21.9% in 2008 to 18.0% in 2013 was attributed to the implementation of new regulations under the "Tobacco Hazards Prevention Act" in 2009. Exposure rates to second-hand smoke in public places also fell from 23.7% in 2008 to 9.2% in 2013.

Following implementation of the second generation

smoking cessation payment scheme in March 2012, cessation drugs were treated like other drugs covered under NHI. In 2013, close to 2,500 medical care institutions and community pharmacies offered cessation services, providing 100% coverage in conjunction with mobile medical stations and serving 96,924 patients, an increase of 49.2% compared to the 64,960 patients served in 2012. The tobacco abstinence rate at six months for those who availed of these services was 28.9%, with more than 28,000 smokers successfully quitting tobacco use. Health benefits were estimated at more than NTD150 million in short-term NHI expenditures and NTD11.7 billion in long-term socioeconomic benefits. (see Figure 3-2)



#### Sources:

- 1. 1971-1996 survey data from the Taiwan Tobacco and Wine Monopoly Bureau.
- 2. 1999 survey data provided by Professor Lee Lan.
- 3. 2002 data obtained from the HPA's Survey on Citizen's Knowledge, Attitude, and Behavior Regarding Health Promotion.
- 4. 2004-2013 data obtained from the HPA's Adult Smoking Behavior Survey.
- 5. From 1999 to 2013, a smoker was defined as someone who had previously smoked 100 cigarettes (five packs) and who had used a tobacco product within the past 30 days.
- 6. Data from 2004-2013 was weighted and standardized in accordance with gender, age, education, and area of residence information from 2000 collected by the Directorate-General of Budget, Accounting and Statistics.

#### 2. Betel Quid Control

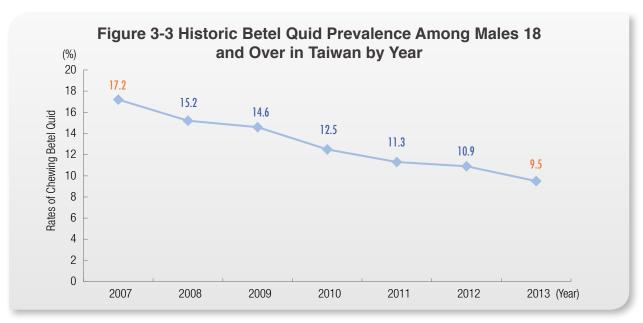
Cross-departmental effort at the central government level along with cooperation from local governments facilitates promotion of betel nut hazards prevention activities in a wide range of settings. Effectiveness is shown by the drop in rate of betel quid chewers among males aged 18 and over, from 17.2% in 2007 to 9.5% in 2013 (see Figure 3-3).

#### Section 2 Obesity Prevention

Raising awareness of calories and nutrition among the general public while encouraging people to maintain a healthy body weight is imperative to boosting physical, mental and social wellbeing and to preventing obesity. Therefore, since 2011, the MOHW has cooperated with the nation's 22 cities and counties to conduct a national healthy weight management campaign. Each year it calls on 600,000 people to join in shedding 600 tons through a combination of "Eat Smartly, Exercise Joyfully, Weight Daily. The campaign represents a declaration of war on obesity. In 2013, participants lost a total of 1,089 tons, or an average of 1.5 kilograms per person, and the percentage who were overweight or obese fell from 61.7% to 54.3%. Key strategies were as follows:

1. Formulating Public Health Policies: Advertisements and promotions of foods unsuitable for long-term

- consumption by children were regulated under an amendment to the "Act Governing Food Sanitation." Other measures included drafting of a National Nutrition Act and requesting the Ministry of Education to ban use of sugary drinks as a student incentive.
- 2. Building a Support Environment for Health: Published the Strategies to Prevent Obesity in Taiwan: A Community Implementation and Measurement Guide. Assisted health departments across the nation in uncovering obesogenic environments located in their jurisdictions and using community strength to make improvements. Established health industry mechanisms that encouraged producers to offer healthy foods with nutrition labelling and consumers to adhere to "health purchasing" principles.
- 3. Modifying Health Care Services Directions: Assisted medical care institutions in actively offering health promotion services – such as preventive medicine, health maintenance, and weight management – to patients and members of the general public. Held a diverse range of classes focused on weight loss, exercise and healthy eating.
- 4. Strengthening Community Action: Consolidated cross-departmental and private resources to encourage communities, schools, workplaces,



Definition of a Betel Quid User: Anyone who chewed betel quid within the past six months Sources: Behavioral Risk Factor Surveillance System, Adult Smoking Behavior Survey

hospitals and other locations to jointly promote active lifestyles. Held a Healthy Communities Achievements Presentation to honor locations with outstanding performances.

 Developing Healthy Lifestyle Capabilities: Provided healthy body weight management information through promotional events, the establishment of a free weight management consultation hotline and an obesity prevention website.

#### Section 3 Healthy Environments

#### 1. Healthy Cities

By the end of 2013, 11 cities and counties and 11 regions in Taiwan joined the Alliance for Healthy Cities (AFHC), an organization supported by the WHO Regional Office for the Western Pacific. In 2013, these areas cooperated with the Alliance for Healthy Cities, Taiwan in hosting the 5<sup>th</sup> Taiwan Healthy City and Age-friendly City Awards Ceremony, an event that encouraged domestic and foreign cities to share their achievements in healthy city promotion.

#### 2. Healthy Communities

In 2013, the MOHW implemented a number of

community health building plans. It subsidized 19 local health bureaus to work with 165 communities on promoting health through tobacco, alcohol, and betel quid hazards prevention; obesity control; healthy aging; promotion of community safety; and other areas. It encouraged the construction of safe home environments by assisting with home inspections and improvements. To raise knowledge of how to prevent accidental injury, the MOHW produced children's and senior citizens' safety handbooks for use by parents and caregivers. And as part of its safe community planning, the MOHW encouraged application for international safe community certification offered by the WHO Collaborating Centre on Community Safety Promotion. By the end of 2013, Taiwan had 19 certified international safe communities and one certified international safe hospital.

#### 3. Health Promoting Schools

Since 2002, the MOHW and the Ministry of Education have committed cross-departmental resources toward implementation of Health Promoting School Plans. By the end of 2013, Taiwan had 3,887 health promoting schools at the high school/vocational school level or lower along with 142 health promoting universities and colleges.



2013 Building Healthy Communities Lifestyle & Healthy Communities Achievements Conference

#### 4. Health Promoting Workplaces

The MOHW has undertaken several initiatives to promote health in the workplace. Since 2007 it has offered healthy workplace certification, with 10,655 workplaces qualified by the end of 2013. In December 2013 domestic and foreign experts shared their knowledge of healthy workplace promotion at the 2013 Healthy Workplace Promotion Summit. The MOHW also produced a 15-minute video called "Healthy Exercise for Workers" in order to further promote active lifestyles.

#### 5. Health Promoting Hospitals and Health Services

- The MOHW actively encourage hospital in Taiwan to participate in the WHO International Network of Health Promoting Hospitals & Health Services.
  - a. By the end of 2013, there were 131 institutions (122 hospitals, one long-term care institution, and eight health centers) that were certified by the WHO International Network of Health Promoting Hospitals & Health Services. The Taiwan Network is the largest network in the world.
  - b. In May 2013 at the 21st International HPH Conference in Gothenburg, Sweden, the Taiwan Network of Health Promoting Hospitals and Health Services won the first Outstanding Fulfillment of HPH Strategy Award and the Changhua Christian Hospital won the second Outstanding Fulfillment of WHO HPH Standards Award. Of the seven hospitals that have won the ENSH Gold Level Awards for smoke-free health care services, four were from Taiwan. Also Director-General of HPA, Dr. Shu-Ti Chiou, who was named the chair of the Governance Board of the International HPH Network in 2012, presided over the General Assembly of the International HPH Network.
  - c. In order to increase the interactivity between health promoting hospitals and health services, the MOHW hosted the 2013 Health Promoting Hospital Conference in October 2013. The "Outstanding Fulfillment of Health Promoting Hospital Strategies and Innovative Planning" Award-winning hospitals were invited to share their experiences.



2013 Workplace Health Promotion Summit

2) Promotion of Low Carbon Hospitals Compilation of the Health Promotion and Environment-friendly Hospital Manual to assist with the implementation of energy-saving and low carbon strategies. 168 hospitals had undertaken the initiative by the end of 2013. Additionally, six domestic and foreign hospitals were honored at the 2013 International Environment-friendly Hospital Team Work Best Practice Awards, hosted by the HPA.

### **Chapter 3 Healthy Ageing**

#### Section 1 Adult Health Promotion

- A free preventive health examination is provided every three years for people aged 40 to 64 and annually for people aged 65 and older, as part of preventative health care services offered to adults. In 2013, 1.81 million people used these services, including more than 880,000 people aged 65 and older.
- 2. In order to provide accurate health information to women undergoing menopause, the MOHW established a special toll-free hotline. It also cooperated with the Taiwanese Osteoporosis Association to submit the "Taiwan Osteoporosis Practice Guidelines" to the US National Guideline Clearinghouse. The guidelines were published on July 15, 2013.
- Using the eight activities of daily living as a basis for the prevention of functional decline in the elderly, health bureaus and centers and community medical



The Taiwan Network of Health Promoting Hospitals and Health Services won the first Outstanding Fulfillment of HPH Strategy Award and Changhua Christian Hospital won the second Outstanding Fulfillment of WHO HPH Standards Award

care institutions cooperated with community care sites to conduct health promotion activities. In 2013, more than 85% of the nation's community care sites joined these cooperative efforts.

4. In 2013, more than 80,000 elderly citizens, or over 3% of the total senior population, formed 1,951 teams which competed in national senior health competitions.

#### Section 2 Age-friendly Environments

 In 2013, Taiwan achieved the highest coverage rate of age-friendly cities in the world after each of its 22 cities and counties promoted the age-friendly cities

- concept. Chiayi City, Taoyuan County, Hsinchu City, Nantou County, Miaoli County, New Taipei City, Yilan County, Tainan City and Taipei City all applied to join the WHO Global Network of Age-friendly Cities and Communities.
- 2. By 2013, a total of 64 health care institutions (including one public health center) were certified under the Age-Friendly Hospitals and Health Services Recognition program. One long-term health care institution had applied for recognition.
- 3. On April 11, 2012, at the 20th International Conference on Health Promoting Hospitals and Health Services, participating countries approved Taiwan's proposal to establish the Working Group on HPH and Age-Friendly Health Care. At the 21st assembly in 2013, the working group was upgraded to the Task Force on HPH and Age-friendly Health Care, which is responsible for establishing the framework of an age-friendly health care certification system that can be used internationally.

#### Section 3 Chronic Disease Control

Chronic disease control initiatives included: working with local health bureaus to promote a certification system for the prevention of the "3-highs" (hypertension, hyperglycemia and

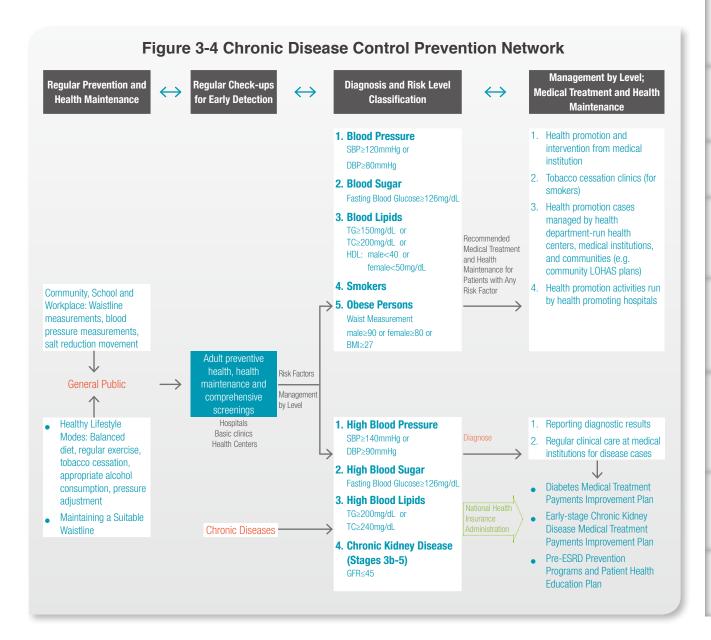


At the finals of the Health 102 Move – National Contest for Elderly Health Promotion, the Changhua County Xianxi Township elders' club won a silver medal for its performance

hyperlipidemia), construction of a chronic disease control network (see Figure 3-4) that encouraged local health authorities to cooperate with medical care institutions in providing integrated screening services, promotion of a diabetes shared care network comprising 194 diabetes health promotion institutions that enhanced care quality, strengthening of kidney disease prevention advocacy and establishment of 145 chronic kidney disease health promotion institutions that enhanced disease control through better case management, and development of a model for integrated management of cardiovascular diseases, which strengthened control of the "3-highs" and reduced functional decline and mortality.

### Section 4 Cancer Prevention and Control

In accordance with the 2003 "Cancer Prevention Act," periodic meetings of the Central Cancer Prevention and Control Conference and the Cancer Prevention and Control Policy Consultation Commission take place. The five-year National Program on Cancer Control was conducted from 2005 to 2009 to lower cancer mortality rates, and it was followed by expansion of cancer screenings through the 2nd Stage National Cancer Control Programme – Cancer Screening, 2010 – 2013. Highlights of historic cancer occurrence, mortality and key strategies are described as follows:



#### 1. Cancer Incidence and Mortality by Year

Mortality data from the MOHW show that cancer was the leading cause of death since 1982. Based on the standard world population age structure from 2000, the standardized mortality rate for cancer in Taiwan per 100,000 population gradually rose from 118 to 144.3 people between 1982 and 1997 then fluctuated between 138 and 144 people in the decade after 1997. In 2013, it was 130.4 (see Figures 3-5, 3-6).

#### 2. Control of Cancer Risk Factors

In response to the four major risk factors associated with cancer – smoking, insufficient exercise, poor eating habits and harmful alcohol use – efforts are made to encourage better lifestyle habits by getting people to quit smoking, maintain a healthy body weight, change their eating habits, etc. Additionally, betel quid control advocacy occurs at a diverse range of locations in order to lower incidence of oral cancer.

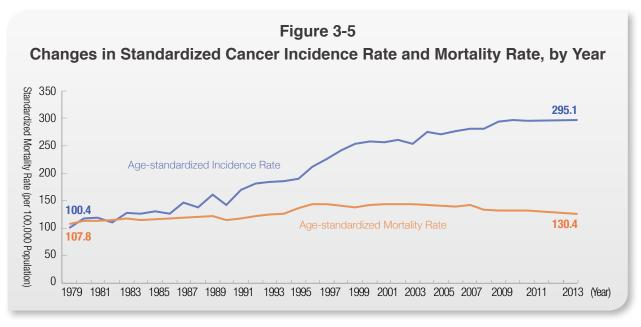
#### 3. Cancer Screenings

In 2010, Taiwan became the first country in the world to fully subsidize screenings for cervical cancer, breast cancer, colorectal cancer and oral cancer. Further advances in screening criteria

arrived on June 1, 2013, when the recommended age for stopping routine colorectal cancer screenings was raised to 74 and oral cancer screenings became available to indigenous betel quid users (including those who quit) from age 18. Review of qualifications of medical care institutions that conduct cervical cancer diagnoses, mammograms and fecal occult blood tests led to accreditation for 116, 206 and 125 institutions respectively, by the end of 2013. Screening results for these four major types of cancer are highlighted in Table 3-1.

#### 4. Raising Cancer Treatment and Care Quality

- 1) Since 2008, accreditation for comprehensive cancer care quality has been offered to hospitals that treat at least 500 new cancer cases each year. By the end of 2013, a total of 50 hospitals qualified.
- 2) In 2010, subsides were extended to NGOs and hospitals to establish one-stop windows for cancer resources. By the end of 2013, 53 hospitals integrated internal and external resources to provide comprehensive services. Patients and families benefitted approximately 120,000 times.



Notes: 1. Cancer Incidence Rate and Mortality Rate Data Source: 2011 HPA cancer registry data and mortality data from the Department of Statistics, MOHW.

2. Standardized age rates are based on the standard world population age structure from 2000.

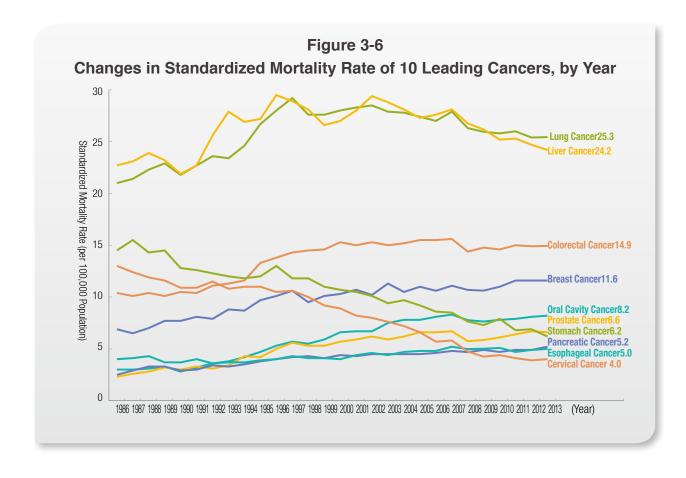


Table 3-1 Screening Volume, Rate, Precancerous Lesions and Cancer Cases for 4 Major Types of Cancer, 2013

	Screening Volume	Screening Rate (%)	Precancerous Lesions	Cancer Cases
Cervical Cancer	2.175 million	70.0	10,632	4,555
Breast Cancer	694,000	36.0	-	3,307
Colorectal Cancer	1.028 million	38.2	26,207	2,030
Oral Cavity Cancer	978,000	54.0	3,703	1,274
Total	4.875 million	-	40,542	11,166

Note: Basis for Screening Rates

- 1. Cervical Cancer Screening Rate: The rate of women aged 30-69 who were screened in the past three years (telephone survey).
- 2. Breast Cancer Screening Rate: The rate of women aged 45-69 who were screened in the past two years.
- 3. Colorectal Cancer Screening Rate: The rate of people aged 50-69 who were screened in the past two years.
- 4. Oral Cavity Cancer Screening Rate: The rate of betel quid chewers (including those who quit) or smokers aged 30 and older who were screened in the past two years.

# Chapter 4 Health Communication and Surveillance

Health information is spread through a variety of mass media channels: TV, radio, newspapers, magazines, transit ads and the internet. Taking a systematic approach, the MOHW provides accurate health information that fosters healthy behaviors, self-care concepts and capabilities that can lead to healthy, prosperous lives.

Other measures include development of a noncommunicable disease surveillance system and conduction of periodic health surveys, as illustrated in Table 3-2, to monitor current health conditions and long-term trends of the whole population and those in different life-course stages. Professional team is commissioned to assess the surveillance system and produce recommendations for future improvements. A convenien and user friendly data query interface is upgraded through the integration of three websites: Health Indicator 123, the Online Interactive Data Query for Cancer Registration, and the Injury Surveillance Indicator Query System.

Table 3-2 Major Health Monitoring and Surveys, by Year

				• Cross	s-section	al Surve	y			
Survey					itudinal					
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Community-Based Face-to-Face In	nterview S	Survey								
National Health Interview Survey		•				•				•
Taiwan Longitudinal Study on Aging				<b>→</b>				<b>→</b>		
Taiwan Fertility and Family Survey	•				•				•	
Taiwan Birth Cohort Study	<b>→</b>	<b>→</b>	<b>→</b>	<b>→</b>		<b>→</b>	<b>→</b>			<b>→</b>
Nutrition and Health Survey in Taiwan	•		•	•	•	•	•	•	•	•
Student Self-administered Survey										
Global Youth Tobacco Survey of Junior High School Students	•		•	•	•	•	•	•	•	•
Global Youth Tobacco Survey of Senior High School Students		•		•	•	•	•	•	•	•
Global School-based Student Health Survey of Junior High School Students	•		•		•		•		•	
Global School-based Student Health Survey of Senior High School Students		•		•		•		•		•
Telephone Interview Surveys										
Adult Smoking Behavior Survey	•	•	•	•	•	•	•	•	•	•
Behavioral Risk Factor Surveillance System	•	•	•	•	•	•	•	•	•	•
Surveys on Health Promotion Issues	•	•	•	•	•	•	•	•	•	•
Survey of Maternal Breastfeeding Rates	•	•	•	•	•	•	•	•	•	•



- Chapter 1 Health Care Systems
- Chapter 2 Mental Health and Psychiatric Care
- Chapter 3 Long-term Care Service Systems
- Chapter 4 The Health Workforce
- Chapter 5 Health Care Quality
- Chapter 6 Health Care in Remote Regions
- Chapter 7 Health Care for Target Groups

With rapid changes underway to medical, social and economic environments, the assurance of safe treatment has become a major challenge for Taiwan's health care system and teams. Key issues to be addressed include the provision of a holistic health care system for all, improving doctor-patient relations, implementing community health care and preventive medicine and the continuous improvement of health and quality of life.

### **Chapter 1 Health Care Systems**

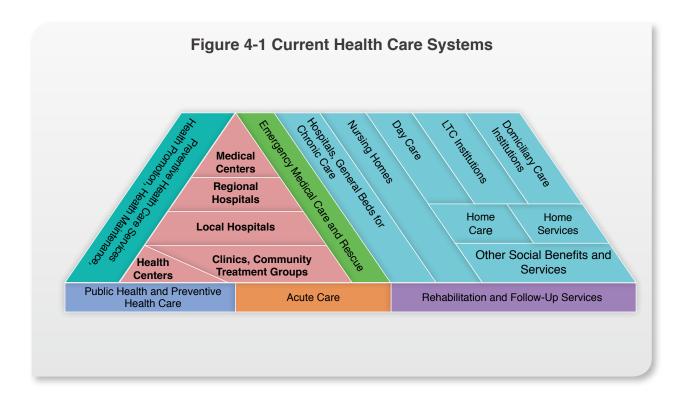
Announcement of the "Medical Care Act" in 1985 led to the launch of the Medical Care Network Project, which divided Taiwan into 17 medical care regions. Subsequent planning of the health manpower and facilities set the stage for the balanced allocation of resources and improvement of regional care quality. The project took place in four stages over a period of two decades, gradually leading to a sufficient number of hospital beds and improved quality of care.

In coordination with post-SARS reform of the medical care system, the "Holistic Health Care Plan" was enacted between 2005 and 2008. It emphasized safety in a patient-centered medical environment and

developed community-based health care systems. To brace for the impact of the aging population, fewer children and new infectious diseases, the "New Generation Health Navigation Project" was enacted between 2009 and 2012. This plan enhanced holistic health care for all based on the principles of suitability, accessibility, sustainability and comprehensiveness. Also, since 2013 the MOHW has conducted a plan for providing greater equality in health care. Through administrative restructuring it combines health care delivery systems to build a public health and medical care services network that is localized, seamless and integrated. Current health care systems are illustrated in Figure 4-1.

#### Section 1 Medical Resources

In order to promote balanced development of medical care resources, the MOHW established a regional medical care system in accordance with the "Medical Care Act" and the Medical Care Network Project. Relying on regional assistance and organizational operations, it assessed regional health needs to aid distribution of medical resources and implement plans for raising regional medical care quality. Achievement highlights in 2013 are as follows.



1. Current Status of Medical Institutions: See Table 4-1

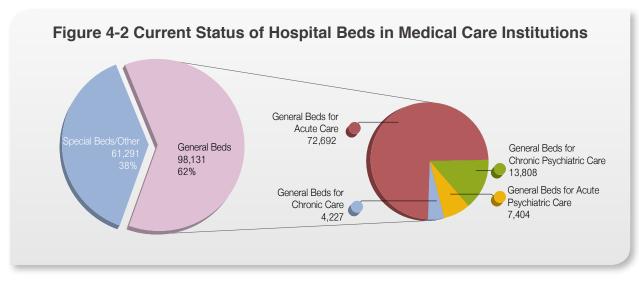
#### **Table 4-1 Current Status of Medical Institutions**

Type of Me	Quantity	
Medical Care Institutions	Hospitals	495
Medical Care Institutions	Clinics	21,218
Pharmacies		7,701
	General Nursing Homes	472
	Psychiatric Nursing Homes	32
Nursing Institutions	Home Nursing Practices	507
	Post-natal Nursing Institutions	171
	Day Care Institutions	15
Blood Donation Institutions	Blood Donation Centers	6
Blood Bollation Institutions	Blood Donation Stations	12
Pathology Institutions		10
	Midwifery Practices	32
	Medical Laboratories	421
	Medical Radiological Institutions	64
	Physical Therapy Practices	57
	Occupational Therapy Practices	9
Other Medical Institutions	Mental Counseling Centers	45
	Psychotherapy Centers	28
	Speech Therapy Centers	15
	Dental Technology Centers	318
	Hearing Centers	4
	Home Respiratory Care Practices	1

#### 2. Current Status of Hospital Beds:

There were 159,422 beds in medical care institutions (including general beds, special beds and beds in clinics). General beds in hospitals included general beds for acute care, general

beds for chronic care, beds for acute psychiatric care, and beds for chronic psychiatric care. There was an average of 68.21 beds for every 10,000 people (see Figure 4-2)



Note: Includes intensive care beds, intensive care beds for psychiatric patients, intensive care beds for burn patients, respiratory care beds, chronic respiratory care beds, isolation beds, beds for bone marrow transplant patients, hospice beds, infant sickbeds, infant beds, hemodialysis beds, peritoneal dialysis beds, surgery recovery beds, emergency observation beds, and beds for sex offenders undergoing compulsory treatment

#### Section 2 Emergency Medical Care

The MOHW reinforced development of the national emergency medical care and rescue network while popularizing integrated response mechanisms for emergency medical care.

- Fortified the capacities of the six Regional Emergency Operation Centers (REOCs). These centers quickly monitor and grasp intra-regional emergency medical care situations and resource status, and their support to inter-regional disaster response groups strengthens response capabilities.
- By 2013, 31 hospitals qualified as severe-grade hospitals and 84 hospitals qualified as moderate grade.
- 3. An improvement project in areas with insufficient emergency medical care resources included establishment of three care models: emergency medical care stations in tourist areas, evening and holiday first-aid stations, and enhanced emergency capabilities of hospitals. In 2013, incentives fostered implementation of these models in 23 areas.
- 4. Incentives were provided to establish 24 special critical care centers in 17 hospitals. Among them were 21 centers that provided critical care services associated with trauma, cardiac catheterization, stroke, perinatology, emergency room treatment and pediatrics.
- 5. Cardiopulmonary resuscitation and automated external defibrillator (CPR & AED) emergency training classes have been held since 2008, with total participation reaching 25,000 by the end of 2013. Also, 138 locations were designated as "safe locations" after installing AEDs.

#### Section 3 Intermediate Care Services

Intermediate care is intermediary between intensive and basic care. It combines several professional teams – including those offering acute care, nursing home services, geriatric day care and home care – to offer patients a seamless chain of medical care services. After patients are evaluated to determine suitability, and either the patient or his or her family grants approval, intermediate care lasting three-to-six weeks can begin. During this period, guidance is offered on returning home and arrangements are made for home care. Once services are ended, a case manager handles follow-up procedures.

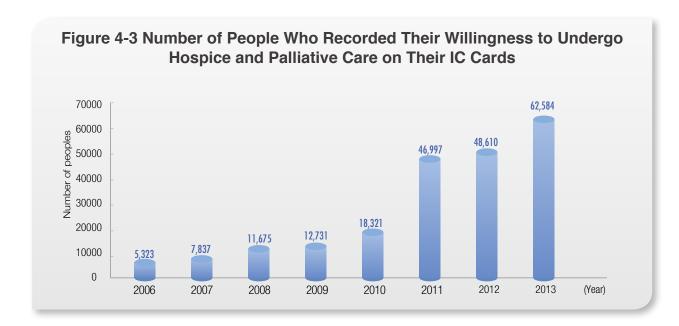
Each of Taiwan's 22 cities and counties offers intermediate care, and by the end of December 2013, intermediate care was available at 18 hospitals overseen by the MOHW. They designated 185 beds for the service (including nursing home care type beds and hospital room beds) and in 2013 admitted a total of 677 patients, with 202 patients, or about 30%, discharged and able to return home. Preliminary results suggest that intermediate care led to significant advances in the areas of body function, cognitive function, nutrition indices and satisfaction rates.

#### Section 4 Hospice and Palliative Care

Implementation of the "Hospice Palliative Care Act" on June 7, 2000, paved the way for doctors to focus on relieving symptoms, eliminating suffering and offering support to terminally ill patients near death, in lieu of curative- and rescue-oriented care. Patient consent is a prerequisite.

From 2006, a special project has sought to raise willingness of medical institutions and the general public to participate in hospice and palliative care while encouraging NHI holders to record consent on their NHI IC cards. Between 2006 and 2013, 214,078 people signed a document expressing their willingness to undergo hospice and palliative care along with their wishes in relation to lifesustaining treatment. Each person's choices were recorded on his or her NHI IC card (see Figure 4-3).

By 2013, there were 50 hospitals that provided hospice care treatment and 70 provided home services. Altogether, they have the capacity to provide end-of-life care to more than 17,000 people each year. In April 2011, a pilot hospice joint care program began that offered patients the chances to remain with their original medical team while hospice care providers moved between



departments to offer treatment. By 2013, these joint services had expanded to 96 hospitals and were used by approximately 20,000 cancer patients. Such programs contributed to an increase in the percentage of terminal cancer patients receiving hospice care within one year of death from 7.4% in 2000 to 47.5% in 2011.

#### Section 5 Oral Cavity Health Care

#### 1. Better Dental Care Services for the Disabled

- 1) Dental care services continued with subsidies for five demonstration centers (National Taiwan University Hospital, Shuang Ho Hospital, Chung Shan Medical University Hospital, Kaohsiung Medical University Hospital, and Mennonite Christian Hospital) and 20 hospitals to implement a comprehensive oral cavity care plan for people with special needs. This included encouraging hospitals to hold special dental clinics and to build support and transfer networks in hospitals and social welfare organizations for people with special needs. Additional advances came with special training for dentists and caregivers. In 2013, such dental services were provided 49,224 times.
- 2) A total of 89 hospitals, reaching every city and county, were designated to provide special dental clinics in accordance with a law governing special clinics for the disabled.

### 2. Dental Care in Areas with Insufficient Medical Care Resources

Dentists were encouraged to offer mobile dental care services in remote regions in accordance with a plan for improving NHI dental clinical services in areas with insufficient dental care resources. In 2013, 52 dentists from 50 dental clinics or health stations provided such services in 65 remote areas.

#### Subsidized Dentures for Mid-to-Low-Income Seniors

A plan to subsidize dentures for mid-to-lowincome seniors was approved by the Executive Yuan on December 31, 2008, and implemented the following day. It offers dentures to people from low-income households, people from midto-low-income-households, people who receive living allowances for mid-to-low-income seniors, people who receive living subsidies for midto-low-income disabled persons, people who receive full placement subsidies offered by any level of government, and seniors who qualify for at least 50% subsidized daily care and living care expenses from any level of government. From 2009 to the end of 2012, a total of 29,943 people (6,000 people, 2013) benefited from this program. Additional assistance to aid seniors' chewing function was initiated in 2013 to increase denture maintenance.

# Chapter 2 Mental Health and Psychiatric Care

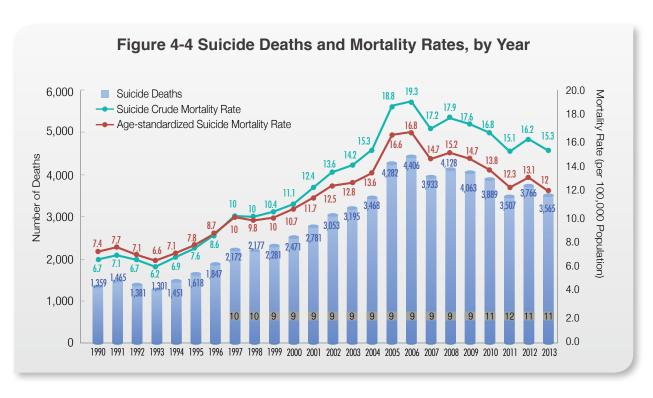
### Section 1 Mental Health Promotion and Suicide Prevention

- 1. Mental health promotion and suicide prevention plans are subsidized in order to expand use of private resources and participation by the general public, thereby boosting development, integration, practicality and actions associated with mental health. People served include children and adolescents, the general public, the elderly, groups at high risk of suicide, single indigenous parents, supervisors and volunteers. Activities take place in communities, schools, households, etc.
- 2. Additional steps were taken to prevent suicide: establishment of the National Suicide Prevention Center, establishment of the National Suicide Surveillance/Aftercare System, subsidies for local health bureau to conduct suicide outreach visits and to provide special training to security guards. In 2013, there were 28,091 reported failed suicide attempts, which led to 183,345 outreach visits. Training classes for security guards were held 61 times with total attendance of 5,360.

- Launch of a toll-free, 24-hour suicide prevention hotline (0800-788995) provided convenient professional counseling. In 2013, hotline services were used 73,750 times, with 591 individuals convinced to end suicide attempts that were in progress.
- 4. For 13 consecutive years starting in 1997, suicide was one of the 10 leading causes of death. Progress was achieved through the joint work of central and local governments, private institutions and groups in dropping the suicide rate from a peak of 19.3 people per 100,000 population in 2006 to 15.3 people per 100,000 population in 2013. For four years since 2010, suicide has not been one of the 10 leading causes of death (see Figure 4-4)

#### Section 2 Psychiatric Care Services

 In order to provide sound health care for psychiatric patients, a regional psychiatric care network divided into six areas of medical responsibility was established. Designated core hospitals were responsible to: 1. Serve as regional psychiatric care units by promoting regional mental health and psychiatric care networks, 2. Cooperate with local health departments to help psychiatric care



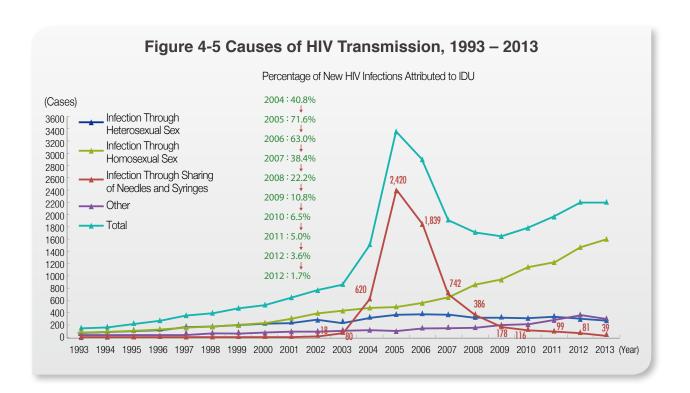
institutions improve service quality, 3. Develop professional mental health and psychiatric care services, 4. Conduct education and training for health professionals.

- 2. In 2013, there were 415 psychiatric care institutions that had a total of 21,255 beds (comprising 7,400 for acute psychiatric patients and 13,855 for chronic psychiatric patients), or 9.08 beds per 10,000 population. There were also 72 daytime psychiatric rehabilitation institutions (3,502 beds), 117 psychiatric rehabilitation institutions that offered accommodation (4,860 beds), psychiatric day care centers (total capacity of 6,494 people), and 32 psychiatric nursing homes (3,005 beds).
- 3. In order to locate and track mental patients, subsides were offered for local governments to hire a total of 96 outreach associates. In 2013, such visits were made to 134,317 psychiatric patients.
- 4. The Taiwanese Society of Psychiatry was commissioned to handle the mandatory hospitalization and treatment of patients with serious mental illness. In 2013, there were 835 applications made for mandatory hospitalization and 63 for mandatory community treatment.

5. In order to ensure service quality offered by psychiatric care institutions, mechanisms were established to accredit various institutions and offer guidance. Accreditation began in 1985 for psychiatric medical institutions (with 32 institutions reviewed in 2013, including psychiatric teaching hospitals), 2004 for psychiatric rehabilitation institutions (with 57 institutions reviewed and 40 offered guidance in 2013), and 2011 for psychiatric nursing homes (with five reviewed in 2013).

#### Section 3 Prevention of Drug Addiction

- Subsidized alternative therapy for drug addiction was introduced in 2006 under a special plan to minimize HIV transmission due to the sharing of needles and syringes. In 2013, there were 122 designated alternative therapy institutions nationwide that treated a total of 40,042 patients. Effectiveness was shown by a decline in the number of new HIV/AIDS cases among drug addicts from 2,420 in 2005 to 39 in 2013 (see Figure 4-5).
- Services available to drug addicts who voluntarily seek help at Taiwan's 153 designated drug addiction treatment institutions include clinical



- addiction treatment, emergency services, hospitalization and post-discharge follow-up aimed at preventing relapses. Another plan implemented in 2009 subsidizes private organizations that expand group drug addiction therapy. In 2013, 11 organizations received subsidies to assist in the development of treatment models and provision of social forms of rehabilitation.
- 3. An alcohol addiction treatment plan targeted at specific groups, such as domestic violence offenders, high-risk family members and people who voluntarily sought assistance. Hospitalization, clinical treatment, mental guidance and awareness education were included in the care used to reduce the violence and injury associated with alcohol abuse. In 2013, a total of 1,026 people used these services.
- 4. In order to improve household relations and function among families with a drug addict, funding from the lottery system was used to help local governments and private organizations recruit specialized social workers who concentrated on family support services. The subsidies were offered in 12 cities and counties in 2013 to provide outreach, mutual family support, family activities hosted by development organizations, legal assistance, employment assistance, social welfare counseling and advocacy seminars. These services were used 41,169 person-times.

# **Chapter 3 Long-term Care Service Systems**

### Section 1 Universal Long-term Care Services

A three-stage program was established to build a comprehensive LTC system. Progress in 2013 was as follows:

### Stage 1: Implementation of the 10-Year LTC Plan (2008 – 2017)

 Continued Implementation of the 10-Year LTC Plan: Development of a community-based aging in place network

- Raising the Service Usage Rate: Usage among the elderly who lost functional ability rose from 2.3% in 2008 to 31.8% in 2013, a 13.8-fold increase.
- 2) Accelerating Resource Expansion
  - a. In areas with insufficient elderly welfare institutions the focus was on subsidizing the establishment of institutions by private organizations. In areas with sufficient resources, the focus was on providing the guidance and improvements needed to raise institutional service quality.
  - b. Overall service capacity climbed by 84%, with the biggest gains in day care service. Its institutions rose from 31 in 2008 to 120 in 2013, nearly four-fold growth (see Tables 4-2, 4-3).
  - c. In December 2013, there were 103,549 beds available at LTC institutions, comprising 36,845 beds at general nursing homes (82.9% bed occupancy), 57,675 beds at LTC institutions and domiciliary care institutions (74.4% bed occupancy), and 9,029 beds at veterans' homes.
- 2. Making LTC a More Accessible Option for the Economically Disadvantaged: An analysis of comparative case socioeconomic data on LTC, taken over a five-year period, shows that mid- to low-income households account for 12% of all households receiving assistance (and just 4% of the total population). Low-income households account for 14% of all households receiving assistance (and just 1% of the total population). These figures show that the economically disadvantaged population receives a relatively high amount of assistance.

### Stage 2: Implementation of an LTC Service Network Plan (2013 – 2016)

An LTC service network plan, drafted with the intent of promoting diverse and balanced LTC resources, has fostered a universal service network that brings LTC to communities across the nation (including remote areas). The plan divides the nation into large (22), medium (63) and small (368) LTC regions based on service needs. It includes incentives for resource development and focuses on community-based, localized resource development. Highlights are as follows:

Table 4-2 Services Provided by Institutions Offering LTC home care and Community-based Care

Unit: Institution

Item/Year	2008	2009	2010	2011	2012	2013
Home Service	124	127	133	144	149	160
Day Care Services (Including Day Care for Dementia Patients)	31	39	66	78	90	120
Household Entrusted Services	4	16	23	16	17	20
Elderly Nutritious Meals	166	204	201	159	169	190
Transportation Services	31	42	43	39	43	42
Home Nursing	487	495	489	451	498	478
Community and Residential Rehabilitation	62	88	113	112	111	191
Respite care Services	102	114	311	474	527	651
Total	1,007	1,125	1,379	1,473	1,604	1,852

Notes: 1.Declines in elderly nutrition meals and transportation services in 2011 were attributed to adjustments in local government planning and implementation. There was no impact to overall service capacity.

#### **Table 4-3 LTC Service Members**

Unit: Persons

Item/Year	2008	2009	2010	2011	2012	2013
Home Service	22,305	22,017	27,800	33,188	37,985	40,677
Day Care	339	618	785	1,213	1,483	1,832
Household Entrusted Services	1	11	35	62	110	131
Auxiliary Devices Purchases/ Rentals and Handicap Friendly Improvements to Residences (Persons-times)	2,734	4,184	6,112	6,845	6,240	13,708
Elderly Meals	5,356	4,695	5,267	6,048	5,824	5,714
Transportation Services (Personstimes)	7,232	18,685	21,916	37,436	46,171	51,137
LTC Institutions	1,875	2,370	2,405	2,755	2,720	2,850
Home Nursing	1,690	5,249	9,443	15,194	18,707	21,249
Community and Residential Rehabilitation	1,765	5,523	9,511	15,439	15,317	21,209
Respite care Services	2,250	6,351	9,267	12,296	18,598	32,629

Note: Auxiliary device purchases/rental and handicap friendly improvements to residences, along with transportation services, refer to the accumulated number of people who provided service during the year. Other items refer to the number of service members at the end of December.

- 1. In 2013 there were 120 day care centers, and there were 23 dementia community service stations established in August 2014.
- Service stations are provided to ease LTC resource shortages in remote areas. There were 50 such centers in 2013 and 89 were expected to be completed by the end of 2014.
- 3. Promotion of Telecare

To ensure that people can receive comprehensive health care services in their community and home and strengthening self-monitoring of health, the MOHW implemented a telecare service plan focused on creating telecare models and cloud-based information platforms. To guarantee access to health management services, since 2011 two telecare regional service centers have operated, one each in the north and south. The centers offer immediate health care consultations and other services via 24-hour service lines. Additional telecare plan highlights from 2013 include the following:

 Apps that adhere to newly completed standards governing the transmission of physiological data for telecare purposes were offered for Android on Google Play and iOS on Apple Store.

<sup>2.</sup> Home care data is from the medical affairs management system (MOHW) and collected every six months.

- Draft guidelines governing security and maintenance of telecare personal data were completed. Finalization and promulgation were expected in 2014.
- 3) Pilot Scheme for Integrating Capitation Payments Into Telecare Services: Established eight community physiological measurement service stations in Jinshan District in cooperation with the Jinshan Branch, National Taiwan University Hospital. Measurements were made on 200 enrollees a total of 7,096 times.

Stage 3 Promote legislation of an LTC service act for comprehensie development of LTC service systems.

#### Section 2 LTC Professional Training

 In order to ensure LTC training that is uniform, continuous and complete, training course plans were designed for LTC health workers and management staff of care centers. In order to eliminate worker shortages, goals include training 38,700 care workers, 3,200 social workers, 8,000 nurses, and 3,500 physical and occupational therapists by 2016.

#### 2. Results of LTC Professional Training

- 1) Enrollment from 2010 to 2013 in a three-phase course covering medical LTC topics was 22,863, and enrollment from 2007 to 2013 in a course for management staff of care centers was 699. Details are shown in Table 4-4.
- Enrollment in localized LTC staff training in remote regions (including mountainous areas

and outlying islands) was 2,394.

#### 3. Retention of the Care Service Workforce

- 1) Improved cultivation of the care service workforce is achieved through a professional training system that encourages middle-toadvanced age workers and people seeking a second career to enter the LTC service industry. Benefits to retain these and other LTC workers included minimum hourly wage standards for workers who offer home service, increased transportation subsidies for remote region work, and subsidized basic equipment. At the end of 2013, there were 7,504 home service care workers, an increase of 82.53% compared to 2008. Increased professional knowledge obtained through on-the-job training of care workers led to better quality and higher client satisfaction. This, and a wide-ranging promotional campaign, raised the care worker image.
- 2) Raising Quality and Effectiveness of Workers in Elderly Welfare Institutions: In 2013, a total of four on-the-job training sessions were provided to presidents (directors) of elderly welfare institutions and social workers. Attendance reached 77 for presidents (directors) and 78 for social workers. Public and private resources were combined to conduct professional training and research related to care for elderly dementia patients along with on-the-job professional training for various workers in elderly welfare institutions. A total of eight sessions were held with attendance reaching 237.

Table 4-4 Localized LTC Training Achievements, 2007 – 2013 (Number of Enrollees)

Cou	Course Type/Year		2008	2009	2010	2011	2012	2013	Total
	Level I General Course	-	-	-	1,926	2,624	3,712	2,483	10,745
Professionals	Level II Professional Course	-	-	-	1,627	3,490	3,642	2,185	10,944
	Level III Integrated Course	-	-	-	-	-	-	1,174	1,174
Management Staff of Care Centers		176	136	111	63	67	27	119	699
Care Service Workers (Persons)		5,518	11,500	6,386	7,976	8,840	9,452	9,328	59,000

# Section 3 Better Quality Through Integration of LTC Institutional Management

In order to raise service quality of nursing homes and senior citizens' welfare institution, accreditation is conducted in accordance with the "Nursing Personnel Act" and the "Senior Citizens Welfare Act." In 2013, the MOHW invited the Ministry of the Interior and the Veterans Affairs Commission to join in integrating LTC institution accreditation indicators and standards.

Until 2012, 430 general nursing homes were evaluated (including 155 in 2013), with 61 rated as outstanding (14.19%), 169 as excellent (39.30%), 158 as good (36.74%), and 42 as disqualified (9.76%). There were also 1,035 senior citizens' welfare institutions which must be checked by competent authorities each year and onsite evaluations every three years. In 2013, the MOHW evaluated 127 of these institutions, with 17 rated as outstanding (12.4%), 63 as excellent (49.6%), 40 as good (31.5%), and 7 as fair or lower (5.5%). Besides from 2011 to 2013, local governments conducted another 977 inspections as well.

In order to raise management quality of LTC institutions, local health bureaus were obliged to focus on Level 1 necessary improvement items and Level 2 areas of improvement when conducting inspections of general nursing homes and to offer enhanced guidance on case-by-case basis to institutions that failed accreditation. Elderly welfare institutions that rated fair or lower were fined by the competent authority and subjected to an improvement period, in accordance with Article 48 of the "Senior Citizens Welfare Act."

## Chapter 4 The Health Workforce

### Section 1 Current Status of the Health Workforce

1. According to the licensing system for professional health workers, there are 14 laws and regulations

governing the management of health workers, including 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 Technologist Act," the "Medical Radiation Technologist Act," the "Psychologists Act," the "Respiratory Therapists Act," the "Hearing Specialists Act," the "Speech Therapists Act," and the "Dental Technicians Act."

 See Table 4-3 in Appendix 1 for the number of practicing health workers and number of practicing health workers per 10,000 population, as of the end of December 2013.

### Section 2 Training the Health Workforce

In order to raise the quality of the health workforce, each year training is offered to a diverse range of health workers. Results of cultivation plans and workplace training follow:

- 1. Mechanisms are in place to regulate the training of health workers. There is a general quota of 1,300 medical students to be enrolled each year, and special mechanisms manage other categories of health workers. These include the requirement that medical training programs apply to the Ministry of Education prior to establishment. Future planning of the physician force work will focus on uniform distribution of resources and be strengthened by regular assessment.
- 2. Over more than three decades of the government-sponsored physician system, gradual improvements were made to the physician shortages that plagued public hospitals, remote regions and outlying islands. Phased implementation of the system has led to the fulfillment of policy goals. Therefore, starting in 2006 recruitment for 40 government scholarships was gradually reduced before being terminated in 2009. Meanwhile, the annual number of locally trained government-sponsored physicians for aborigines and residents from outlying islands rose from 6-9 each year to 27.

- 3. Post-graduate general medical training is offered to strengthen holistic care concepts and capabilities of physicians while improving training quality of resident physicians. This includes a post-graduate year (PGY) program launched in July 2011. A total of 127 hospitals were approved to conduct the program in 2012 (consisting of 40 training hospitals and 87 collaborated hospitals) and 1,386 students participated.
- 4. Advances in oral cavity health care quality and patient safety are made through a postgraduate clinical training program that serves as a link between classroom education and clinical services. In 2013, participation by 291 medical care institutions was approved, with 78 hospitals and 213 clinics conducting training plans and 673 dentists participating.
- 5. "The Training Program of Responsible Physicians in Chinese Medical Care Institutions" tentatively began in 2009. In 2013, 73 training hospitals were assisted to receive 247 new Chinese medicine physicians. This program officially begins in 2014, and all new Chinese medicine physicians wanting to become responsible physicians will be required to complete this two-year training program in the hospitals approved by the Ministry of Health and Welfare.
- 6. Specialty training has been offered since 2006 to raise professionalism and care quality of nursing practitioners. The program was divided into internal medicine and surgery, with the internal section subdivided into internal, pediatric and neurologic groups in 2012, and an OB/GYN group added to the surgery section in 2013. Through 2013, 4,464 specialty nursing practitioners were accepted into and completed the program (comprising 2,318 internal medicine practitioners and 2,146 surgery practitioners).
- 7. Due to the importance of clinical training for raising the quality of new health professionals, subsidies have been offered since 2007 to offset teaching fees accrued by teaching hospitals. In 2013, a total of 2,187 training plans were approved at 133 participating hospitals. On average 15,058 health workers participated in training each month and

- 81.12% of health workers received training within two years of obtaining their license.
- 8. A continuing education system for 14 types of health workers mandated that health workers spend a certain number of hours in continuing education every six years as a prerequisite for license renewal. This ensures that professional skills of health workers are kept up to date.
- 9. In order to better assess clinical skills of medical students while improving quality of clinical education, since 2010 assistance has been provided to teaching hospitals in establishing the software and hardware needed for clinical capability assessments. Also, an amendment to the "Enforcement Rules of the Physicians Act" paved the way for assessment testing to take place at 22 teaching hospitals. Since 2013, more than 1,300 medical school graduates have passed an Objective Structured Clinical Examination (OSCE), which tests doctor-patient communication, physical examinations and other health care techniques. Only by passing this could graduates advance to the second stage of the doctor's exam.

#### Section 3 Nursing Reform

- Short-term and mid-term plans announced on May 10, 2012, named six major objectives and 10 strategies for improving the working environment for nurses. Implementation results in 2013 were as follows:
  - 1) Reducing the Work Burden of Nurses
    - a. An amendment to the "Establishment Standards for Medical Institutions" raised nursing manpower requirements.
    - b. On-site evaluation and inspection requirements were streamlined for 71% of hospitals.
    - c. Amendment to the regulations governing professional registration and continuing education of nurse practitioners were expected to increase total credits for internet and communications courses offered to nurses while lowering the classroom load.
    - d. Paperwork responsibilities of nursing professionals at hospitals were simplified and reduced.

- e. Hospital accreditation will include assessment of thre shift arrangements. Besides making standards for daytime shifts stricter, standards were introduced for evening and nighttime shifts. These will formally become part of hospital accreditation in 2015.
- f. Completed formulation of an amendment to the guidelines governing the management of hospital care workers. The amendment stipulated range of duties and working content.
- 2) Raising Salary and Benefits for Nurses
  - a. NHI budgeted NTD2.5 billion for use in increasing the nursing workforce, raising nighttime shift fees for nurses, and raising salaries and benefits. According to NHIA data, primary use of the budget by hospitals in 2013 was to increase nursing manpower (34.0%) followed by raising evening and nighttime shift fees for nurses (22.7%).
  - An investigation of public hospitals (including military hospitals) showed that 77% of hospitals raised nighttime shift fees.
- 3) Raising Retention of Nurses Through Workplace Environment Improvements
  - a. Special indicators were developed as part of plans to certify hospitals with outstanding nursing workplace environments.
  - b. In order to ensure worker rights, from January
     1, 2014, Article 84-1 of the "Labor Standards
     Act" was no longer applied to nurses
     (eliminating designated responsibilities).
- 2. At the end of 2013, 144,855 people were registered as nurses, an increase of 8,440 compared to prereform registration.

#### Section 4 Medical Specialist System

Following a June 9, 2010, amendment, Article 3
 of the "Rules of Specialization and Examination
 for Medical Specialists" designated 23 physician
 specialties: family medicine, internal medicine,
 surgery, pediatrics, OB/GYN, orthopedics,
 neurosurgery, urology, otolaryngology,
 ophthalmology, dermatology, neurology, psychiatry,
 rehabilitation medicine, anesthesiology, diagnostic

- radiology, radiation oncology, anatomical pathology, clinical pathology, nuclear medicine, emergency medicine, occupational medicine and plastic surgery. Article 4 designated three dentist specializations: oral and maxillofacial surgery, oral pathology and orthodontics. Through the end of 2013, physicians had participated in and passed specialist examinations 46,725 times.
- 2. In order to balance distribution of specialists while creating a stronger, better training environment, full implementation of a plan that restricts the number of trainees in each medical specialty began in 2001. The plan started with an annual limit of 1,948 trainees and a flexible cap that permitted up to 20% additional trainees (or 2,339 in total). Medical specialization associations were entrusted to designate hospitals that offer specialist training and to manage enrollment capacity. As time progressed, however, it became apparent that there was too large of a gap between the aforementioned limits and the number of resident physicians (1,300), which affected the distribution of specialists. Therefore, in 2013, the annual limit was reduced to 1,670, and in 2014 it was lowered again to 1,550.

## **Chapter 5 Health Care Quality**

### Section 1 Quality of Medical Care Services

With a view to better quality, the MOHW created a patient-centered safe care environment, implemented a hospital evaluation and accreditation system, published annual objectives for medical care quality and patient safety, and developed a patient safety incident reporting mechanism. Achievement highlights from 2012 follow:

#### 1. Patient Safety and Quality of Medical Care

- 1) The MOHW stipulated the "2014-2015 Taiwan Patient Safety Goals for Hospitals" (see Table 4-5).
- 2) Establishment of the Taiwan Patient Safety Reporting System contributed to a safe culture for patients. In 2013, 5,694 health care institutions participated in the system and reported a total of 63,699 cases.

3) Regulations associated with safe hospital environments were stipulated under the "Hospital Accreditation Standards." They included safety of the environment and equipment, patient orientation services and management, management of health care quality, safe use of pharmaceuticals, anesthesia and operations, and infection control.

#### 2. The Hospital Accreditation System

Relying on the core values of patient-centered care and prioritizing patient safety, reforms were made to the hospital accreditation and teaching hospital accreditation systems.

- 1) Through 2013, accreditation was granted to 419 hospitals, 121 teaching hospitals, 45 psychiatric hospitals, and 10 psychiatric teaching hospitals (see Tables 4-6, 4-7, 4-8 and 4-9). Drafting of hospital accreditation standards and conducting of test evaluations also took place in dentistry, hospice and palliative care, and Chinese medicine. In order to build an excellent Chinese medicine care system that puts patients first, accreditation of Chinese medicine hospitals was conducted. Announcement of procedures and evaluation standards took place in April 2014 and on-site evaluations were scheduled for completion by the end of August.
- 2) Hospital accreditation, health treatment and hygiene service inspections, and certification of training institutes for specialist medical practitioners were integrated. By the end of 2013, this had lowered required evaluations from 754 to 370 and reduced disruption of day-to-day affairs at medical care institutions.

#### Section 2 Improving Quality of Blood Supply/Transfusion and Medical Radiological Services

Taiwan has promoted voluntary, non-remunerated blood donation since 1974. It has maintained a voluntary, unpaid donation rate of at least 5% and kept 100% of its national blood supplies based on strictly altruistic donations, putting it in the ranks of other nations with advanced blood supplies.

In order to strengthen safety of blood products

and blood preparations, Taiwan tests donations for pathogens, including HIV, hepatitis B, hepatitis C and syphilis. Traditionally these tests used Enzyme Immuno Assays (EIA), though from February 2013 they were expanded with support from NHI to include full implementation of nucleic acid amplification testing for HIV and hepatitis. This brought Taiwan's blood testing in line with international standards while ensuring safe blood products.

Since 2009, inspection visits made to basic medical institutions have contributed to improved use, management, protection and image quality of equipment capable of producing ionizing radiation. According to Atomic Energy Council data from June 2013, there were 7,262 basic medical institutions with equipment capable of producing ionizing radiation. By December 2013, on-site guidance and inspections were completed at 597 of these institutions.

# Section 3 Improving Efficiency and Quality of Organ Donation and Transplantation

In December 2013, there were more than 8,000 patients in Taiwan awaiting organs. Only about 800 patients a year, however, receive a transplant. In order to promote organ donation, expand sources and aid distribution, in 2002 the Taiwan Organ Registry and Sharing System was established. Measures such as this have made Taiwan's organ donation rate number two in Asia and its organ transplant success rate competitive with developed countries in the west. Details are as follows:

- Besides establishment of the Taiwan Organ Registry and Sharing Center, fair, just and transparent allocation of organs was achieved through the April 2005 launch of a system for online distribution of organs obtained from deceased donors.
- In June 2013, linking of the Taiwan Organ Registry and Sharing Center with tracking systems for HIV and Hansen's disease and case data for Creutzfeldt-Jakob disease was completed. This enhanced accuracy of registered data.

**Table 4-5 2004-2015 Taiwan Patient Safety Goals for Hospitals** 

Year/	2004	2005	2006~2007	2008~2009	2010~2011	2012~2013	2014~2015
Total Items	5 Major Performance Objectives	6 Major Performance Objectives	8 Major Performance Objectives	8 Major Performance Objectives	9 Major Performance Objectives	10 Major Performance Objectives	8 Major Performance Objectives
1	Avoiding pharmaceutical errors	Avoiding pharmaceutical errors		Improving safe use of pharmaceuticals			
2	Implementing nosocomial infection control	Implementing nosocomial infection control	Implementing infection control at medical institutions	Implementing infection control at medical institutions	Implementing infection control	Implementing infection control	Implementing infection control
3	Eliminating surgical location errors, patient errors and surgical procedure errors	Improving surgical accuracy	Improving surgical accuracy	Improving surgical safety	Improving surgical safety	Improving surgical safety	Improving surgical safety
4	Preventing patient identification errors	Raising patient identification accuracy	Raising patient identification accuracy	Preventing patient falls and lowering degree of injury	Preventing patient falls and lowering degree of injury	Preventing patient falls and lowering degree of injury	Preventing patient falls and lowering degree of injury
5	Preventing patient falls	Preventing patient falls	Preventing patient falls	Encouraging reporting of abnormal situations and data accuracy	Encouraging reporting of abnormal situations	Managing patient safety in the event of abnormal situations	Managing patient safety in the event of abnormal situations
6		Encouraging reporting of abnormal situations	Encouraging reporting of abnormal situations	Improving communication between medical care workers	Improving communication between medical care workers	Improving communication between medical care workers	Improving communication between medical care workers
7			Improving patient handoff communication and safety	Encouraging patients and family members to carry out patient safety tasks	Encouraging patients and family members to carry out patient safety tasks	Encouraging patients and family members to carry out patient safety tasks	Encouraging patients and family members to carry out patient safety tasks
8			Raising public participation in patient safety	Improving tube safety	Improving tube safety	Improving tube safety	Improving tube safety
9					Enhancing hospital fire prevention and response	Enhancing hospital fire prevention and response	
10						Improving suicide prevention among hospitalized patients	

3. On December 21, 2011, revisions to the "Human Organ Transplant Act" stipulated that the willingness to donate organs should be indicated on NHI IC cards and be regarded as official; revised and expanded legal authority over the allocation of organs; and stated that donor's laboratory reports should be submitted to the hospital carrying out the transplantation. These changes ensured that doctors could understand organ status prior to transplantation.

4. At the end of 2012, new SOPs for the donation, transplantation and allocation of organs made several steps in the verification of test results between medical groups repetitive. This ensured accurate transmission of patient information.

#### **Table 4-6 Hospital Accreditation Results**

Approditation Regults	l Qualified					New Hospital Accreditation.	
Accreditation Results	Medical Centers	Regional Hospitals	District Hospitais	Regional Hospitals	District Hospitais	Outstanding	,
Quantity	19	58	35	2	267	11	27

#### **Table 4-7 Teaching Hospital Accreditation Results**

Accreditation Results	Doctors and Medical Personnel – Teaching Hospital Accreditation, Qualified ( Medical Centers)	Doctors and Medical Personnel – Teaching Hospital Accreditation, Qualified	Medical Personnel (Not Doctors) – Teaching Hospital Accreditation, Qualified	New Teaching Hospital Accreditation, Excellent
Quantity	19	92	6	4

#### **Table 4-8 Psychiatric Hospital Accreditation Results**

Accreditation Results	Psychiatric Hosp	ital Accreditation	New Psychiatric Hospital Accreditation		
Accreditation Results	Qualified	Excellent	Qualified	Excellent	
Quantity	21	2	12	10	

#### **Table 4-9 Psychiatric Teaching Hospital Accreditation Results**

Accreditation Results	New Psychiatric Teaching Hospital Accreditation, Qualified	Doctors and Medical Personnel – Psychiatric Teaching Hospital Accreditation, Qualified		
Quantity	4	6		

- Started implementing a plan to build a nationwide eye bank at the end of 2012. Objectives included improving the handling, preservation and transplantation of corneas.
- 6. In 2013, completed integration of hospitals involved with the northern, central, southern and eastern Taiwan organ donation networks. New unified approaches to the solicitation of organ donors, as well as the removal, distribution and transport of organs, led to improved quality and effectiveness.

### Section 4 Promoting Electronic Medical Records

Promotion of EMR can be broken down into four categories — regulatory, standards, security and popularization. By the end of 2013, the following steps were completed:

1. Formulated standards for EMR interoperability between hospitals, including the completion

- of 117 medical record forms, to ensure completeness and accuracy.
- Formulated standards for sharing and form interoperability of five EHR types: medical imaging reports, blood tests, discharge summaries, outpatient medication records and outpatient medical records.
- 3. Help in establishing EMR sharing platforms was provided to more than 260 hospitals through the 2013 EMR and Interoperability Assistance Program. Implementation and interoperability of EMR are expected to be completed at all hospitals in 2015.
- 4. In order to promote EMR use and interoperability between hospitals while raising awareness among the general public, models were established for meaningful use. In 2013, six groups (comprising six hospitals and 30 clinics and health centers) were formed to share access to EMR.

# Chapter 6 Health Care in Remote Regions

# Section 1 Strengthening Localization of Medical Care on Outlying Islands and in Remote Regions

In order to protect the right to medical care of people who live on outlying islands and in remote regions, the MOHW adheres to the principle of seamless medical care. Measures taken to strengthen local health functions in 2013 were as follows:

- 1. To eliminate medical care resource deficiencies and inconveniences in mountainous regions and on outlying islands, an integrated delivery system was launched. Hospitals formulated plans and dispatched manpower and resources to remote regions to provide specialized care, emergency care and evening clinics at fixed locations and through mobile medical services. They continued to work toward implementing the "doctors move, patients stay put" principle to further strengthen local medical care.
- 2. Construction took place on the Kinmen County Comprehensive Medical Building and a new medical building for Lienchiang County Hospital. In 2013, the Cardiac Catheterization Room of Penghu Hospital opened, and in January 2013 services officially began at the Psychiatric Building of Kinmen Hospital. The future objective is to raise treatment services at these institutions to the level of a regional hospital.
- 3. Continued to build and renovate health stations (rooms) in remote regions and on outlying islands, including new health stations in Lieyu Township, Kinmen, and Green Island Township, Taitung; and health rooms in Wenle and Wangjia villages, Laiyi Township, Pingtung, and Dongji Village, Wangan Township, Penghu. Work continued on a new health room for Kaaluwan, renovations were conducted on the health station in Lanyu Township, Taitung, and an improvement project was carried out to repair the central air

facilities in the old medical building of Lienchiang County Hospital. Another proposed project to raise quality of emergency care at the Dawu Township health center and the South Link region contained plans to establish a South Link emergency medical care center at Dawu. Improvements to hardware and equipment provided better care environments and services to residents of remote regions.

#### Section 2 Improving Medical Information Networks and Electronic Medical Records in Remote Regions

#### Building a Digital Medical Information Network for Remote Regions

As mobile clinics continued to bring medical care deep into remote aboriginal villages, a new user-friendly registration system offered additional languages to enhance convenience. By the end of 2013, medical information systems were established at 55 health stations in 15 counties, including Hsinchu, and there were 319 mobile medical stations that provided assistance in 7,347 cases.

### 2. EMR Interoperability Plan for 48 Remote Regions and Outlying Islands

In order to improve medical information services and quality in remote regions and on outlying islands, in 2013 EMR reading systems were built in 48 remote health stations, including the center in Fuhsing Township, Taoyuan. An added benefit was development of cloud infrastructure.

#### 3. Mobile Medical Care Services

Mobile medical care services are used to solve treatment challenges caused by inconvenient transportation in mountainous and remote regions. One problem with mobile services is a lack of diagnostic and treatment equipment, but physicians can overcome this issue using cloud platforms to examine patients' medical records and images. These platforms have become an invaluable tool for doctors when seeing patients, and they save time and money spent by people who previously had to leave their villages for care.

#### Section 3 Medical Center Support and Tri-Services Emergency Medical Evacuations

In order to increase specialist physician manpower on outlying islands and improve quality, a project was launched that offered incentives for medical centers to support emergency treatment care services on outlying islands and in areas with insufficient medical care resources. Currently, Taipei Veterans General Hospital supports Kinmen Hospital, Kaohsiung Chang Gung Memorial Hospital and Chi Mei Medical Center support Penghu Hospital, and Far Eastern Memorial Hospital and Wan Fang Hospital support Lienchiang County Hospital.

- 1. An aeromedical review mechanism was established in 2002 to maximize efficient use of emergency rescue and care resources. Besides dispatching specialist physicians, 24-hour emergency consultations, air ambulance need evaluations, and coordination of aircraft and Coast Guard vessels were conducted in accordance with outlying island emergency evacuation standards determined by the National Aeromedical Approval Center, MOHW. These steps provided an effective system for reviewing and improving air ambulance services.
- 2. Adhering to the principles of "doctors move, patients stay put" and seamless medical care, local medical care was strengthened with aeromedical services provided in a complementary role. If aircraft were insufficient due to time or other constraints, assistance was obtained from the Airborne Service Corps or the Ministry of National Defense. In 2013, there were a total of 240 air evacuations (comprising 63 by private firms, 171 by the Airborne Service Corps and six by the Ministry of National Defense). This represented a decrease of 37 evacuations, or 13.36%, compared to 2012, an improvement attributed to better medical care services on outlying islands.
- 3. For patients from mountainous regions or outlying islands with serious or emergency illnesses or

injuries but who are in stable enough condition to arrange their own travel, subsidies are available to cover half the costs associated with sea or air transportation to receive treatment.

### Section 4 Improving Medical Care in Areas with Insufficient Resources

#### Guaranteeing Medical Care Funding for Areas with Insufficient Resources

An NHI-associated project launched in May 2012 sought to improve medical care services in areas with insufficient resources. Funding of NTD500-800 million is provided annually to community hospitals that play a primary role in providing urgent medical care to mountainous regions, outlying islands and remote areas. The funding subsidizes 24-hour emergency care and inpatient services in four main departments: internal medicine, surgery, OB/GYN and pediatrics.

#### 2. Increased, Guaranteed NHI Payments for Emergency Care

In 2013, 42 hospitals were designated to handle emergency and rescue services in areas with insufficient resources. They were offered a 30-50% increase in emergency diagnostic and examination fees and were guaranteed a full NTD1 payment for emergency cases under NHI's pay for points system. These incentives encouraged hospitals in remote areas to add and improve emergency care.

- 3. An NHI program for increasing dental care resources in underserved areas included a NTD500 million special fund in 2012 to provide fixed-location clinics and mobile medical services. In 2013, dental clinics under the plan were operating in 37 areas, and there were 18 medical teams (and 291 institutions) that offered mobile services in 126 townships and villages. These services helped to bridge the treatment gap that exists between urban and rural areas.
- 4. Another program sought to increase western medicine resources in underserved areas by encouraging basic clinics and local hospitals

(or larger) to provide health care and health maintenance services. In 2013, incentives were offered to four clinics to open practices in three townships and villages. Also 177 medical institutions offered mobile services to 118 townships and villages (including 135 primary care clinics that served 87 townships and villages and 42 hospitals that served 31 townships and villages). These services ensured the right to medical care of residents in remote areas.

### Section 5 Training and Retaining Staff on offshore and in Remote Areas

In order to balance distribution of medical care resources in remote regions and train local health workers, since 1969 the MOHW has conducted a health worker cultivation program that targets aboriginal regions and outlying islands. Through 2013, a total of 842 health workers were trained under the program, including 440 doctors and 402 nurses, and the retention rate of governmentsponsored physicians who completed their required service time remained above 70%. There were 60 doctors serving in health stations located in mountainous townships, 50 of whom were government sponsored (83%), and 31 doctors serving in health stations located on outlying islands, 14 of whom were government sponsored (45%). To solve difficulties in recruiting nursing professionals, in 2013 a plan was formulated to train 200 elite nursing professionals to serve in remote regions over the course of four years. Enrollment is to begin in 2015. Also, in order to encourage health workers to remain in remote regions and contribute to a localized health care system, subsidies continued to be offered for health workers to open practices and undergo additional training in mountainous areas and outlying islands. In 2013, these subsidies contributed to the opening of four practices and additional training for two workers.

## **Chapter 7 Health Care for Target Groups**

#### Section 1 Health Care for New Inhabitants

- 1. Besides helping new inhabitants join the NHI system, a special management plan was formulated to support reproductive health, reproductive health consultations, and reproductive health management for foreign and mainland Chinese spouses. In 2013, the reproductive health management rate among this group reached 99%. Also, in line with prenatal standards for citizens, foreign and mainland Chinese spouses received subsidies for 10 prenatal checks, Group B streptococcus screening and one ultrasound.
- 2. In 2013, a total of 330 interpreters participated in a project to provide interpretation services for foreign spouses seeking reproductive care. The Child Health Handbook and the Maternal Health Handbook were also published in several languages.

### Section 2 Health Care for Rare Disease Patients

- A total of 201 rare diseases were announced by the end of December 2013, along with 82 drugs and 40 nutritional supplements for sustaining the life of patients. Rare diseases were brought within the scope of serious diseases, reducing some of the treatment burden of patients.
- 2. Establishment of a distribution center for nutritional supplements and drugs for rare disease patients aided subsidies for health care fees for rare disease treatments not covered under the "National Health Insurance Act," including diagnostic exams, therapy, drugs, supplements needed to sustain life and home medical care equipment. In 2013, these subsidies were offered a total of 2,026 times.
- 3. Rare disease control, education and advocacy are strengthened through 11 genetic counseling centers as well as genetic counseling websites and patients' organizations. Also, in 2013 a special rare disease film event was held to raise awareness.

### Section 3 Groups with Special Health Needs

#### 1. Health Care for PCB Poisoning Patients

- 1) A PCB poisoning outbreak occurred in Taiwan due to the consumption of contaminated rice bran oil. Since PCB poisoning can be passed to the next generation through the placenta or breast milk, the special treatment provided to PCB poisoning patients was also furnished to children born after January 1, 1980 to mothers affected by the outbreak (these children are known as second-generation PCB poisoning patients). Through the end of 2013, 1,750 PCB poisoning patients had benefited from this plan, including 1,281 first-generation patients and 469 second-generation patients.
- 2) Provision of health care services for PCB poisoning patients continues to be regulated through special implementation guidelines. Other services include free health checks, health education and advocacy for patients and their families, and professional health maintenance consultations.

#### 2. Care for Hansen's Disease Patients

Continued implementation of a direct observation of treatment program for Hansen's disease patients. In 2013 there were five hospitals – National Taiwan

University Hospital, MacKay Memorial Hospital, Taichung Veterans General Hospital, National Cheng Kung University Hospital, and Lo-Sheng Sanatorium and Hospital – that were designated to diagnose and treat Hansen's disease.

#### 3.Care for HIV Patients

- Since February 5, 2005, when budgeting of HIV care costs shifted to the central competent authority, patients without NHI received coverage. In 2013, there were 52 hospitals designated for HIV treatment, and about 88% of people infected sought treatment.
- 2) In 2013, 51 hospitals designated for HIV treatment participated in an HIV case management program by providing health and counseling services. A total of 10,662 patients were enrolled.
- 3) Follow-up management by local health bureaus (stations) and case managers encourages patients to regularly visit designated hospitals for treatment and strengthens the effectiveness of consultations and follow-up examinations for patients' partners.
- 4) Subsidies are offered to HIV-related NGOs that assist in providing shelter and care. In 2013, these NGOs offered placement services to 156 AIDS patients and provided case management services in 391 cases.



A special screening of the 2013 film Rock Me to the Moon



## **Communicable Disease Control**

- Chapter 1 Communicable Disease Control System
- Chapter 2 Control of Major/Emerging Communicable
  Diseases
- 60 Chapter 3 Emergency Preparedness and Infection Control
- 62 Chapter 4 Immunization



Frequent international contact and travel in recent years have significantly increased opportunities for the import of communicable diseases. The threats posed by emerging and indigenous communicable diseases have made implementation of comprehensive, fast, effective and globalized prevention measures even more vital. As part of its nationwide communicable disease management program, the Taiwan CDC builds modern control systems that protect the health of citizens and eliminate disease threats.

# **Chapter 1 Communicable Disease Control System**

Section 1 Laws, Regulations and Framework for Communicable Disease Control

### Laws and Regulations Governing Communicable Disease Control

The "Communicable Disease Control Act" and the "HIV Infection Control and Patient Rights Protection Act" serve as main sources of legislation governing communicable disease prevention and control strategies. Major legal revisions made in 2013 due to organizational restructuring and operational needs are described as follows in Table 5-1.

#### 2. Communicable Disease Control Framework

Communicable disease prevention should be accomplished through the concerted efforts of central and local governments. The Taiwan Centers for Disease Control (Taiwan CDC) is the highest authority in Taiwan responsible for the formulation, examination and approval of communicable disease

Table 5-1 Revised Legal Orders Issued, 2013

Issue Date(s) of Amendment	Name of Legal Order	Objective of Amendment
Jun. 19	"Communicable Disease Control Act"	Response to the H1N1 influenza outbreak, quarantine measures for TB patients and epidemic control policy needs
Jun. 19	"Organization of the Centers for Disease Control, Ministry of Health and Welfare Act"	Amended in accordance with organizational restructuring
Jul. 21	"The Regulations for Departmental Affairs of the Centers for Disease Control, Ministry of Health and Welfare Act"	Amended in accordance with organizational restructuring
Aug. 5	"Regulations on Implementation of Communicable Disease Surveillance and Alert Systems"	Amended in accordance with organizational restructuring and systematic needs
Sep. 30	"Implementation Regulations Governing Materials for Communicable Disease Control and Establishment of Resources"	Revised items under the materials reserved for communicable disease control
Oct. 17	"Regulations Governing Collection of Quarantine Fees at Ports"	Revised in accordance with organizational restructuring

Issue Date(s) of Amendment	Name of Legal Order	Objective of Amendment
Oct. 24	"Standards for Subsidies for Funeral Costs of Human Remains Subject to Autopsy"	Prioritized individuals with the right to claim and eliminated joint claimants
Oct. 24	"Regulations Governing Compensations to Persons Infected with HIV through Execution of Preventive Functions"	Amended in accordance with organizational restructuring
Oct. 25	"Regulations Governing the Management of Laboratory Diagnoses for Communicable Diseases and Laboratory Testing Institutions"	Simplified regulations governing collection of specimens
Nov. 29	"Enforcement Rules of the Communicable Disease Control Act"	Amended in accordance with changes made to the Communicable Disease Control Act
Dec. 31	"Fee Standards for Biological Products, Centers for Disease Control, Ministry of Health and Welfare"	Amended in accordance with organizational restructuring and fee standard adjustments
Jan. 24, Mar. 14, Apr. 3, Jun. 7, Dec. 27	"The Categories of Communicable Diseases and Preventive Measures for Category IV and V Communicable Diseases"	Amended in accordance with communicable disease control needs
May. 3, Jul. 5	"Emergency Medical Services Act," regulations governing communicable diseases requiring notification as stipulated in Article 19	Amended names of communicable diseases

control strategies and plans. Local health bureaus devise their own action plans to execute strategies and plans established by the Taiwan CDC.

#### 3. Testing Framework

The Research and Diagnostic Center of Taiwan CDC is responsible for laboratory testing and research. It developed the "National Plan for the Quality Management of the Collection and Transportation of Specimens of Communicable Diseases" to ensure the quality, timeliness, and safety of specimen collection and transportation.

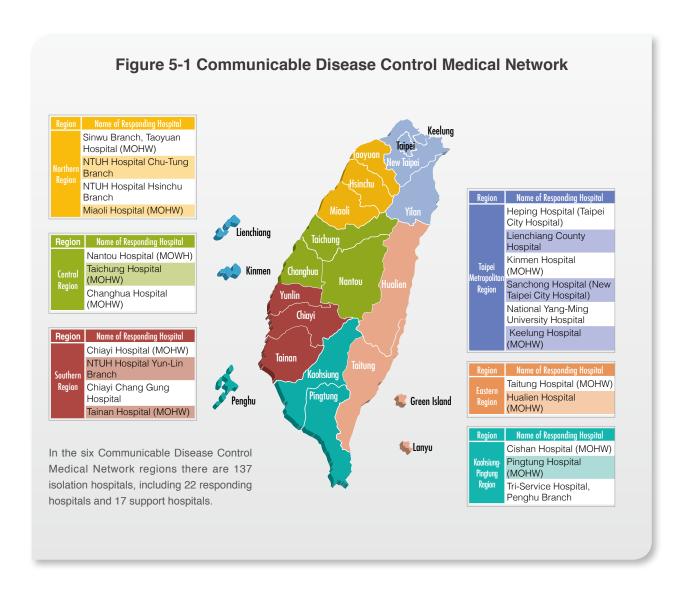
#### 4. Command Framework

The National Health Command Center was established in 2005 to gather health-

related information from the central and local government agencies. Another breakthrough in disease control efforts was achieved when Taiwan implemented the International Health Regulations by setting up a platform to interact with counterparts-countries from around the world when reporting or responding to major outbreaks and public health emergencies.

#### Section 2 Communicable Disease Control Medical Network

Following the establishment of the Communicable Disease Control Medical Network in 2003, the nation was divided into six medical care regions with a designated authority responsible for



coordinating disease control resources. In addition 137 isolation hospitals and responding hospitals were designated for the admittance and treatment of communicable disease patients requiring isolated care (see Figure 5-1).

### Section 3 Disease Surveillance and Investigation Mechanisms

The number of notifiable disease cases for 2013 is shown in Appendix 2. The mechanisms of disease monitoring and investigation include:

#### Comprehensive Surveillance Systems for Communicable Diseases

The MOHW has implemented comprehensive national communicable diseases surveillance

systems accompanied with data collected through emergency services, NHI, and death records. The data were analyzed for detecting outbreaks, monitoring disease trends, and evaluating the effectiveness of disease control programs and policies.

#### 2. Integration of Disease Reporting Systems

The integration of various disease reporting systems achieves single data warehouse for reporting and real-time monitoring of outbreaks.

#### 3. Investigation of Outbreaks

In addition to implement the Field Epidemiology Training Program, the MOHW investigates communicable disease outbreaks of emergency or unidentified origin.

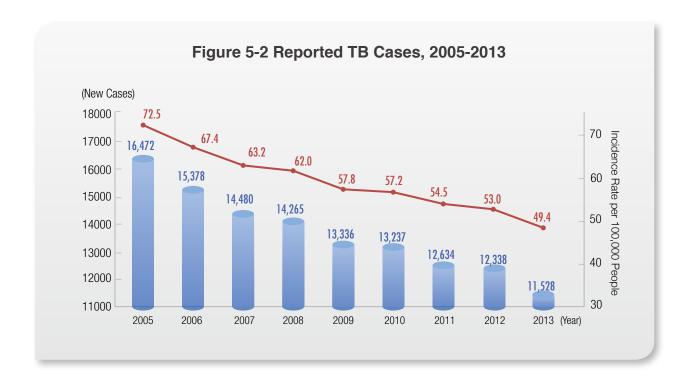
# Chapter 2 Control of Major/Emerging Infectious Diseases

#### Section 1 Tuberculosis Control

In 2013, there were 11,528 confirmed cases of TB in Taiwan. Infections continue to fall through the Halving TB in 10 Years Program, which is expected to achieve its main objective in 2015 (see Figure 5-2). Other achievements are as follows:

 Implementation of directly observed treatment, short-course (DOTS). Among patients who tested positive for TB smear or culture tests, more than 90% participated in DOTS.

- Implementation of a dedicated medical treatment and care system for multidrug resistant TB (MDR-TB). The treatment success rate was 77.2%.
- 3. Strengthened contact investigation for TB, with an average of 9.5 contacts investigated in each case.
- 4. Implemented directly observed preventive therapy (DOPT) in conjunction with the Latent TB Infection Treatment Program. The program participants totaled 5,410 people.
- 5. Discovered 458 diagnosed cases of TB via mobile chest X-ray vans.
- Promotion of management principles governing HIV/TB cooperation models, which included conventional HIV examinations for TB patients between the ages of 15 and 49.



### Section 2 Communicable Diseases of the Enteric Tract

#### 1. Enterovirus

With 12 cases of severe enterovirus infection confirmed in 2013 and one death, the outbreak was mild compared to the previous year. Prevention strategies included: outbreak monitoring systems,

enhanced hygiene inspections at educational institutions and nursery schools along with public locations frequented by children, commissioning of a plan for strengthening enterovirus control, extended community health education, establishment of a medical care network for severe enterovirus infections, and improved transfer effectiveness between hospitals.

#### 2. Hepatitis A

Since 1995, the MOHW has provided hepatitis A immunization to preschool children in 30 mountainous villages in remote regions and nine villages in lowland areas adjacent to mountainous regions. The immunization activity notably decreased the hepatitis A incidence rate in the villages from 90.7 to 0.5 per 100,000 people.

### Section 3 Vector-borne Communicable Diseases

#### 1. Dengue Fever

In 2013, there were 860 confirmed dengue fever cases, including 264 imported cases (including one death) and 596 indigenous cases (including one death). In addition, there were 16 cases of dengue hemorrhagic fever, two of which were imported and 14 of which were indigenous (see Figure 5-3). Strategies for controlling dengue fever include strengthened monitoring of dengue fever cases and vectors, public health education and promotion through various channels, encouraging doctors to provide prompt diagnosis and care for suspected cases, and use of community mobilization to eliminate vector

breeding sites such as empty containers.

#### 2. Japanese Encephalitis

In 2013, there were 16 confirmed cases of Japanese encephalitis, which is prevalent in Taiwan between May and October and peaks in June and July every year.

#### 3. Malaria

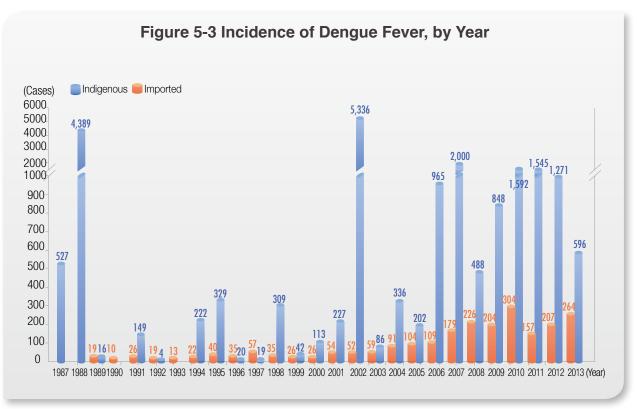
Continued malaria disease and vector monitoring along with strengthened health education helped Taiwan continue to maintain the malaria-free status. In 2013, there were 13 imported malaria cases.

#### Section 4 Communicable Diseases Transmitted by Blood or Body Fluids

#### 1. HIV/AIDS

In 2013, there were 2,243 new reported cases of Taiwanese nationals infected with HIV, bringing the total accumulated cases to 26,475. Of the new cases, 80% were men who became infected through sex with other men. Control strategy and achievement highlights in 2013 are as follows:

1) Continued to promote community health service



centers for homosexuals. These provide friendly health services environments for the LGBT community.

- 2) Establishment of an AIDS alliance facilitated cooperation among local governments, education units and civil organizations, thereby promoting more comprehensive AIDS prevention and control advocacy.
- 3) Implemented a harm reduction program to reduce the incidence of HIV/AIDS among intravenous drug users. By September, there were 97 medical care institutions provided substitution therapy, 841 clean needle syringe stations, and 409 needle syringe vending machines. The needle and syringe return rate reached 94%.
- 4) Health institutions were commissioned to provide free and confidential testing and consultation service for HIV/AIDS. Of the 32,770 people screened, 2.4% tested positive.
- 5) A universal HIV screening program for pregnant women revealed three new cases (see Figure 5-4). For five consecutive years since 2009, there were zero cases of motherto-child transmission.

#### 2. Sexually Transmitted Diseases (STDs)

A plan to improve quality of HIV/AIDS and STD clinical treatment, which included education

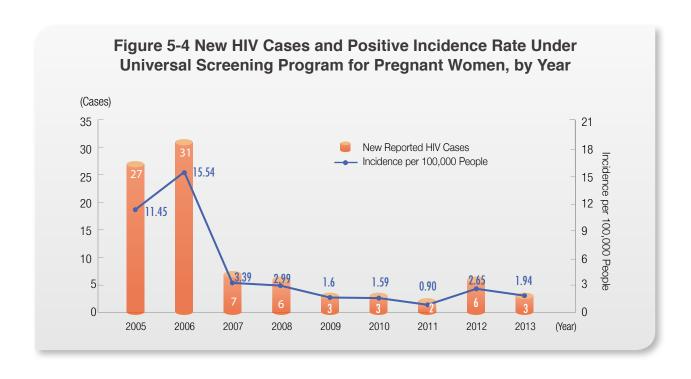
and training of specialized physicians was promoted. Continued promotion of HIV screening among patients with STDs led to 86,279 patients screened in 2013, 0.43% of whom tested positive.

#### 3. Hepatitis B and C

Continued implementation of hepatitis B screenings for pregnant women and immunization of newborns stopped mother-to-child transmissions. Since 2003, a treatment plan for chronic hepatitis B and C patients has reduced the risk of cirrhosis and liver cancer.

### Section 5 Control of Emerging Infectious Diseases

Multiple approaches are necessary to control emerging infectious diseases. Besides closely monitoring international outbreaks, the MOHW improves domestic disease monitoring and reporting systems by upgrading laboratory diagnostic capabilities and preparing for outbreak responses. In response to the outbreak of Middle East Respiratory Syndrome (MERS) and the Ebola outbreak in West Africa, the MOHW launched respective response mechanisms. Thus far, Taiwan has not had any confirmed cases of the diseases.



### Section 6 Control of Imported Communicable Diseases

Necessary quarantine measures are conducted with regard to travelers, ships, and aircraft. Light box, wall and standing advertisements carry promotional messages that enhance the general public's knowledge of travelers' diseases. Screening at port diagnostic stations in 2013 identified 12,924 people who were considered as symptomatic, 159 of whom were confirmed to be infected with a notifiable communicable disease.

Hospitals contributed by establishing travel health clinics specializing in consultations along with the provision of immunizations and preventive medicine. In 2013, travel clinics at 12 contracted hospitals served patients 24,218 times.



#### Section 1 Pandemic Influenza Preparedness and Response

- Since 2005, the MOHW has organized pandemic influenza preparedness operations pursuant to the "National Influenza Pandemic Preparedness Plan." It continues to uphold the "Four Major Strategies and Five Lines of Defense" as the outlines of Taiwan's influenza pandemic response.
- Actions to counter the spread of H7N9 influenza included announcing H7N9 as a Category V Notifiable Infections Disease and the activation of the Central Epidemic Command Center for H7N9 influenza to direct unified control efforts.
- 3. Rules banning the slaughter and sale of live poultry in traditional markets were implemented in May in conjunction with health monitoring of poultry workers.
- 4. Disease information is gathered via a single window set up under the International Health Regulations(IHR), and Taiwan obtained H7N9 influenza virus strains from mainland China through the Cross-Strait Cooperation Agreement on Medicine and Public Health Affairs. The US Centers for Disease Control and Prevention and Japan's National Institute

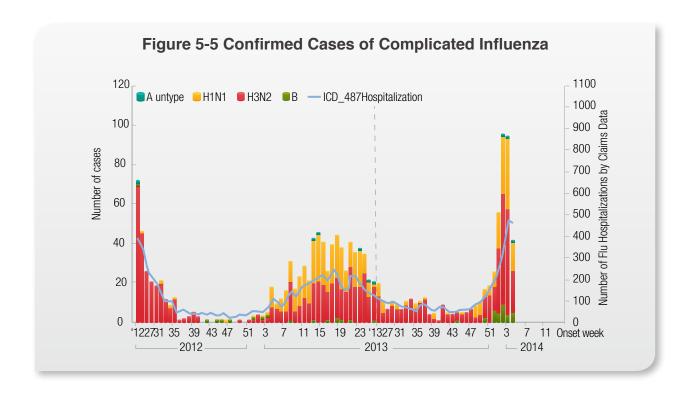


H7N9 influenza Central Epidemic Command Center meeting

of Infectious Diseases also agreed to share candidate vaccine viruses for H7N9 with Taiwan.

#### Section 2 Seasonal Influenza Monitoring and Control

- During the 2012-2013 influenza season there were 968 confirmed cases of influenza-related complications with a fatality rate of 7.13%. During the 2013-2014 season, there were 1,873 confirmed cases, including 171 deaths, which calculates to a fatality rate of 9.13%. During both season, Influenza A (H3N2) was the dominant virus strain circulating in the community. (see Figure 5-5)
- The MOHW launches the annual seasonal influenza vaccination program began in October with fully subsidized immunizations for children and people aged 65 and over.
- The "Practical Guidelines for Prevention and Control of Seasonal Influenza" was published in October, 2013.
- 4. The MOHW was maintained sufficient influenza antiviral drug stockpiles to accommodate 10-15% of the total population. The duration for the expanded use the government-funded antiviral drugs was expended from December 2012 to April 2013 and the number of locations that distribute antivirals was increased to more than 3,100.
- 5. An incentives scheme was implemented to encourage the treatment of patients with influenza-like illnesses during the peak of the influenza season. In 2013, the MOHW approved incentives for 37 medical care institutions that agreed to open specialized influenza clinics in 2014.



#### Section 3 Bioterrorism Defense

- The MOHW signed a memorandum of understanding with the US Battelle Memorial Institute on January 25, 2013 to facilitate collaboration on bioterrorism defense and training and establish a cooperation mechanism for technological exchanges.
- 2. The MOHW continued to conduct annual training programs and exercises through the Biohazard Response And Verification Expert Team, or BRAVE.

### Section 4 Management of Disease Control Supplies

- The MOHW established a three-tiered system of supply management, comprising of central, local, and hospital authorities. Nationwide supply situations were monitored via a management information system.
- The MOHW commissioned a professional logistics firm to ensure effective distribution during emergencies.

### Section 5 Nosocomial Infection Control

 Annual on-site infection control inspections were conducted by experienced infection control

- practitioners and medical officers, together with local health authorities. The 338 hospitals were inspected in 2013.
- 2. Conducted a national plan for implementing central line "care bundle" hospitals.
- The MOHW continued to encourage hospitals to participate in the Taiwan Nosocomial Infections Surveillance System.
- 4. In response to the threat of emerging infectious diseases, provided medical institutions with infection control guidelines for important infectious diseases such as H7N9 influenza.
- The MOHW has continued to monitor antimicrobial resistance and formulated related control guidelines to assist hospitals in enhancing infection management policies.
- 6. Implemented a nationwide Antimicrobial Stewardship Program. In 2013, a program management center and seven demonstration centers were set up. In 2014, 54 hospitals were selected to participate in the program.
- 7. Developed infection control guideline in longterm care facilities and e-learning courses to strengthen the capacities of health care workers. Formulated infection control checklist and audited nursing facilities in 2014 to improve the health care qualities.

### Section 6 Research and Laboratory Testing

- 1. In 2013, a total of 90,880 specimens were sent to the Research and Diagnostic Center for testing. The samples had a positive incidence rate of 13.7%.
- 2. The platforms used for monitoring emerging and re-emerging infectious diseases detected one case of rabies, two imported cases of H7N9 avian influenza and the first human case of H6N1 avian influenza. There were also two reports of neonatal pneumonia of unclear origin, which were shown to be legionnaires' disease.
- The MOHW has continued to operate of the PulseNet Taiwan, which allowed for fast confirmation and comparison of foodborne diseases. The network has also served as an international monitoring platform.
- 4. The MOHW has continued cooperation with Japan's National Institute of Infectious Disease, Japan's Research Institute of Tuberculosis, the US Centers for Disease Control and Prevention, the National Health Research Institutes, and domestic hospitals designated for monitoring.
- 5. The MOHW has continued to build the Taiwan Pathogenic Microorganism Genome Database, which contains genotyping and epidemiological data of pathogens. The database is available to all interested parties who file requests for enterovirus or influenza virus sequences and related epidemiological information.
- 6. The MOHW implemented an accreditation system for laboratory testing institutions qualified to diagnose communicable diseases. In 2013, 133 testing institutions passed accreditation for 1,148 items.
- 7. The MOHW published 96 papers in SCI-listed journals in 2013.

### Section 7 Management of Laboratory Biosafety

- The MOHW amended Article 34 of the "Communicable Disease Control Act" in June 2013, and amended the "Regulations Governing Management of Infections Biological Materials" on March 11, 2014.
- In 2013, the MOHW inspected four Biosafety Level 3 (BSL-3) laboratories and five TB negative pressure laboratories. In response to the H7N9

- influenza outbreak, the MOHW inspected biosafety preparedness efforts at the six MOHW-contracted virology and infectious disease laboratories and six BSL-3 laboratories.
- 3. In 2013, the MOHW conducted 19 biosafety education and training sessions that had a total attendance of 1,426.

## Chapter 4 Immunization

### Section 1 Current Immunization Status and Trends

Routine, immunization schedule is shown in Table 5-2, while children in mountainous regions and other high-risk areas also receive hepatitis A immunization. Local health bureaus maintain high immunization rates by implementing active health promotion approaches, including tracking and encouragement. Success is shown by the pediatric immunization coverage rates of routine vaccines displayed in Figure 5-6.

New immunization policies introduced in 2013-2014 included the following: 1. Providing of PCV for children aged 2-5 starting from March, 2. Expanding PVC vaccination target to children aged 1-2 year.

### Section 2 Development and Manufacturing of Serum Vaccines

#### 1. Production of Biological Products

- 1) Produced 150 L of antivenin horse serum.
- A supply of vaccines, toxoids and antivenins totaling 953,992 doses was manufactured.
   Income from the sale of these products was NTD46.40 million.
- 3) Supplied animals for experimentation.

#### 2. Development of Biological Products

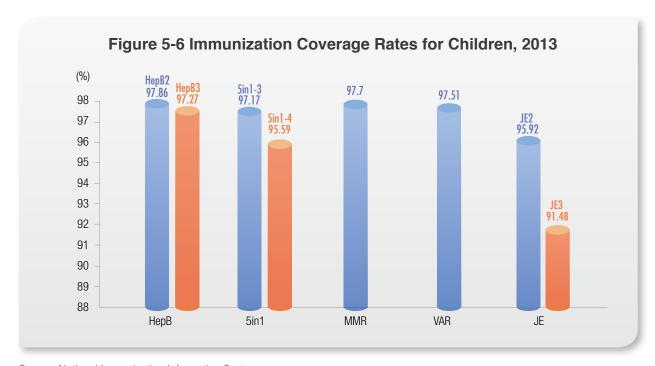
- A 50-liter tidal bioreactor was used in conjunction with a serum-free medium to produce six batches of enterovirus 71 subgenotype C4 inactivated vaccine.
- 2) Developed water content analysis methods to be applied to lyophilized antivenin serum for injection.
- 3) Developed methods for milking free-living rather than captive snakes.

**Table 5-2 Immunization Schedule** 

Age	Vaccine
Within 24 hours of birth	► HBIG ► HepB 1
After 24 hours of birth	▶ BCG
1 month	► HepB 2
2 months	► DTaP-IPV-Hib 1
4 months	► DTaP-IPV-Hib 2
6 months	► HepB 3  ► DTaP-IPV-Hib 3
1 year	► MMR1 ► Varicella
1 year, 3 months	▶ JE1, JE2(two-week interval)
1 year, 6 months	► DTaP-IPV-Hib 4
2 years, 3 months	▶ JE3
Between 5 years and 1 <sup>st</sup> grade	► Tdap-IPV  ► MMR2  ► JE4

Notes: 1. If mothers are hepatitis B carriers (HBeAg positive), their babies should be given one dose of HBIG shortly after birth and no later than 24 hours.

2. The first dose of JE vaccine is given 15 months after birth, and the second dose is given two weeks later.



Source: National Immunization Information System



# **Management of Food and Drugs**

- 65 Chapter 1 Management of Food
- 68 Chapter 2 Management of Drugs
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- 75 Chapter 4 National Laboratory and Risk Management
- 77 Chapter 5 Protecting Consumers and Consumer Education

To achieve unified and improved food and drug safety management, the Taiwan Food and Drug Administration (TFDA), focused on several working points in 2013: strengthening regulatory standards and review mechanisms, managing safety and quality at manufacturing sites, building a comprehensive monitoring system for product supply chains, promoting risk assessment and national reference laboratory, improving consumer protection and risk communication channels. The Administration's overriding goal was to provide an environment where consumers could eat at ease and take medicine without fear.

## **Chapter 1 Management of Food**

### Section 1 Regulatory Standards and Product Inspection

- 1. Results of a comprehensive review of food sanitation regulations are illustrated in Table 6-1.
- 2. Cumulative permits granted for food products through registration and review at the end of 2013 are described in Table 6-2.

Table 6-1 Amendment in 2013 of Food Sanitation Management Related

Amended Date	Name of Regulation/ Standard	Summary of Amendment		
Jun. 19	"Act Governing Food Safety and Sanitation"	Chapters and articles were increased to 10 and 60, respectively. In particular, risk management for food safety, food import control, food testing, and food examination and control were covered in exclusive chapters. Health agencies were given greater authority and responsibility; food manufacturers were given greater responsibility and subjected to more severe fines and criminal responsibility in the event of violations.		
Oct. 2	"Regulations Governing the Labeling of Prepackaged Beverages Claimed to Contain Fruit and/or Vegetable Juice"	<ol> <li>Packaged beverages containing fruit and/or vegetable and sold for direct consumption. That shall be labeled explicitly declare the juice content percentage of fruit/vegetable on the package.</li> <li>Regulations governing product names were stipulated for various categories of products.</li> </ol>		
Nov. 19	"Regulations Governing Traceability of Foods and Relevant Products"	Clearly designated the scope of products subject to a product traceability system for food and related products as well as the scope of required records and data.		
Nov. 20	"Regulations Governing the Labeling of Packaged Frozen Food"	<ol> <li>Prepackaged frozen food products being sold in the market shall be labelled with storage methods and conditions.</li> <li>In addition to comply with the foregoing provisions, prepackaged frozen food products may only serve after heating and being sold in the market shall be indicated time heating temperature.</li> </ol>		
Nov. 29	"Regulations Governing the Labeling of Packaged Rice Thread"	Prepackaged pure rice thread, rice thread, and mixed rice thread products sold in the market should bear a label indicating the rice content or similar information on the front-side of the product packaging .		
Dec. 3	"Regulations Governing the Registration of Food Businesses"	Clearly stipulate the registration process, designated conditions to apply for registration, procedures, registration items and other required actions.		
Dec. 5	"Regulations Governing Food Examination, Testing and Control Measures"	Changes ensured that food products, food additives, food utensils, food containers and packaging, and food cleansers were in accordance with the "Act Governing Food Sanitation." They also provided uniform procedures for competent authorities carrying out checks, samples, tests and management.		
JanDec.	"Standards for Pesticide Residue Limits in Foods," "Standards for Veterinary Drug Residue Limits in Foods," "Standards for Specification, Scope, Application and Limitation of Food Additives," and "Food Sanitation Standards"	Accumulated Designations: 3,587 standards for pesticide residue limits governing 349 types of pesticide; 1,286 standards for veterinary drug residue limits governing 124 types of veterinary drugs; 800 standards for specification, scope, application and limitation of food additives; and 37 food sanitation standards.		

### Section 2 Management of Food Sources

#### Promotion of Hazard Analysis and Critical Control Points

- 1) Inspections using the Hazard Analysis and Critical Control Points (HACCP) system are progressively conducted on designated food products and product types in order to prevent the occurrence of food hazards (see Table 6-3).
- 2) In line with government policy, qualified professionals are encouraged to enter the food product industry. Between 1990 and 2013, 1,520 food technologist became available for industrial employment.

#### 2. Food Product Import Inspections

Imported foods are subject to border inspections at port of entry and must comply with regulations to enter. In 2013, inspection applications were completed for a total of 514,710 batches of food imports, of which 38,460 were examined and tested, for an sampling rate of 7.47%.

Approximately 1.45% failed to meet regulations and were either withdrawn or destroyed.

#### 3. Management of Food Additive Registration

Progress included implementation of regulations governing food additive registration, announcement of the "Regulations Governing the Registration of Food Businesses," and establishment of a registration and management information website (http://fadenbook.fda. gov.tw/). By the end of 2013, 669 enterprises in the food additive manufacturing, import and retail industries had registered a total of 27,712 food additive products.

### Section 3 Safety Chain Management for Foods

- 1. Expansion of the "PMDS, Product Management Distribution System" database to facilitate and enhance the inspection effectiveness.
  - In 2013, continued to expand functions of the express query system and related digital handheld processor query system of PMDS.

Table 6-2 Registered and Approved Food Products through Registration and Review, 2013

Food Categories Subject to Registration and Review	Registered and Approved Food Products
Imported Foods in Tablet or Capsule Form	8,157
Domestic Vitamin Products in Tablet or Capsule Form	1,411
Food Additive	5,494
Infant and Follow-Up Formula	212
Formulas for Certain Diseases	178
Vacuum-Packed Ready to Eat Soybean Foods	124
Health Foods	276

Table 6-3 Producers Fully Compliant with HACCP, 2013

Product Types	Period (Years)	Inspected Producers	
Seafood Processing Industry	2004~2013	194	
Meat Processing Industry	2008~2013	222	
Dairy Product Processing Industry	2011~2013	50	
Box Meal Factory	2013	195	

2) Completed an interface linking to human testing results obtained by the Taiwan CDC. Continued building interfaces linking to local health department inspection systems to obtain more comprehensive and immediate data.

#### 2. Establishment of a Joint Inspection Task Force

In order to combine food safety inspection capacity of central and local agencies, the Executive Yuan established a food safety joint inspection task force. Within half a year starting from December 2013, the task force had inspected products of six major daily food categories.

- 3. On-site Inspections of Registered Food Products
  Outcomes from 2013 are described in Table 6-4.
- 4. Post-market Surveillance of Food

Post-market surveillance of food products is conducted to ensure compliance with health standards. Results from 2013 are illustrated in Table 6-5:

### Section 4 Food Safety and Hygiene Management

 In order to strengthen autonomous sanitation and safety practices of domestic food service businesses, promotion of the Good Hygiene Practice, rating system for food service has been operated. Based on evaluation results, businesses can be awarded a rating of "excellent" or "good" as an incentive to improve their practices (see Figure 6-1). In 2013, 3,456 food service businesses had been awarded.





Figure 6-1 GHP 'Excellent' and 'Good' Awards for Food Service Businesses

#### Table 6-4 Outcomes of On-site Inspections of Registered Food Products, 2013

Туре	Inspected Companies	Outcome
Health Food Product Manufacturers	20	No major non-compliance has occurred, violators were in compliance upon re-inspection
Domestic Manufacturers of Vitamin Tablets and Gelatin Capsules	40	No major non-compliance has occurred, violators were in compliance upon re-inspection
Food Additive Manufacturers and Dealers	80	No major non-compliance has occurred, violators were in compliance upon re-inspection

#### Table 6-5 Outcomes of Post-market Surveillance, 2013

Surveillance Item	Outcome			
Sui veillaille itelli	Total Sampled	Qualified	Qualified Rate (%)	
Pesticide Residues in Packaged Fruit and Vegetables	2,340	2,080	88.9	
Veterinary Drug Residues in Food	736	703	95.5	
Heavy Metals (Cadmium, Mercury and Lead) in Rice	202	202	100.0	
Mycotoxin Monitoring of Commercial Foodstuffs	421	412	97.9	
Heavy Metal Contents in Fruit and Vegetables on Markets	151	151	100.0	
Pesticide Residues in Rice	201	201	100.0	

Note: Local health bureaus conducted handle by law of products that failed by post market surveillance.

2. In accordance with planned promulgation of the "Regulations Governing the Registration of Food Businesses," announcements will progressively be made of the types and scale of food businesses (including food service businesses) that should be registered, based on the principle of risk management. Related food businesses are invited to attend explanatory meetings to be held across Taiwan, where the assistance will be offered.

## **Chapter 2 Management of Drugs**

#### Section 1 Drug Regulations, Standards and Product Inspections

Improving Regulations and Standards
 2013 amendments and additions to regulations and standards governing drug policy management are described in Table 6-6.

#### 2. Managements of Medicinal Product Registration

- 1) Registration and Market Approval, including clinical trials, must be conducted before a drug can be marketing to ensure effectiveness and safety. Between 2012 and 2013, applications for clinical trials grew by 1.4 times, and by the end of 2013, a total of 1,980 drug ingredients received permission to undergo bioavailability, bioequivalence and BA/BE/dissolution tests. Of drugs that already underwent bioequivalence and BA/BE/dissolution tests, 1,495 were domestic. Also through the end of 2013, permission was granted for 26,687 drug products, comprising 2,671 active pharmaceutical ingredients and 24,016 medicinal preparations.
- 2) Reform of drug review mechanisms included building professional review capability and core review capacity, streamlining review mechanisms, and enhancing transparency, quality and speed. In 2013, registration reviews were completed for 157 new drugs (comprising 26 domestic items and 131 imported items). Of these, 122 were approved.

### Section 2 Management of Drug at Sources

#### 1. Promotion of PIC/S GMP

- The MOHW continued implementing the Good Manufacturing Practice (GMP) for medicinal products as well as the GMP standard of the "Pharmaceutical Inspection Convention and Pharmaceutical Inspection Cooperation Schemes, PIC/S". Achievements are shown in Table 6-7.
- 2) Taiwan TFDA officially became a PIC/S member on January 1, 2013. Use of the PIC/S platform will strengthen international cooperation and allow Taiwan to share drug alert system with other countries, leading to a more competitive domestic pharmaceutical industry.

### 2. Strengthening the Management of Active Pharmaceutical Ingredients

- Enhanced Quality Management of Active Pharmaceutical Ingredient Manufacturers: TFDA had announced the adoption of PIC/ S GMP Guide for the active pharmaceutical ingredients (API) manufacturers. In addition, API manufacturers should comply with PIC/S GMP Guide by the end of December 31, 2015.
- Established a drug master file (DMF) review system. From October 2009 to the end of 2013, 1,455 DMF applications were concluded, with 871, or 59.86%, approved.

### Section 3 Quality Chain Management of Drugs

#### 1. Management of Drug Distribution

1) In order to improve quality management of the whole drug supply chains, Good Distribution Practice (GDP) was implemented for drugs. The system focused on four concepts: maintenance of drug quality, efficiently recall of drugs, and correct delivery to clients within a reasonable period of time, and prevention of counterfeit drugs from entering the drug supply chain. These advances ensured safe, high-quality medicinal products for consumers.

## Table 6-6 Amendments /Additions to Regulations and Standards Governing Drug Policy Management

Date	Name of Regulation/ Standard	Summary of Changes
Jan. 31	"Regulations for Bioavailability and Bioequivalence Studies"	Amendments Act of article 15, 17 and 21.
Feb. 23	"Guidance for Investigational New Drug Applications"	Any new drug clinical trial application must fulfill the current requirement.
Apr. 17	"Guideline for Review and Approval of Botanical Drug Products"	The application and approval guidelines for the Botanical New Drug Product. A separate regulation was issued to meet the distinctive properties of the botanical drug products.
Apr. 18	"Guideline for Review and Approval of new chemical entities which have been approved for over 10 years in the 10 advanced countries"	This guideline lists the requirement of technical document for marketing approval of drugs which have been approved in the 10 advanced countries for over 10 years, nonetheless a including new chemical entity drug in Taiwan. There are plenty clinical information for those drugs, the publicly available information is accepted to substitute for partial submission document.
May. 29	"Guidelines for Nonclinical Pharmacology/Toxicology Studies for Medicinal Products Applications" (4th)	Removing outdated standards for physiological values of laboratory animals and specific pathogen-free experimental animals.
Jul. 26	"Regulations for Registration of Medicinal Products"	Amendments for the articles 10, 46 and 70. Revise the rule for the pyrogen tests preferred nonliving animal descriptions, and the requirements for post-market changes.
Aug. 14	"Regulation for Accelerated Approval of New Medicinal Products"	Created a mechanism for the express purpose of meeting pressing medical treatment needs of citizens. Used empirical evidence to select surrogate endpoints which could reduce the R&D timetable of medicinal products and allow products to reach market earlier.
Sep. 4	"Guidelines for Review and Approval of Biosimilar Monoclonal Antibodies"	A new guideline for the biological similarity monoclonal antibody drugs for the experimental and technical information requirements for approval.

#### Table 6-7 No. of Pharmaceutical Manufacturers Compliant with GMP, 2013

Product Type	Inspection Type	No. of Manufacturers	
	Domestic western pharmaceutical manufacturers compliant with GMP	140	
Medicinal Products	Domestic western pharmaceutical manufacturers compliant with PIC/S GMP	57	
	Registered foreign pharmaceutical manufacturers	820	
	Foreign western pharmaceutical manufacturers compliant with GMP after on-site inspection	213	

2) Gradual promotion of the GMP/GDP management began in 2011. International Guidance was used as a reference for drafting GDP Guide. Gap assessment visits were held to assist the companies in understanding standards. By the end of 2013, GDP gap assessment visits were provided to 35 wholesale distributors and 20 pharmaceutical manufacturers compliant with PIC/S GMP Guide.

#### 2. Monitoring of Drug Quality

In 2013, a total of 831 quality defects were reported, 702 recalls and alerts were monitored, and 3 imported drug products and 1 herbal drug were identified as defective (Table 6-8). Voluntary recall by market authorization holder will be activated while the drug product fail to meet its release specification or significant quality defects were shown.

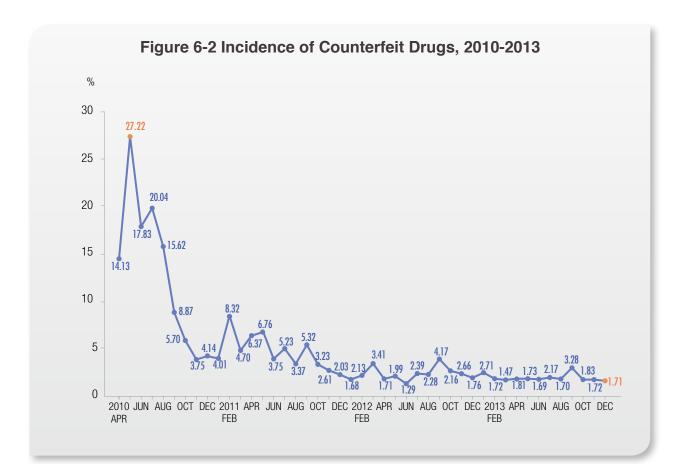
#### 3. Suppressing Illegal Drugs, Food and Cosmetics

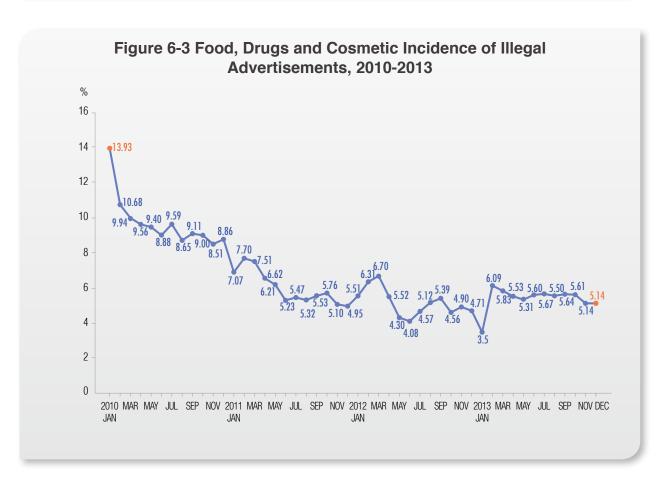
- 1) Cross-departmental resources were employed to strengthen anti-counterfeit drug policies. In March 2010, the Executive Yuan established a project dedicated to the suppression of counterfeit drugs and illegal broadcasting stations while departments and local governments formed joint task forces that sought to suppress counterfeit drugs. Inspection results from 2013 were as follows:
  - a. On average, health agencies continued

- to conduct over 1,500 medicinal product investigations per month. The incidence of counterfeit drugs fell to 1.71% (see Figure 6-2).
- b. An accumulated 14.519 million illegal pills were detected and seized.
- c. Approximately 24.8% of tested food products were adulterated with western medicine. Most detected medicines were meant to promote virility or assist with weight loss.
- d. The rate of illegal advertisements related to food, drugs and cosmetic fell to 5.14% (see Figure 6-3).
- 2) Continued monitoring of the marketplace for illegal medicinal products, food and cosmetics
  - a. In 2013, there were 881 cases involving detection and seizure of illegal medicinal products. Among these, legal proceedings were initiated in 844 cases, administrative action was taken in 37 cases and a total of NTD645,000 in fines was collected.
  - b. Cross-departmental cooperation was used to streamline investigation procedures relating to illegal advertisements and strengthen oversight of local health bureaus. In 2013, health agencies investigated and handled 6,815 cases relating to illegal food, drug and cosmetic advertisements. Total fines were NTD152.656 million.

Table 6-8 Survey On Drugs

Category	Project Name	Number of Finished Piece	Number of Qualified Piece	Qualified Rate
Drugs	Surveillance on the Quality of Anticoagulant, Corticosteroid and Antibiotic Preparations in Taiwan	85	84	98.8
	Investigation of Microbial Limit for Rectal Drug	88	88	100
	Post-market Surveillance of Rotavirus Vaccine in Taiwan	26	26	100
	Subtotal	199	198	99.5
Chinese Medicine	Investigation on the Contaminations and quality in Chinese Herbal Preparations	144	139	96.5
	Subtotal	144	139	96.5





### Section 4 Drug Safety Management

### 1. Strengthen Drug Safety Monitoring and Control

The established drug reporting and drug safety monitoring systems will strengthen the drug safety monitoring strategies. Data in the shared database was classified by the risk level, in order to achieving the goal of public health and resource sharing. Outcomes are shown in Table 6-9.

#### 2. Drug Safety Re-evaluation and Risk Control

In 2013, there were 64 drugs re-evaluated, among them, 26 were required for risk management measures, including 22 safety labeling changes or restricted use, 2 drugs were required to implement Risk Management Plan (RMP) and 2 drugs were off the market. Also issued 16 press releases, 24 information charts, and 4 safety short messages regarding to drug safety.

### Section 5 Management of Controlled Drugs

Taiwan Formulate the "Controlled Drugs Act" to strengthen the management system of medical and scientific use of controlled drugs. There are the three main regulated system to prevent the problem of drug abuse and illegal use, including the schedule management, licensing regulation management and diversion control management.

#### 1. Management of Controlled Drugs

- Schedule Management: Controlled drugs are classified into four schedules by the potential for habitual use, dependence, abuse and danger to society. Additions and amendment in 2013 are described in Table 6-10.
- 2) Licensing Regulation Management: At the end of December 2013, there were 14,511 institutions with registration licenses to handle controlled drugs and 47,391 people with licenses to use controlled drugs.
- 3) Diversion Control Management:
  - a. In 2013, written permission was granted 1,909 times for controlled drugs to be manufactured, imported, exported or used for medicinal, educational, research, or experimental purposes.
  - b. In 2013, on-site auditing of 16,197 institutions took place, of which 211, or 1.30%, were found to have committed a violation. Each was dealt with accordingly.

#### 2. Drug Abuse Prevention on Internet

The authority provide the multiple style information to prevent drug abuse on the official website, including the related statistics data, publications,, multimedia training sources, and other methods to prevent the drug abuse.

Table 6-9 Outcomes of Drug Safety and Quality Monitoring and Control, 2013

Drug Safety/Control Systems	Summary of Outcomes			
Adverse Drug Reactions (ADRs) Reporting System	10,667 cases were reported.			
Drug Safety Monitoring	Completed 12 drug analysis reports.			
Monitoring of Domestic and Global Drug Safety Alerts	291 drug safety alerts were monitored.			
Batch Release for Biological Products	389 batches of biological products were applied for batch release in Taiwan. Among them, 377 batches (12.51 million doses) were released, but 12 batches (about 135,436 doses) were rejected due to the failed test or the cold chain failure during transportation.			

### Table 6-10 Additions and Amendment to the Schedules of Controlled Drugs, 2013

Date	Schedule	Name of Controlled Drug	
Apr. 18	2	Added tapentadol	
Apr. 18	3	Added JWG-122 and AM-2201	
Oct. 21	2	. Revised the fluoromethamphetamine, FMA item name 2. Added chloromethamphetamine, CMA	
Oct. 21	3	Added the chloroamphetamine, CA item name     AAdded 4-Methylethcathinone, 4-MEC and phenazepam	

### Section 6 Management of Chinese Medicine

- After implementing the GMP system for Chinese medicine in 2005, by the end of 2013 there were 104 Chinese medicine GMP manufacturers. Also, 48 manufacturers were subjected to follow-up inspections in 2013 based on the "Regulations of Medicament Manufacturer Inspection."
- In order to enhance management of concentrated Chinese medicine preparations and traditional Chinese medicine preparations, new regulations governing the management of Chinese medicine were announced in 2013. Highlights are shown in Table 6-11.
- 3. A new border control measure for Chinese medicinal materials to be declared is implemented since August 1, 2012. Customs inspection is carried out for 10 kinds of high trading volume Chinese medicinal materials imports, including Jujubae Fructus.

In 2013, there are 2,473 applications, in total 12,044 tons, to apply for import permits, among them, the attached Certificate of Analysis is in compliance with the testing requirements. In addition, Jujubae Fructus, Astragali Radix, Angelicae Sinensis Radix and Glycyrrhizae Radix Et Rhizoma have been subject to mandatory inspection under the Pharmaceutical Affairs act. Among them, 57 batches

- are due to customs inspection, and it was found 2 batches of Astragali Radix from China (5,290 kg in total) failed to meet the regulatory requirements due to high concentration of heavy metals.
- 4. Chinese medicine inspections conducted by health agencies in 2013 are described in Table 6-12.

# **Chapter 3 Management of Medical Devices and Cosmetics**

### Section 1 Medical Device and Cosmetics Regulations and Product Review

1. Regulatory environment and international regulatory harmonization

In 2013, medical devices and cosmetics regulatory amendments and related announcements were made as follows (Table 6-13).

2. Review of Medical Devices, Cosmetics and Advertisements

Depending on the characteristics and the degree of risk, medical devices are divided into 17 categories (more than 6,200 variety of items). By the end of 2013, 37 domestic preclinical testing guidance documents, 1,002 medical device

### Table 6-11 New Regulations Governing the Management of Chinese Medicine, 2013

Date	Name of Regulation/Standard	Content Summary
Aug. 29, 2011	Standards governing the limits of harmful substances contained in concentrated Chinese medicine preparations	From July 1, 2013, all arsenic, cadmium, mercury and lead levels in the 200 announced standard formulas had to adhere to these standards.
Dec. 26, 2013	Standards governing the limits of harmful substances and the scope of use of 22 traditional Chinese medicine preparations, including Tianwang Buxin Dan	Increased the number of traditional Chinese medicine preparations subjected to limits of harmful substances. The new regulations took effect on July 1, 2014.

### Table 6-12 Chinese Medicine Inspections, 2013

Item	Inspection Results
Investigation of illegal advertisements for Chinese medicines	In 2013, health agencies issued 1,222 administrative penalties and levied fines of NTD29.236 million.
Inspection of packaging labels of commercial Chinese medicine materials	In 2013, inspections of 491 items yielded a pass rate of 99.8%.
Testing of commercial Chinese medicine materials for heavy metals, pesticide residue and aflatoxin	In 2013, a total of 300 items were tested, four of which failed to meet standards, yielding a pass rate of 98.8%.
Testing for adulteration of traditional Chinese medicines with western medicines	In 2013, all 130 items that were inspected met standards.

Table 6-13 Updates and Amendments for Medical Device and Cosmetic Regulations and Related Announcements

Date	Name of Regulation/Standard	Announcement Content Summary
Mar. 11	Publish the "Pharmaceutical Good Manufacturing Practice Regulations" and revise the "Standards for Medicament Factory Establishments"	Adopt ISO 13485:2003 version. Medical device manufacturers are comprehensively required to be in compliance with the medical device good manufacturing practices (GMP).
Mar. 14	Revise the "Food and Drug Administration, Ministry of Health and Welfare Key Principles for Medical Device Consultation"	To increase the willingness of multinational companies to conduct clinical trials for medical devices in Taiwan, multinational multicenter clinical trials (MCT) programs for medical devices become qualified for application of regulatory project counseling.
Mar. 26	Enumeration of Expressions that are Appropriate or Inappropriate to be Claimed for Cosmetics	Enumeration of Expressions that are Appropriate or Inappropriate to be Claimed for Cosmetics.
Apr. 2	Announce the recognition of 90 US FDA medical device guidance documents	This measure assists medical device manufacturers to prepare data for applying registration and market approval. In addition, these recognized guidance documents also serve as as a references for the management of medical devices.
Apr. 30	Amend "Guidelines for Registration of <i>In Vitro</i> Diagnostic Medical Device" Article 7	Relax provisions related to the number of test specimen for human immunodeficiency virus (HIV) in vitro diagnostic reagents for HIV-1 subtype O. Revise the analytical sensitivity of international standards for hepatitis B surface antigen (HBsAg), HIV-1 antigen and Anti-HBs.
Apr. 30	Announcement of Priority Review Program for Cosmetics Compliant with Voluntary Cosmetics Good Manufacturing Practices	Manufacturers compliant with the domestic "Voluntary Cosmetics Good Manufacturing Practices" and obtaining official documentation are eligible for priority review when their products are submitted for registration. In addition, the announcement simplified the technical data required for registration of medicated cosmetics.
May. 1	Announce the joining of the Notified Bodies of European Union and the TFDA- Authorized Medical Device GMP Auditing Organizations to the second generation Taiwan and Europe medical devices factory inspection report exchange of Technical Cooperation Programme version 2.0 (TCP II)	To strengthen Taiwan and European Union's mutually beneficial cooperation, TFDA published the 11 EU AIMD / MDD / IVDD Notified Body Partners and the 4 R.O.C. TFDA Authorized Medical Device GMP Auditing Organizations newly added to the TCP II list (new member: PIDC).
May. 8	Revise the Pharmaceutical Affairs Act, Article 13 - Definition of medical devices	Add "regulating fertility", "do not achieve its primary intended function by pharmacological, immunological or metabolic means in or on the human body", "software" and "reagent for <i>in vitro</i> use" into the scope of medical devices, to enhance the harmonization with international regulations.
May. 15	Announce Regulations for the Inspection and Examination of Imported Medicaments	Provide the legal basis for conducting random sampling and testing of medical devices before permission of import, in order to establish the mechanism for random border inspections and punishments.
May. 28	Amendment of Regulation on the pH Value and Warning Statement of Cosmetics Containing Alpha Hydroxy Acids and Other Related Ingredients	Amended pH value testing methods for cosmetics to bring methods in line with the CNS Methods of Hygienic Test for Cosmetics -pH Value, Acidity and Alkalinity (No. 9036, Type S2073).
Jun. 10	Publish the "Scope and types of medical devices which pharmacies may retail"	Publish the revised Article 19, Paragraph 2 of the "Pharmaceutical Affairs Act". Pharmacies may also have retail business for a certain class of medical devices. Paragraph 3 of the same Article authorizes central health authorities to set scope and types for the certain classes of medical devices.
Jun. 27	Amendment of Regulation on Residue Limits for Free Formaldehyde in Cosmetics	Stipulate the residue limits for free formaldehyde in cosmetics.
Aus. 27	Amendment of Regulation Governing the Use and the Dosage Limit of Urea Ingredient in Cosmetics	Added a dosage limit of 10% for urea (only permitted in hair dying products).
Sep. 17	Publish the "Regulations Forbidding the Use of Rhododendrol Ingredient in Cosmetics"	Forbid the import, manufacture, sale, supply, intent to sell, or intent to supply of cosmetics containing rhododendrol.
Dec. 31	Amendment of Guideline for the Use of Preservative Ingredient and Dosage Limit Requirement in Cosmetics	Amendment of regulations governing Methylisothiazolinone and mixture of 5-Chloro-2-methyl-isothiazol-3(2H)-one and 2-Methylisothiazol-3-(2H)-one with magnesium chloride and magnesium nitrate.

international standards and 90 medical device guidance documents announced by US FDA were recognized, and the review time is equivalent to the level of the global leading countries. The registration data from 2013 for medical devices and cosmetics are shown in Table 6-14.

### Section 2 Medical Device and Cosmetics Source Control

In order to align the GMP regulation with global regulatory requirements, the 2003 version of ISO 13485 was thereby adopted for implementation. All medical device manufacturers were brought under the regulation of medical device GMP. TFDA continues to promote voluntary cosmetic GMP and has completed the establishment of the "Cosmetics Product Notification Portal". Data relating to manufacturers of medical devices and cosmetics that met the GMP regulation at the end of 2013 are shown in Table 6-15.

### Section 3 Quality Surveillance of Medical Devices and Cosmetics

To enhance the monitoring of medical device and cosmetics package labeling, quality and safety, TFDA conducted joint inspection with local health bureaus. Results are shown in Table 6-16.

### Section 4 Safety Management of Medical Devices and Cosmetics

In 2013, 399 warning reports were received from the National Competent Authority Report (NCAR) exchange program. There were a total of 1,634 reports for defective medical device products, 144 reports for adverse reactions to medical devices, and 87 reports for defective cosmetics products. In addition, 327 domestic and international cosmetics warnings were overseen. There were 52 consumer news items from 'The Consumer's Red and Green Signs for cosmetics'. In the future, we will continue to improve reporting and monitoring systems for cosmetic products.

# Chapter 4 National Laboratory and Risk Management

## Section 1 Missions of the National Laboratory Purchas

- 1. Procure new cutting edge instruments and develop technical documents.
- 2. Conduct a series of conferences related to nontarget and unknowns screening for strengthening analytical capabilities.

### Table 6-14 The registration data for Medical Devices and Cosmetics in 2013

	Medical Devices		Cosmetics		
Letters	Medical Devices Registrations	Medical Devices Advertisements	Medicated Cosmetic Registrations	Cosmetics Advertisements	
Total Number of Applications	5,288	209	1,650	1,261	
Total Number of Concluded Cases	5,208	163	1,506	1,192	
Valid License: 35,792 for medical devices, 13,964 for medicated cosmetics					

# Table 6-15 Manufacturers of Medical Device and Cosmetics That Met the GMP Regulation in 2013

		Valid Quality System Documentation Compliance Letters for Importers Medical Devices	Valid Voluntary Cosmetics GMP
Letters/Manufacturers	568 Letters	3,231 Letters	18 Manufacturers

Table 6-16 The Statistical Analysis for Joint Inspections on Medical Devices and Cosmetics in 2013

	Inspected	Inspected	Product labeling			
Product Type	counties no.	shops/ street vendors	Inspected cases	Violations	Violation Rate (%)	
Colored Contact Lenses	6	49	142	19	13.38	
Wound Dressings	6	49	330	21	6.4	
Surgical Masks	6	49	155	19	12.3	
Condoms	7	26	256	2	0.7	
Powered Heating Pads	7	26	32	0	0	
PVC Medical Devices Containing DEHP	7	13	18	0	0	
Total for Medical Devices	13 <sup>(NOTE)</sup>	75 <sup>(Note)</sup>	933	61	6.5	
Bathing Lotion	9	81		10		
Shampoo	9	81	1,425	26	3.20	
Liquid Hand Lotion	9	81		10		
Total for Cosmetics	9	81	1,425	46	3.2	

Note: Because of different implementation times, some counties and shops/street vendors were inspected twice

#### 3. Inspection and Testing Functions

- Basic testing: Registration testing of medical devices, food additives, lot release testing for biologics, and testing of emergency incidents, such as Oil adulteration & Copper chlorophyll events and the doubts of the color additive fall off in marketed daily wear contact lenses.
- 2) Cooperative Testing: Inspection or service testing for the related authorities, testing for adulterant and illegal drugs of food and Chinese medicines. The results shown 392 items out of 2,566 tests were violated.
- 3) Collaborative Testing: Contract or assistance of testing for illegal drugs, medicines, and controlled drug residues in Chinese medicine and food products. A total of 4,460 tests were conducted, while 3,499 items were violated.

#### Development and Promotion of New Testing Methods

- Additions/Revisions to Testing Methods: 107 and 9 methods for food products and cosmetics were published, respectively.
- 2) Developments of testing method for gossypol and copper chlorophyll in edible oils, and maleic acid modified starch in food products.
- 3) Six conferences related to methodology and one open forum on minimum requirement for biologics.

5. HCV genotype 2 national standard was prepared and assigned a unitage by the collaborative study.

### Section 2 Risk Management and Emergency Response Mechanisms

### Promotion of an Organizational Risk Management Mechanism

Through a combination of education, training and a task force responsible for risk management and crisis response, better risk and crisis practices were integrated into everyday procedures and decision-making. Implementation of risk management procedures facilitated early warnings of food, medical devices and drug dangers so necessary control and management measures could be quickly adopted.

#### 2. Strengthening Crisis Response

Emergency response mechanisms were initiated following the discovery of maleic anhydride-modified starch, the sale of blended edible oils labeled as higher quality pure products, and the illegal adulteration of edible oils with copper chlorophyll. After action reports were completed to strengthen future organizational risk management and crisis response capabilities.

# Chapter 5 Protecting Consumers and Consumer Educationn

### Section 1 Providing Immediate Information to Consumers

- Maintenance of the Consumer Food and Drug Website (http://consumer.fda.gov.tw/): Provides operational information, health advocacy materials and inquiry services.
- 2. The "Real-time drug safety information monitoring and delivery platform" was established, including the alters' announcement to the public in time.
- 3. TFDA created Facebook and blog pages that explain safe cosmetics use and provide consumers with the latest related information.
- 4. Constantly to provide assistance and encouragement for health institutions to report abuse of controlled drugs. These data were compiled into monthly reports on drug abuse cases and testing statistics along with seasonal newsletters on controlled drugs.
- 5. Published 20 books and six periodicals related to food and drugs, providing the diverse information that consumers are entitled to.
- 6. Established a convenient online payment system that offers application services and diverse payment methods.

### Section 2 Consumer Advocacy and Communication

- Continued promotion of food hygiene and safety policy included advocacy meetings for enterprises and consumers, in accordance with the "Act Governing Food Safety and Sanitation."
- Conducted a program that sought to train elementary school teachers to serve as seeds for food safety and risk education. Target topics included prevention of food poisoning as well as

packaging, purchase and storage of food.

- 3. On 925 Drug Safety Day, TFDA conducted a press conference to deliver information who to use analgesics and hosted a health walk. The event promoted the five core principles of taking medicine (act as the master of your own body, clearly describe your physical condition, read the label carefully, understand how and when to take the medicine, and become friends with your doctor and pharmacist), the five "do's" (do know the kind of analgesics, do read the labels, do describe the symptoms, do obey the doctor's orders, and do ask questions to the doctors and pharmacists), and the five "don'ts" (don't use drugs overdose, don't combine medicines, don't drink, don't use drugs on an empty stomatch, and don't buy unnecessary medicines).
- 4. Established an interactive digital website to deliver Drug Safety information and used social networks to strength the competence of using medicines. Established 22 educational resource centers, 19 leading schools, 93 seed schools and 473 community-based consultation stations to promote drug safety information.
- 5. Conducted a special event to promote inspection of certificates and instruction manuals prior to the purchase and use of medical devices. This was one of several activities that educated consumers on proper use of medical devices and cosmetics.
- 6. Prevention of Drug Abuse:
  - Anti-drug publications included posters, abuse prevention videos and drug-abuse case study handbook. These improved understanding of the proper use of controlled drugs and the dangers of abuse.
  - Joined with 34 non-governmental organizations and health institutions to conduct drug abuse prevention events and six training classes for instructors.
  - Established six anti-drug educational resource centers. These cooperated with 104 institutions to spread the anti-abuse message and encourage correct usage of sedative-hypnotic drugs.



Chapter 3 Planning Long-term Care Insurance



As society changed and health advanced, through social insurance and its legislation, the social security system, under the principles of mutual help and risk-sharing, has been built to protect citizens from the individual or family economic crises due to birth, illness, injury, aging, death, and unemployment. Thereby, National Health Insurance, National Pension, and planning Long-Term Care Insurance are the three chapters described in Part 7.

# **Chapter 1 National Health Insurance**

### Section 1 Current Status of National Health Insurance

Since March 1995, when Taiwan implemented NHI, people have been able to breaking the reciprocal relationship between poverty and health. NHI quickly became the bedrock on which Taiwan's social safety net is built.

In order to make health care sustainable, in 2013 the government implemented second-generation NHI. Its visions -to raise quality, care for the disadvantaged, ensure sustainability, and serve as an international benchmark -were formulated with the objectives of guaranteeing universal health care and fair treatment. Reforms included linking financial revenues and expenditures, raising the financial burden of the government, strengthening care for disadvantaged groups, expanding citizen participation, introducing diverse payment mechanisms, and releasing medical treatment quality information, bed volume data, and financial statements of medical institutions. Inmates of correctional institutions were also added to the NHI system to ensure their right to health.

By the end of 2013, total enrollment in NHI was 23,462,863 persons, and the enrollment rate exceeded 99% of the population. Approximately 93% of the nation's medical care institutions were contracted by the National Health Insurance Administration (NHIA) to accept NHI, demonstrating the high accessibility of medical care.

The main sources of NHI's revenues are the premiums paid by the insured, their employers and the government. A small portion of revenues come from other sources, including Public Welfare Lottery Profits, Health and Welfare Surcharge of Tobacco Products, and overdue fine.

### Section 2 Convenient Access to Health Care Through Universal Coverage

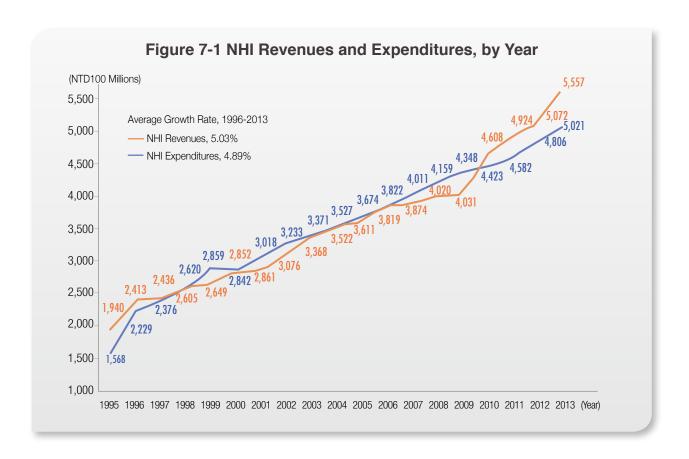
In 2013, there were 350.15 million outpatient visits and 3.13 million hospital admissions. Averages per person included 15.1 clinic visits and 0.14 hospital stays, and the average length of hospitalization was 1.3 days.

At the end of 2013, there were 26,824 NHI-contracted medical institutions, accounting for 93.46% of total medical care institutions. Insured persons could receive suitable care wherever they chose. While overseas if they required treatment for an emergency illness or injury, they also could qualify for either a partial or full reimbursement of accrued fees.

## Section 3 Improving Finances by Linking Revenues and Expenditures

Rising up of medical fees can be attributed to population aging, advancement of medical treatments and medicines, an increase in patients with major illness or injury, and demand for higher quality medical care. The impact of these fee hikes has been exacerbated by sluggish insurance revenue growth, attributed to the slow increases in payroll-related amounts that stagnant salaries in a weak economy bring. Aside from searching for new sources of revenue and cutting expense, the NHIA adjusted premium rates in 2002 and 2010. Despite of widespread opposition, the NHIA succeeded in improving NHI finances by eliminating the gap between revenues and expenditures. The government ensured that NHI would be sustainable, as shown in Figure 7-1.

The following reforms were implemented under second-generation NHI in order to maintain fair



distribution of the insurance premium burden while balancing finances through expansion of the premium base:

- Merger of the NHI Supervisory Committee and the NHI Medical Expenditure Negotiation Committee, which contributed to building a mechanism to link revenues and expenditures, thereby achieving financial balance.
- 2. Earnings outside of the insured payroll-related amount, such as large bonuses, salaries for parttime work, income from professional practice, stock earnings, interest earnings, and earnings from rentals, were subjected to supplementary insurance premiums. This was in line with the principle that premiums should be paid according to capacity.
- 3. For the group insurance applicant (employer), when the total amount of salary paid exceeds the insured payroll-related amount for that month, supplementary premium should be calculated

based on the difference. This ensured a fairer burden among employers.

4. The government's financial responsibility was increased through the stipulation that its insurance premium burden shall not be lower than 36%.

### Section 4 Promotion of Diverse Health Payment Methods

The NHI payment system primarily relies on feefor-service. Problems with this model include proliferation of unnecessary examinations, tests, medications, and surgeries, which not only cause excessive medical fee growth but also impact the quality of health care.

Since July 2002, the NHIA has used a global budget payment system. It has also begun to rely on payment micro strategies, such as case payments and pay-for-performance, in order to change diagnosis and treatment behaviors, thereby improving medical treatment service

quality. Other changes include more efficient use of medical treatment resources, which has kept treatment costs down, and implementation of the Taiwan Diagnosis Related Group (Tw-DRG) system on January 1, 2010.

Further advances were made starting July 1, 2011, with the launch of a pilot capitation payment system. This arrangement provides greater profits to hospitals and doctors that enhance health promotion, allowing patients to benefit from more holistic treatment and care services. By the end of December 2013, eight teams implementing this pilot system were caring for approximately 200,000 patients.

A pilot plan that began in 2014 seeks to build higher quality post-acute care models that spread across different departments. The scheme, which began by focusing on stroke patients, establishes individualized therapy plans to be conducted during the golden rehabilitation period. These seek to minimize loss of function so patients can return to their former way of life.

### Section 5 Disclosure of Information to Raise Quality

In order to improve medical treatment quality, the NHIA releases NHI treatment service information on its global website. Users have access to info on contracted medical institutions, treatment quality and payment ranges. Implementation of second-generation NHI led to the release of even more valuable treatment info that could help patients make informed medical choices. The public release of major infractions encouraged institutions that operate under the NHI system to further improve quality.

Patients also benefit from transparent information on the cost of self-pay medical devices. In 2014, the NHIA established a price comparison site that allows patients to check self-payment variations among different institutions for medical devices (such as drug-eluting stents, man made crystals with purported special functions, and ceramic joints), allowing them to protect their rights as consumers.

### Section 6 Care for the Disadvantaged and Remote Regions

#### 1. Subsidies for the Economically Disadvantaged

1) Besides offering premium subsidies to disadvantaged groups, relief fund loans, payment by installments, and charity donation referrals are used to ensure the right to treatment of economically disadvantaged patients. Assistance offered in 2013 is described in Table 7-1.

Table 7-1 NHI Premium Payment Assistance Measures, 2013

Item	Beneficiaries	Total Assisted	Total Contribution
Premium Subsidies	Disadvantaged groups that receive government insurance premium subsidies include low-income households, near-poor households, unemployed veterans, unemployed laborers and their families, disabled persons, unemployed indigenous people who are under the age of 20 or aged 55 or above.	2.88 million people	NTD23.1 billion
Relief Fund Loans	People who meet MOHW standards for facing economic difficulties	3,164 cases	NTD185 million
Payment by Installments	People unable to pay their premium arrears at one time	110,000 cases	NTD2.895 billion
Charity Donation Referrals	People unable to pay their premiums		NTD24.8 million

- 2) Medical Assistance for People with an Acute or a Severe Condition: Disadvantaged people in arrears on their premium payments and facing economic difficulty can receive support in subscribing to NHI when their doctor diagnoses them as in need of hospitalization or clinical services for an acute or a serious condition. The patient must provide a certificate of poverty issued by his or her village (town) chief or a hospital. In 2013, there were 2,508 cases of people receiving assistance under these conditions, with total contributions reaching NTD66.27 million.
- 3) Use of Feedback from Public Welfare Lottery for the Disadvantaged: Assistance provided in 2013 included payment of NHI premium arrears and fees associated with treatment. Help was provided more than 60,000 cases of people, with total assistance exceeding NTD450 million.

### Care for People in Remote Regions and Areas with Insufficient Medical Resources

- 1) Plan for Improving Health Care in Remote Regions via Integrated Delivery Systems: In November 1999 the NHIA launched this plan to solve problems associated with insufficient medical resources in mountainous regions and on outlying islands. Through 2013, 26 contracted medical institutions were participating in a total of 50 locations. They had served more than 430,000 people and achieved average overall satisfaction of 95%.
- 2) Plan for Improving Medical Treatment in Areas with Insufficient Resources: Implementation of this plan began in 2012 through the provision of a special budget and value guarantees. Regional hospitals located in or nearby areas with insufficient resources were encouraged to provide 24-hour emergency internal medicine, surgery, OB/GYN, pediatric and hospitalization services. Through 2013, a total of 66 hospitals were participating.

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

 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. Through the end of December 2013 approximately 980,000 such certificates were granted (covering more than 920,000 people, or about 3.94% of NHI beneficiaries). Fees associated with major illnesses and injuries were approximately NTD162.5 billion in 2013 (accounting for 27.58% of total health care expenditures).
- 2) From a legal standpoint, rare diseases are treated like major illnesses or injuries. Patients are eligible for a Major Illness/Injury Certificate, which exempts them from payment of expenses, and drugs designated by the MOHW as necessary for the treatment of rare diseases are fully covered by NHI. Through the end of December 2013, 9,096 rare disease patients obtained a certificate. Fees associated with rare diseases were approximately NTD2.904 billion in 2013, NTD2.623 billion of which was spent on drugs.

## Section 7 Using Technology to Raise Efficiency

In order to raise information operational efficiency, in 1997 the NHIA established a medical expenses data warehouse system, the first data warehouse system adopted by a government agency in Taiwan. The system, which is used for reporting and data analysis, is highly beneficial when making decisions, checking abnormalities and investigating data.

Another advance came with the establishment of a virtual private network when NHI IC cards were put online on January 1, 2004. The network not only allows two-way communication with contracted medical institutions but also facilitates pilot schemes and is used by 100% of contracted institutions for fee applications.

NHI IC cards store extensive information: besides records of major illness and injury, they indicate drug allergies and clinical records (including prescriptions, testing and examinations). Doctors use this information as a reference to improve patient safety. IC cardholders can also indicate their willingness to donate organs and register for hospice and palliative care along with do not resuscitate orders. If the insured is unconscious or unable to

communicate, family members can understand his or her wishes and allow for a dignified death.

In order to implement e-government policy and diversify services, in January 2006 the MOHW updated its network OS by building a multiple certificate authority online underwriting operation platform. Through the end of December 2013, 124,000 group insurance applicants had already used the system. Each month approximately 1.4 million online applications are made to change information, accounting for more than 70% of such changes.

In July 2013 the NHIA established a cloud-based NHI medication record system that physicians and pharmacists use to check patients' medication records. This prevents duplicate prescribing and administration of medicines, resulting in safer and better use while minimizing the risk of unfavorable drug interaction.

Also, to improve the general public's understanding of personal health and treatment conditions, the Health Deposit Book system is scheduled to be completed before the end of 2014. The system, which takes into account protection of personal information, convenience and treatment transparency, allows people to use their Citizen Digital Certificate to apply for data on NHI fee applications made in the past year for treatments received at contracted medical institutions.

Information available to help users improve personal health management capabilities includes date of visit, name of the medical institution, procedures, prescriptions, special materials, tests, examinations, co-payment amounts, and NHI payment points.

# **Chapter 2 National Pension (NP)**

Taiwan established NP on October 1, 2008, as a new form of social insurance. Citizens aged 25 or above and under 65 who are not participating in related social insurance for military, civil servants and teachers, laborers, and farmers, should participate in the NP. By providing basic economic safety for beneficiaries and their families once the insured person becomes old or faces maternity, disability or death, the NP system has become an indispensible part of the nation's social safety net.

### Section 1 Status of National Pension

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 protection. Highlights in 2013 were as follows:

#### 1. Insured:

There were 3,677,601 insured persons in December 2013 (see Table 7-2).

Table 7-2 NP Insured Persons, December 2013

Classification	Insured Persons	Ratio (%)
General Insured Persons	3,180,002	86.47
Low-income Household	76,420	2.08
Persons with Severe or Extremely Severe Disability	100,335	2.73
Persons with Medium Disability	78,657	2.14
Persons with Mild Disability	67,400	1.83
Income Under 1.5-fold minimum cost of living	123,093	3.35
Income Under 2-fold minimum cost of liing	51,694	1.41
Total	3,677,601	100

#### 2. The premium rate was 7.5%.

#### 3. Insurance Burden:

In principle, the government should pay 40% (NTD518 monthly) of NP insurance fees. For insured persons whose income does not reach a designated threshold or who are disabled, the government's share is increased to 55% (NTD713) or 70% (NTD907). For low-income households and people with a severe or greater disability, the government's extremely is 100% (NTD1,296).

#### 4. Monthly Insurance Amount:

According to the "National Pension Act," the NP's monthly insurance amount shall be adjusted in accordance with the consumer price index (CPI). The CPI reported by the Directorate-General of Budget, Accounting and Statistics in 2013 did not reach the threshold required for an adjustment, so the monthly insurance amount remained at NTD17,280.

#### 5. Premium payment rate by the Insured:

From the start of NP (October 2008) to December 2013, the total premiums receivable by insured persons was NTD161.01 billion. Through March 11, 2014, NTD91.17 billion of this amount had been paid out, or 56.63% of accumulated payments.

#### 6. Benefits

- Insurance Benefits: include old age pension payments, maternity payments, disability pension payments, funeral payments and surviving family pension payments.
- Other Benefits: Old age basic guaranteed pension payments, disability basic guaranteed pension payments and aboriginal pension payments.
- 3) NP benefits paid in 2013 are described in Table 7-3.

### 7. Financial Status of the National Pension Insurance Fund:

Through the end of 2013, the accumulated value of the fund was NTD171,630,456,775. Investments and earnings are described in Table 7-4.

Table 7-3 NP Benefit Recipients and Payment Amounts, 2013

	Payment Type	Recipients	2013 Payment Amounts (NTD)
	Old Age Pension Payments	466,600	18,171,100,916
	Maternity Payments	17,606	311,921,280
Insurance	Disability Pension Payments	4,935	215,248,026
Payments	Funeral Payments	18,328	1,583,625,600
	Surviving Family Pension Payments	46,793	1,973,136,883
	Subtotal	554,262	22,255,032,705
	Old Age Basic Guaranteed Pension Payments	764,476	33,074,562,302
Other Payments	Disability Basic Guaranteed Pension Payments	21,762	1,305,985,461
	Aboriginal Pension Payments	33,099	1,366,138,288
	Subtotal	819,337	35,746,686,051
Total		1,373,599	58,001,718,756

Note: Recipients of lump sum payments are accumulated over the course of the year. Data for yearly pension payment recipients are accumulated till the end of the year.

Table 7-4 Investments and Earnings of the National Pension Insurance Fund, as of December 2013

Investment	Amount (NTD, End of December 2013)	%	Accumulated Earnings, Current Fiscal Year (NTD)	Annual Earnings Rate (%)
I. Domestic Operations	122,451,068,856	72.09	5,876,908,177	5.43
Cash Equivalents	47,901,451,899	28.19	432,930,892	0.89
Bank Deposits	47,351,451,899	27.87	424,902,180	0.89
Demand Deposits	1,232,351,899	0.73	8,281,702	0.66
Time Deposits	46,119,100,000	27.14	416,620,478	0.90
Short-term Instruments	550,000,000	0.32	8,028,712	0.79
Equity Securities	64,649,616,957	38.07	5,264,288,613	10.23
In-house Management	37,290,095,193	21.96	3,409,087,812	11.72
Mandated Management	27,359,521,764	16.11	1,855,200,801	8.30
Debt Securities	9,900,000,000	5.83	179,688,672	2.16
Corporate Bonds	2,300,000,000	1.35	54,063,463	2.60
Bank Debentures	7,600,000,000	4.48	125,625,209	2.02
II. Foreign Operations	47,377,203,271	27.91	237,080,167	0.56
Cash Equivalents	3,271,095,785	1.93	196,854,040	3.71
Debt Securities (In-house Management)	44,106,107,486	25.98	40,226,127	0.11
Foreign Negotiable Securities	18,397,971,656	10.83	31,669,559	0.32
Bond Fund	25,708,135,830	15.15	8,556,568	0.03
Subtotal	169,828,272,127	100.00	6,113,988,344	
Subtotal (Weighted)				4.06

### Section 2 Legal Reform

Numerous reforms were conducted in order to make NP fairer and more rational. Highlights are described in Table 7-5:

The Executive Yuan established a special reform group force to improve the public pension system

through reforms that adhere to the concepts of financial stability, social fairness, generational inclusion, and pragmatism. The MOHW will continue to operate in accordance with the Executive Yuan's policy instruction and gather a wide range of opinions to be considered when amending the "National Pension Act."

Table 7-5 Major Revisions to the National Pension Act

Amended Date	Amended Articles	Main Amended Objectives			
Aug.13, 2008	Amended Articles 6, 7, 30-32; deleted Articles 52, 54; enforced since October 1, 2008	Ensured the original rights of farmers by separating their insurance from National Pension Insurance. Eased the deadline for retired laborers to participate in National Pension Insurance.			
Jun. 29, 2011	Amended Articles 1, 2, 6, 7, 12 – 14, 30 – 32, 34, 40, 42, 50, 53, 59; changed the name of Section 2, Chapter 4; added Articles 13-1, 18-1, and 32-1	Strengthened protection of the disadvantaged and improved the overa pension system including: expansion of the range of people covered, revision of premium collection and insurance period calculation rule, eased requirements for receipt of guaranteed basic pension, added maternity payments and conditional elimination of joint responsibility for fines for spouses.			
Dec. 21, 2011	Added Article 54-1	A mechanism was created that linked the monthly insurance amount to the rate of consumer price index growth. This ensured that pension payments were sufficient to guarantee basic economic security when costs of goods rise.			
Dec. 26, 2012	Amended Article 31	Requirements for receipt of payment were eased for the old age basis guaranteed pension payment, the disabled basic guaranteed pension payment, and aboriginal payments in response to annual adjustment to current land value. Those who lost qualification due to adjustments to current land value prequalified starting from January 2012.			
Jan. 8, 2014	Amended Article 55	To prevent NP payments from becoming the object of mortgage or compulsory execution, thereby affecting basic economic security of the payments recipients, payments recipients under this Act are eligible for opening a specific account in a financial institution with the proving documents provided by the insurer. The specific account is only for depositing payments, and the deposit in the specific account shall not be the objects of offset, mortgage, guarantee or compulsory execution in order. To strengthen the function of the National Pension Insurance to ensure the basic eonomic safety for recipients.			

# **Chapter 3 Planning Long-term Care Insurance**

### Section 1 Planning Evolution and Major Pointse

Evolution of LTC insurance planning is described in Table 7-6. Major tasks associated with LTC insurance are described in Figure 7-2.

### Section 2 Planning Mechanisms and Content

1. Planning objectives and principles are described in Table 7-7.

#### 2. Planning Content

- The statistical and empirical foundation needed for LTC insurance planning was obtained by National LTC Need Survey.
   Survey phase 1 in 2010, involved randomized 350,000 people aged 5 years and over, interviewed face-to-face. It resulted that the disability rate aged 5 years and over was 2.98%.
- 2) From April to September 2011, Survey phase 2 involved 10,000 persons from phase 1 who were evaluated with LTC needs, and their primary caregivers. Using the draft Multidimensional Assessment Instrument (MDAI), evaluated their LTC needs, primary caregiver's problems and LTC resources they need.

### **Table 7-6 Evolution of LTC Insurance Plannin**

Timeframe	Event
2008	During his presidential election campaign, Ma Ying-jeou proposed starting LTC insurance.
May. 2008	The Premier's Administrative Report issued by then-Premier Liu Chao-shiuan announced: "Due to rapid growth in LTC needs that will arise in the future, the government will promote legislation of an LTC insurance system that can reduce the public's burden and foster a healthy, happy environment for the aged." Officials from the Council for Economic Planning and Development then met with representatives of the Ministry of the Interior and the Department of Health to conduct preliminary planning.
Jul. 2009	Acting in accordance with an Executive Yuan request, the Department of Health established the Long-term Care Insurance Preparatory Task Force. The task force formally accepted responsibility for follow-up planning and preparations.
2011	The second vision of Taiwan's "Golden Decade – National Vision" plan called for building a just society. Part of this vision was caring for the young and old, and one of its administrative objectives was to promote LTC insurance.
Jul. 23, 2013	Upon formal establishment of the MOHW, planning of LTC insurance was assigned to the Department of Social Insurance. The department continued conducting system planning and related legislative tasks.

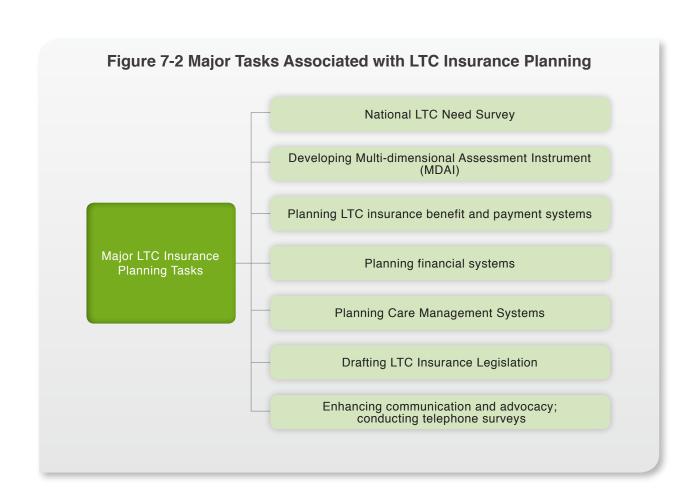


Table 7-7 LTC Insurance Planning Objectives and Principles

Planning Objectives	<ol> <li>Build a comprehensive LTC system for an aging society</li> <li>Rely on social joint assistance to spread LTC financial risks</li> <li>Boost LTC service resource development while raising accessibility</li> <li>Maintain and advance the independent, autonomous lifestyle of people with functional disabilities</li> </ol>
Planning Principles	<ol> <li>Use social insurance techniques to provide basic LTC services</li> <li>Implement mandatory participation in LTC insurance for all citizens</li> <li>Adopt a single insurance system and achieve joint assistance through universal coverage. In order to maximize economic effects of administrative resources, the NHIA will take responsibility for operations of LTCI</li> <li>Build a financial system that is independent and autonomous, fair and efficient</li> <li>Base insured person categories, insurance amount, and insurance fee responsibilities on the "National Health Insurance Act"</li> <li>Plan reasonable insurance benefits and focus on provision of services</li> <li>The insurer shall select good quality of providers for providing services, and ensure the quality of services.</li> </ol>

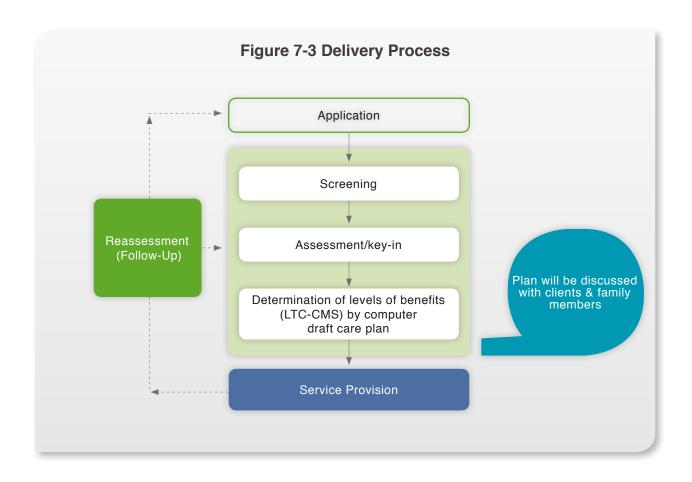
- 2) Development of the Multi-dimensioned Assessment Instrument (MDAI) for Assessing LTC Insurance
  - a. A variety of forms, developed to serve as assessment tools for the provision of LTC insurance, can be used to determine the levels of benefit and payment. Six dimensions of MDAI: 1. Activities of daily living and instrumental activities of daily living; 2. Communication; 3. Health conditions and special & complex care; 4. Cognitive, mental & behavior problem; 5. Environmental and social participation; and 6. Caregiver burden.
  - b. Testing and modification of the MDAI and control handbooks ensured suitability for different population. The 2012 focus was on mental disorders, intellectual disabilities and dementia. The 2013 focus was on patients in need of physical therapy and occupational therapy.
- 3) Planning LTC Insurance Benefits and Payment Systems
  - a. Benefits systems: Since 2011, empirical data such as functional status and long-term

- care service utilization have been gathered on various categories of patients suffering from functional loss (including patients with general aging issues, disabilities, mental disorders, respirator dependency, rare diseases, and dementia). Those examined received home care services, home nursing, community services, or institutional residential services, etc. Analysis of the data contributes to the report of the Long-Term Care Case-Mix System (LTC-CMS) first version preliminary draft, completed at the end of 2013, which can serve as a reference when setting future LTC insurance benefit standards.
- b. Payment systems: Planning of LTC insurance payment systems is based on the items and unit of benefit. For home services, community services, and institutional residential services, payments are assessed on a case-by-case basis. For assistive devices, payments are assessed by item on a day-by-day basis.
- 4) Planning LTC Insurance Financial systems

LTC insurance fees are shared by the government, employer and insured person, with the government responsible for at least 36% of total fees. The distribution is similar to standards contained in the "National Health Insurance Act." Several mechanisms were introduced to ensure responsible LTC insurance finances. Besides adopting an instrument to link revenues and expenses, an LTC insurance committee must review proposals for balancing finances and

payment scope before the competent authority announces implementation. A formula was established to adjust premium rate every three years to ensure actuarial balance over a 25-year valuation period, and reserve funds are sufficient to last at least eight months.

5) Planning an LTC Insurance Care Management Systems: Delivery Process is described in Figure 7-3.



# Section 3 Enacting Legislation and Advocacy

#### 1. Enacting Legislation

As the MOHW plans implementation of an LTC service network, it is also undertaking the legislation needed to underpin it. One step is promulgation of an LTC service act that will strengthen the popularization and manpower

needed to ensure quality and integrate related workers and resources. These changes are building the foundation needed to introduce LTC insurance at the same time that the MOHW is formulating an LTC insurance draft act. Implementation will depend on the scale of LTC service integration, government finances, the degree of population aging, and social consensus.

#### 2. Advocacy

- Advocacy Content, Methods and Target Audiences: The current focus is on LTC insurance planning and discussion. Besides widespread communication and opinion gathering, advocacy was increasing awareness and support of LTC insurance among the general public. Details are described in Table 7-8.
- 2) Telephone Survey Results: In order to understand the general public's views toward introducing LTC insurance and expectations toward premiums, 13 telephone surveys were conducted between March 2010 and December 2013. The surveys targeted residents of the Taiwan area (including Kinmen and Matsu) who were at least 20 years old. Results are described in Table 7-9.

Table 7-8 Current Advocacy Content, Methods and Target Audiences for LTC Insurance

Content	Advocating social insurance concepts while expressing the necessity, planning directions and principles of LTC insurance. Discussed LTC insurance finances, system and payments/benefits.
Methods	Conducting conferences, seminars and telephone opinion surveys to gather opinions.
Target Audiences	General citizens, experts and related organizations (such LTC, social welfare, and social service providers).

**Table 7-9 LTC Insurance Telephone Survey Results** 

Торіс	Survey Results		
Citizens' view of the government planning an LTC insurance system	More than 70% of respondents approved of the government planning an LTC insurance system		
Citizens' view of the government planning an LTC insurance system, by age group	The four latest surveys all suggested that more than 70% of respondents in each age group approve of the government planning an LTC insurance system		
Citizens' view of the government's timetable for LTC insurance planning	The number one response, at approximately 40%, was "the sooner the better." It was followed by "within two years," expressed by 20% of respondents. "Three or four years" and "later than four years" were each favored by between 8% and 12% of respondents.		
Monthly premiums citizens were willing to pay, expressed as a percentage of NHI premiums	The following opinions from the premiums respondents said that they were willing to pay for LTC insurance, expressed as a fraction of NHI premiums.    Respondents   Premium Tolerance		
Citizens' view of family caregivers receiving care allowances	If the government introduced LTC insurance, a portion of patients were willing to be cared by family members instead of workers dispatched to their home by the insurer. The approval rate for offering allowances to such family caregivers was between 66% and 71% while the disapproval rate was between 19% and 23%.		



- 92 Chapter 1 Children and Youths Welfare
- 94 Chapter 2 Welfare for Women and Family Support
- 96 Chapter 3 Welfare for the Elderly
- 98 Chapter 4 Welfare for the Disabled



Social and Family Affairs Administration(SFAA), Ministry of Health and Welfare was established on July23,2013. The primary focus of SFAA is on planning and promoting welfare services policy in relating to women welfare, child and youth welfare, senior welfare, and welfare for the disabled. By combining household and community resources, the SFAA provides appropriate care for disadvantaged groups.

# **Chapter 1 Children and Youths Welfare**

At the end of 2013, children and youths population in Taiwan was 4,258,385, account for 18.22% of total population. Faceing the challenge of fewer children, now in the 2013 Population Policy White Paper, the Administration cooperated with related departments to promote friendly environments and policies to support children youths (see Figure 8-1).

In response to changes on the society and household, an amendment to "The Protection of Children and Youths Welfare and Rights Act," promulgated on November 30, 2011, increased the articles in the act from 75 to 118. The significant change was to give equal stress on welfare and rights. In recent years, additional changes have sought to more closely align the act with the needs of children and youths. Further progress arrived on June 4, 2014, by presidential decree, the "Act to Implement the Convention on the Rights of the Child" was announced. Which provided a legal basis to coordinate related agencies in reporting and reviewing on the measures they adopted which support the rights of the child.

### Section 1 Welfare for Children and Youths

 Parenting Allowances for Unemployed Parents with Children Aged 0-2

These allowances, were monthly subsidies of NTD2,500 to NTD5,000 for either one or two parents who were unable to work due to child-rearing needs. In 2013, 254,331 children benefitted from these allowances to receive a total of NTD5,255,000,000.

### 2. Emergency Living Assistance for Children and Youths from Disadvantaged Families

For families with children which facing hardship, or at high risk, or dealing with economic difficulties, monthly emergency living assistance payments of NTD3,000 per person were available. These helped disadvantaged families get through economic crises. In 2013, the payments assisted 9,028 families, including 15,476 children and youths. Additionally, 37,153 visitations were made, counseling was provided to 1,046 people of high-risk families, and 639 children entered into protective services.

#### NHI Subsidies for Children and Youths from Midto-low Income Families

SFAA guaranteed the right to NHI resources for this population. In 2013, the subsidies were furnished 2,299,272 times for people total NTD1,246,622,646.

4. Medical Subsidies for Children Under 3 Years Old Subsidies were available to cover co-payment fees of outpatient and hospitalization services for children under 3 years old. In 2013, these subsidies, of total NTD1,808,056,343, allowed treatment for 12,530,311 cases.

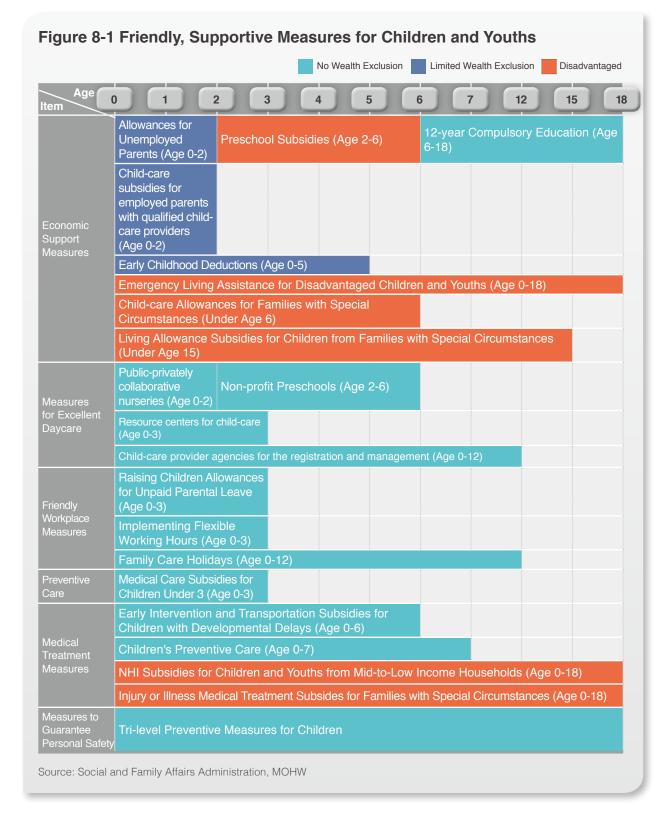
### Section 2 Maintaining the Rights of Children and Youths

 Meetings to Discuss the Welfare and Rights of Children and Youths

Established an MOHW promotional team for the welfare and rights of children and youths. The team holds a meeting every six months to discuss, research, deliberate and inquire on welfare policies. In 2014, Executive Yuan promotional team was also established in order to raise the policymaking level.

Promotion of a on Safety Plan for Children and Youths to Foster Mechanisms for Prevention of Accident and Injury

Drafting of the Children and Youths Safety Implementation Plan integrated resources from several agencies to promote eight major safety



projects. Promotional Team for Children and Youths Injury Prevention, was also established to hold meetings which met every six months for a Children and Youths injury prevention coordination.

Empowering Children and Youths to Boost Development and Social Participation

In combination with private organizations, a plan launched to empower children and youths

representatives gave greater free expression to this important segment of the population. Also, in response to the United Nations designating October 11 as "International Day of the Girl Child," Taiwan named October 11 "Taiwan Girls' Day." as well. To actively accelerate resources that foster social support environments for girls.

### Section 3 Placement Services

#### 1. Promotion of Institutional Placement Services

- 1) Guidance to institutions specializing in placement and education of children and youths. In 2013, 126 institutions were established, and 3,542 of 4,985 individuals approved for placement were actually placed, for a placement rate of 71%.
- Created a budget to subsidize professional service fees, facilities and equipment costs, and welfare charges accrued by institutions. Subsidies in 2013 totaled NTD55,647,000.
- 2. Accreditation of Institutions Specializing in Placement and Education of Children and Youths Accreditation of institutions takes place once every three years. In 2013, there were 109 institutions evaluated that had previously undergone by Taipei City in 2011 and central government evaluations in 2012. That 32 rated outstanding, 55 as excellent, 18 as good and 4 as fair.

#### 3. Promoting Foster Care Services

Guided local governments on commissioning private children and youths welfare groups to conduct foster care services. Until December 2013, there were 1,275 households registered to serve as foster care families, 251 reserve foster care families, and 1,804 children and youths received foster care.

# Chapter 2 Welfare for Women and Family Support

#### Section 1 Women's Welfare

At the end of 2013, there were 11,688,843 women in

Taiwan, accounting for 50.01% of total population. Government sought to empower these women through several plans, as follows:

- 1. Supportive services that sought to boost women's welfare and empowerment were offered in combination with private organizations. These measures not only raised women's capabilities but also created more opportunities for fair development which were offered 15,050 times in 2013.
- Strengthened functions of 19 women's welfare service centers across counties. By linking government and private resources, the centers better provided diversified community-based and comprehensive women's welfare and rights services.
- 3. Taiwan Women's Center was established to serve as a platform for popularizing women's welfare, women's rights and gender mainstreaming. The center also increases interaction between women's organizations (both domestic and foreign) and public and private agencies. In 2013, there were 11,542 visitors to the center and 62 organizations used its premises (a total of 286 times). Domestic organizations and foreigners figures visited on in 64 occasions (with total visitor numbers reaching 1,129), and the online traffic exceeded 740,000 times.
- 4. Advanced the women's dream pavilion by subsidizing establishment of pavilions by the New Taipei City and Pingtung County governments in 2013. The pavilions served as a platform for empowering women's groups and cultivating exchanges between different groups. Besides, it encouraged women to participate in social and public affairs, to host exhibitions and foster localized women empowerment mechanisms and operation models.

### Section 2 Services for Disadvantaged Families

 Welfare Services for Single-parent and Foreignspouse Families In 2013, SFAA provided supporting programs for 187 single-parent families and 108 foreign-spouse families. Furthermore, we also established 38 service centers for single-parent families, 35 service centers for foreign-spouse families and 92 community service offices nationwide.

### Community Care Services for Children and Youths from Disadvantaged Families

SFAA instituted and published "Promoting the communal care service programs for the children and youth in disadvantaged families", and subsidized 106 programs for managing home visits, community promotion, after-school care and parenting education in 2013.

### 3. Intervention Services for Children and Youths in High-risk Families

"The implementation plan about promoting the care and assistance for high-risk families" was established to take charge of screening, referral and care systems for high-risk families. We subsidized 226 social workers who had provided screening and visiting 31,513 families and aided 24,226 families.

### Section 3 Daycare and Early Intervention Services

#### 1. Services for Families with Daycare Needs

 Child-care subsidies for employed parents with qualified child-care providers. For both parents (or guardians) or the single parents who could not care for the young children (aged between 0-2) due to employment which can receive subsidies between NTD2,000 to NTD5,000 to alleviate their burdens of raising children. In 2013, 55,331 children benefited from a total of NTD964,406,000 from subsidies.

#### 2) Daycare Services

- a. In-home Daycare Services: In 2013, 34,199 child-care providers who joined 66 Childcare provider agencies for the registration and management nationwide cared for 49,296 children.
- b. Nursery Services: In 2013, there were 553 legally registered nurseries that were caring for 11,362 children.

c. Community-based Family Support Services: At the end of 2013 there were 46 public-privately collaborative nurseries opened and were caring for 2,275 children. There were also 53 resource centers for child-care opened and provided services for 700,000 times.

### 2. Early Intervention Services for Families with Developmental Retardation in Children

- 1) Subsidized Intervention Fees and Home Intervention Services: In 2013, 23,696 children with developmental retardation received a total of NTD79,081,000 in intervention and transportation fee subsidies. In addition, we offered subsidies and home-intervention services for 1,777 developmentally retarded children whose caregivers were incapable of providing care or who lived in areas with insufficient intervention resources.
- 2) Services by Communal Intervention offices: In order to enter areas with deficient resources to offer intervention services, we integrate professionals in the health and social welfare administrative fields to promote communitybased interventions services.

# Section 4 Services for Families with Special Needs

### 1. Children and Youth Adoption Service Providers

Apart from cases involving family and stepfamily relations, those who seeking to adopt must connect with approved children and youth adoption service providers or associations. At the end of 2013, there were nine adoption service providers (with 13 service locations).

#### 2. Assistance for Families in Hardship

For families encountering special circumstances, we provide emergency living aids, children living allowance, the subsidy for child care, medical aid for injuries and diseases, legal proceeding aid, children's education aid, and grant for startup loans, as well as a number of other supporting measures. In 2013, 19,169 families benefited 148,979 times with total monetary contributions exceeding NTD427,840,000.

#### 3. Custody Rights

Local governments dispatch social workers to conduct interviews and assessments when custody disputes arise due to divorce and issue recommendation reports to the court hearing the custody case. In 2013, there were 10,907 cases in courts.

#### 4. Support Services for Teen Pregnancies

Through the establishment of the "National Teen Pregnancy Consulting Hotline" (0800-257-085) and the "Teen Pregnancy Help Website" (http://www/257085.org.tw), we build the comprehensive service system about pregnancy preventions, interventions, and the subsequent counseling for under-age adolescents.

# **Chapter 3 Welfare for the Elderly**

## Section 1 Economic Security for the Elderly

- The monthly living allowance of NTD3,600 or NTD7,200 is offered to guarantee the economic security and basic lifestyle of mid-to-low income elderly people. In 2013, 120,410 elderly people received more than NTD9,248,230,000.
- The monthly special care allowance of NTD5,000 is offered to mid-to-low income people who has to sacrifice employment to care for an elderly family member. In 2013, 9,152 allowances of NTD45,860,000 were provided.
- 3. In order to help the elderly transform their home and land into monthly cash payments, a pilot program of reverse mortgage mechanism (which allows the elderly to convert home equity into cash) was launched on March 1, 2013, and scheduled to end on December 31, 2017.

### Section 2 Elderly Health Maintenance

1. NHI premiums are fully subsidized for mid-to-low income elderly people aged 70 and above. In 2013, 79,572 people benefitted from this measure.

 The daily subsidy of NTD1,800, with an annual limit of NTD216,000, is offered to pay inpatient and nursing fees of seriously ill mid-to-low income elderly people who are in the care of MOHW-commissioned placement institutions. In 2013, four institutions received these subsidies.

### Section 3 Elderly Lifestyle Care

Rapid aging population makes it more critical that people with functional loss receive the continuing care they need. Besides, guidance also provided to local governments on the provision of homebased, community-based and institutional services, in 2013, the following measures were taken to help elderly people.

- 1. In recognition of contributions Dr. George Mackay made to the poor in Taiwan, discounted public transit was approved for foreigners with an Alien Permanent Resident Certificate who showed long-term dedication or made special contributions toward Taiwan, which lived in Taiwan for at least 20 years. Until the end of 2013, a total of 209 senior foreign nationals had applied and qualified for this benefit.
- 2. Added attention toward the elderly living alone included lifestyle care services, visits conducted by private organizations, creation of a specialized safety network, and provision of 24-hour emergency assistance services. Also, establishment of a center for tracking missing elderly people helped to reunite families. Through the center's efforts from October 2011 to the end of 2013, it located 1,151 elderly people out of 2,000 reported to it as missing.
- 3. Subsidies were provided to establish a private elderly consultation service center that operates a hotline for the elderly as 0800-228585 which solve. variety of questions of elderly. The hotline handles about 600 calls per month on average.
- 4. Through a combination of cross-departmental resources and the gathering of local governments, experts and private organizations,

SFAA plans second phase program for friendly care services for the elderly which focused on the needs of the more than 2 million domestic elderly people who were either healthy or in suboptimal health, targeted on healthy aging, aging in place, intelligent aging, energetic aging and vigorous aging. It included 84 action measures to satisfy comprehensive needs of elderly people.

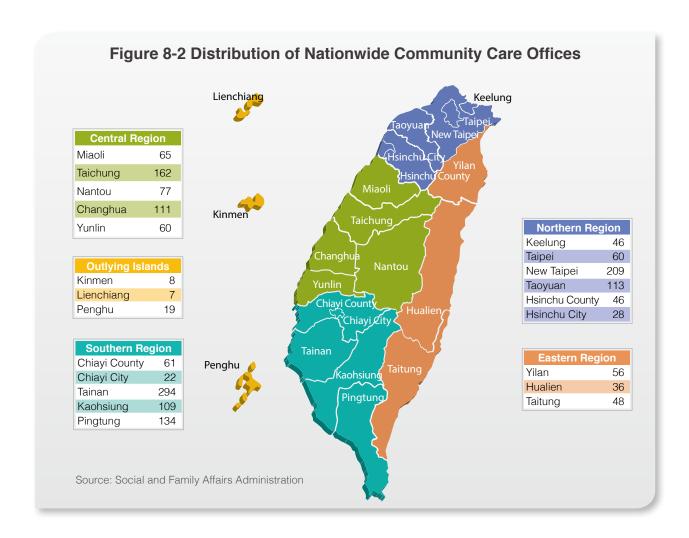
5. Institutional Care: In 2013, there were 1,035 elderly welfare institutions with a total capacity of 57,675 and enrollment of 43,499 people. For areas with insufficient resources, subsidies were offered to private organizations to establish elderly welfare institutions. For other areas, the focus was on assisting institutions to raise service quality. Other steps taken by the central competent authority to improve quality included urging local governments to enhance guidance and inspections of elderly

welfare institutions and conducting of regular accreditation. In 2013, funding of NTD19,879,000 was budgeted to subsidize institutional service fees, facility and equipment costs, and educational and training fees.

### Section 4 Elderly Social Participation

The following measures were implemented to encourage elderly people to go out of their homes and participate in leisure activities.

 Local governments, cooperate with community organizations to establish community care offices across the nation. At the end of 2013, there were 1,852 offices (see Figure 8-2) staffed by local volunteers who provided care visits, care calls, consultations and referral services, dining services and health promotion activities and they have served more than 200,000 people.



- 2. In addition to senior citizen schools, learning courses for retirees at retirement age and senior welfare activities were provided, elderly people also benefitted from discounts on public transit, health and leisure centers, and admissions into cultural and educational facilities. Elderly people were also encouraged to participate in more outdoor activities to promote physical health. In 2013, a total of 413,772 elderly people benefitted from the schools and activities with subsidies provided.
- 3. Subsidies were provided to purchase of 18 multi-functional tour care buses for 16 cities and counties. Local governments offered regular mobile tour services to the elderly in conjunction with private organizations, not only helping the elderly to reach welfare services and health consultations but also leisure, culture and entertainment activities. In each city and county, there were 23-24 of these tour services took place each month with average attendance of 1,100-1,200 people.
- 4. A special show on Senior Citizens' Day to perform the themes of "recollection of love" and "comeback of the classics", which was held on October 6 celebratory event to feature a nationwide competition giving elderly people chances to demonstrate their energy and talents. The creativity and understanding of inter-generational cooperation has increased shared awareness and tradition between people of in different generations age groups.

# **Chapter 4 Welfare for the Disabled**

### Section 1 Identification of the Disabled and Needs Evaluations

The quantity of people with disabilities continues to rise to 1,125,113 people till the end of 2013, accounting for 4.81% of the total population.

1. A new mechanism for identifying people

- with disabilities and evaluating their needs formally began on July 11, 2012. Professional teams conducted assessments and need evaluations and offered personalized, diverse welfare services were offered through a single channel.
- 2. In 2013, 241,935 people applied for disability identification and 203,363 people were granted disability identification as well as 200,349 people underwent needs evaluations.

### Section 2 Economic Security for the Disabled

- In order to ensure economic security of people with disabilities, the disabled with qualifyed household income and properties can receive monthly life subsidies of NTD3,500, NTD4,700 or NTD8,200.
- 2. Life subsidies of NTD20,428,200,000 were offered in 2013 to people with disabilities (benefitting 348,316 people). Day care and residential care subsidies of NTD6,482,350,000 (benefitting 36,520 people)were offered as well.

### Section 3 Daily living Care for the Disabled

- Services offered to people with disabilities include home care, support for independent life, daily living reconstruction, day care, housing in community, rehabilitation buses, home-based care services, temporary and respite care, household care visits, and support for caregivers.
- 2. In 2013, community care services had a total of NTD1,884,460,000 to offer benefits to disabled for 7,395,320 times. There were 88 community housing service locations, 83 community day care service locations, 81 home-based care service locations, and 1,332 rehabilitation buses operating nationwide.

Section 4 Integration of Assistive Device Resources and Services for the Disabled

- SFAA Conducted a nationwide joint meetings to facilitate integration of assistive device resources and services for the disabled which further enhanced progress through establishment of Resource Portal of Assistive Device Technology.
- 2. Commissioned establishment of three central government-level assistive device promotion centers and assisted local governments in establishing local assistive device resource centers. The centers offered professional consultations, evaluations, education and training, exhibitions, maintenance and promotional activities.
- 3. Amendment to the appendix table for Article 5 of "regulations for subsidizing fees and medical assistive devices associated with treatment and rehabilitation for the disabled" by adding continuous positive airway pressure as a subsidized item.
- 4. From July 2012 to the end of 2013, 7,520 medical assistive device subsidies with a total of NTD46,470,000 provided. Also, in 2013, 70,564 subsidies with total NTD678,220,000 were provided for living assistive devices.

# Section 5 Assisting Welfare Institutions for People with Disabilities

- Trainings are provided to welfare service providers who specialize in assisting the disabled. Subsidies foster training for support service providers who offer in-home care, day care and residential care. A specialized professional social worker training program improves professional capabilities and skills of social workers in different specialties and at different service levels.
- 2. SFAA urged local governments to strengthen

assistance and audits on institutions. Each quarter, local governments must report results of institutional guidance and review to the MOHW, and regular institutional accreditation is also required. In order to ensure the service quality and protect the rights and interests of disabled, an amendment to the "People with Disabilities Rights Protection Act" strengthened the exit mechanism for institutions that disqualified in accreditation evaluations, thus making competent authorities and institutions being responsible for investigating qualifications of workers (including operation managers) prior to hiring, and the regulations and requirements of workers in order to ensure service quality.

### Section 6 Social Participation of the Disabled

- Funding is offered to private organizations to manage leisure, entertainment, trainings, and other activities for the disabled. These subsidies can also be used to add or enhance websites and facilities and equipments for use.
- Before Mid-Autumn Festival, the general public and enterprises were encouraged to purchase festival-related goods produced by disabled welfare organizations.
- Activities held in conjunction with International Day of Persons with Disabilities included a special awards ceremony to present Golden Eagle awards to commend disabled.
- 4. Subsidies were offered to conduct guide dog training and advocacy programs.
- 5. Special license and plates to disabled people allowed them to use disabled parking lots.
- 6. Discounts on tickets were available for disabled to use public transit and enter scenic areas, recreation spots, and cultural or educational facilities.



# **Social Assistance and Social Work**

- 101 Chapter 1 Emergency Assistance for (Middle) Low Income Households
- 103 Chapter 2 Assistance for the Homeless
- 104 Chapter 3 Disaster Assistance
- 105 Chapter 4 Social Work
- 106 Chapter 5 Welfare Resources Network

Upon establishment of the MOHW on July 23, 2013, the Department of Social Assistance and Social Work began to streamline the various governing bodies among social assistance, disaster aid and emergency aid with the vision of community-based social service delivery system. The policy goal is to ensure economic security of disadvantaged citizens through an integrated resource network and a comprehensive social safety net.

# Chapter 1 Emergency Aid for Low Income Households

### Section 1 General Description

In order to include the near-poor households, an amendment to the "Social Assistance Act" was

passed on December 29, 2010, by lifting the poverty line and loosing the qualification in the review procedure. As a result, a new category of mid-to-low income households is created within the system. Since the implementation of the amended Social Assistance Act on July 1, 2011, city and county governments had approved 696,156 disadvantaged people from 148,590 low-income households (361,765 people)and 108,589 mid-to-low income households (334,391 people) in total at the end of 2013. This represented an increase of 142,742 households (adding 420,028 people, 152% increase) compared to June 2011 (see Figure 9-1).

The amended Social Assistance Act has shifted overly line from the average rate of expenditure per person to the median rate of expenditure per person (the central and municipal competent

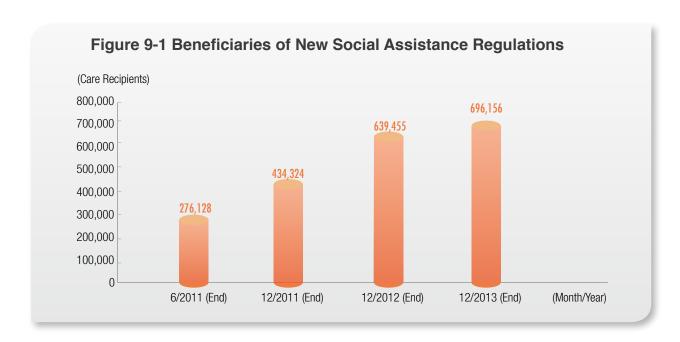


Table 9-1 Lowest Living Indexes Over the Past Four Years

(NTD)

Location	Taiwan	Toinoi	Vachaiuna	New Toinei City	Taichung	Toinen	Fujian Province	
Year	Province	Taipei	Kaohsiung	New Taipei City	Taichung	Tainan	Kinmen	Lienchi
2010	9,829	14,614	11,309	10,792			7,40	00
2011 (Jan. – Jun.)	9,829	14,794	10,033	10,792	9,945	9,829	7,920	
2011 (Jul. – Dec.)	10,244	14,794	11,146	11,832	10,303	10,244	8,79	98
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	8,79	98

authorities used standards announced by the central department of budget, accounting and statistics for each jurisdiction to determine the median rate of expenditure per person in the past year) as the base to determine poverty line. The poverty line is to be adjusted when the difference between the amount of the index calculated in the past year and the amount of the existing index is more than 5% (See Table 9-1 for the lowest living indexes of the past four years).

### Section 2 Income Support

Social assistance program offered by local governments currently is composed of three parts: family living support, student living support and children living support subsidies to low-income households. Additional measures are available for different welfare groups. According to Article 12 of the "Social assistance Act," members of low-income households who are elderly, pregnant over three months or longer, or disabled, can qualify for an additional subsidy from the competent authority that is no more than 40% of the original amount in cash. In order to prevent excessive welfare payments affecting a recipient's willingness to work, Article 8 of the Act states that the total amount of assistance granted by the government to each person per month shall not exceed the minimum wage of the current year. Highlights of key living support measures provided to low-income households in 2013 are illustrated in Table 9-2.

#### Section 3 Medical Subsidies

According to Articles 18 and 19 of the "Social

Assistance Act," medical subsidies offered to low-income households and mid-to-low income households include the following:

- 1. NHI Premium Subsidies: Following an amendment to the "Social assistance Act" announced on December 29, 2010, Article 19 said: "The NHI premium of low-income households shall be paid from the budget of the central competent authorities. As for the insurance premium for mid-to-low income households to cover NHI, this shall be paid by themselves and 50% of it shall be paid by the central competent authority. Those who meet the subsidies conditions in other acts that have common provisions as this Act shall not receive subsidies from both legal provisions." The aforementioned regulations were implemented on July 1, 2011. In 2013, NHI premium subsidies totaled more than NTD6,540,050,000.
- 2. Copayment Subsidies: In order to reduce the health care burden faced by low-income households, Article 37 of the "Social Assistance Act" stated that when low-income households receive medical treatment, the treatment expenses to be borne by them shall be paid out of the central competent authority budget. In 2013, subsidies for these expenses (including outpatient and hospitalization fees) totaled NTD1,793,090,000.
- Subsidies for Medical Treatments Not Covered by NHI: In order to satisfy health care needs of low-income households and mid-to-low income households, local governments also

Table 9-2 Key Living Support Measures Provided to Low-income Households, 2013

Subsidy Item	No. of Subsidies	Total Subsidy Amount (NTD)	
Family Living Subsidies	1,360,970	6,489,175,565	
Student Living Subsidies	695,024	4,097,859,024	
Work Relief Programs (Including Mid-to-low Income Households)	26,929	398,711,960	
Holiday Greetings	809,600	617,441,111	

established related laws and regulations for medical subsidies. In 2013, these rules and regulations led to subsidies for 4,322 persons, worth a total of NTD80,407,028.

#### Section 4 Workfare

The amended "Social Assistance Act" introduced new mechanism to strengthen recipients' incentive to work with a goal to help disadvantaged people become self- reliant and out of poverty. Lowincome and mid-to-low-income households that increased their income by receiving government guidance and employment opportunity referrals were exempt from including the additional income under total household earnings for up to three years, with an additional one-year extension available. These measures increased incentives for the disadvantaged to become self-reliant and lift themselves out of poverty.

### Section 5 Emergency Aid

The "Social Assistance Act" provides timely assistance to people who are impoverished due to emergency situations. After municipal or county (city) competent authorities approve and provide assistance, if the beneficiary is still impoverished, the MOHW can approve and grant assistance in accordance with its own regulations governing the application, review, approval and distribution of emergency aid. To further strengthen support for the disadvantaged, an immediate care plan was introduced for delivery of emergency aid. When

impoverishment resulted from an accident befalling a family's primary breadwinner, relief payments and referral services were granted following visits and confirmation by the village office, private charitable organizations, and the local township (village/city/district) office. Related emergency aid achievements in 2013 are described in Table 9-3.

# **Chapter 2 Assistance for the Homeless**

### Section 1 Current Status of Homeless Persons

According to local government data, there were 3,604 homeless persons listed for assistance services at the end of 2013, nearly 80% of whom stayed in major metropolitan areas, such as Taipei, New Taipei City, Taichung, Tainan, Kaohsiung or Taoyuan County. There were 8 cities and counties with 50 or fewer homeless persons, and there were no homeless persons in Kinmen, Lienchiang or Penghu. The data show a significant gap among different localities, with most homeless people concentrated in urban areas.

### Section 2 Homeless Assistance Measures

According to Article 17 of the "Social Assistance Act," local governments shall take measures to assist homeless people based on their needs. Current assistance measures are as follows:

Table 9-3 No. and Amount of Emergency Aid (2013)

Туре	Beneficiaries (People)	Relief Payment Amount (NTD)
Emergency Aid from Municipal and County (City) Authorities	42,152	251,043,837
Emergency Aid from the MOHW	1,225	17,685,000
"Immediate Care" Emergency Aid	17,896	259,963,179

- Shelter and Placement Services: Municipal and county (city) governments offered professional assistance with arranging shelters and flexibility in providing temporary placement locations. There were 10 public-owned homeless shelters (including seven that were privately operated under government contract).
- Livelihood Maintenance Measures: In order to ensure a secure livelihood for the homeless, the government and related institutions cooperated with private organizations to conduct outreach. This included basic livelihood maintenance measures, such as warm meals, showers, barber services, clean clothes, sleeping bags and sanitation maintenance.
- 3. Measures to Promote Self-reliance: In cooperation with the competent authority of employment, professional training was provided to homeless persons to enhance their ability and desire to work. Characteristics of homeless persons were considered when negotiating with relevant units to create job opportunities. For example, work relief programs raised self-sufficiency, and consultation services increased independence and encouraged the homeless to return to their families and have a more satisfying social life.
- 4. Service summary: In 2013, local governments provided assistance to homeless persons 223,863 times, including care services 201,425 times, placement and shelter services 1,508 times, assistance returning to family 462 times, referral for welfare services 3,927 times, referral for employment services or occupational training 5,561 times, and other medical/care services 2,576 times.

# Chapter 3 Disaster Aid

## Section 1 Sheltering of Disaster Victims and Goods Supply Preparations

1. During the flooding and typhoon season, local

- governments are required to be ready to respond by providing temporary shelter, social assistance and special protective measures for disadvantaged groups, in accordance with the "Disaster Prevention and Protection Act." In 2013, there were 5,282 shelters for disaster victims established nationwide that had a total capacity of 3,929,629.
- 2. In order to reduce potential casualties and loss of property due to natural disaster, each level of local government can act in accordance with guidelines governing the storage of livelihood supply for the high- risk areas (villages, communities). Storage mechanisms allow local governments to ensure a stable supply of staples and livelihood supply for residents.
- 3. In order to consolidate goods supply and deploy staff when disaster happens, the government built a management system to integrate livelihood supply and volunteers in December 2011. Further measures were in effect in 2013 when the MOHW tasked municipal and county (city) governments with assisting operations and training by township (village, city, district) offices and volunteer groups. The MOHW held six education and training sessions for central and local disaster monitoring members.

### Section 2 Disaster Relief Payments

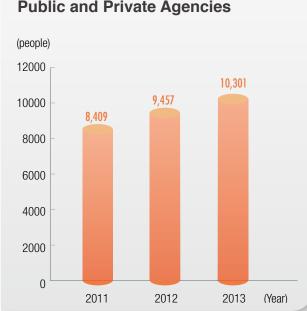
- When major disasters occur, following instruction from the premier or the Central Emergency Operation Center (if convened), the MOHW collects information from local governments to determine deaths, missing people or major injuries attributed to the disaster. It is the Premier who can initiate the procedures for Executive Yuan (premier) condolence payments.
- In 2013, 16 Executive Yuan (premier) condolence payments were issued with the a total worth of NTD3.2 million for deaths caused by the 0602 earthquake, Typhoon Soulik and Typhoon Kong-rey.

# Chapter 4 Social Work

### Section 1 Social Work System

Up until the end of 2013, there were 6,942 people nationwide who passed the examination for social

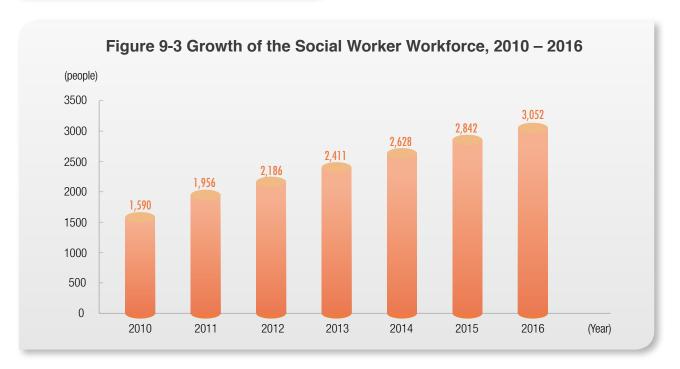
Figure 9-2 Full-time Social Workers Assigned to Social Welfare Tasks in Public and Private Agencies



work specialists and 3,837 people who were professional social work specialists. There were also 10,301 full-time social worker and 3,837 of them were in practice. There were 10,301 full-time social workers implementing social welfare tasks in both public and private sectors in 2013 (see Figure 9-2). The ratio of social workers for total population is one social worker per 2,232 people.

In order to build a professional social work system, the following measures were conducted:

- Investigation of Social Work Practical Experience and Years of Seniority: There were 618 reviews conducted in 2013.
- On April 2, 2013, 121 outstanding social workers were honored for Social Work Day.
- In accordance with updated regulations governing continuing education and professional licensing of social workers, in 2013 review and recognition of 1,633 continuing education cases took place.
- 4. In 2014, an estimated 217 specialist social workers were to be enrolled under regulations governing the distribution, screening, selection and continuing education of specialist social workers.



 In order to improve management of social worker manpower, in May 2013 an outside organization was commissioned to establish a national social worker database. Estimated time of completion was May 2014.

### Section 2 Plan for Strengthening the Social Worker Workforce

On September 14, 2010, the Executive Yuan approved a plan for local governments to increase employment and utilization of social workers. Between 2011 and 2016, the plan is estimated to add 1,462 social workers, leading to an increase in social workers employed by public agencies from 1,590 in 2010 to 3,052 in 2016 (see Figure 9-3).

At this time, the population per public social worker will fall from 14,549 to 7,580. Public social workers will be able to provide better service by placing more emphasis on specialized tasks with greater professional capacity.

### Section 3 Safety of Social Workers

Protection of the occupational safety for social workers is regulated under the "Social Worker Act" and other related laws, regulations and measures. For a more systematic approach, with the added benefit of raising effectiveness of social work, the MOHW formulated a draft statute governing social worker safety. This was sent to the Executive Yuan for review on January 9, 2014.

In order to strengthen the occupational safety of social workers, a study on the drafting of a social worker safety act was commissioned in 2013. In 2014, an application was issued to use revenues from the public welfare lottery to implement a plan that ensures the occupational safety of social workers and to commission research on social worker supply, demand and occupational safety.

# **Chapter 5 Welfare Resources Network**

### Section 1 Community Development

1. Community development relies on a combination of social movements and education to cultivate

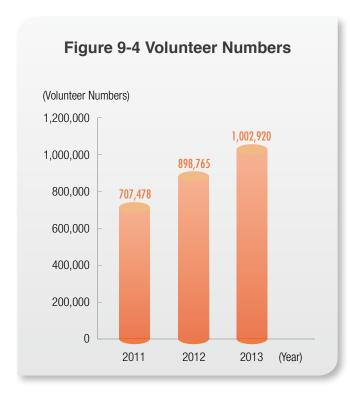
- community awareness among the general public. This inspires people to take action by helping themselves and others, resulting in stronger manpower, material resources and financial resources and contributing to a higher quality of life. Therefore, community development is about more than just hardware and infrastructure. It must also emphasize community awareness and consolidation along with social welfare, health promotion, and cultural inheritance.
- 2. An important part of community development involves using social forces to promote community welfare and services. Subsidies were offered for communities to issue publications, popularize welfare services and hold related activities. By bringing residents together, these initiatives raised quality of life. Achievements include the following:
  - Establishment of Community Activity Centers: At the end of 2013, Taiwan was home to 3,945 community activity centers that provided a location for residents to hold meetings, activities and other gatherings.
  - 2) Building Community-based Welfare: Conducted flagship plans, community manpower cultivation, disaster prevention and preparation, cultivation of community capacity for proposal writing, etc. In 2013, subsidies were provided for 249 cases.
  - 3) Holding Nationwide Demonstration Activities: Nationwide demonstration events in 2013 focused on rotating outreach for communities with outstanding performances, folk recreation, and community-based welfare. Attendance in these three categories of events was 422 people, 3,567 people and 1,470 people respectively.
  - 4) Conducting Community Development Accreditation: Results of accreditation in the south region for 2013 included outstanding marks for Kaohsiung, Tainan, Changhua and Chiayi County and excellent marks for Yunlin, Pingtung, Taitung, Chiayi City and Penghu. Individual category honors ranging from superior to outstanding and excellent were given to Wenxian Community, in Linyuan District, Kaohsiung, and 31 other communities for their unique characteristics. Events held to honor these communities were attended by 803 people.

### Section 2 Charity Fundraising

- In 2013, a total of 236 groups applied for charity fundraising. Permission was granted in 282 cases, in accordance with the "Charity Fundraising Permission Regulations," and total funds collected surpassed NTD118,840,000.
- 2. In order to raise financial accountability and operational effectiveness of organizations seeking donations, 2013 an accounting firm was commissioned to audit 221 cases of charity fundraising approved by the Ministry of the Interior in 2012, along with 14 charity fundraising for major disasters that had not yet been audited. In total, the agency examined 235 cases.

### Section 3 Volunteer Services

To effectively combine the strength of the society and promote the spirit of mutual help through volunteer services, community human resources were consolidated in accordance with the Volunteer Service Act. In addition, following the organizational merge between the health and social welfare departments, authority over volunteer service incentives has shifted from the Ministry of the Interior to the MOHW in 2014. The numbers of volunteer were on the rise. In 2013,



there were 1,002,920 volunteers (see Figure 9-4), including 52,007 health volunteers and 202,853 social welfare volunteers.

## Section 4 Hotline for Welfare Consultation

In order to assist families and individuals facing hardships, the MOHW combined public and private services and resources to launch the 1957 welfare consultation hotline. The hotline offers a single entry point for welfare consultations, reporting and referrals. People simply have to dial the toll free number line 1957 on a mobile phone or local calls to access information on a diverse range of welfare services.

- 1. Operation of the hotline, which was launched in 2006, was commissioned to the Taiwan Fund for Children and Families on September 1, 2010. The hotline employed 30 professional social workers (including one administrator) who, from the hours of 8 am to 10 pm daily, offered consultations and assistance to people facing hardship or in need of welfare services. Following formal implementation of the International Classification of Functioning, Disability and Health in July 2012, the volume of calls rose. The fund responded by hiring five additional responders, bringing the total number of employees to 35 (including one administrator).
- 2. In 2011, the hotline was integrated with single-entry point for information of welfare services offered by all municipality and county (city) governments. When responders received a call that required reporting or transfer, they could use the system to notify local social welfare departments. After referral from the hotline, the departments dispatch social workers for visits or related services. A hotline knowledge bank was also created that consolidates welfare and safety network resources and links to related networks specializing in occupational safety, suicide prevention, school safety and public safety.
- 3. From 2010 to 2013 there were 216,383 calls to the hotline. Reports were issued to municipal or county (city) governments in 2,193 cases.



# Protective Services and Prevention of Violence

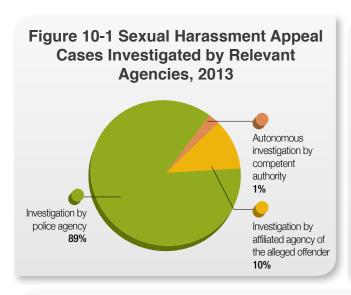
- Chapter 1 Prevention of Gender-based Violence and Sexual Harassments
- Chapter 2 Prevention of Domestic Violence
- 113 Chapter 3 Prevention of Sexual Assault
- Chapter 4 Protection of Children and Youths and Prevention of Child and Youth Sexual Transactions

Following formation of the MOHW, public intervention on personal safety issues are consolidated under its authority included domestic violence, sexual assault, and sexual harassment, along with protection of the elderly, the disabled, children and youths, and the prevention of child and youth sexual transactions. The protective services for victims of domestic violence falls under the jurisdiction of the Department of Protective Services; treatment programs for offenders falls under the Department of Mental and Oral Health. Organizational restructuring consolidated social and health administration, allowing for better specialization among professions and resource integration.

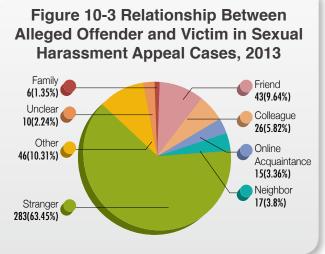
## Chapter 1 Prevention of Gender-based Violence and Sexual Harassment

### Section 1 Current Status of Sexual Harassment Prevention

In 2013, there were 494 sexual harassment appeal cases received and investigated by relevant agencies (units). This represented growth of 14.62% compared to the 431 appeal cases received in 2012. Police agencies handled 89% of these cases (see Figure 10-1). The main type of appeal cases, accounting for 49.47% of total cases, involved "advantageous kissing, embracing, or touching of the breasts, buttocks, or other private parts (see Figure 10-2). A majority of the cases involved strangers 63.45% (see Figure 10-3), and the most frequent incident location was the workplace 44.92% (see Figure 10-4).



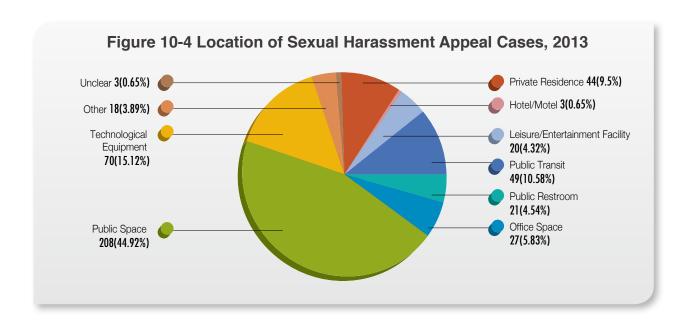
erotic photos (files) 24(5.12%)



8(1.70%)



Figure 10-2 Type of Sexual Harassment Appeal Cases, 2013



### Section 2 Promotion and Advocacy of Sexual Harassment Prevention

- Steps in 2013 included development of an investigation and query form for sexual harassment and compilation of a handbook on handling sexual harassment cases. Difficulties and solutions related to three laws governing prevention of sexual harassment served as a basis for location-based education and training attended by 220 people.
- In order to remind employers of public institutions of their duty to prevent sexual harassment, there were 45,000 posters advertising "the prohibition against of sexual harassment and sexual assault" distributed in 2013.
- In 2013, exposure to sexual harassment prevention advocacy and advertisements was achieved through numerous channels: television, radio, public transit and outdoor media. Total number of broadcasts were 3,960.

## Section 3 Prevention of Gender-based Violence

In response to widespread attention placed on gender-based violence and greater awareness of violence prevention, after three years of planning, Taiwan's first anti-gender violence online library, called Taiwan Against Gender-based Violence (http://tagv.mohw.gov.tw/) was launched in November 21,2013. By December 2013, there were already more than 10,000 pieces of information recorded on the site and browsing number exceeded 800,000.

### Section 4 Inter-departmental Network

- In October 2013, "the establishment regulation of Domestic Violence and Sexual Assault Prevention Committee" were concluded. The committee members held regular meetings, gathered a range of public opinions, built a inter- departmental communication platform and promoted protection initiatives.
- A special event was held to honor those who made outstanding contributions to the prevention



Ceremony to Mark Launch of the Taiwan Anti-Gender- based Violence Website

of domestic violence, sexual assault and sexual harassment and to offer visions on future policy directions. A total of 200 participants comprising members of national and local prevention networks, NGOs and other units gathered to share visions, goals and action strategies for gender violence prevention. Also, 30 individuals and units were honored for their contributions.

3. In conjunction with a 2013 central government plan for evaluating social welfare performance at the municipal and county (city) government levels, the MOHW conducted on-site inspections related to the promotion of domestic violence, sexual assault and sexual harassment prevention. Local governments rated as superior were Kaohsiung, Taipei and New Taipei City; outstanding local governments were Changhua, Yilan, Miaoli, Chiayi City, Taoyuan County and Taichung.

## **Chapter 2 Prevention of Domestic Violence**

### Section 1 Status of Domestic Violence Reporting and Service

Reported cases of domestic violence in Taiwan were rising by an average of 5-10% per year. In 2013, there were 110,103 reported victims with an increase of 11.89%, compared to the 98,399 reported victims in 2012. Among women, though there was still a relatively small increase of 6,853 reported victims from 2012 to 2013, women still were victims in 69.4% of cases, with a decrease of just 1.3% compared to their 70.7% share in 2012. About 6.21%, or 6,839 of reported victims in 2013 were suspected or confirmed of being disabled. As for relations between victim and offender in

Table 10-1 Reported Victims of Domestic Violence from 2008-2013- By Gender and Category

Table 10-1	neported	/ICUITIS OF L	oniestic v	iolerice in	JIII 2000-2	013— Бу С	crider aric	Category
	Ye	ar	2008	2009	2010	2011	2012	2013
	Category	Gender	2000	2000	20.0	2011	20.2	20.0
	Violence Involving Married	Male	3,604	4,428	5,287	5,672	6,512	5,824
	Couples/ Divorcees/ Cohabitants (Violence	Femal	38,950	43,046	49,163	43,562	43,492	43,112
Reported	Between Intimate Partners)	Unknown	488	434	471	660	611	697
Victims of	Children	Male	8,370	8,498	10,679	11,763	13,877	16,540
Domestic	and Youths Abuse	Femal	7,706	8,044	10,234	11,889	13,605	17,653
Violence		Unknown	913	794	821	334	454	662
		Male	876	1,053	1,215	1,096	1,169	1,171
	Elder Abuse	Femal	1,267	1,467	1,868	1,766	1,871	1,889
		Unknown	33	28	39	48	50	55
		Male	3,658	4,530	5,818	5,617	5,860	8,261
	Other	Femal	9,353	11,166	12,850	11,368	10,575	13,742
		Unknown	220	240	275	375	323	497
		Male	16,508	18,509	22,999	24,148	27,418	31,796
	Subtotal/	Femal	57,276	63,723	74,115	68,585	69,543	76,396
	Total	Unknown	1654	1496	1,606	1417	1438	1911
		Total	75,438	83,728	98,720	94,150	98,399	110,103

2013, intimate partners ranked first, at 45.08%. The sharpest rise was seen in violence between non-intimate family members and harm toward children (see Table 10-1). In 2013, municipality and county (city) governments provided protection services 988,586 person-times as well as NTD468,542,425 in-cash assistance.

## Section 2 Plan for a Safety Network for Domestic Violence

- 1. Since 2009, a plan to create safety network for domestic violence has been underway. At the same time, research, development and use of the Taiwan Intimate Partner Violence Danger Assessment form took place. Known as TIPVDA, the assessment form facilitated early identification of high-risk cases and subsequent intervention. Up until December 2013, these risk evaluations were carried out in 80.37% of reported cases.
- 2. An on-job training plan on the safety network for the protection of domestic violence for supervisors was carried out for 423 participants in 2013. It included individualized guidance in five localities Penghu, Taichung, Chiayi County, Yilan and Hualien that helped solve network-related problems and contributed to the gradual implementation of localized work models. Experts were commissioned to conduct research and develop network cost-benefit analysis models that local governments could use as a reference when assessing effectiveness.

### Section 3 Diversified Intervention Models on Domestic Violence Cases

In order to assist each municipality and county (city) government in strengthening protective services for victims of domestic violence, a wide range of intervention services continued to be subsidized through a combination of social welfare funds and revenues from the Welfare Lottery. Projects included emergency shelters, legal aid, direct services for victims, prevention of domestic violence in remote townships and communities, employment assistance, care for children and

youths who witnessed violence, and safety and protective services for immigrants (applications could be made to the Care and Assistance Fund for Marriage Immigrants). In 2013, there were 90 plans approved with total subsidies amounting to NTD77,440,000.

## Section 4 Professional Services and Accountability

- Regular meetings were held to discuss major domestic violence incidents and review status of the domestic violence prevention network. The meetings presented an opportunity to gather inter-disciplinary suggestions and strategies for improvements and advancement.
- 2. Amended the domestic violence incident reporting form, evaluation standards for opening/closing adult protective cases of domestic violence, and the assessment summary form used to determine whether to accept a domestic violence case. These were formally distributed to relevant agencies on December 18, 2013 and implemented on January 1, 2014
- 3. Strengthened on-job training for professionals who works in the domestic violence network. In 2013, total attendance in training courses offered to network professionals and health workers who provide psychological services and intervention therapy for victims was 1,397.
- 4. A pilot plan on integration, education and training of local elderly protection and domestic violence prevention systems was in place in 2013. Frontline practitioners shared elderly protection work models in seminars. The eventual goal was to build a platform to exchange experiences on the elderly protection.

## Section 5 Raising Awareness in the Community Prevention

 A plan to strengthen violence prevention in communities was continued. A competition on innovative violence prevention was held to promote the message of anti-violence into neighborhoods. In July and August 2013, ten workshops were conducted for communities. Total number of participants was 680.

2. Preventive and advocacy programs to targeted groups were offered. Eight advocacy and education activities focused on the transformation of domestic violence offenders were held, and total attendance was 836. Personal safety advocacy plans were held for marriage immigrants. Promotion on regulatory and aid resources were strengthened in Southeast Asian languages. In 2013, 12 related print advertisements and 650 broadcasts were made in foreign languages.

## Section 6 Intervention for Offenders of Domestic Violence

- 1. Active promotion for the judges to issue civil protection orders about offender treatment program was implemented to protect victims of domestic violence, while overseeing the implementation of intervention plans by local governments. In 2013, intervention should be provided to 3,607 offenders, 1,442 of whom already completed the program.
- 2. Preventive Services for Domestic Violence Offenders
  - 1) Since 2004, a male-oriented hotline (0800-013-999) has provided consultations and guidance related to marriage conflict, reducing the odds of violent response. Call volume in 2013 was 23,105.
  - 2) Revenues from the Public Welfare Lottery were used to subsidize offender-oriented domestic violence prevention programs conducted by local governments and NGOs. These subsides were offered in 19 cases in 2013.

## **Chapter 3 Prevention of Sexual Assault**

## Section 1 Reporting and Services of Sexual Assault

There were 10,901 reported victims of sexual

assault, 85% of whom were women, and 63% of whom were under the age of 18 in 2013(see Table 10-2). Among the reported cases, 1,157 people suspected or confirmed to have a disability (about 10% of total reported victims). Of the alleged offenders. 86% were male and 32% were between the ages of 12 and 24. In 80% of cases, the alleged victim and offender were familiar with each other, and 60% of incidents occurred in private locations. These numbers suggest that the closer people were, the more likely they were to disregard body boundaries. These figures also show that more education and advocacy were needed to strengthen awareness of both personal autonomy and body boundaries. Municipal and county (city) governments provided protective and assistance services to victims of sexual assault 177,258 times in 2013. Total expenditures were NTD77,530,000.

## Section 2 Diversified Intervention for Victims of Sexual Assault

- Reference standards of services and subsidies in sexual assault cases were established. Prevention centers were supported in providing assistance, medical treatment, medical examination and evidence gathering, emergency shelters, psychological therapy, and legal consultations.
- 2. Evidence gathering and testing in the cases of sexual assault was strengthened.149 designated hospitals gathered evidence and conducted medical examination provided services for 3,769 cases of suspected sexual assault victims in 2013. In 1,882 of these cases, results were sent to the Bureau of Criminal Investigation.
- 3. The "Directives for Reduction of Repeated Interrogation of Victims of Sexual Assault Cases" was continued to function in order to cooperate police, prosecutors, social workers and medical treatment teams to raise quality of questioning and reduce the secondary injury for the victims.
- 4. A plan to cultivate workers' capacity for assistance and consultations related to children and people with intellectual disabilities was implemented in 2013. Three workshops for training seed instructors

Table 10-2 Gender and Age of Reported Victims of Sexual Assault, by Year

					R	eported	Victims (	of Sexua	l Assaul	t			
Year	Gender	0-5 Years	6-11 Years	12-17 Years	18-23 Years	24-29 Years	30-39 Years	40-49 Years	50-64 Years	Years and Older	Unknown	То	tal
	Male	19	90	228	30	9	5	1	1	1	48	432	
2008	Female	213	510	2,958	909	558	484	241	91	24	659	6,647	7,285
	Unknown	5	17	57	24	11	9	4	2	48	29	206	
	Male	16	114	329	31	18	7	1	0	0	57	573	
2009	Female	244	528	3,349	960	556	582	242	106	18	633	7,218	8,008
	Unknown	10	16	78	26	16	13	9	1	17	31	217	
	Male	28	140	443	61	16	10	3	2	1	61	765	
2010	Female	228	665	4,045	1,024	608	650	291	103	33	711	8,358	9,320
	Unknown	6	17	58	20	7	11	2	4	0	72	197	
	Male	13	185	712	79	18	12	7	2	1	111	1,140	
2011	Female	274	739	4,964	1,132	567	547	278	127	22	971	9,621	11,121
	Unknown	7	20	111	24	8	14	8	1	0	167	360	
	Male	27	205	831	87	30	18	12	2	1	122	1,335	
2012	Female	270	734	5,409	1,254	585	635	315	125	34	947	10,308	12,066
	Unknown	11	9	112	18	11	8	4	3	0	247	423	
	Male	34	161	860	90	34	24	12	5	2	107	1,329	
2013	Female	216	617	4,735	1,144	496	648	318	143	18	824	9,159	10,901
	Unknown	5	18	138	26	5	6	5	4	0	206	413	

were held. International seminars and workshops were held by inviting domestic and foreign experts to introduce interview procedures developed by the National Institute of Child Health and Human Development (NICHD).

## Section 3 Improving Quality of Sexual Assault Prevention

1. Training courses for social workers in sexual assault prevention were classified according to

different fields and levels. Professional training courses were systematically conducted for junior and senior social workers and supervisor that led to better training arrangements.

- 2. Teaching material that explained procedures for collecting evidence and conducting medical examination in sexual assault cases was developed. In accordance with special training standards, professional training for workers responsible for conducting these procedures and intervention was offered. The number of participants was 1,455 in 2013.
- Pedagogical videos on the prevention of sexual assault for children with intellectual disabilities were provided to schools and related agencies.
   NGOs that conducted community-based sexual assault prevention education and advocacy program were subsidized.

## Section 4 Reporting System and Information Platform

- 1. The 113 Protection Hotline was established by integrating hotlines for domestic violence, sexual assault and child and youth abuse in 2001. The new composite hotline offered year-round and 24-hour phone consultation and reporting services. There are 163,028 calls to the hotline, including the reporting of 26,881 cases of domestic violence, sexual assault and child and youth abuse in 2013.
- 2. To improve accessibility to assistance, multiple channels of help-seeking, such as online consultation (chat) and reporting channels, were established. There were 115,686 cases of domestic violence, sexual assault and children and youths abuse reported online and 771 online consultations in 2013.

## Section 5 Therapy and Support for Sexual Assault Offenders

1. Institutes offering compulsory therapy for sexual assault offenders who had completed criminal

- prison sentences were established. By the end of 2013, two more hospitals were designated by the Ministry of Justice to handle compulsory therapy Tsaotun Psychiatric Center and Kai-Suan Psychiatric Hospital– bringing the total number of designated hospitals to three.
- 2. Community intervention for sexual assault offenders was strengthened. A total of 5,641 offenders received physical and physiological treatment and counseling, including 1,754 offenders who completed intervention services and 2,995 who were still undergoing intervention in 2013. There were 8 people transferred for compulsory treatment, 501 explained absences and 383 punished for failure to show.

# Chapter 4 Protection of Children and Youths and Prevention of Child and Youth Sexual Transactions

### Section 1 Training and Retaining Social Workers Specializing in Protection Services

- 1. In order to increase the number of social workers who offer protective services, subsidies were offered to local governments to hire more social workers specializing in children/youth protection and domestic violence/sexual assault prevention since 2006 and 2007 respectively. These subsidies helped support for 510 workers. The central government's share, which accounted for 40% of funding, amounted to NTD145,560,000 in 2013.
- 2. Local governments were urged to set up vacancies for high-ranking social workers and social work supervisors in protective service with priority. Local governments were encouraged to raise the salary grade conversion for social workers specializing in protective services from NTD121.1 per point up to NTD130, in order to ensure reasonable remuneration and career paths for social workers.

3. An auditing checklist for local governments to examine protection measures of social workers involved in prevention of domestic violence and sexual assault was developed in order to ensure their personal safety. Related facilities and equipment were subsidized to build a friendly and safe working environment.

## Section 2 Protection of Children and Youths

- 1. A system for reporting child and youth protection cases was introduced to provide individualized plan for investigation and intervention based on type and level of violence. Priority was given to critical cases, and service model for protection in the home. Public intervention was provided to 16,119 children and youths being abused in 2013. The leading form of abuse was physical abuse, accounted for 35.1% of cases, with 68% of alleged offenders being parents (including adoptive parents). The leading causes of abuse, accounting for 44.3% of cases, were lack of parental education and improper discipline.
- 2. A standardized protocol of child and youth protection was established. Competent authorities of the municipal and county (city) governments were supervised to ensure that they were handling reported cases in accordance with the standardized protocol, including: providing protective placement, family intervention, compulsory parenthood education and other services to assist children and youths to return their homes. When parents proved unsuitable, the local authority should apply to cease parental rights or change for guardians if the government provided adoption services, long-term placement and other alternatives. Intervention based on the aforementioned regulations and policies took place 560,000 person-times in 2013.
- 3. Service models of family preservation and family reunification were adapted from abroad, and authorities worked together with Children's Research Center of National Council on Crime and Delinquency in the U.S. to develop the Structured Decision-Making Model (SDM) designed for use

in Taiwan's child abuse assessment procedures, resulting in a fully standardized and structured assessment tools. These tools that could assist social workers in quick evaluation of family function, safety of children and youths, and risk of recurrence of abuse, would contribute to the safety and family intervention plans.

## Section 3 Child and Youth Sexual Transaction Prevention

- An amendment to the "Child and Youth Sexual Transaction Prevention Act" was under committee review on February 26, 2013, focused on strengthening protection measures for victims and family intervention mechanisms.
- Regular meetings on oversight of child and youth sexual transaction prevention were held in order to assess performance of related units. The 2012 annual work report should that there were assistance for 420 cases and detection of 362 victims, 336 of whom were sent to emergency shelters and 26 of whom have been returning to their families.
- In order to prevent child and youth from sexual transactions and expand related communitybased preventive services, subsidies were offered to NGOs that conducted related social service activities. Total subsidies in 2013 were NTD46,002,000.

### Section 4 Internet Safety Mechanisms for Children and Youths

In cooperation with a National Communications Commission directive, the iWIN Institute of Watch Internet Network was founded in accordance with Article 46 of "The Protection of Children and Youths Welfare and Rights Act." The iWIN handled reports of internet content that violated related child and youth regulations. Besides participating in planning and sharing cost, the MOHW formulated operating procedures and principles for violations. Additional assurances of safe online use among children and youths were achieved through local governments committed to investigate violations.



# Research Development and International Cooperation

- Chapter 1 Science and Technology Research in Health and Welfare
- 123 Chapter 2 International Cooperation
- 131 Chapter 3 Globalized Medical Services

In 2013, the MOHW's health science and technology research budget was NTD3,898,672,000. Investment were focused on food and drug management, empirical scientific research to inform policies related to monitoring communicable diseases and disease control, building an environment conducive to development of the health care industry, and biomedical technology research (see Figure 11-1).

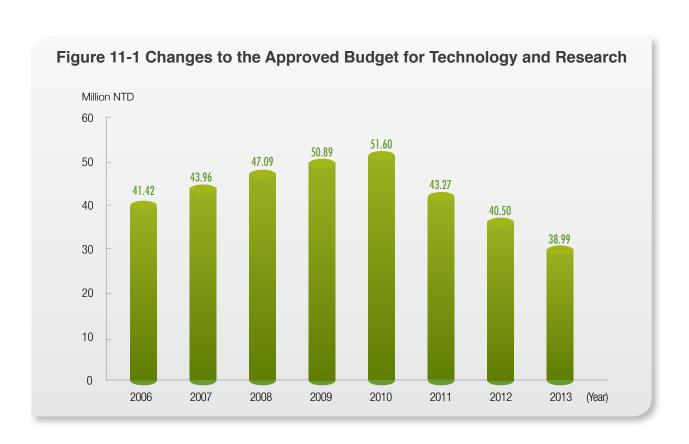
With the age of globalization upon us, so too are new obligations that come with being a member of the global village. Taiwan seeks to join international medical and health cooperative ventures along with emergency humanitarian and medical aid efforts. It is currently an observer of the World Health Assembly and will continue to participate in related international organizations where it can share its medical and health experiences and achievements.

# Chapter 1 Science and Technology Research in Health and Welfare

Section 1 Mission-Oriented Research

In order to provide the empirical evidence needed for policy formation, approximately NTD1,592,111,000 was spent on this investment focus (40.8% of the total). It consisted of 16 master plans and 384 plans while contributing to the training of 106 graduate students. In 2013, 51.2% health policy recommendations for based on research were approved utilized, showing that research associated with technology planning had become an important empirical basis for government administration.

- 1. Disease Prevention Preparation: Completed domestic production of BCG vaccine and antivenin as well as manufacturing lines for influenza and EV71 vaccine reserves. Developed new techniques and built an examination platform in response to climate change. Successfully developed a rapid test reagent for dengue fever that was used at airport fever screening points. An EV71 rapid screening kit had been developed, and technology transfer to industry had been curried out.
- 2. Health Promotion: Developed a community breastfeeding intervention model that sought to



raise the breastfeeding rate. Completed handbooks that offered guidance to breastfeeding volunteers and breastfeeding support organizations. These materials were available in local health bureaus, health stations and medical care institutions where promoting the breastfeeding were performed. Built a comprehensive workplace health promotion model and evaluation standards that could be used by governments when promoting workplace health and evaluating effectiveness of related plans.

### 3. Food and Drug Management

- 1) Improving Food and Drug Management Regulatory Systems: Five drafts (or draft amendments) were proposed including, one related to categorical management systems for food additive manufacturing, import and sales, along with seven suggestions, including one relating to permissible margin of error for caffeine content. Also, using 12 standards based on empirical evidence, created rapid approval mechanisms for new drug registration, market approval, review of drug product registration, and market approval.
- 2) Food and Drug Distribution Monitoring: Built a mass spectrometry database of 50 types of western medicine ingredients that could be mixed into food. Built an environmental fingerprinting database for Ginkgo biloba leaves and seeds, which has already been used in numerous testing cases. Completed 15 residue testing surveys of organochloride pesticides available on the market and research on the renal toxicity of 29 concentrated compound Chinese herbal medicines.
- 4. Advancing Medical Care System: Promoted telecare service development plans. Used research to determine the best service models as a reference for follow-up policy promotion. Built a mechanism to pave the way for nursing practitioners who left their profession to return. In 2013, 126 nurses benefitted from this mechanism. Researched the premium burden placed on LTC insurance beneficiaries to serve as a basis for medical care and health policy planning.

### 5. National Health Insurance Reform

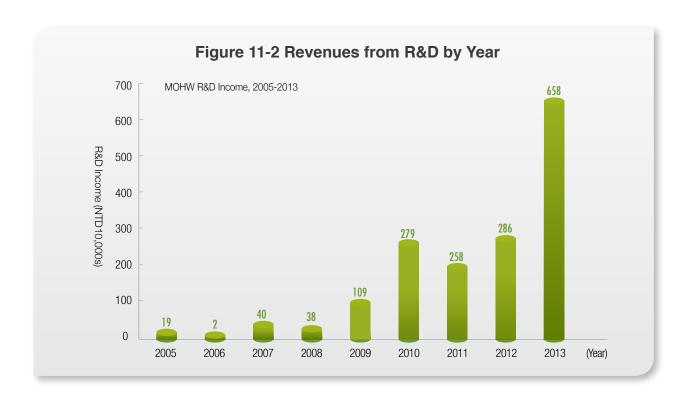
- 1) Improving NHI Finances: Gathered and analyzed data related to health insurance revenues, second-generation NHI finances and the collection/payment of supplementary insurance fees. Research recommendations were used as a basis for admendment of the "National Health Insurance Act."
- 2) Continue the Reform of financil support: Analyzed overall effectiveness of an NHI pay for performance scheme for five types of conditions: diabetes, asthma, schizophrenia, chronic hepatitis B/hepatitis C, and early stage chronic kidney disease. Patient satisfaction was 85%.
- 3) Incrensing Payment Effectiveness: Built a medical care payment review system to be used by the National Health Insurance Committee following implementation of second-generation NHI. The mechanism provided an important basis to ensure reasonable use and effective distribution of NHI resources. Established methodology for analyzing the impact of adding newly introduced medical care and diagnostic techniques to the NHI system. Results could determine economic efficiency.

## Section 2 Translational Research and Industrial Development R&D

In order to strengthen medicinal and health techniques, raise the capacity of domestic R&D, and advance development of the biomedical technology industry, An amount of NTD2,280,838,000 were investal in 2013 (58.5% of investment) to implement six master plans (see Appendix 4) and 264 plans while training 434 graduate students. Technology transfer and authorization were used as the basis for cooperating on product development with interested firms, thereby facilitating commercialization and mass production. A summary of major achievements were listed below:

### 1. Technology Transfer and Patent Authorization

In 2013, obtained 70 domestic and foreign patents on the area of biomedical foundation and applied research. 11 R&D technology transfers were completed, and it brought a total revenues of NTD6,578,587, representing growth of 130% compared to R&D revenues in 2012 (NTD2,857,518, see Figure 11-2).



### Establishment of a Clinical Testing and Research Center

Sought to industrialize upstream, midstream and downstream R&D capacity of new drugs and medical devices. Established one national level and four comprehensive or specialized clinical testing and research centers (see Figure 11-3). Through a combination of outstanding clinical testing and establishment of R&D centers, cultivated new clinical testing talents and raised experience levels. Major achievements were as follows:

- Clinical Testing of Drugs and Medical Devices: There were 226 new drug clinical testing cases and 15 new medical device clinical testing cases, for a total of 241 new cases. Published a total of 459 papers and obtained 67 patents.
- 2) Rising the efficiency of Ethical review for Multicenter Drug Trials: There were 43 cases reviewed by the Centralized Institutional Review Board. The average time for a review was reduced from 3-4 months to 8.6 days, decreasing time spent by 2.5-3.5 months.
- Advancing Domestic Industrial Development: Assisted with general legal consultations related to biotechnology and the biomedicine industry in 1,817 cases, including 45 index cases, 12 of

- which featured drugs that entered the clinical testing phase (reaching the investigational new drug phase). The legal assistance offered a solution to biomedical R&D regulatory questions.
- 4) Promoting International Cooperation in Clinical Testing: Acted as a steering committee member in more than 40 global clinical testing plans. Oversaw the design and execution of testing as well as announcement of results. Encouraged major manufacturers such as Pfizer and GSK to establish clinical research centers in Taiwan.

## 3. Building an Outstanding Cancer Research System

NTD300 million annually was invested since 2010 to subsidize cancer research at eight medical centers and biomedical research institutions located across Taiwan (see Figure 11-3). The outstanding cancer centers worked as core facilities for expansion of cancer diagnosis, treatment and care services to 20 regional hospitals, thereby raising regional cancer treatment and care standards. Supported establishment of an internationally certified cancer molecular diagnostics laboratory that could raise diagnostic accuracy and treatment effectiveness.

1) Assessment of Cancer Risk Factors: Research





- Clinical Testing and Research Centers
- ▲ Outstanding Cancer Research Centers



Figure 11-4 Automated Breast Volume Scanner

revealed a high level of correspondence between aristolochic acids and the rate of urinary tract cancer in Taiwan. Also, the interaction between environmental hormones and genes was seen as a possible cause for the rapid increase in breast cancer among young Taiwanese women.

- 2) Early Screening and Diagnosis:
  Development of several early screening and diagnosis methods included 1. A new blood testing method for nasopharyngeal carcinoma that was more accurate than traditional blood screening methods, 2.
  Completion of a computer-aided imaging system for early lung cancer diagnosis, 3.
  Development of a hyperspectral biomedical imaging system for oral cavity cancer, 4.
  Development of an automated breast volume scanner (see Figure 11-4).
- 3) Cancer Treatment and Care: Completed 43 teaching resources covering topics such as scope, diagnostic guidelines, care standards, and strategies for screening high-risk groups for 17 types of cancer, including lung cancer, oral cavity cancer, leukemia, breast cancer, and colorectal cancer.

#### 4. Biomedical Technology R&D

1) Development of Major Vaccines: Completed first stage clinical testing for an EV-71 vaccine.

Followed by commissioning manufacture of the vaccine, which began two-stage clinical testing in 2013. Developed a vaccine for HPV that has been shown effective for treating cervical cancer in animals. Researched and developed a protein-based vaccine for Group B recombinant Neisseria meningitis which passed first stage IND review in April 2013 and a vaccine for respiratory syncytial virus that obtained approval for a Taiwan patent in September 2013.

- 2) Medicinal Ingredient R&D: Subsidized research by the National Health Research Institutes was honored at the 10th National Innovation Awards (see Figure 11-5) for a number of advances, including: 1. DBPR112, an anti-cancer drug that suppresses growth of drug resistant cancer cells, 2. An anticancer EGFR target drug, 3. An endogenous RDV drug carrier, 4. Nano-gold particles with cancer treatment and diagnostic properties.
- 3) Innovative Biomedical Technology R&D: Research found that pancreatic cancer molecular markers can accurately (95% success rate) determine post-surgical prognosis of pancreatic cancer patients, and that postnatal PDMSCs have relatively strong proliferation and differentiation capabilities. In the future these findings were expected to have a wide range of clinical applications.



Figure 11-5 Winner at the 10<sup>th</sup> National Innovation Awards for Development of DBPR112, an Anti-cancer Drug That Suppresses Growth of Drug Resistant Cancer Cells

### Section 3 Promotion of Value-added Applications Relating to Health and Welfare Information

When seeking to improve academic research and empirical data support for policy making, the MOHW adheres to the core values of protecting personal health privacy, advancing sharing of health information, and reducing duplicate investment. In 2013, investment was approximately NTD25,724,000 (about 1% of total investment).

 Management of the Service Platform of the Center for Health Information Value-added Applications: The Executive Yuan provided support from 2012 to 2015 for planning expansion of Cloud services. Besides better platform services through digitalization, expanded secure collection of health databases took place. More diversity of services was achieved through establishment of themebased databases, subdata files, random sample data files, and simulated data files for training. In 2013, besides continuing to strengthen information management, ISO 27001 information security management certification was obtained.

- 2. Service Content and Volume of the Center for Health Information Value-added Applications
  - In 2013, began accepting applications for 47 databases categorized into 14 major types. Usage handbooks were provided as a reference for each database.
  - 2) Established research sub-centers at China Medical University, Taipei Medical University, National Taiwan University, National Cheng Kung University, Kaohsiung Medical University, Chang Gung University and National Yang-Ming University, in response to academic research needs.
  - 3) Case number were increased from 135 in 2011 to 190 in 2013, with an average annual growth rate of 14%.

## **Chapter 2 International Cooperation**

Section 1 Participation in International Organizations (see Figure 11-6)

### 1. World Health Organization

In May 2013, former Health Minister Chiu Wen-Ta led a delegation to the 66th World Health



The Taiwan delegation to attend the 66th World Health Assembly



Assembly, which discussed the theme of how to ensure the place of health in the next generation of global development goals. During an address to the assembly, Chiu talked about half a century of communicable disease control experiences in Taiwan, implementation of NHI, financial reforms under second-generation NHI, improvements to the medical work environment, and Taiwan's commitment to preventing non-communicable diseases in line with the WHO's 25 by 25 goal.

### 2. Asia-Pacific Economic Cooperation

Former Health Minister Chiu Wen-Ta led a delegation to Bali, Indonesia to attend the September 2013 APEC High Level Meeting on Health and the Economy. In a keynote speech, Chiu shared Taiwan's experiences since 1995 in implementing NHI. A major focus was on measures taken to overcome financial challenges through the introduction of second-generation NHI.





Participants in the 18<sup>th</sup> Tri-lateral (Korea-Japan-Taiwan) Conference of Non-Governmental Social Welfare Organizations

### 3. International Council on Social Welfare

The Social and Family Affairs Administration attended the 2013 North East Asia Region Conference of ICSW and the 18th Tri-Lateral Conference of Non-Government Social Welfare Organizations. Discussion with experts and practicing professionals on the impact that low birth rates and aging populations have on population structures served as a reference for future policymaking and planning.

4. Pharmaceutical Inspection Convention and Pharmaceutical Inspection Co-operation Scheme The former Food and Drug Administration (under the then-Department of Health) formally became a member of the Pharmaceutical Inspection Convention and Pharmaceutical Inspection Co-operation Scheme (jointly referred to as PIC/S) on January 1, 2013. By participating in PIC/S, Taiwan can share pharmaceutical safety information with other nations and establish GMP recognition



The 20th PIC/S Expert Circle on Human Blood, Tissues and Cells



2013 A Workshop for High-Ranking Health Administrators and the Taiwan-US Public Health Roundtable Meeting

mechanisms. The resulting expansion of pharmaceutical exports encourages foreign investors to build factories in Taiwan and commission production by local manufacturers, boosting development of the domestic biotechnology and pharmaceutical industries. Taiwan's participation was demonstrated by its hosting of the 20th PIC/S Expert Circle on Human Blood, Tissues and Cells. Participants

discussed management of the quality and safety of biomedical products while jointly investigating more efficient inspection regulations.

## Section 2 International Exchange and Aid

- 1. International Cooperation and Exchange
  - 1) Current Status of International Operations:

Participated in 86 international meetings or research/study gatherings. Held 18 international meetings in Taiwan and welcomed 824 visits by foreign nationals from 63 countries. Highlights were as follows:

- a. Participation in International Meetings
  - a) Hosted the 2013 Taiwan-US Health and Welfare Policy Symposium in Taipei in conjunction with Duke University. The theme was "Advancing Population Health: from Policy to Practice." In August held a Taiwan-US public health roundtable meeting in the United States that had the theme "Pathways to Improving Population Health: Evidence-Based Practices."
  - b) The theme of the 21st IUHPE World Conference on Health Promotion was "Best Investments in Health." At the conference, Health Promotion Administration Director-General Chiou Shu-Ti was named the vice president for partnerships of the International Union for Health Promotion and Education. Chiou was also invited to host an oral presentation on HPH and health care and to give a speech.

- b. Hosting International Meetings
  - a) 2013 International Conference of Traditional and Complementary Medicine on Health: The conference, which took place in Taipei in May, involved investigation and sharing of recent findings in traditional medicine, herbal remedies and dietary therapy.
  - b) APEC 10 Years After the SARS Epidemic: Invited to the conference, which took place in July in Taipei, were all members of the Asia-Pacific Economic Cooperation and experts. A total of 120 people, including representatives from 14 APEC member economics, discussed and investigated health systems reforms and progress one decade after SARS.
  - c) 2013 Taiwan-Japan-Korea National Health Insurance Conference: The conference, held in July in Taipei, had the themes "NHI implementation status and outlook," "treatment in remote areas and outlying islands," and "the impact of aging societies on treatment costs." Discussion centered on treatment status, insurance finances, future finance challenges, and reform planning.



**APEC 10 Years After the SARS Epidemic** 



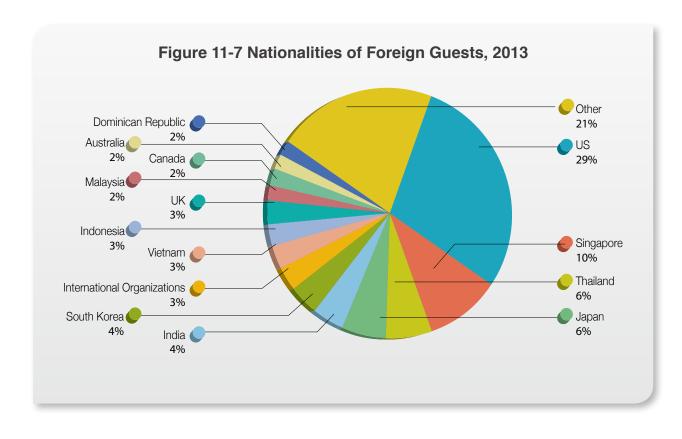
2013 Global Health Forum in Taiwan

- d) International Experts Meeting Challenges and Opportunities in Prevention and Control of Rabies: The meeting, held in August in Taipei, included 120 domestic and foreign experts from the WHO, the US Centers for Disease Control and Prevention and the Global Alliance for Rabies Control. Topics included rabies prevention measures, response strategies, assessments of oral vaccines, animal rabies investigations, and immunity before and after exposure.
- e) 2013 Global Health Forum in Taiwan: The forum, held in November in Taipei, had the theme "Health in All Policies." A total of 66 foreign guests from 24 countries attended, including nine health ministers or deputy ministers, health ministry representatives and officials, 32 experts, and 25 leaders in the medical field.
- visits by Foreign Guests: In 2013, welcomed
   visits by foreign guests from 63 countries.
   Besides general purpose visits, guests came

to discuss specific topics such as health and welfare policy, medicines, foods, health insurance, technology and bilateral cooperation. Origins of visitors are shown in Figure 11-7.

### 2) International Cooperation

- a. A Memorandum of Understanding on Cooperation in Drug Safety Information Between Taiwan and Austria: The memorandum, signed on July 9, 2013, by former Food and Drug Administration Director-General Kang Jaw-jou and Austrian Agency for Health and Food Safety chief executive Dr. Heinz Fruhauf, increased bilateral information exchange and cooperation in drug safety and related areas.
- b. Cross-Strait Cooperation Agreement on Medicine and Public Health Affairs: The agreement, which was signed in December 2010 during the 6th Chiang-Chen meeting, was used to share medical case information and disease-related news during the 2013 outbreak of avian



influenza (A) H7N9. China provided H7N9 clinical treatment information to Taiwan for reference and supplied a virus strain. Taiwan sent experts to China to gain a better understanding of the outbreak.

- c. Exchanges with Foreign Experts and Organizations: Members of Taiwan's medical and health field maintain friendly relations and interact with numerous groups, including the World Medical Foundation, the International Council of Nurses, the World Health Professions Alliance, the International Pharmaceutical Federation, the World Federation of Public Health Associations, the International Society of Physical and Rehabilitation Medicine, and the International Federation of Pharmaceutical Manufacturers & Associations.
- d. Visits to Allies: As part of a diplomatic tour from August 11-21, 2013, by President Ma Ying-jeou to five Central and South American allies – Haiti, Paraguay, St. Lucia, St. Vincent and the Grenadines, St. Kitts and Nevis –

- former Health Minister Chiu Wen-Ta met the health ministers of each nation to discuss future bilateral health exchanges and areas of cooperation. Topics included: training of health professionals, sharing experiences, hospital rebuilding and provision of medical aid, and assistance from allies in boosting Taiwan's opportunities for international participation.
- e. A Memorandum of Understanding on Food Safety Cooperation Between Taiwan and Belgium: The memorandum was signed in a remote ceremony by the acting Food and Drug Administration director-general, Hsu Ming-neng (who concurrently served as deputy health minister), and the managing director of the Federal Agency for the Safety of the Food Chain, Gilbert Houins. The two sides agreed to share information and cooperate in international risk evaluation planning and personnel exchange. Through bilateral cooperation, stronger food safety management and professional research capabilities could be expected on both sides.



In the company of President Ma, Minister Chiu met St. Lucia Governor-General Pearlette Louisy.

#### 2. International Health and Medical Aid

In these difficult times, when climate anomalies and natural disasters are becoming more frequent, Taiwan is committed to providing foreign health and medical aid. Benefits include benevolence and a demonstration of the important role Taiwan plays in the world.

### 1) Disaster Assistance

- a. Haiti Earthquake Disaster Rebuilding Assistance by the ROC: This plan, which was formulated by the Ministry of Foreign Affairs and is being implemented by the MOHW, consists of three public health and medical care sub-plans: the "Taiwan Health Promotion Center Project," the "Medical Equipment Donation Project," and the "Epidemic Prevention Project."
- b. Taiwan International Health Action: Since its founding in 2006, TaiwanIHA has conducted 19 humanitarian medical aid missions. In July and August 2013, a medical team mission to Sri Lanka performed cataract surgery on 190 people.
- Typhoon Haiyan Disaster Relief Account:
   The destruction wreaked by Typhoon
   Haiyan on central Philippines in November

2013 caused massive damage to homes and more than 10,000 casualties. The storm impacted millions of people. The MOHW responded by establishing a special account to gather disaster relief funds to aid victims. Selflessness shown by Taiwanese donors led to the collection of NTD21,746,750.

#### 2) Medical Assistance

- a. Global Medical Instruments Support & Service Program: This program gathers secondhand medical equipment from medical care institutions across Taiwan to be donated to diplomatic allies, in accordance with Ministry of Foreign Affairs policy. In 2013, five donations consisting of a total of 253 pieces of medical equipment were made to Haiti, Sao Tome and Principe, and Paraguay.
- b. Taiwan International Healthcare Training Center Program: This program promotes friendly relations by training health care workers from allies lacking in medical resources. In 2013, training courses with 140 total participants from 26 countries.
- c. 2013 Plan to Expand Health Cooperation with African Nations: Assistance with the advancement of public health in Africa covered NHI, care for women and children, AIDS prevention, parasite prevention and cure, eHealth, medical supply donations and personnel training.
- d. Taiwan Health Center on the Marshall Islands 2013 Plan: Implemented by MOHW Shuang Ho Hospital, this plan focused on parasite prevention, healthy lifestyle and nutrition education, adolescent health, sex education, tobacco hazards prevention, prevention of sexually transmitted diseases, and training of health seed instructors who focus on women's and children's health.
- e. Taiwan Health Center on the Solomon Islands 2013 Plan: Implemented jointly by the MOHW and Kaohsiung Medical University Chung-Ho Hospital, the plan

provided local medical treatment and health education, parasite prevention among children, training of seed teachers (who sought to improve care of women and infants, CPR for infants, and diabetes health education, etc.)

## **Chapter 3 Globalized Medical Services**

## Section 1 Background Development of the Medical Service Industry

- 1. Reform to the health care payment system is changing how hospitals operate at the same time that the aging population and technological progress are expanding coverage of the health care services market. The medical industry has moved from simply treating disease toward customer-oriented service. In spite of rising expenditures on health treatment and care, the relatively low share of these expenditures as a percentage of GDP compared to other developed nations shows that there is room for growth. Globalized development of health care services presents an opportunity for Taiwan to effectively use its advantages in technique and quality. This will not only spark further development of Taiwan's health care industry but also raise international competitiveness.
- 2. Development Goals for Globalized Medical Services
  - 1) In order to expand innovative operational strategies of medical treatment providers, and thereby encourage a diverse environment in the health industry, providers assisted in developing brand, specialties, and range of services. Other steps included expanded corporate capabilities, such as industrial systematization and organizational structure, and encouragement of horizontal and vertical integration with organizations inside and outside the industry.
  - 2) Plans were created to develop the international

health industry in accordance with the Free Economic Pilot Zone policy. As the central competent authority dictates policy direction, local governments are planning execution. Medical treatment is to serve as an engine to boost development in other areas: biotechnology, pharmaceutical manufacturing, medical devices, information and health maintenance.

## Section 2 Implementation Results of Developing Globalized Medical Services

- 1. Established the Taiwan Task Force for Medical Travel, which serves as a platform for information exchange and dissemination. Also continued to assist 43 participating hospitals in building internationally competitive environments by reviewing foreign language telephone networks and websites as well as performing on-site guidance and inspections.
- Continued to enhance marketing strategies associated with medical treatment in Taiwan. This included local and overseas promotion of medical tourism along with marketing of Taiwan's medical services brand.
- 3. In coordination with the regulations governing entry permission to citizens of mainland China, 45 hospitals were announced that could apply for mainland Chinese to come to Taiwan for health examinations or aesthetic medicine procedures. This provided even easier entry for Mainland Chinese interested in coming to Taiwan for these purposes.
- 4. Conducted a pilot program to ease restrictions on overseas Chinese from designated countries coming to Taiwan for health examinations, aesthetic medicine treatment or medical treatment. The program — covering Myanmar, Laos and Cambodia — restricted the patients to entering and leaving as a group. Through June 2014, total applications reached 115 groups and 2,341 participants.

- 5. Recent achievements in the promotion of medical travel are described in Table 11-1.
- 6. In line with promotion of the international health care industry under the Taiwan Free Economic Pilot Zones plan, Stage 1 involved establishment of an international medical service center that could facilitate provision of domestic medical care information and assistance with making appointments for medical consultations. Four airport service centers (at Taipei Songshan, Taoyuan, Taichung and Kaohsiung) opened on December 28, 2014. Stage 2 (to begin

following passage of the special statute governing free economic pilot zones) calls for establishment of an international health industry park that will recruit top-flight talent to develop the medical care and health industries. By attracting enterprises involved in international health care, drug and medical device manufacturing, biotechnology R&D, elderly health maintenance, and health information, the park will raise recognition of Taiwan's international health industry while seeking to make inroads in the immense business opportunities available in international health.

**Table 11-1 Recent Achievements in the Promotion of Medical Travel** 

Period Type	2008	2009	2010	2011	2012	2013
Clinical	63,388	78,553	96,850	92,931	115,569	123,107
Hospitalization	1,102	1,818	2,157	3,105	3,845	4,293
Aesthetic Medicine	1,072	3,902	3,125	3,254	5,822	10,627
Health Examination	2,983	5,234	8,532	9,843	48,075	93,137
Total person times	68,545	89,507	110,664	109,133	173,311	231,164
Output Value (NTD100 Million)	20.29	34.33	41.49	54.14	96.23	136.48



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### Appendix 1 Health and Welfare Indicators

Table 1 Population Indicators

	Total	Popu	lation Compo	sition	Crude	Crude	Natural	Total		Danulation
Year	Total Population	Under 15	15-64	Over 65	Birth Rate	Death Rate	Increase Rate	Fertility Rate	Adolescent Pregnancy	Population Density
	1,000s of Persons	%	%	%	‰	‰	‰	Per Woman	<b>‰</b>	People/km²
1995	21,357	23.8	68.6	7.6	15.5	5.6	9.9	1.8	17	590
1996	21,525	23.2	69.0	7.9	15.2	5.7	9.5	1.8	17	595
1997	21,743	22.6	69.3	8.1	15.1	5.6	9.5	1.8	15	601
1998	21,929	22.0	69.8	8.3	12.4	5.6	6.8	1.5	14	606
1999	22,092	21.4	70.1	8.4	12.9	5.7	7.2	1.6	13	610
2000	22,277	21.1	70.3	8.6	13.8	5.7	8.1	1.7	14	616
2001	22,406	20.8	70.4	8.8	11.7	5.7	5.9	1.4	13	619
2002	22,521	20.4	70.6	9.0	11.0	5.7	5.3	1.3	13	622
2003	22,605	19.8	70.9	9.2	10.1	5.8	4.3	1.2	11	625
2004	22,689	19.3	71.2	9.5	9.6	6.0	3.6	1.2	10	627
2005	22,770	18.7	71.6	9.7	9.1	6.1	2.9	1.1	8	629
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	15.7	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

Source: Ministry of the Interior

Table 2 Life Expectancy and Mortality Rate

		Life Expectancy at Birth			Adult Mortality Rate
Year	Total	Male	Female	- Under 5 Mortality Rate	(Ages 15-60)
	Years	Years	Years	Per 1,000 Population	Per 1,000 Population
1995	74.5	71.9	77.7	9.0	131.4
1996	75.0	72.4	78.0	9.3	131.4
1997	75.5	71.9	77.7	9.0	126.7
1998	75.8	73.1	78.9	9.3	123.8
1999	75.9	73.3	79.0	9.1	122.6
2000	76.5	73.8	79.6	8.5	119.0
2001	76.7	74.1	79.9	8.2	116.7
2002	77.2	74.6	80.2	7.6	111.8
2003	77.3	74.8	80.3	6.9	110.7
2004	77.5	74.7	80.8	7.3	111.1
2005	77.4	74.5	80.8	6.9	112.8
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	83.3	5.1	96.3

Source: Ministry of the Interior

Table 3 Health Expenditures

					Health Ex	penditures			
				Financial Agents	Fi	nancial Resoui	ce	Total Expenditures	Per Capita Total
Year	Economic Growth Rate	Per Capita GDP		Public Sector Ratio	Government Department Ratio	Family Department Ratio	Family Out-of-Pocket Ratio	on Health as % of GDP	Expenditures on Health
	%	US\$	Million NTD	%	%	%	%	%	NTD
1995	6.4	12,918	382,195	62.9	31.9	45.0	27.8	5.3	17,971
1996	5.5	13,428	423,626	64.3	30.8	47.1	26.4	5.4	19,757
1997	5.5	13,810	458,764	62.0	28.4	50.0	29.6	5.4	21,206
1998	3.5	12,598	499,471	61.7	27.2	49.8	29.5	5.4	22,874
1999	6.0	13,585	540,108	61.5	25.7	49.5	30.0	5.6	24,539
2000	5.8	14,704	563,124	60.0	26.6	51.8	31.9	5.5	25,384
2001	-1.7	13,147	583,775	61.3	27.1	52.0	32.3	5.9	26,130
2002	5.3	13,404	620,674	60.4	25.7	51.6	32.5	6.0	27,631
2003	3.7	13,773	657,796	60.2	27.2	51.8	32.7	6.1	29,154
2004	6.2	15,012	705,353	58.9	25.9	52.3	33.8	6.2	31,146
2005	4.7	16,051	735,502	57.0	24.9	53.6	35.3	6.3	32,359
2006	5.4	16,491	767,432	57.3	24.8	52.5	34.3	6.3	33,625
2007	6.0	17,154	796,540	57.8	24.1	52.8	34.9	6.2	34,757
2008	0.7	17,399	819,416	57.2	23.9	53.7	35.7	6.5	35,630
2009	-1.8	16,359	862,552	57.4	23.9	52.7	35.5	6.9	37,375
2010	10.8	18,503	885,045	57.2	25.5	55.6	36.8	6.5	38,246
2011	4.2	20,057	906,246	57.3	25.3	56.3	36.8	6.6	39,073
2012	1.5	20,423	930,181	58.1	24.9	55.5	36.2	6.6	39,973

Source: Directorate-General of Budget, Accounting and Statistics, Executive Yuan; MOHW

Table 4-1 Health Facilities – Institutions

						tions						
					Hospitals					CI	inics	
Year			Wes	stern Medi	cine	Chi	nese Medio	cine		Western	Chinese	Dentistry
				Public	Private		Public	Private		Medicine	Medicine	
	Stores	Stores	Stores	Stores	Stores	Stores	Stores	Stores	Stores	Stores	Stores	Stores
1995	16,104	787	688	94	594	99	1	98	15,317	8,680	1,933	4,704
1996	16,645	773	684	94	590	89	1	88	15,872	9,009	1,987	4,876
1997	17,398	750	667	95	572	83	2	81	16,648	9,347	2,165	5,136
1998	17,731	719	647	95	552	72	2	70	17,012	9,473	2,259	5,280
1999	17,770	700	634	96	538	66	2	64	17,070	9,378	2,317	5,375
2000	18,082	669	617	94	523	52	2	50	17,413	9,402	2,461	5,550
2001	18,265	637	593	92	501	44	2	42	17,628	9,425	2,544	5,659
2002	18,228	610	574	91	483	36	2	34	17,618	9,287	2,601	5,730
2003	18,777	594	558	91	467	36	2	34	18,183	9,565	2,729	5,889
2004	19,240	590	556	88	468	34	2	32	18,650	9,819	2,852	5,979
2005	19,433	556	531	79	452	25	1	24	18,877	9,948	2,900	6,029
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

Table 4-2 Health Facilities – Beds

				Beds					Beds Pe	er 10,000	Population	
				Hospitals						Hospital	s	
Year			Public	Private	Acute Care Beds	Acute General Care Beds	Clinics			Acute Care Beds	Acute General Care Beds	Clinics
	bed	bed	bed	bed	bed	bed	bed	bed	bed	bed	bed	bed
1995	112,378	101,430	39,922	61,508	66,928	64,322	10,948	52.6	47.5	31.3	30.1	5.1
1996	114,923	104,111	40,125	63,986	69,310	65,891	10,812	53.4	48.4	32.2	30.6	5.0
1997	120,485	108,536	41,421	67,115	69,986	66,226	11,949	55.4	49.9	32.2	30.5	5.5
1998	124,564	111,941	42,838	69,103	71,884	67,944	12,623	56.8	51.0	32.8	31.0	5.8
1999	122,937	110,660	39,440	71,220	72,764	68,123	12,277	55.6	50.1	32.9	30.8	5.6
2000	126,476	114,179	40,129	74,050	74,135	69,124	12,297	56.8	51.3	33.3	31.0	5.5
2001	127,676	114,640	39,670	74,970	72,915	67,818	13,036	57.0	51.2	32.5	30.3	5.8
2002	133,398	119,847	41,904	77,943	74,902	69,572	13,551	59.2	53.2	33.3	30.9	6.0
2003	136,331	121,698	42,777	78,921	75,097	69,545	14,633	60.3	53.8	33.2	30.8	6.5
2004	143,343	127,667	43,865	83,802	78,168	72,300	15,676	63.2	56.3	34.5	31.9	6.9
2005	146,382	129,548	44,273	85,275	78,423	72,411	16,834	64.3	56.9	34.4	31.8	7.4
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

Table 4-3 Health Workforce – Medical Professionals

	Distribution of Health Workers																	
Year		Physicians	Chinese Medicine Doctors	Dentists	Pharmacists (Assistants)	Medical Technologists (Assistants)	Medical Radiation Technologists	Registered Nurses	Midwives	Dietitians	Physical Therapists (Assistants)	Occupational Therapists (Assistants)	Clinical Psychologists	Counseling Psychologists	Respiratory Therapists	Speech Therapists	Audiologists	Dental Technicians (Assistants)
	People	People	People	People	People	People	People	People	People	People	People	People	People	People	People	People	People	People
1995	118,248	24,465	3,030	7,026	19,224	4,722	1,793	56,743	842	298								
1996	123,829	24,790	2,992	7,254	19,667	5,034	1,453	61,494	774	293	•••			•••				
1997	137,829	25,730	3,299	7,573	21,246	5,389	2,266	69,665	782	515	1,287							
1998	144,070	27,168	3,461	7,900	22,761	5,583	2,485	71,215	704	575	1,720	405						
1999	152,385	28,216	3,546	8,240	23,937	6,015	2,500	75,603	649	656	2,290	669				•••		•••
2000	159,212	29,585	3,733	8,597	24,404	6,230	2,761	79,176	558	743	2,620	746						
2001	165,855	30,562	3,979	8,944	24,891	6,542	3,152	82,763	518	778	2,790	868						
2002	175,444	31,532	4,101	9,206	25,355	6,725	3,410	89,568	490	845	3,084	1,061						
2003	183,103	32,390	4,266	9,551	25,033	7,055	3,557	95,271	476	895	3,373	1,169						
2004	192,611	33,360	4,588	9,868	26,079	7,122	3,704	101,465	459	978	3,614	1,307						
2005	199,734	34,093	4,610	10,141	26,750	7,323	3,880	104,786	397	1,056	3,742	1,447	379	170	899			
2006	206,959	34,899	4,743	10,412	27,412	7,457	4,052	109,153	368	1,137	3,901	1,526	478	278	1,097			
2007	214,748	35,849	4,862	10,740	28,040	7,642	4,211	113,832	347	1,239	4,172	1,744	524	325	1,178			
2008	223,623	37,142	5,112	11,093	28,741	7,896	4,443	118,785	308	1,379	4,457	1,882	584	423	1,335			
2009	233,553	37,880	5,290	11,351	29,587	8,203	4,651	125,081	258	1,563	4,867	2,105	643	524	1,508	-	-	-
2010	241,156	38,887	5,354	11,656	30,001	8,377	4,913	128,955	208	1,687	5,214	2,287	696	671	1,657	434	118	-
2011	250,258	40,002	5,570	11,992	31,300	8,579	5,133	133,336	134	1,824	5,608	2,496	757	836	1,810	498	157	186
2012	258,283	40,938	5,740	12,391	32,015	8,751	5,341	137,641	120	2,050	5,878	2,660	832	1,000	1,892	554	181	259
2013	265,759	41,965	5,977	12,794	32,668	9,006	5,507	140,915	132	2,234	6,203	2,806	925	1,122	1,950	676	233	606

Table 4-4 Health Workforce – Medical Professionals per 10,000 Population

	Practicing Health Workers per 10,000 Population																	
Year		Physicians	Chinese Medicine Doctors	Dentists	Pharmacists (Assistants)	Medical Technologists (Assistants)	Medical Radiation Technologists	Registered Nurses	Midwives	Dietitians	Physical Therapists (Assistants)	Occupational Therapists (Assistants)	Clinical Psychologists	Counseling Psychologists	Respiratory Therapists	Speech Therapists	Audiologists	Dental Technicians (Assistants)
	People	People	People	People	People	People	People	People	People	People	People	People	People	People	People	People	People	People
1995	55.4	11.5	1.4	3.3	9.0	2.2	0.8	26.6	0.4	0.1								
1996	57.5	11.5	1.4	3.4	9.1	2.3	0.7	28.6	0.4	0.1								
1997	63.4	11.8	1.5	3.5	9.8	2.5	1.0	32.0	0.4	0.2	0.6							
1998	65.7	12.4	1.6	3.6	10.4	2.5	1.1	32.5	0.3	0.3	0.8	0.2	***	***	***	***	***	
1999	69.0	12.8	1.6	3.7	10.8	2.7	1.1	34.2	0.3	0.3	1.0	0.3						
2000	71.5	13.3	1.7	3.9	11.0	2.8	1.2	35.5	0.3	0.3	1.2	0.3						
2001	74.0	13.6	1.8	4.0	11.1	2.9	1.4	36.9	0.2	0.3	1.2	0.4						
2002	77.9	14.0	1.8	4.1	11.3	3.0	1.5	39.8	0.2	0.4	1.4	0.5	•••		•••	•••		
2003	81.0	14.3	1.9	4.2	11.1	3.1	1.6	42.1	0.2	0.4	1.5	0.5						
2004	84.9	14.7	2.0	4.3	11.5	3.1	1.6	44.7	0.2	0.4	1.6	0.6						
2005	87.7	15.0	2.0	4.5	11.7	3.2	1.7	46.0	0.2	0.5	1.6	0.6	0.2	0.1	0.4			
2006	90.5	15.3	2.1	4.6	12.0	3.3	1.8	47.7	0.2	0.5	1.7	0.7	0.2	0.1	0.5			
2007	93.5	15.6	2.1	4.7	12.2	3.3	1.8	49.6	0.2	0.5	1.8	0.8	0.2	0.1	0.5			
2008	97.1	16.1	2.2	4.8	12.5	3.4	1.9	51.6	0.1	0.6	1.9	0.8	0.3	0.2	0.6	•••		
2009	101.0	16.4	2.3	4.9	12.8	3.5	2.0	54.1	0.1	0.7	2.1	0.9	0.3	0.2	0.7	-	-	-
2010	104.1	16.8	2.3	5.0	13.0	3.6	2.1	55.7	0.1	0.7	2.3	1.0	0.3	0.3	0.7	0.2	0.1	-
2011	107.8	17.2	2.4	5.2	13.5	3.7	2.2	57.4	0.1	0.8	2.4	1.1	0.3	0.4	0.8	0.2	0.1	0.1
2012	110.8	17.6	2.5	5.3	13.7	3.8	2.3	59.0	0.1	0.9	2.5	1.1	0.4	0.4	0.8	0.2	0.1	0.1
2013	113.7	18.0	2.6	5.5	14.0	3.9	2.4	60.3	0.1	1.0	2.7	1.2	0.4	0.5	0.8	0.3	0.1	0.3

### Table 5 Notifiable Diseases

	Confirmed Cases														
Year	Cholera	H5N1 Influenza	Japanese Encephalitis	Hansen's Disease	Malaria	Measies	Meningococcal	Mumps	Pertussis	Poliomyelitis	Congenital Rubella Syndrome	Rubella	Neonatal Tetanus	Tetanus	TB
	People	People	People	People	People	People	People	People	People	People	People	People	People	People	People
1995	3		27	10	38	-	9	181	26	-	-	2		13	10,836
1996	-		21	15	38	-	16	346	15	-	-	3	•••	14	11,591
1997	1		6	7	48	5	19	256	102	-	-	4		12	15,386
1998	-		22	7	49	9	12	270	34	-	-	5		21	14,169
1999	5		24	3	32	1	13	261	19	-	-	2		20	13,496
2000	8		13	4	42	6	16	375	47	-	-	29	•••	24	13,910
2001	-		33	2	29	10	43	444	6	-	3	17		19	14,486
2002	2		19	8	28	24	46	665	18	-	-	4		15	16,758
2003	1		25	9	34	6	26	676	26	-	<del>-</del>	2		13	15,042
2004	1	***	32	9	18	-	24	1,081	21	-	-	4		16	16,784
2005	2	-	35	9	26	7	20	1,158	38	-	-	7		16	16,472
2006	1	-	29	11	26	4	13	971	14	-	-	6		14	15,378
2007	-	-	37	12	13	10	20	1,208	41	-	1	54	-	10	14,480
2008	1	-	17	8	18	16	19	1,145	41	-	1	33	-	18	14,265
2009	3	-	18	7	11	48	2	1,068	90	-	-	23	-	12	13,336
2010	5	-	33	5	21	12	7	1,125	61	-	-	21	-	12	13,237
2011	3	-	22	5	17	33	5	1,171	77	-	-	60	-	10	12,634
2012	5	-	32	13	12	9	6	1,061	54	-	-	12	-	17	12,338
2013	7	-	16	7	13	8	6	1,170	51	-	-	7	-	24	11,528
Source:	NAOL IVA/		ī	ſ	T	T	T	T		ſ	ſ		T		I I

Source: MOHW

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

	Incid	ents of Food Poiso	ning		Number of Phar	maceutical Firms	
Year		No. of Cases	No. of Deaths		Pharmacies	Dealers of Drugs or Medical Devices	Manufacturers of Drugs or Medical Devices
	No. of outbreaks	People	People	Stores	Stores	Stores	Stores
1995	123	4,950	-	34,846	4,862	29,314	670
1996	178	4,043	-	37,176	6,438	30,096	642
1997	234	7,235	1	38,583	6,707	31,241	635
1998	180	3,951	-	39,027	6,434	31,945	648
1999	150	3,112	1	40,322	6,349	33,313	660
2000	208	3,759	3	43,641	6,397	36,536	708
2001	178	2,955	2	47,130	6,440	39,948	742
2002	262	5,566	1	49,752	6,990	41,996	766
2003	251	5,283	2	51,447	7,155	43,500	792
2004	274	3,992	2	52,685	7,435	44,395	855
2005	247	3,530	1	55,802	7,673	47,198	931
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

Table 7 Mortality Statistics – Major Causes of Death

	I.C.							Major Ca	uses of Death				
V	Infant Mortality Rate	All Caus	ses of Death	Malignar	nt Neoplasms	Diseas	se of Heart		rovascular seases	Pne	eumonia	Diabet	es Mellitus
Year	Per 1,000 Live Births	Number of Deaths	Standardized Mortality Rate per 100,000 Population										
1995	6.5	117,954	647.7	25,841	136.4	11,256	64.7	14,132	79.0	3,070	18.4	7,225	39.2
1996	6.7	120,605	641.1	27,961	143.5	11,273	62.2	13,944	75.3	3,200	18.5	7,525	39.4
1997	6.4	119,385	610.7	29,011	144.3	10,754	56.8	12,885	66.6	3,619	19.7	7,500	38.1
1998	6.6	121,946	600.8	29,260	140.5	11,030	55.4	12,705	63.0	4,447	23.0	7,532	36.7
1999	6.1	124,991	594.1	29,784	138.3	11,299	54.5	12,631	60.4	4,006	19.9	9,023	42.4
2000	5.8	124,481	569.4	31,554	141.6	10,552	48.8	13,332	61.1	3,302	15.6	9,450	42.7
2001	6.0	126,667	558.7	32,993	143.1	11,003	48.8	13,141	57.8	3,746	16.8	9,113	39.8
2002	5.4	126,936	539.8	34,342	144.2	11,441	48.5	12,009	50.5	4,530	19.4	8,818	37.1
2003	4.9	129,878	532.3	35,201	143.1	11,785	47.9	12,404	49.9	5,099	20.8	10,013	40.5
2004	5.3	133,680	528.7	36,357	142.8	12,861	50.1	12,339	47.8	5,536	21.5	9,191	35.8
2005	5.0	138,957	530.0	37,222	141.2	12,970	48.3	13,139	48.9	5,687	21.0	10,501	39.4
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

Source: Department of Statistics, MOHW

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 Mortality Statistics – Major Causes of Death (continued)

	Major Causes of Death  Accidents and Chronic Lower Chronic Liver Hypertensive Nephritis, Nephrotic Intentional Self-harm											
				ic Lower ory Diseases	Dise	nic Liver ase and rhosis		rtensive seases	Syndi	s, Nephrotic come and phrosis		al Self-harm iicide)
year	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
1995	12,983	62.6	4,017	23.5	4,456	22.8	2,616	15.3	3,519	19.9	1,618	7.8
1996	12,422	58.9	4,310	24.3	4,610	23.1	2,656	14.9	3,547	19.4	1,847	8.7
1997	11,297	52.5	4,457	23.9	4,767	23.0	2,611	13.8	3,504	18.4	2,172	10.0
1998	10,973	50.2	4,961	25.3	4,940	23.2	2,273	11.5	3,435	17.2	2,177	9.8
1999	12,960	58.7	5,046	24.6	5,180	23.5	1,856	9.0	3,474	16.8	2,281	10.0
2000	10,515	46.5	4,717	21.9	5,174	22.6	1,602	7.5	3,872	17.9	2,471	10.6
2001	9,513	41.5	5,159	22.9	5,239	22.3	1,766	7.9	4,056	17.9	2,781	11.7
2002	8,489	36.3	5,226	22.0	4,795	19.9	1,947	8.2	4,168	17.7	3,053	12.5
2003	8,191	34.5	5,192	20.9	5,185	20.9	1,844	7.4	4,306	17.5	3,195	12.8
2004	8,453	35.0	5,292	20.3	5,351	20.8	1,806	7.0	4,680	18.2	3,468	13.6
2005	8,365	34.0	5,484	20.0	5,621	21.3	1,891	7.0	4,822	17.9	4,282	16.6
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

Source: Department of Statistics, MOHW

Notes: 1.The standardized mortality rate is based on the WHO standard world population age structure for 2000.

<sup>2.</sup> Began using the International Classification of Diseases (ICD-10) as a standard diagnostic tool in 2008.

Table 7-1 Mortality Statistics – Major Causes of Cancer Death

	Major Causes of Cancer Death  Cancers of Liver and Cancers of Trachea, Cancers of Colon, Cancer of Breast Cancers of Prostate											
		of Liver and ic Bile Ducts		of Trachea, s and Lung		s of Colon, and Anus		of Breast male)	Cancer (	of Prostate		
year	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		
1995	5,204	27.2	5,030	26.7	2,469	13.3	918	9.7	371	4.2		
1996	5,794	29.5	5,439	28.0	2,642	13.8	987	10.1	463	5.0		
1997	5,842	28.9	5,857	29.2	2,855	14.3	1,073	10.6	531	5.6		
1998	5,865	28.1	5,749	27.6	2,987	14.5	995	9.5	540	5.3		
1999	5,762	26.6	5,959	27.6	3,128	14.6	1,082	10.1	561	5.3		
2000	6,001	27.0	6,261	28.0	3,376	15.3	1,149	10.3	635	5.7		
2001	6,415	28.0	6,555	28.3	3,457	15.0	1,241	10.7	693	5.9		
2002	6,943	29.4	6,846	28.5	3,649	15.3	1,203	10.2	750	6.2		
2003	7,010	28.8	6,911	27.9	3,711	15.0	1,381	11.3	742	5.9		
2004	7,059	28.1	7,153	27.8	3,898	15.2	1,339	10.5	821	6.2		
2005	7,108	27.3	7,302	27.4	4,111	15.5	1,439	11.0	909	6.6		
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		

Source: Department of Statistics, MOHW

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

				NHI					Nationa	l Pension	
				Heal	th Care Ind	icators				Sta	tus
Year	Insured	Percentage of Total Population	Average Clinical Visits per Insured Person	Average Hospital Stays per 100 Insured Persons	Average Fees per Clinical Visit	Average Fees per Hospital Stay	Average Length of Hospitalization Stays	Insured Persons	Ratio of People 15-64	Low- Income Households	Disabled Person
	1,000s of Persons	%	Times	Times	Points	Points	Days	1,000s of Persons	%	1,000s of Persons	1,000s of Persons
1995	19,123						•••				
1996	20,041					•••					
1997	20,492										
1998	20,757	***	14.4	11.6	651	36,770	8.8	***	***		
1999	21,090		14.7	12.0	687	38,000	8.7				
2000	21,401	***	14.1	12.3	718	38,337	8.7		***		
2001	21,654		13.6	12.5	752	39,101	8.8				
2002	21,869		13.6	13.0	806	41,046	9.1				
2003	21,984	•••	13.4	12.0	849	45,265	9.6	•••		•••	•••
2004	22,134		14.6	13.2	874	49,048	9.7				
2005	22,315	•••	14.7	13.2	897	51,406	9.9				
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	4,221	31.3	39	242
2009	23,026	99.3	14.4	13.4	1,052	54,774	9.9	4,015	29.4	50	251
2010	23,074	99.4	14.6	13.6	1,067	54,693	10.0	3,872	27.9	51	250
2011	23,199	99.5	15.1	13.8	1,086	55,253	9.9	3,784	27.1	62	251
2012	23,281	99.5	15.1	13.8	1,113	55,569	9.9	3,726	26.5	73	248
2013	23,463	99.6	15.1	13.5	1,168	57,168	9.9	3,678	25.9	76	246

<sup>1.</sup> Sources of Health Care Indicators: Insured person files in the MOHW second-generation storage system, clinics, delivery institutions, and clinical records (data acquired on May 8, 2014).

<sup>2.</sup> Statistics contained in this table do not include commissioned cases.

<sup>3.</sup> In calculations based on "per insured person," insured persons refers to the average number of insured persons from the months of February, May, August and November.

<sup>4.</sup> Clinical visits do not include reported at-home care and community psychological care, transfers and outsourced examinations, refilling of prescriptions for chronic illnesses, delivery institutions, and care order payment amount supplementary reports.

<sup>5.</sup> Clinical cases do not include transfers and outsourced examinations, refilling of prescriptions for chronic illnesses, delivery institutions, and care order payment amount supplementary reports.

<sup>6.</sup> Hospitalization cases do not include care order payment amount supplementary reports.

<sup>7.</sup> Length of hospitalization stays refers to combined time spent in acute care beds and chronic illness beds.

Table 9 Social Assistance

		Low-income	Households		Low-income	Low-ir	ncome Hous	eholds – Me	mbers	Low-income Household
Year	Subtotal	Class 1	Class 2	Class 3	Households as Percentage of Total Households	Subtotal	Class 1	Class 2	Class 3	Members as Percentage of Total Population
	Households	Households	Households	Households	%	People	People	People	People	%
1995	48,580	8,755	17,160	22,665	0.8	114,707	10,794	42,824	61,089	0.5
1996	49,307	7,855	17,884	23,568	0.8	115,542	9,533	42,738	63,271	0.5
1997	49,780	6,544	18,486	24,750	0.8	116,056	7,906	42,852	65,298	0.5
1998	54,951	5,795	20,696	28,460	0.9	125,426	6,767	45,658	73,001	0.6
1999	58,310	4,980	21,357	31,973	0.9	136,691	5,769	47,064	83,858	0.6
2000	66,467	4,983	24,470	37,014	1.0	156,134	5,778	52,630	97,726	0.7
2001	67,191	4,132	22,461	40,598	1.0	162,699	4,761	49,876	108,062	0.7
2002	70,417	3,648	20,987	45,782	1.0	171,200	4,064	45,454	121,682	0.8
2003	76,406	3,702	21,219	51,485	1.1	187,875	4,175	46,762	136,938	0.8
2004	82,783	3,665	21,220	57,898	1.2	204,216	4,014	46,659	153,543	0.9
2005	84,823	4,049	20,445	60,329	1.2	211,292	4,394	46,973	159,925	0.9
2006	89,900	4,214	21,073	64,613	1.2	218,166	4,472	47,168	166,526	1.0
2007	90,682	4,207	21,025	65,450	1.2	220,990	4,461	46,776	169,753	1.0
2008	93,032	4,308	21,324	67,400	1.2	223,697	4,540	46,748	172,409	1.0
2009	105,265	4,253	23,447	77,565	1.3	256,342	4,451	50,811	201,080	1.1
2010	112,200	4,085	24,201	83,914	1.4	273,361	4,271	51,788	217,302	1.2
2011	128,237	4,253	26,999	96,985	1.6	314,282	4,482	56,295	253,505	1.4
2012	145,613	4,364	31,095	110,154	1.8	357,446	4,582	63,984	288,880	1.5
2013	148,590	4,520	32,656	111,414	1.8	361,765	4,698	64,022	293,045	1.5

Notes: 1. Kaohsiung added Type 4 in 2011

<sup>2.</sup> Implementation of the new "Public Assistance Act" on July 1, 2011, not only raised the lowest living index but also removed siblings from the calculation.

Table 9 Social Assistance (Continued)

Year	Middle-low Income Households	Middle-low Income Households as a Percentage of Total Households	Middle- low Income Household Members	Middle-low Income Household Members as a Percentage of Total Population	Medical Subsidies		Nursing Care Assistance for Mid or Low-income  Person- times NTD10,000		Disaster Aid	r Emergency Aid	
	Households	%	People	%	Person- times	NTD10,000	Person- times	NTD10,000	NTD10,000	Person- times	NTD10,000
1995	-	-	-	-			-	-	9,364	37,197	27,170
1996	-	-	-	-	25,561	14,522	-	-	37,421	47,584	31,143
1997	-	-	-	-	45,196	15,762	-	-	29,554	38,391	21,048
1998	-	-	-	-	14,788	16,758	-	-	21,254	44,697	23,528
1999	-	-	-	-	10,548	10,253	-	-	2,996,312	42,580	23,542
2000	-	-	-	-	7,889	9,695	-	-	62,946	41,599	23,949
2001	-	-	-	-	9,640	10,173	4,454	10,209	96,886	39,229	21,406
2002	-	-	-	-	10,049	10,485	4,678	9,191	17,900	39,335	20,536
2003	-	-	-	-	11,242	8,963	4,683	9,523	8,129	35,257	19,914
2004	-	-	-	-	12,146	10,522	4,880	9,246	66,271	36,134	24,592
2005	-	-	-	-	10,756	9,376	5,145	10,429	54,774	33,960	21,794
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	35,420	0.4	120,042	0.5	5,383	7,092	9,761	16,269	4,672	45,418	27,423
2012	88,988	1.1	282,019	1.2	5,013	7,176	9,667	16,283	17,363	46,978	26,910
2013	108,589	1.3	334,391	1.4	4,322	8,041	10,258	16,936	8,853	40,961	24,669

Notes: 1. Kaohsiung added Type 4 in 2011

<sup>2.</sup> Implementation of the new "Public Assistance Act" on July 1, 2011, not only raised the lowest living index but also removed siblings from the calculation.

Table 10 Social Welfare

		Children	and You	th Welfare (	Under 18)		Elderly Welfare (65 Years and Older)					
Vacu	Quantity of	of Total	Family Foster Care		Living Support for Disadvantaged		Quantity	As Percentage	Subsidies Low-inco	Allowance s for Mid or ome Elderly ople	Allowand or Low	ial Care ces for Mid r-income y People
Year	People	Population	Placed in Care	Amount	Children a	and Youths	of People	of Total Population	Approved, as of End of Year	Amount	Times	Amount
	People	%	People	NTD10,000	Person- times	NTD10,000	People	%	People	NTD10,000	Person- times	NTD10,000
2002	5,544,533	24.6					2,031,300	9.0	182,392	999,266	=	-
2003	5,429,950	24.0					2,087,734	9.2	173,951	987,948	7,634	3,554
2004	5,345,047	23.6	1,960	37,220	597,918	108,056	2,150,475	9.5	156,446	926,000	8,517	3,971
2005	5,242,928	23.0	2,052	39,579	824,842	171,496	2,216,804	9.7	148,118	892,951	7,847	3,646
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

Table 10 Social Welfare (Continued)

					Р	eople with Di	sabilities				
	Total Peopl		s of Peopl Disabilitie		As Percentage	Living S	ubsidies	Subsidies fo			for Auxiliary
Year	iotai i Gopi	Under 18	18-64	65 and Over	of Total Population	Living 5	unstates	and Reside	ntial Care	Appliances	
	People	%	%	%	%	Person- times	NTD10,000	People, as of End of Year	NTD10,000	Person- times	NTD10,000
2002	831,266	6.6	57.9	35.5	3.7	2,370,720	753,556	13,709	226,751	58,169	64,061
2003	861,030	6.6	58.6	34.8	3.8	2,654,420	824,960	16,429	265,940	61,223	70,846
2004	908,719	6.6	58.7	34.7	4.0	2,975,141	1,217,452	20,162	292,195	54,843	58,832
2005	937,944	6.5	58.5	34.9	4.1	3,273,538	1,333,763	21,658	323,290	45,162	47,753
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	648,236	70,564	67,823

Source: MOHW

Table 10 Social Welfare (Continued)

				Wo	elfare for	Women					F	amily Suppo	t
	Logol	Conquitations		l Education ctures		n's Welfare es) Activities		for Women Education)	O	)ther	Single- parent	Assistance	ou Formily in
Year	Legal Consultations	Consultations and Guidance	Times Held	Total Participants	Times Held	Total Participants	Total Classes	Total Participants	Times Held	Total Participants	Cases Accepted by Halfway Homes	Assistance f Hard	
	Person- times	Person- times	Times	Participants	Times	Participants	Classes	Participants	Times	Participants	Participants	Participants	NTD10,000
2002	15,388	62,200	333	39,768	1,708	167,606	727	54,111	217	303,213	=	109,598	27,035
2003	15,203	59,050	400	27,790	2,113	192,558	1,469	165,063	406	114,142	-	169,999	33,806
2004	20,841	53,106	617	33,937	3,088	280,341	2,510	102,737	948	152,627	-	172,683	34,172
2005	19,022	44,140	502	26,788	2,445	221,178	2,275	70,135	1,536	104,949	-	188,293	36,244
2006	19,496	51,595	1,918	23,681	1,474	223,033	2,928	111,472	920	112,451	-	98,858	24,220
2007	18,400	45,239	504	36,403	2,309	236,683	2,157	64,850	1,861	155,601	1,444	103,612	28,547
2008	22,099	33,690	638	39,049	1,842	221,142	3,090	164,833	2,326	84,443	2,661	107,149	30,625
2009	25,602	31,419	624	31,062	1,908	198,079	2,182	82,335	1,844	131,100	2,150	153,175	40,913
2010	23,000	49,653	771	43,591	4,493	263,686	2,612	83,527	3,072	235,062	2,055	188,433	47,861
2011	21,641	53,976	2,336	83,301	3,836	245,763	1,970	91,720	11,366	274,230	539	188,987	48,159
2012	28,019	40,761	1,121	41,611	4,728	334,630	1,699	65,352	2,069	132,885	548	156,784	44,840
2013	40,809	53,535	1,352	41,928	7,932	478,181	2,211	80,103	5,429	166,696	581	148,979	42,784

Table 11 Protective Services

	Don	nestic Violence Incid	lents	Sex	nts	Children and Youth Protective Services	
Year	Reported Victims	Protection Assist	ance for Victims	Reported Victims	Protection Assis	tance for Victims	Children and Youths Subjected to Abuse
	People	Person-times	NTD10,000s	People	Person-times	NTD10,000s	People
2004	-	-	-	-	-	-	7,837
2005	58,614	-	-	4,900	-	=	9,897
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	7,317	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

Source: MOHW

Table 12 International Comparisons

		Population Statistics					Life Expectancy and Mortality Rate						
	Median	Crude Birth	Crude Death	Total Fertility	Adolescent Birth Rate	Life Ex	pectancy	at Birth	Infant Mortality	Under 5 Mortality	Adult Mor (Ages	tality Rate 15-60)	
Country	Age	Rate	Rate	Rate	nate	Total	Male	Female	Rate	Rate	Males	Females	
,	2012	2012	2012	2012	2006-2011	2012	2012	2012	2012	2012	2012	2012	
	Years	‰	‰	Per Woman	<b>‰</b>	Years	Years	Years	Per 1,000 Live Births	Per 1,000 Population	Per 1,000 Population	Per 1,000 Population	
Taiwan	38	10	7	1.3	5	80	76	83	4	5	136	56	
Japan	46	8	9	1.4	5	84	80	87	2	3	82	43	
Korea	39	10	5	1.3	2	81	78	85	3	4	98	40	
US	37	13	8	2.0	34	79	76	81	6	7	130	77	
Canada	40	11	7	1.7	14	82	80	84	5	5	83	52	
UK	40	12	9	1.9	25	81	79	83	4	5	90	56	
Germany	45	8	11	1.4	8	81	78	83	3	4	94	50	
France	40	12	9	2.0	12	82	79	85	3	4	109	52	
Australia	37	13	6	1.9	16	83	81	85	4	5	75	44	
New Zealand	37	14	6	2.1	29	82	80	84	5	6	81	53	

Sources: WHO Statistical Information System, 2014; MOHW Note: International comparisons are based on western year

Table 12 International Comparisons (Continued)

			Health E	Ith Expenditures					
	Нє	alth Expenditure Rati	os		Per Capita Heal	th Expenditures			
Country	Total Health Expenditures as a Percentage of GDP	Government Health Expenditures as a Percentage of Total Health Expenditures	Out-of-pocket Expenditures as a Percentage of Private Expenditures on	Per Capita Heal at Average Ex	th Expenditures xchange Rate	Expenditure	ernment Health s at Average ge Rate		
	2011	2011	2011	20	11	20	11		
	%	%	%	US\$	PPP int. \$	US\$	PPP int. \$		
Taiwan	6.6	57.3	86.2	1,326	2,479	759	1,420		
Japan	9.6	82.1	80.6	4,114	3,213	3,378	2,638		
Korea	7.4	55.3	78.8	1,652	2,198	914	1,217		
US	17.7	47.8	22.2	8,508	8,508	4,066	4,066		
Canada	11.2	70.4	49.8	5,575	4,522	3,925	3,183		
UK	9.4	82.8	57.9	3,853	3,405	3,192	2,821		
Germany	11.3	76.5	56.1	5,158	4,495	3,943	3,436		
France	11.6	76.8	32.1	5,093	4,118	3,909	3,161		
Australia	8.9	67.8	59.9	5,176	3,800	3,511	2,578		
New Zealand	10.3	82.7	63.2	3,626	3,182	2,998	2,631		

Sources: WHO Statistical Information System, 2014; MOHW Note: International comparisons are based on western year

# Appendix 2 Notifiable Diseases Statistics

Table 1 Number of Confirmed Cases of Acute Notifiable Diseases, 2013

Categories	Diseases	Total	Indigenous Cases	Imported Cases
	Smallpox	0	0	0
	Plague	0	0	0
1	Severe Acute Respiratory Syndrome (SARS)	0	0	0
	Rabies	1	0	1
	H5N1 Influenza		0	0
	Diphtheria	0	0	0
	Typhoid Fever	19	6	13
	Dengue Fever	860	596	264
	Dengue Hemorrhagic Fever / Dengue Shock Syndrome	16	14	2
	Meningococcal Meningitis	6	6	0
	Paratyphoid Fever	9	7	2
	Poliomyelitis	0	0	0
	Acute Flaccid Paralysis (Note 4)	25	23	2
	Shigellosis	155	24	131
	Amoebiasis	270	88	182
	Malaria	13	0	13
II	Measles	8	2	6
	Acute Hepatitis A	139	99	40
	Enterohaemorrhagic Escherichia coli Infection	0	0	0
	Hantavirus Hemorrhagic Fever with Renal Syndrome	0	0	0
	Hantavirus Pulmonary Syndrome (HPS)	0	0	0
	Cholera	7	7	0
	Rubella	7	1	6
	Chikungunya Fever	29	0	29
	West Nile Fever	0	0	0
	Epidemic Typhus Fever	0	0	0
	Anthrax	0	0	0
	Pertussis	51	51	0
	Tetanus (Note 3)	24	-	-
	Japanese Encephalitis	16	16	0
	Congenital Rubella Syndrome	0	0	0
	Acute Hepatitis B	97	88	9
	Acute Hepatitis C	10	10	0
	Acute Hepatitis D	0	0	0
III	Acute Hepatitis E	9	4	5
	Acute Hepatitis Unspecified	5	5	0
	Mumps (Note 3)	1,170	-	-
	Legionnaires' Disease	115	111	4
	Invasive Haemophilus Influenzae Type b (Hib) Infection	10	10	0
	Neonatal Tetanus	0	0	0
	Enteroviruses Infection with Severe Complications	12	11	1

Categories	Diseases		Indigenous Cases	Imported Cases
	Herpesvirus B Infection	0	0	0
	Leptospirosis	82	79	3
	Melioidosis	19	19	0
	Botulism	1	1	0
	Invasive Pneumococcal Disease	625	624	1
	Q Fever	48	43	5
	Endemic Typhus	27	26	1
IV	Lyme Disease	0	0	0
IV	Tularemia	0	0	0
	Scrub Typhus	538	537	1
	Varicella (Note 3)	10,276	-	-
	Cat-Scratch Disease (Note 5)	23	22	1
	Toxoplasmosis	15	14	1
	Complicated Influenza	965	959	6
	New Delhi metallo-β-lactamase 1 Enterobacteriaceae	0	0	0
	Brucellosis	0	0	0
	Rift Valley Fever	0	0	0
	Marburg Haemorrhagic Fever	0	0	0
	Yellow Fever	0	0	0
V	Ebola Haemorrhagic Fever	0	0	0
	Lassa Fever	0	0	0
	Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Infections	0	0	0
	H7N9 Influenza	2	0	2

### Notes:

- 1. Data were downloaded on May 1, 2014.
- 2. Day of disease onset is used as the basis of analysis for all acute notifiable diseases.
- 3. Tetanus, mumps and varicella were reported cases (not confirmed by examination of the specimen).
- 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.
- 5. Cat-Scratch Disease and New Delhi metallo-β-lactamase 1 Enterobacteriaceae were removed from the list of Category IV notifiable diseases on June 7, 2013.

### Table 2 Number of Confirmed Cases of Chronic Notifiable Diseases, 2013

Categories	Diseases	Number of Confirmed Cases
II	Multidrug-Resistant Tuberculosis (MDR-TB)	129
	Smear-Positive Tuberculosis	4,592
	Others Tuberculosis	6,936
	Syphilis	6,346
III	Gonorrhea	2,155
	Human Immunodeficiency Virus Infection	2,244
	Acquired Immunodeficiency Syndrome	1,430
	Hansen's Disease	7
IV	Creutzfeldt-Jakob Disease	0

### Notes:

- 1. Data were downloaded on May 1, 2014.
- Caseloads of MDR-TB, smear-positive tuberculosis and others tuberculosis were calculated based on Taiwan CDC's registration date and notification date respectively. Other chronic notifiable diseases were analyzed based on diagnosis dates.

# Appendix 3 2013 MOHW Publications

### Books

No.	Title/Topic	Publishing Agency	Government Publications Number (GPN)	Publishing Month/ Year
1	Maternal Health Booklet, Chinese/Indonesian Version	Health Promotion Administration, Ministry of Health and Welfare	1010201930	9/2013
2	Maternal Health Booklet, Chinese/Khmer Version	Health Promotion Administration, Ministry of Health and Welfare	1010201931	9/2013
3	Maternal Health Booklet, Chinese/English Version	Health Promotion Administration, Ministry of Health and Welfare	1010201932	9/2013
4	Maternal Health Booklet, Chinese/Thai Version	Health Promotion Administration, Ministry of Health and Welfare	1010201933	9/2013
5	Maternal Health Booklet, Chinese/Vietnamese Version	Health Promotion Administration, Ministry of Health and Welfare	1010201935	9/2013
6	Children Health Booklet, Chinese/Indonesian Version	Health Promotion Administration, Ministry of Health and Welfare	1010201937	9/2013
7	Children Health Booklet, Chinese/Khmer Version	Health Promotion Administration, Ministry of Health and Welfare	1010201938	9/2013
8	Children Health Booklet, Chinese/Thai Version	Health Promotion Administration, Ministry of Health and Welfare	1010201939	9/2013
9	Children Health Booklet, Chinese/English Version	Health Promotion Administration, Ministry of Health and Welfare	1010201940	9/2013
10	Children Health Booklet, Chinese / Vietnamese Version	Health Promotion Administration, Ministry of Health and Welfare	1010201941	9/2013
11	2013-2014 Handbook of Taiwan's National Health Insurance, English Version	National Health Insurance Administration, Ministry of Health and Welfare	1010202183	11/2013
12	2013-2014 Handbook of Taiwan's National Health Insurance, Japanese Version	National Health Insurance Administration, Ministry of Health and Welfare	1010201959	10/2013
13	2013-2014 Handbook of Taiwan's National Health Insurance, Thai Version	National Health Insurance Administration, Ministry of Health and Welfare	1010201794	11/2013
14	2013-2014 Handbook of Taiwan's National Health Insurance, Indonesian Version	National Health Insurance Administration, Ministry of Health and Welfare	1010202417	11/2013
15	2013-2014 Handbook of Taiwan's National Health Insurance, Vietnamese Version	National Health Insurance Administration, Ministry of Health and Welfare	1010202412	11/2013

## Periodicals

No.	Title/Topic	Publishing Agency	Government Publications Number (GPN)	Publishing Month/ Year
1	Taiwan Public Health Report	Ministry of Health and Welfare	2008800168	12/1999
2	Statistics of General Health	Ministry of Health and Welfare	2009502827	12/2013
3	Statistics of Causes of Death	Ministry of Health and Welfare	2009502599	12/2013
4	The Statistical Annual Report of Medical Care Institution Status & Hospital Utilization	Ministry of Health and Welfare	2009502598	112/2013
5	Taiwan Tobacco Control Annual Report	Health Promotion Administration	2009601377	6/2007
6	Annual Report: Cherish Life Promote Health	Health Promotion Administration	2009602537	12/2007
7	Journal of Food and Drug Analysis V 21 No 1	Food and Drug Administration	2008200056	3/2013
8	Journal of Food and Drug Analysis V 21 No 2	Food and Drug Administration	2008200056	6/2013
9	Journal of Food and Drug Analysis V 21 No 3	Food and Drug Administration	2008200056	9/2013

No.	Title/Topic	Publishing Agency	Government Publications Number (GPN)	Publishing Month/ Year
10	Journal of Food and Drug Analysis V 21 No 4	Food and Drug Administration	2008200056	12/2013
11	CDC Annual Report	Centers for Disease Control	2009205617	12/2003
12	Statistics of Communicable Diseases and Surveillance Report	Centers for Disease Control	2009503743	11/2006
13	Taiwan Tuberculosis Control Report 2007	Centers for Disease Control	2009604164	12/2007

## Digital Publication

No.	Topic/Title	Publishing Agency	Government Publications Number (GPN)	Publishing Month/ Year
1	Taiwan Tobacco Control 2013 Annual Report	Health Promotion Administration	4709601379	6/2007

# Appendix 4 MOHW Associated Websites

No.	Website Name	Websites
1	Ministry of Health and Welfare	http://www.mohw.gov.tw/EN/
2	Centers for Disease Control, R.O.C. (Taiwan)	http://www.cdc.gov.tw
3	Health Promotion Administration, Ministry of Health and Welfare	http://www.hpa.gov.tw/English
4	Food and Drug Administration, Ministry of Health and Welfare	http://www.fda.gov.tw
5	National Health Insurance Administration, Ministry of Health and Welfare	http://www.nhi.gov.tw
6	Social and Family Affairs Administration, Ministry of Health and Welfare	http://www.sfaa.gov.tw
7	National Research Institute of Chinese Medicine, Ministry of Health and Welfare	http://www.nricm.edu.tw
8	The Executive Yuan Gazette Online	http://gazette.nat.gov.tw
9	National Health Research Institutes	http://www.nhri.org.tw
10	Taiwan Drug Relief Foundation	http://www.tdrf.org.tw
11	Center for Drug Evaluation, Taiwan	http://www.cde.org.tw
12	Taiwan Joint Commission on Hospital Accreditation	http://www.tjcha.org.tw
13	Food Industry Research and Development Institute	http://www.firdi.org.tw/EngWeb/EngHPg.html
14	Taiwan Suicide Prevention Center	http://tspc.tw/tspc/portal/English/
15	Health 99 Website	http://health99.hpa.gov.tw/en/
16	Taiwan Health Promoting Schools	http://hpshome.giee.ntnu.edu.tw/en/index.html
17	Taiwan International Health Action	http://www.taiwaniha.org.tw/indexe.php
18	The Collaboration Center of Health Information Application	http://www.mohw.gov.tw/CHT/DOS/DM1.aspx?f_list_ no=812
19	Taiwan International Healthcare Training Center	http://ptph.gov.tw/tihtc/2011%20New%20 Frames/01%20Left%20Menus/01%20Latest%20News/ English/01%20English%20Main%20Frame.html
20	Global Medical Instruments Support & Service Program	http://gmiss.mohw.gov.tw/eng/english.asp
21	Child and Juvenile Adoption Information Center	http://www.adoptinfo.org.tw/English/AboutUs.aspx

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