



Health
Promotion
Administration
Ministry of Health and Welfare





Ministry of Health and Welfare



2019

14 annual key performance target indicators

Infant mortality rate for indigenous areas and offshore islands maintains at or below	5.64%0	Possibility of premature death by cardiovascular disease drops to	*3.09%
Under-five mortality rate for indigenous areas and offshore islands maintaines at or below	1.28‰	Possibility of premature death by diabetes drops to	~ 1.01%
Antenatal care coverage rate (at least 8 visits) reaches	89.8% or more	Possibility of premature death by chronic respiratory diseases drops to	*0.46 %
Child preventive healthcare service utilization rate (for children under 7) reaches	′80%	Prevalence of overweight and obesity among adults maintains at	47.1%
Possibility of premature death from cancer drops to	6.77%	Smoking rate of senior and vocational high school students drops to	*8.1%
The average follow-up rate for 4 main cancer screening achieves	84.5%	Smoking rate of junior high school students decreases to	4.2%
Prevalence of adults cons servings of vegetable and fruit achieves in 2017	~	The salt intake per day a in 2017	mong adults
14% 13.5%		8 9.4g 9 7.5g	



Preface by the Director-General

04

Chapter 1 About HPA

06

Chapter 2 Healthy Birth and Growth

12

Chapter 3 Healthy Living

32

Chapter 4
Healthy Environment

58

Chapter 5 Healthy Aging

74

Chapter 6 Non-Communicable Disease Prevention

86

Chapter 7
Peculiar Groups

110

Chapter 8
Health Promotion
Infrastructure

124

Appendix

144



Preface by the Director-General

(John Weller)

With people's health needs as the base, we protect citizens and promote health

Director-General

Health Promotion Administration

Ministry of Health and Welfare



To achieve the "Health for All" objective of the UN's World Health Organization, based on the idea of person-centered care, the HPA continues to advocate Promotion, Prevention and Protection and other health promotion policies for people at different stages of life. We increase joint participation from industry, government, academia and citizens, enhance partnership between central government, local government and health agency and jointly achieve Person Engagement health decision making and Person Empowerment with self-protection ability in health, with the aim of building a fair and healthy society and pursuing "total well-being."

Establishing a people centered service system

The policy objective of the HPA is to prevent the harm of non-communicable disease (NCD) and to carry out source management of risk factors (tobacco, alcohol, betel quid, unhealthy food, lack of exercise). To reduce the early death rate for the four main chronic diseases (cancer, diabetes, cardiovascular disease, chronic respiratory system) affecting citizens in Taiwan and implement the UN SDGs, a health supporting environment has been established in workplaces, schools, communities and hospitals, etc. In cooperation with partners in different fields from Taiwan and overseas, with the needs of citizens as the starting point, we provide health policies and preventive screening covering mother and child health, tobacco hazards prevention, chronic disease prevention and cancer screening to mold healthy lifestyles. The concrete achievements in 2019 are as follows:

In the area of mother and child health, checks for newborn congenital abnormality have been expanded from 11 items to 21. In total, 175,514 newborn babies were checked with a screening rate of 99.7%. In terms of building a friendly environment for breastfeeding, the Regulations on Breastfeeding in Public Places were revised, protecting the right of mothers to breastfeed in public places. Establishment of breastfeeding rooms has also been promoted, with an accumulated total of 3,568 such rooms established by 2019. In response to the behavioral changes of young people, various mother and child booklets

have been revised and electronic versions issued to increase use, allowing information to be carried around.

In the area of tobacco hazard prevention, in response to the successive appearance of new tobacco products internationally, a draft amendment of the Tobacco Hazards Prevention Act was promoted and diverse smoking cessation and advocacy services continued to be provided. In 2019, smoking cessation service were provided to 170,000 people, with a success rate of 25.9% for stopping smoking within six months, helping more than 45,000 people quit smoking and moving towards the WHO's target of reducing the smoking rate by 30% by 2025. This year, moreover, design thinking was used to find the needs of the public and the services they want, gradually moving towards customized smoking cessation services.

As for prevention of NCD, through four screening services, a total of 515,000 people were screened in 2019, with 60,000 people discovered to have precancerous lesions and cancer. Together with the National Health Research Institute, the Taiwan Hospice and Palliative Care Policy White Paper was formulated, promoting physical, mental, spiritual, social and long-term care programs and raising the professional knowledge and skills of various types of personnel in the area of hospice and palliative care. Care quality upgrading programs for the "three highs," cardiovascular disease, diabetes and kidney disease were actively promoted. Through adult preventive health services, around 2 million people are screened annually, allowing early detection and intervention. This year, moreover, with people at the center, diabetes and kidney disease care has been integrated and a comorbity care model developed. To care for the disadvantaged and reduce health inequality, in 2019, screening of indigenous people for hepatitis B and C was adjusted to one time between the ages of 40 and 60 years of age in conjunction with adult preventive health services. To reduce the economic burden of artificial insemination for childless low income or medium income couples, the upper limit of the subsidy was raised. Subsidies for prenatal checks and medical expenses are provided for pregnant new immigrants before they complete household registration. High risk pregnancies are also managed in 16 cities and counties to reduce the risk to pregnant women and newborn babies due to low socio-economic status.

Integrating active aging network

In response to the aging population, we promoted to set up 204 seniors' health promotion stations and clubs in 22 cities and counties. A total of 10 dementia friendly communities were established and 66,000 dementia friendly angels and 5,541 dementia friendly organizations were recruited, increasing the dementia care coverage rate and helping Taiwan move towards an important indicator of the WHO's Global Dementia Action Plan. Also, various units, community organizations and individual resources were integrated to provide resources for senior health and frailty prevention, promoting the Frailty Prevention Service Network–Hub Plan (80 hubs). The Seniors' Home Technology Interactive Platform was also established, using technology to provide seniors with a two-way interactive platform to allow them to obtain more health resources, various courses, so they can age actively and age healthily in a familiar environment, thus achieving the objective of active aging as well as making smart health care services more widespread (Be he@lthy, Be mobile)!

About HPA

3 Key Points of Administrative Policies

Supportive health environment
Non-communicable disease prevention and control
Holistic health promotion across life-span

Missions

Enhancing health literacy and promoting healthy lifestyles

Spreading preventative healthcare and promoting effective prevention and screening

Upgrade healthcare quality and improve chronic disease control and prognosis

Creating a friendly and supportive environment and bolstering healthy options and equality

6 Administrative Policy Goals

Nurture healthy lifestyles, create healthy settings

Comprehensive the healthcare service environment for women and children and reproductive care

Promote vitality and harmonious aging and create age-friendly health environment.

Reinforce cancers and chronic diseases prevention and control

Reinforce national health indices and non-communicable disease monitoring system implement evidence-based policies

Reinforce eHealth and increase the health empowerment of the public

7 Major Administration Policy Plans

2nd Viral Hepatitis Prevention Program (2017-2020)

1st National Cardiovascular Disease Prevention Program (2018-2022)

4th National Cancer Prevention and Control Program (2019-2023)

Tobacco Control Program

Smart Healthy Lifestyle Construction–Big data and ICT value-added Application (2017-2022)

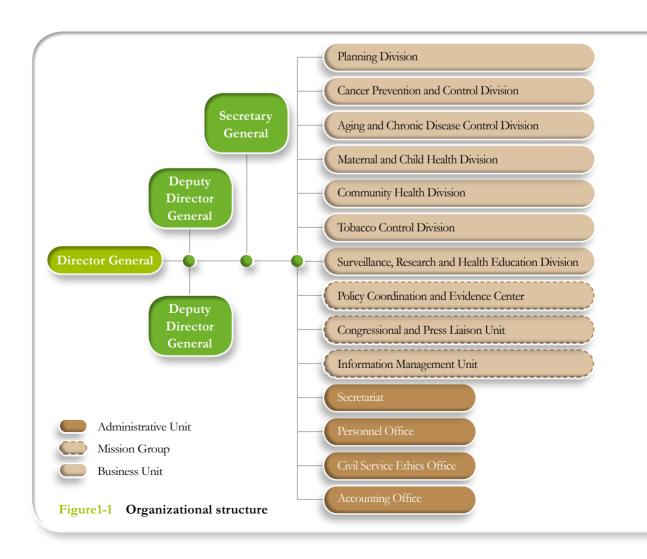
Aging Society Demand-oriented Biomedical Technology Research Project (2017-2020)

Advancing Taiwan's Environmental Health–Beginning with Environmental Exposure Health Impact Assessment for Children Living around Petrochemical Industrial Parks (2019-2022)

Organization and Major Duties

With the director-general in overall charge of the HPA, it has two deputy director-generals and one secretary general. There are seven operational divisions and four administrative offices. To meet mission requirements, three mission groups have been established, namely, the Information Management Unit was established on February 18th, 2019, the Policy Coordination and Evidence Center was established on July 29th, and the Congressional and Press Liaison Unit was established on January 9th, 2020 (Figure 1-1). Their main responsibilities include:

- 1. Planning, coordinating and implementing health promotion policies and formulating related laws and regulations
- 2. Planning, executing and supervising matters related to cancers, cardiovascular diseases, and other major non-communicable diseases prevention and control
- 3. Planning, executing and supervising matters related to healthy lifestyles
- 4. Planning, executing and supervising matters related to tobacco hazards prevention
- 5. Planning, executing and supervising matters related to national nutrition



- 6. Planning, executing and supervising matters related to reproductive health
- 7. Planning, executing and supervising matters related to hearing and vision preventive care
- 8. Planning, executing and supervising matters related to public health surveillance, research and development
- 9. International cooperation related to health promotion and non-communicable disease prevention affairs
- 10. Other relevant administrative matters related to health promotion

Organization and Missions

The HPA gives priority to four major initiatives: enhancing health literacy and promoting healthy lifestyles; promoting preventive healthcare and effective prevention and screening; upgrading the quality of healthcare and improving chronic disease control and prognosis; creating a friendly and supportive environment and bolstering healthy options and equality. It plans and implements measures to promote reproductive health, maternal and child health, adolescent health, and the health of middle-aged and elderly people as well

Formulate holistic and whole process health promotion policies



- Enhance health literacy and build healthy lifestyles
- Spread preventive healthcare and promote effective prevention and screening
- Upgrade healthcare quality and improve chronic disease control and prognosis
- Creat a friendly and supportive environment and bolster health options and equality







- | Birth control guildlines
- Newly-married couple health manuals
- Prenatal examination and guidance
- Nutrition and healthcare guidance for pregnant women and babies
- Breastfeeding

- Newborn screening of metabolic disorders and hearing
- Preventive care for children and guidance on hygiene education
- Screening of preschool children for visual impairments
- | Screening for strabismus/amblyopia

- | Health check-up for students
- Preventive healthcare for adults | Screening for cancer
- Smoking cessation service
- Diabetes management
- Chronic kidney
- disease management
- Quality accreditation of cancer diagnosis and treatment
- | Service for cancer patients
- Palliative care

Well-rounded infrastructure/Bolstered legal framework/Surveillance and research Education and training/Domestic and international cooperation

Figure 1-2 Organizational tasks of the HPA

as to advance the prevention and control of health hazards such as smoking and betelquid use, cancers, cardiovascular diseases, and other major non-communicable diseases. It is also responsible for conducting public health surveillance and related research and addressing other special health topics. Moreover, the HPA joins forces with all the public health agencies in the country's cities and counties, hospitals and other medical institutions, and private groups to implement health policies and to build a healthy environment for the entire population (Figure 1-2).

2019 Administrative Goals

Policy

Strengthen people-centered community healthcare services, Building a supportive and healthy environment

The goals of administration

Building a physical and psychological healthy and supportive environment Increasing holistic health promotion across life-span

Goals

- Nurturing of healthy lifestyles, creation of healthy workplaces, promotion of national nutrition and obesity prevention, promotion of cigarette and betel nut prevention work, provision of diverse tobacco cessation services, creation of tobacco and betel quid-free supportive environment.
- Consoliation of women and children birth healthcare service environment, continued enhancement of healthcare for all life courses from pregnancy and birth to healthy growth, improved health promotion for aborigines and new immigrants.

Health Promotion - Vision and Challenges

Based on the Alma-Ata Declaration of 1978 and the Ottawa Charter of 1986, the HPA proactively promotes "Health in All Policies" (HiAP). The ultimate goal is to achieve "health for all," as articulated by the World Health Organization (WHO), while gradually rectifying health inequality.

When it comes to health promotion action strategies, the HPA adopts an ecological model that is increasingly considered preferable to other approaches across the international community. That is, government agencies and local authorities work together in improving social and organization systems so that healthy behavior and choices can become more readily within reach, thereby fostering large-scale collective changes. Opportunities and momentum are created to empower people in different settings, thus making the pursuit of health a trend and enhancing the status of health promotion in public policy.

- Reinforcement of comprehensive health assessment services for seniors, creation of age-friendly health communities and cities, promotion of social engagement by seniors, reinforcement of prevention and management of chronic diseases, reduction of disabilities and improvement of life quality.
- Reinforcement of cancer prevention and early diagnosis, increase of the rate and quality of follow-up for positive cancer screening results, promotion of precision medicine, implementation of patient-centered shared decision making (SDM), provision of integrated palliative and holistic health care, reduction of cancer mortality rates.
- Reinforcement of education and empirical research on the health impacts of air pollution, refinement of national health indicators and non-communicable disease monitoring systems, establishment of senior and national nutrition data bases, reinforcement of the collection and analysis of information pertaining to groups in different regions, implementation of evidence-based policies.
- Promotion of health information service platform integration, adoption of information and communication technologies, establishment of a platform for sharing of health promotion and health education resources and personalized health management services, promotion of empowerment of the general public and health unit personnel.



Healthy Birth and Growth

Maternal Health	14	
Infant and Child Health	19	
Adolescent Health	28	



In 2018, the average utilization rate of the 10 pre-natal checkups for pregnant women was over

 $90_{\%}$ or more



The average utilization rate for children preventive healthcare services was over

80% or more



In 2019, 175,514 newborns were screened for congenital metabolic disorders. The screening rate was over



In 2019, the smoking rate of junior school students has dropped by 61.4%, and the smoking rate of senior and vacational high school students has dropped by 43.0%.

99.7%





The sex e-school website uploaded 12 correct-rumor articles and 30 health education documents. There were 130,491 new browsers searched the website.



In 2019, four hospitals and one clinic were certified as teen-friendly care institutions.

As society changes, its multicultural nature is changing society types and family structure and functions. Promoting sound mental and physical development of pregnant women, babies and infants, children and teenagers, strengthening the care system and building healthy and safe environment are all focuses of the HPA's policies.

Maternal Health



Status Quo

In 1989, Taiwanese women had their first child at an average age of 25.2 years old. By 2019, the average age was 31.1 years old (Figure 2-1). Structural analysis of a trend toward late childbirth is clearly evident (Figure 2-2). The maternal mortality ratio in 2019 was 16.0 per 100,000 individuals. Compared with 34 OECD member countries in 2017, Taiwan's maternal mortality ratio ranked 34th.



Target Indicators

- 1. In 2018, the average utilization rate of pregnant women visiting 10 prenatal care sessions exceeded 90%, and more than 97% of women used prenatal examination at least one time.
- 2. More than 99% of women with high-risk pregnancies underwent prenatal genetic diagnosis and follow-up.

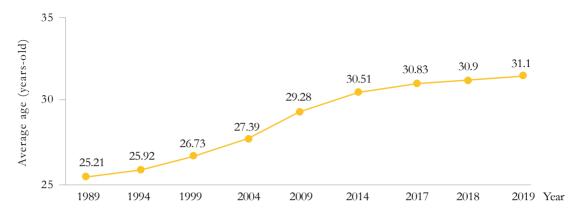
Policy Implementation and Results

1. Establish systematic birth healthcare service

(1) Heartfelt healthcare: establish systematic birth healthcare service

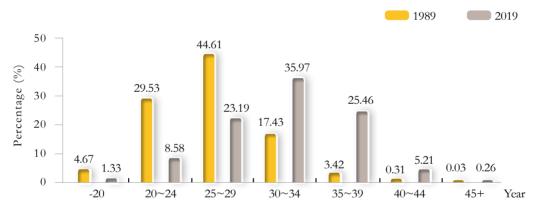
In order to promote the health of expectant mothers, the HPA subsidizes 10 prenatal care sessions for pregnant women. The utilization rate of this service has reached 90% (Figure 2-3). In 2018, 1.638 million pregnant women used the prenatal care sessions. The average utilization rate of women taking at least 10 prenatal care sessions is 94.5%. In 2019, this service was used around 1,575,000 times.

We have conducted Group B streptococcus screening for women at the 35th to 37th weeks of pregnancy. In 2019, a total of 153,424 women were screened, with 31,596 women tested positive (20.1%) (Figure 2-4).



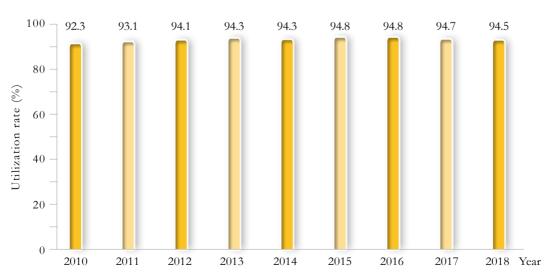
Source: Ministry of the Interior. 1989-2019 number of live births by age of mother, average age of mother, and average age of first birth

Figure2-1 Average age of first birth for women in Taiwan



Source: Ministry of the Interior. 1989-2018 Number of Births by age of mother, average age of mother, and average age of first birth

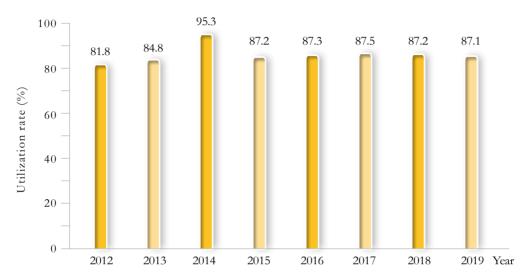
Figure 2-2 Percent distribution of live births by age of mother (1989, 2019)



Source: Data from Prenatal Care Sessions 2007-2018 and 2007-2018 Birth Reports

Figure 2-3 The average utilization rate of women attending 10 prenatal care sessions

Since November 2014, we started promoting prenatal healthcare instruction services for pregnant women. In 2018, a total of 278,709 people were served, and 1,276 health insurance contracted hospitals and midwifery clinics joined this project. In addition, 1,931 physicians and midwives have been qualified to provide services. In 2019, this service was used 268,875 times.

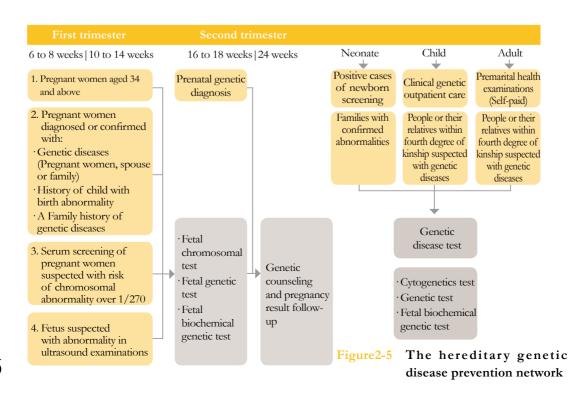


Source: 2012-2019 Group B Streptococcus Screening System, data from the 7-9 Prenatal Examinations

Figure 2-4 Group B streptococcus screening rate

(2) Provision of comprehensive genetic testing services

We establish a genetic disease prevention network (Figure 2-5) with primary and secondary prevention measures or fertility selection for all life stages from marriage, pre-pregnancy, pre-delivery, birth, and even to adulthood, to decrease the incidence of congenital malformations.



(3) Genetic service results of reproductive stage

1

Screening for Thalassemia in Pregnant Women

In 2019, a total of 268 women were tested for thalassemia genetic testing, of whom 75 were found to be carriers of thalassemia major.

Prenatal Genetic Diagnosis for High-Risk Pregnancies

2

A total of 43,878 tests were subsidized. As many as 38,456 of these tests were conducted for advanced maternal age (34 years or older) pregnancies. The testing rate reached 66.2% (Figure 2-6). Abnormalities were detected in 1,451 cases, accounting for 3.31% of all prenatal tests. Tracking, counseling, or referral to relevant medical institutions has been implemented by hospitals, clinics, or public health systems in charge of sample testing.

(3)

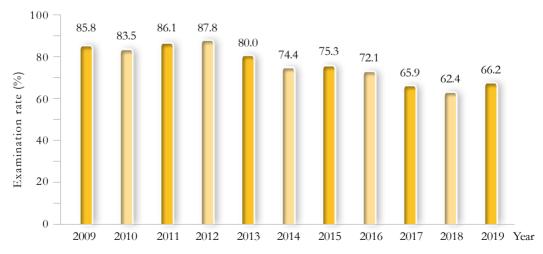
Genetic disease testing and counseling related to reproductive health

In 2019, a total of 11,764 individuals took such tests. Of these, 580 people were found to have chromosomal abnormality, 823 were thalassemia carriers, and 3,192 showed evidence of other conditions.

Regular reviews of designated institutions for genetic and rare diseases

4

To ensure the quality of genetic counseling, diagnosis, treatment, and testing, in 2019, a total of 27 clinical cytogenetics laboratories, 13 genetic laboratories, and 14 genetic counseling centers passed relevant reviews.



Sources: Subsidy information of pregnant women receiving prenatal genetic diagnosis and number of prenatal examination.

Figure 2-6 Percentage of pregnant woman aged 34 and above receiving prenatal genetic diagnosis subsidies

(4) Pregnant women healthcare counseling

Based on the concept of comprehensive health care, we provide prenatal and postnatal care for pregnant women and their families through our national free hotline (0800-870-870) for pregnant women, our cloud pregnancy app and our pregnancy care website (https://mammy.



hpa.gov.tw). This care session consists of providing health information in response to queries about parent-children health, breastfeeding, pregnancy nutrition and weight management, infant health promotion, physical and mental adjustment, emotional stress, and necessary referrals for health counseling, care and support services. In 2019, there were 19,328 calls through the enquiry hotline, and the website received 2,190,040 hits.

(5) Promoting the Program follow-up care of pregnant women and infants in high-risk groups

Since 2017, HPA has cooperated with local health bureaus to implement program for follow-up care of pregnant women and infants in high-risk groups. In 2020, HPA subsidies 11 health bureaus of Yilan County, Hualien County, Taitung County, New Taipei City, Miaoli County, Nantou County, Chiayi County, Kaohsiung City and Pingtung County working in cooperation with 96 medical institutions to provide health education, followup care and referral services to high-risk pregnant women from pregnancy to 6 weeks/6 months after delivery.

2. Complete childbirth health management laws and regulations

(1) Complete assisted reproduction regulations and institutions

Taiwan has introduced a series of laws aiming to ensure the appropriate development and use of assisted reproductive technologies, and to protect the rights of infertile couples, sperm and oocyte donors, and children conceived through assisted reproduction. The Assisted Reproduction Act was promulgated and implemented in 2007, which was followed by the Regulations for Inquiring kinship Information of Concern to the Children Born Through Assisted Reproduction, Regulations for Assisted Reproduction Institution Permits, Regulations for Verification on Kinship between the Sperm/Oocyte Donors and the Recipient. Regulations for Assisted Reproduction Information Notification and Administration, and the Notice of Maximum Payment Limits of a Donor's Expenses by the Recipient Couple. By the end of 2019, a total of 86 institutions have been permitted as assisted reproduction institutions.

(2) Continue to review Genetic Health Law draft amendment

Since 2006, Genetic Health Law has been amended and submitted to the Legislative Yuan for 3 times. However, the Legislative Yuan review was unfinished, and was not further reviewed by legislative committee each time. In 2008, 2012, and 2016, it was rejected and returned to the administrative agencies for review. HPA has deliberated the revision and amendment of the Genetic Health Act and its renaming to Reproductive Health Law and continues to invite experts and stakeholder groups

to engage in relevant deliberations and discussions. In addition, HPA adopted a resolution in the National Conference on Judicial Reform in 2017 regarding the implementation of an adequate judicial or administrative dispute resolution mechanism to safeguard the right of minors and married women to choose abortion. The Administration emphasizes that legal amendments must be based on a general social consensus regarding respect for life, minors, women, and family values.

(3) Improving the quality of prenatal and ultrasound examinations

Currently, we provide 10 prenatal examinations and 1 ultrasound examination. Since 2014, we administered Hepatitis B blood serum labeling test (HBsAG, HBeAG) in the first prenatal examination, and increased the prenatal screening subsidies.

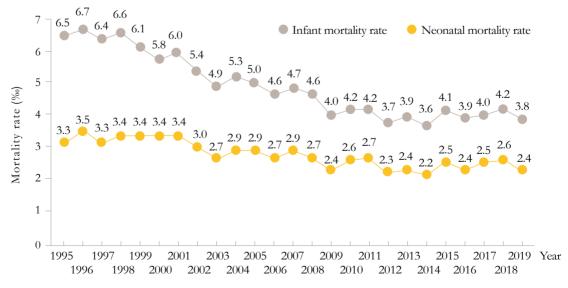
In addition, in order to improve the antenatal ultrasonic inspection quality, we also stipulated the current prenatal ultrasound examination index, which include the educational training courses of all members. They are available on the website for members and medical staff.

Infant and Child Health

Birth and Death



The infant mortality rate is one of the key indicators of a Country's child health status. Taiwan's neonatal mortality has decreased to 2.4‰ in 2019. The infant mortality rate has also decreased to 3.8‰ in 2019 (Figure 2-7). Compared with the 37 OECD countries, Taiwan's neonatal mortality rate ranks 21st, and infant mortality rate ranks 28th in 2019.



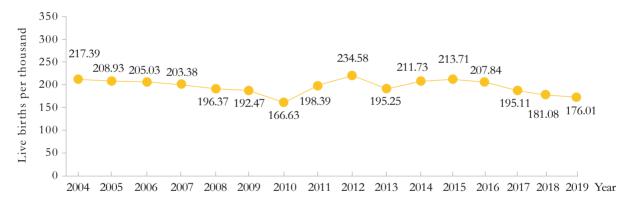
Sources: 2019 Causes of Death Statistics, MOHW

Figure 2-7 Neonatal and infant mortality rates in recent years

The HPA's statistics of birth reporting system reveal that there was a total of 176,006 births in Taiwan in 2019 (Figure 2-8). Among them, 10.24% of live births had low birth weight (less than 2,500 grams) and 0.95% of live births had extremely low birth weight (less than 1,500 grams) (Figure 2-9).

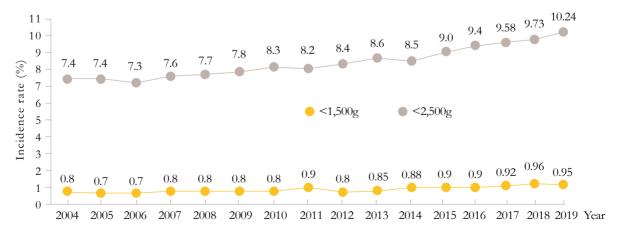
Under natural conditions, sex ratio at birth (male: female) is approximately 1.04 to 1.06. Taiwan's sex ratio at birth decreased from 1.09 in 2010 to 1.077 in 2019. The sex ratio for third child and above has also decreased to 1.085. According to our sustainable development goal proposal, our goal for sex ratio was set as 1.068 in 2020, which has become the target value of our annual efforts (Figure 2-10).

HPA is fully committed to the promotion of breastfeeding policies to ensure the healthy growth of infants and children. The exclusive breastfeeding rate in the first month of life reached 67.2% in 2018, while the breastfeeding rate for the same period increased to 95.7% in 2018. In addition to early detection and treatment of abnormalities, the constant provision of a sound healthcare system is a key prerequisite to healthy growth and development of infants and children.



Sources: HPA Statistics of Births Reporting System

Figure 2-8 Live births reported in recent years



Sources: HPA Statistics of Birth Reporting System

Figure 2-9 Annual incidence rate of low birth weight and extremely low birth weight in infants

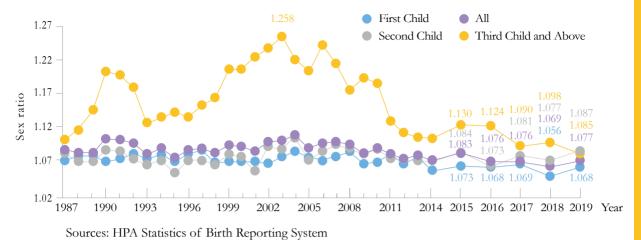


Figure 2-10 Sex ratio (males to females) of live births by order of birth

► Target Indicators

- 1. Screen rate of congenital metabolic disorders for newborns was more than 99% in 2019.
- 2. The utilization rate of children's preventive health care services was above 80% in 2019.
- 3. According to WHO recommendation, the HPA has aimed to push Taiwan's exclusive breastfeeding rate in the first 6 months of life up to 50% in 2025.

► Policy Implementation and Results

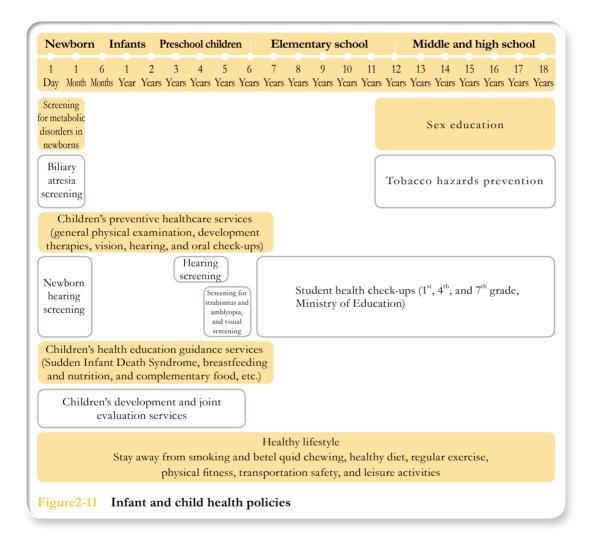
When stipulating policies, emphasis should be placed on integrating resources to form a comprehensive care and service system, whilst also taking into account the special characteristics of different segments of society. Moreover, all endeavors should be geared towards the establishment of a supportive environment conducive to health and safety.

1. Establishment of a Children's Health Promotion Committee to advance health education and research and development of relevant technologies

The Children's Health Promotion Committee, established in 2006, deliberates child health policies to enhance the physical and mental development of infants and children. It improves care service systems for child health and safety and promotes child health education, research and development of health technologies.

2. Establishment of a sound child healthcare system and provision of seven major services

We have established a comprehensive child healthcare services (Figure 2-11) for infants and children in Taiwan.



(1) Implementing of the Birth Reporting System

Birth reporting has been fully implemented to give health and household registration units at all levels a clear grasp of demographic data and statistics pertaining to neonates in high-risk groups. A total of 178,068 births were reported in 2019. Live births and stillbirths amounted to 176,006 (98.84%) and 2,062 (1.16%), respectively.

(2) Providing screening services for newborns

Alongside a screening rate of over 99% in the recent years, we further provide treatments and genetic counseling for newborns who have been diagnosed with newborn congenital metabolic disorders. This helps to lessen the impact of disorders. In 2019, a total of 175,514 newborns underwent screening, with a total screening rate of 99.7%. A total of 3,888 cases were found to have abnormalities. The conditions and diseases along with prevalence ratios and abnormality numbers, are shown below in Table 2-1.

Table2-1 Abnormalities detected amongst newborns in 2019

Screening Items	Prevalence ratio	Number of abnormalities
Glucose-6-Phosphate dehydrogenase deficiency (G-6-PD)	1:50	3,522
Congenital hypothyroidism (CHT)	1:532	330
Congenital adrenal hyperplasia (CAH)	1:17,551	10
Phenylketonuria (PKU)	1:19,502	9
Homocystinuria (HCU)	1:175,514	1
Isovaleric acidemia (IVA)	0	0
Maple syrup urine disease (MSUD)	1:175,514	1
Galactosemia (GAL)	0	0
Methylmalonic acidemia (MMA)	1:25,073	7
Type 1 glutaric acidemia (GA 1)	1:87,757	2
Medium-chain acyl-CoA dehydrogenase deficiency (MCAD)	0	0
Citrullinemia Type I (CIT I)	0	0
Citrullinemia Type II (CIT II)	1:175,514	1
3-Hydroxy-3-Methyl-Glutaric Acidemia (HMG)	0	0
Holocarboxylase Synthetase Deficiency (HCSD)	0	0
Propionic acidemia (PA)	0	0
Carnitine transporter defect (PCD)	1:43,879	4
Carnitine tanslocase deficiency Type I (CPTI)	0	0
Carnitine tanslocase deficiency Type II (CPTII)	0	0
Very long chain acyl-CoA dehydroxygenase deficiency (VLCAD)	1:175,514	1
Glutaric acidemia type II (GAII)	0	0
Total		3,888

^{*}A total of 175,514 newborns were screened in 2019.

(3) Providing hearing screening for newborns

In March, 2012 we began providing hearing screening for all newborns with R.O.C. nationality, with a subsidy of NT\$700 provided for each case. In 2019, a total of 314 hospitals had screened 171,645 newborns, with a screening rate of 98.4%, and 775 newborns were diagnosed with hearing. In addition, the hearing screening for preschool age children provided in communities or nurseries, had screened 960,142 children in 2019, with a screening rate of 82.2% and a recheck rate of 97.1%.

(4) Providing children's preventive healthcare services

Seven times children's preventive healthcare services are provided to children under the age of 7 by pediatricians or family physicians in designated clinics and hospitals with the goal of offering continuous health management services to facilitate early detection and treatment of abnormalities. A total of 1.048 million services was provided in 2019, which represents an average 7-time utilization rate of 80.3% (Figure 2-12).

The "Child Health Education Guidance Service Subsidy Program" was launched in 2013. In November 2014, child health education guidance services was expanded to 7 times fully Subsidized service for children under the age of 7. Physicians provide one-on-one health education guidance to primary caregivers of children. In 2019, a total of 913,000 services was provided, which represents an average 7-time utilization rate of 69.6% (Figure 2-13).

(5) Providing subsidies for locally-established children's development and joint evaluation centers

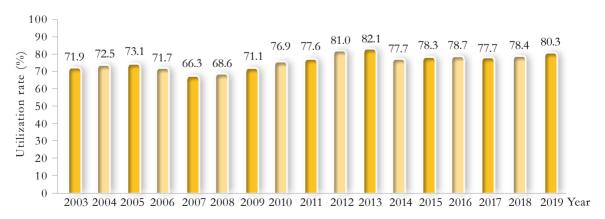
As of 2010, HPA provides guidance to medical institutions for children's development and joint evaluation services based on the number of children under the age of 6 and the availability of medical resources in respective cities and counties, with the goal of offering accessible and integrated services for children with suspected developmental delay and facilitating early intervention. A total of 51 children's development and joint evaluation centers has received guidance in 2019.

(6) Creating a breastfeeding-friendly environment to increase the breastfeeding rate

The HPA implements a baby-friendly hospital accreditation system as a way of fostering positive change at hospitals, so as to eliminate hospitals to offer baby formula at free or lower price. This is done so that the act of breastfeeding can be normalized, and newborns thereby receive the best possible start in life (Figure 2-14, 2-15). The HPA has continued to reinforce cross-sectoral coordination to make workplaces as breastfeeding-friendly as possible.

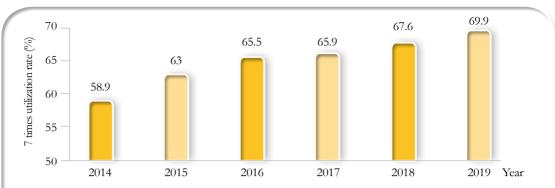
(7) Implementing the Public Breastfeeding Act

The "Public Breastfeeding Act" was implemented in November 2010. In 2019 a total of 2,346 public places across Taiwan were equipped with breastfeeding rooms, and 1,222 public places had voluntarily established facilities in accordance with these new regulations.



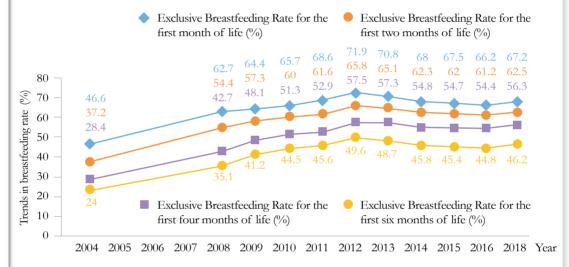
Source: Children's Preventive Health Insurance Declaration, number of children under the age of 7 from the Ministry of the Interior

Figure 2-12 Average utilization rate of children's preventive healthcare services



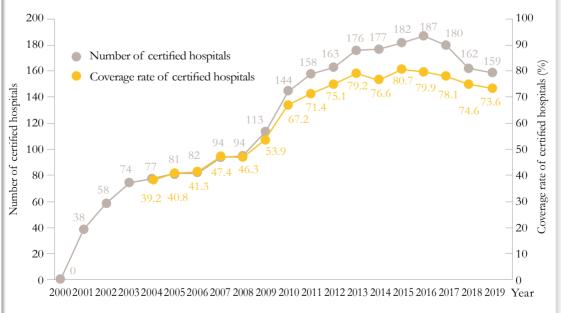
Source: Children's Preventive Health Insurance Declaration, number of children under the age of 7 from the Ministry of the Interior

Figure 2-13 Average utilization rate of children's health education guidance



Source: City/County Breastfeeding Rate Survey Plan (phone survey)

Figure 2-14 Chart of trends in breastfeeding rate in Taiwan over the years



Source: Breastfeeding Hospital Certification Promotion Program

Figure 2-15 Number of certified mother-and-baby-friendly hospitals and coverage rate over the years

3. Effectively rectifying imbalances in gender ratios at birth

The HPA, the Department of Medical Affairs, and the Food and Drug Administration have jointly formed a Sex Ratio at Birth (SRB) task force to protect the right to life of the fetus, eliminate gender discrimination, and prevent social issues caused by gender imbalance. The task force closely monitors the SRB of hospitals, clinics, and midwives to strengthen detection of violations. As a result, SRB dropped from 1.090 in 2010 to 1.077 in 2019.

Vision Healthcare



Status Quo

According to the 2017 Children and Adolescent Vision Monitoring Survey (Table 2-2), there was an increase in the prevalence of myopia from first to sixth graders as compared to 2010. It is evident that the myopia problem for school-aged children worsen every year. The prevalence of myopia in first graders was 19.8% and for sixth graders was 70.6%. Since high myopia increases the risk of eye-related complications, therefore, through children's vision screening services poor vision problems are diagnosed at an early stage for timely referral and treatment.

Table2	Percentage of Taiwand	ana atradamta ama	d 6 to 10 with marrania
Tablez-z	Percentage of Taiwane	ese students aged	i o to ta with myodia

Year	1986 (%) 1990 (%)	1005 (9/) 200	2000 (9/)	2006 (9/)	2010(%)		2017	
Grade	1900 (%)	1990 (%)	1995 (%)	2000 (%)	2000 (%) 2006 (%)	≦-0.25D	≦-0.50 D	(%)
Grade 1	3.0	6.5	12.8	20.4	19.6	21.5	17.9	19.8
Grade 6	27.5	35.2	55.8	60.6	61.8	65.9	62.0	70.6
Grade 9	61.6	74.0	76.4	80.7	77.1	-	-	89.3
Grade 12	76.3	75.2	84.1	84.2	85.1	-	-	87.2

Sources:

- 1. HPA-commissioned epidemiological survey on refractive errors amongst children and teenagers aged 6 to 18, conducted every five years. From 1986 to 2006 myopia prevalence was defined as ≤-0.25D
- HPA-commissioned epidemiological survey on children and adolescent vision surveys in 2017.
 Myopia prevalence in 2017 was defined as ≤-0.5D.

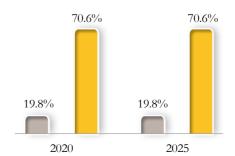


Target Indicators

- Mid-term Indicators (2020): Prevent further increase in the myopia prevalence (maintain the 2017 value of 19.8% in 1st graders and 70.6% in 6th graders (≤-0.5D, 50 degrees)).
- 2. Long-term Indicators (2025): Prevent further increase in the myopia prevalence (maintain the 2017 value of 19.8% in 1st graders and 70.6% in 6th graders (≤-0.5D, 50 degrees)).

Mid-term Indicators Long-term Indicators

1st graders 6st graders 1st graders 6st graders



Policy Implementation and Results

The HPA offers screening services to preschool children aged 4-5 for myopia, strabismus and amblyopia. Referrals and follow-up management are provided when warranted. HPA in cooperation with the Ministry of Education (MOE) has implemented a vision health program intended for both preschool and school children. All in all, the HPA strives to establish a comprehensive network of vision health services by integrating ophthalmology associations, local communities and local public health bureaus, to undertake health promotion campaigns, health education, screening, and referral services, in order to achieve a perfect vision care for preschool children.



Preventive vision care for children to develop regular check-up habit since childhood

Pediatricians or family physicians carry out assessments based on eye development stages through children's preventive healthcare services and implements tests of pupil, visual fixation, ocular position (strabismus and amblyopia cover tests), cornea, and Randomdot Stereogram.



Joint promotion of child vision care through cross-ministerial cooperation

Health education, screening, and research are implemented through cross-ministerial cooperation. Child vision care is jointly promoted on the basis of empirical approaches.



Child vision, strabismus, and amblyopia screening coupled with referral counseling for greater convenience

In addition to vision, strabismus, and amblyopia screening services for preschool children aged 4 and 5 nationwide, HPA provides referral and counseling services for children with vision abnormalities. In 2019, a total of 415,088 children received screening services, which represents a screening rate of 100%. The referral rate for children with vision abnormalities reached 99.96%.



Joint protection of child vision through constant assessment of the effectiveness of preventive measures

Children's and Adolescent Vision Monitoring and Survey Program are conducted, together with constant assessment of the effectiveness of myopia prevention.



Vision care made simple through daily outdoor activities

Vision care through education on beneficial activities are promoted, such as daily outdoor activities for more than 2-3 hours, no screen time for children under 2 years, no more than 1 hour screen time per day for children above 2 years, avoid excessive near work activity, and 10 minutes of rest after every 30 minutes of eye usage.



2019 Vision Care Promotion Activities



1. The "Creative Eye Protection Film Collection" event was held, collecting 76 films in all (53 in family category, 23 in group category).



2. The "Eye Family Internet Celebrity Call-up" event was held. Eight distinctive family Internet celebrities were invited to share articles on their FB fans page on key points of vision health promotion. There were 326 sharings 10,854 likes and 206 positive comments.



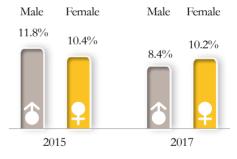
3. The "Eye Children's Rhythm MV" and "3010120 Eye Protection Picture Diary" films were produced, encouraging nurseries and parents to enhance correct visual health concepts through interactive games. This will be combined with the Nursery Health Promotion Program in the future.

Adolescent Health

Adolescent Sexual Health

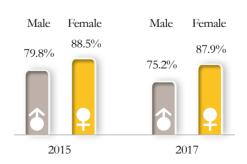


A survey of the health behavior of senior/vocational high school and junior college students reveals that 15-to 17-year-old female adolescents are more likely to engage in sexual behavior than their male counterparts. By 2015, the percentage had slightly decreased for both sexes. An observation of the most recent sexual behavior and contraception rates reveals that the contraception rate dropped. (Figure 2-16, 2-17)



Source: 2018 Statistics of Health Promotion

Figure 2-16
Age 15-17 Adolescent Sexual Behavior Rate

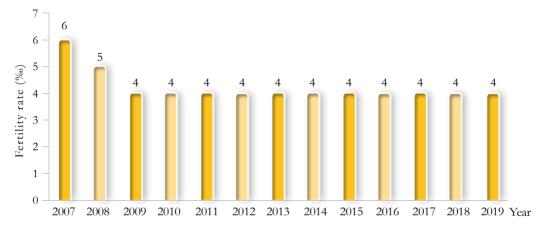


Source: 2018 Statistics of Health Promotion

Figure2-17

Age 15-17 Adolescent Most Recent Sexual Behavior Contraception Rate

The Ministry of the Interior population data showed that the fertility rate of teenage females aged 15-19 in Taiwan was 4‰ in 2019, a significant drop compared to 6‰ in 2007 (Figure 2-18). The fertility rate amongst this age group in Taiwan in 2018 was lower than those of the United States (20.3‰), the United Kingdom (13.7‰), Australia (11.9‰), Sweden (4.5‰), and Japan (4.1‰), but it was higher than that of South Korea (1.3‰) in 2019. Early sexual behavior may result in unintended pregnancy for adolescents who are lacking economic foundation and are still immature physically and mentally.



Source: Ministry of the Interior statistics

Figure 2-18 Age 15-19 adolescent girl fertility rate amongst girls in Taiwan from 2007 to 2019



Reduce the adolescent fertility rate amongst girls aged 15-19 to less than 4‰ in 2019.

► Policy Implementation and Results

1. Sex e-school, online search for the correct sexual knowledge

The sex e-school website (https://young.hpa.gov.tw/index/) was established to provide parents and teachers with correct sexual knowledge information and teaching materials. We added 12 rumor correction articles and 30 health education documents in 2019. A total of 130,491 people searched the website.

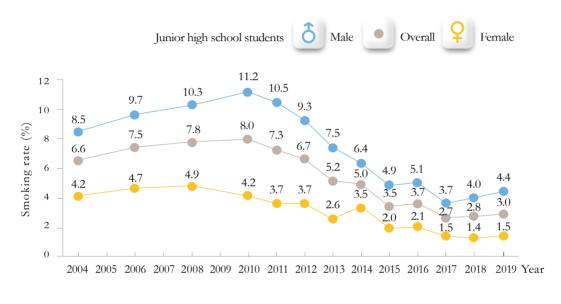
2. Planning and pilot implementation of certification of adolescent-friendly medical institutions and empowerment of medical personnel

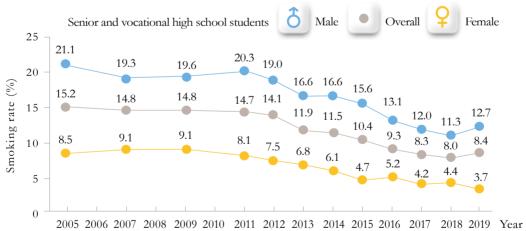
In 2019, four hospitals and one clinic were certified as teen-friendly hospitals, with the aim of expanding and upgrading teen healthcare capability. Four digital courses on teen-friendly healthcare knowledge and skills were made and provided to related health professionals for self-study. A total of 1,633 people completed the courses.

Tobacco Control in Schools

► Status Quo

In 2009, after the new stipulations of Tobacco Hazards Prevention Act was implemented, with the promotion of all policies, the smoking rate of junior high school students decreased by over 61.4% in 2019, and 43.0% for senior and vocational high school students (Figure 2-19). We are gradually marching toward the goal of reducing smoking rate by 30% in 2025 set by WHO NCD.





Sources: HPA Global Youth Tobacco Survey (GYTS)

Figure 2-19 Smoking rate in adolescents

► Target Indicators

In 2019, the smoking rate of junior high school students was less than 4.2%, and the smoking rate of senior and vocational high school students fell to less than 8.1%.



Policy Implementation and Results



Joint efforts to combat tobacco use on campuses

The HPA and Ministry of Education jointly promoted the Campus Tobacco Hazards Prevention Program, carrying out spot checks on campuses with local educational units. In 2019, the secondhand smoke exposure rate on junior high school campuses was down to 5.4%, while the senior and vocational high school exposure rate was down to 12.2%.



Enhancement of knowledge and skills in the field of adolescent tobacco hazards prevention through participation of schools

A total of 35 universities took part in the 2019 Adolescent Field Tobacco Prevention Work Program, providing smoking cessation service and referral information. Together with the Ministry of Education, the University Hazard Prevention Outstanding Performance Commendation and Results Observation Meeting was held, commending outstanding performance and sharing highlights.



Smoking cessation and combating of tobacco use made easy through integration of resources

Integrating local health department and social resources, we gather civil groups and community volunteers to collectively monitor the surrounding campus stores, and prohibit the sale of tobacco products to adolescents. As for violation of Article 12 of Tobacco Hazard Prevention Act which stipulates that people under 18 cannot smoke, we have penalized 2,188 people, and 1,855 have completed tobacco cessation education.



Cross-ministerial cooperation and prevention of e-cigarette use

Inter-agency cooperation brought about a reduction in the e-cigarette smoking rate of junior and senior and vocational high school students to 1.9% and 3.4%, respectively in 2018; however, the rates increased to 2.5% and 5.6% in 2019, respectively. The HPA sent out the "Draft for E-cigarette Hazard Prevention Self-governance Ordinance" for the reference of city and county government heath bureaus. The Ministry of Health and Welfare will re-submit the Tobacco Hazards Prevention Act for deliberation in 2020 and after amendment, there will be clearer regulations on e-cigarettes.



Continuous efforts in the field of campus tobacco hazards prevention

We conduct campus tobacco hazards prevention spot checks, create tobacco-free campuses, implement tobacco cessation education, and reinforce campus tobacco prevention work.



Healthy Living

Prevention and Control of Tobacco Hazards	
Prevention and Control of Betel Quid Hazards	42
Promoting Physical Activity	45
National Nutrition	47
Obesity Prevention	51
Accident and Injury Prevention	53



The smoking rate of adults above the age of 18 dropped to 13.0% in 2018



The betel quid chewing rate for adults above the age of 18 fell to 7% in 2019

13.0%





33.6% of all citizens do regular exercise in 2019.

33.6%



In 2019, the prevalence rate for adult daily consumption of three portions of vegetables was 14%, and the prevalence rate was 13.5% for two portions of fruit.

14.0% 13.5%



The prevalence rate of excess weight and obesity for elementary school, junior high and senior high school students is gradually decreasing. Excess weight and obesity for adults are slowing.



In 2020, the National Healthy People white paper included the issues of injury prevention and safety promotion, with the aim of lowering the accidental death and injury rate year by year

3

According to a report issued in 2012 by the WHO, the four diseases (cancer, diabetes, cardiovascular disease, disease) now account for approximately 68% of that figure is nearly 80%. Smoking, a lack of exercise, unhealthy diets and excessive alcohol consumption are the 4 major common risk factors behind the occurrence of non-communicable diseases. The International Agency for Research on Cancer has listed betel quids as Group 1 carcinogenic agents to

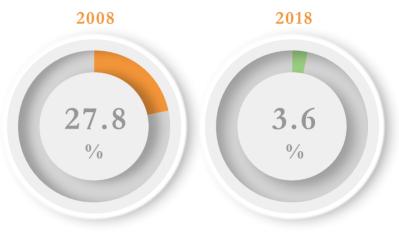
HPA actively advocates for health promotion, and reinforces health education and the dissemination of health related information. In the meantime, we have sought to work with civil society to create a healthier environment.

Prevention and Control of Tobacco Hazards



Status Quo

Since the new provisions in the Tobacco Hazards Prevention Act took effect in 2009, HPA has achieved the following results in the field of tobacco hazards prevention through the promotion of various strategies.



Second-hand smoke exposure rate of adults above the age of 18 in indoor public areas

The smoking rate of adults above the age of 18 dropped from 21.9% in 2008 to 13.0% in 2018 (Figure 3-1). Taiwan is making steady progress toward the target of a 30% reduction in tobacco use by 2025 set by WHO NCD. In addition, the second-hand smoke exposure rate of adults above the age of 18 in indoor public spaces dropped significantly from 27.8% in 2008 to 3.6% in 2018 due to a gradual expansion of non-smoking areas. The second-hand smoke exposure rate in indoor and outdoor public non-smoking areas also decreased considerably from 23.7% in 2008 to 5.4% in 2018. The smoking ban has a protective efficacy of 94.6% with regard to prevention of exposure to second-hand smoke in non-smoking areas.



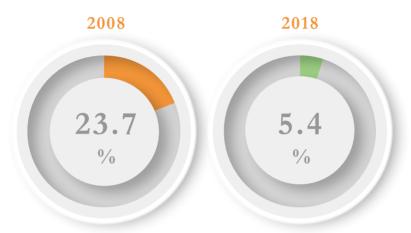
Tobacco Hazards Prevention Results

Smoking rate of adults above the age of 18

2008	21.9	%
2018	13.0	0/2

94.6%

Protective efficacy of smoking bans with regard to prevention of exposure to second-hand smoke in nonsmoking areas



Second-hand smoke exposure rate in indoor and outdoor public non-smoking areas

The survey frequency of the Adult Smoking Behavior Survey was changed to once every two years. As 2019 was not a survey year, there is no related data.



Source:

- The subjects of the HPA's Adult Smoking Behavior Survey over the years has targeted on citisens aged over 18. In 2019, survey frequency was changed to once every two years. As 2019 was not a survey year.
- 2. Definition of smoker refers to a person who has smoked in excess 100 cigarettes (five packs) from the past to the present and has used tobacco in the past 30 days.

Figure 3-1 Smoking rate of adults aged 18 and above in Taiwan

The Department continues to promote the revision of the "Tobacco Hazards Prevention Act," increase the area of warning graphics, non-smoking areas in indoor public places, and increase measures such as strong control of e-cigarettes and the prohibition of flavored cigarettes. At the same time, we continue to promote "smoke-free workplaces" and combine corporate strength to bring smoking cessation services into the workplace.



Target Indicators

The smoking rate of people above the age of 18 was under 15.0% in 2018.



Policy Implementation and Results

1. Continued enforcement of the "Tobacco Hazards Prevention Act"

Emphasis has been placed on carrying out compliance checks, expanding the network of smoking cessation services, bolstering targeted education programs, increasing publicity and promoting local tobacco control work. These approaches remind people to comply with the Tobacco Hazards Prevention Act so a more comprehensive smoke-free environment can be achieved.

(1) Procactive law enforcement, inspection and guidance in the promotion of tobacco hazards prevention work

Health bureaus in all cities and counties are actively committed to law enforcement, inspections, and guidance. In 2019, the number of inspected cases nationwide exceeded 690,000 with over 4.65 million individual inspections. A total of 7,872 disciplinary citations were issued. Total fines amounted to over NT\$88.94 million. Fines imposed for 33 cases violating the provisions governing the promotion or advertising of tobacco products set forth in Article 9 of the Tobacco Hazards Prevention Act exceeded NT\$42.55 million.

(2) Training activities held to enhance the professionalism of tobacco hazards prevention

By holding research camps, seminars, and training classes, and compiling handbooks on compliance with the law, the HPA has improved the quality of tobacco prevention professionals' work. It also provides education and training for tobacco hazards prevention volunteers.

(3) Tobacco hazards complaint hotline Tobacco hazard prevention needs us to work together

The HPA provides a "Complaints on Tobacco Hazards Hotline" at 0800-531-531 to deal with public inquiries and reports relating to the Tobacco Hazards Prevention Act. In 2019, the Hotline dealt with approximately 3,359 public inquiries and 1,487 complaints, all of which were passed on to the relevant local health bureaus to be dealt with.

(4) Active promotion of the amendment of related laws to build a tobacco-free environment

The HPA actively promotes revision of the Tobacco Hazards Prevention Act. The key points of those revisions include electronic cigarette management, prohibition of flavored cigarettes, enlargement of pictorial warnings on tobacco products, expansion of smoking-free areas, increased fines for repeat offenders, prohibition of named sponsorship by tobacco industry, increase of legal and medical assistance, and bans on authorized advertisements of products that imitate the use of tobacco products. The first reading was passed by the Legislative Yuan on December 2017. As the Legislative Yuan was extended, deliberation was terminated and the process of amendment of the Act restarted. Work to amend the Act restarted in 2020.

2. Establishment of smoke-free supportive environments and reduction of smoking rates and second-hand smoke exposure rates

To help people stay healthy, the HPA supports smoke-free environments in parks, communities, restaurants, schools, workplaces, and the military. It also promotes tobacco control through multimedia education and events.

(1) Inculcating in children an awareness of the dangers of smoking at home and school from a young age

a. Keeping children away from tobacco and letting the concept of no-smoking take root at an early age

In 2012, the children's tobacco hazards prevention picture book "Tobacco-free home 3D game book" was developed, merging tobacco hazards prevention into child education resources. In 2019, the book was revised and 40,000 copies printed. In 2020, it was delivered to 6,727 nurseries and local government health bureaus to help with tobacco-free family promotion work to keep children well away from tobacco.

b. Promoting campus cooperation and implementing a smoke-free campus

According to Paragraph 13 of Item 1 Article 15 of the Tobacco Hazards Prevention Act, local governments shall voluntarily announce the surrounding environment (including school gates, parent pick-up areas, sidewalks, etc.) of schools below senior high schools under their jurisdiction as non-smoking places, and clearly mark the scope of the smoking ban. In 2019, a total of 2,971 sidewalks around the campus had been announced and a total of 35 colleges and universities were guided to implement Campus Tobacco Hazards Prevention Program.



Promoting "Project for Tobacco Control Work in Youth Group Area," to guide 35 colleges or universities to promote tobacco control programs on campus



Advocating tobacco hazards prevention by design the Line "Morning Greeting" stickers



Arranging campus, beautifying the environment, bringing in tobacco hazards prevention concepts



Providing free haircuts in indigenous villages, while at the same time promoting the tobacco free, betel nut free and drinking cessation concepts



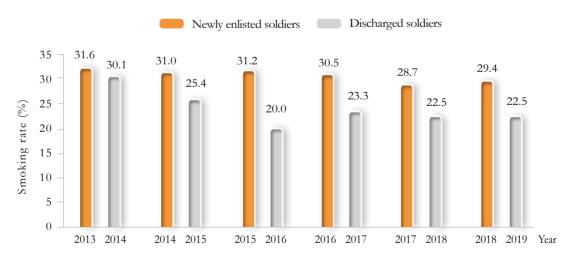
With Service Education Course, schools taking part in the "Pick up your cigarette butt" health activity



Holding debating competitions on tobacco product and e-cigarette hazards were held

c. Drafting Tobacco-free military policy to enhance prevention work in the military

The HPA and Medical Affairs Bureau under the Ministry of National Defense
worked together to promote tobacco control work in the military by drafting
policy and providing tobacco treatment services, health education promotional
materials and counselors. On average 300 tobacco cession counselors were trained
every year. A "tobacco cessation counselor family" network was established. The
smoking rate of discharged soldiers was dropped to 22.5% in 2019.



Sources: Ministry of National Defense, Integrated Tobacco Hazards Prevention Control Plan and Report

Figure 3-2 Smoking rate of national soldiers

d. Tobacco-free Hospitals and joining the Global Network for Tobacco-free Healthcare Services

Hospitals joined Global Network for Tobacco-free Healthcare Services and transferred online certification standards into indicators and key evaluation standards for tobacco-free hospitals.

1999

2011

2019

Global Network for Tobacco-free Healthcare Services. Taiwan jointed the network in 2011 and became the first network in the Asia-Pacific.

- In Taiwan, 213 hospitals have joined the network.
- 56 hospitals throughout the world garnered this gold forum award. In Taiwan, 22 hospitals received the honor, making Taiwan with the greatest number of Gold Forum members in 2019.

(2) Advocacy education on tobacco hazards prevention through various channels

Media advocacy was centered around the health hazards of second-and third-hand smoke, the smoking cessation services and the risk of e-cigarettes. The HPA combined TV, radio, outdoor media and print media and online media to improve the effectiveness of tobacco hazards prevention advocacy.

Education and promotion of tobacco hazards prevention through various methods in 2019

Inviting superstar singer Jolin Tsai as a volunteer. With "I refuse tobacco, I'm proud" as the theme, together with the K-12 Education Administration, a series of events were used to smash the myths about new tobacco products to say to students that "All tobacco products, Get Out!" The satisfaction rate for national promotion on campuses was 96%.



Multiple Internet celebrities, picture and text creators and doctors cooperated in making "Know Third-hand Smoke Early," "The Co-worker's Mistress" and animations which were put on a special topic webpage on the portal website for online exposure to enhance tobacco hazard prevention and e-cigarette hazard advocacy.

The campaign, keep away from the hazards of vapor, which calls for submission of pictures and text from students with the theme of keeping away from the hazards of e-cigarettes, was held for the first time in cooperation with the Ministry of Education. In all, 964 entries were received.





- 3. Provision of comprehensive and accessible smoke cessation services to assist smokers to change their habit and reduce obstacles: Smokers receive assistance in their efforts to quit smoking through outpatient smoking cessation treatment, toll-free phone counseling, and smoking cessation courses.
 - (1) Second Generation Smoking Cessation Service: In 2019, 173,525 were served with 631,764 visits and the six-month cessation success rate was 25.9%, helping 45,000 people to quit smoking. In the short term, it is estimated that more than NT\$240 million will be saved in medical health insurance expenditure and in the long term, more than NT\$18.8 billion in social and economic benefits.
 - (2) Smoker's Helpline: From 2003-2019, telephone counseling received 1,329,271 calls and a total of 363,942 individuals were helped to set cessation plans. The success rate for cases that received multiple counseling sessions exceeded 40% in 2019.
 - (3) Smoking Cessation Classes: In 2019, local governments held a total of 405 classes, with approximately 4,916 participants.

Second Generation Smoking Cessation Services

Up to NT\$ 200 (drug fees)



3,826

In 2012, second generation smoking cessation services were introduced. As of 2019, a total of 3,826 medical institutions provide smoking cessation services.



Smoking cessation medication is subsidized through the Tobacco Health and Welfare Surcharge, which ensures that drug fees copayment don't exceed NT\$200 each time. Regions that lack medical resources are entitled to an additional 20% discount, while aborigines, low-income households, and smokers in mountainous regions, and offshore islands are eligible for full exemption.



Certain healthcare institutions or community pharmacies offer professional support and care to smokers willing to undergo smoking cessation treatment in coordination with smoking cessation health educator.

4. Establishment of a long-term research and monitoring system

The HPA has established long-term smoking behavior monitoring systems to determine the effectiveness of its tobacco control work. These include "Adult Smoking Behavior Survey," "Global Youth Tobacco Survey (GYTS)," and "Nicotine, Tar and Carbon Monoxide Content of Tobacco Products Monitoring." In 2019, the HPA also studied the effectiveness of its smoking cessation services, tobacco product

composition reports, media promotion evaluation, tobacco product information inspection, evaluation of efficacy of law execution and policy assessment.

A "Tobacco Product Testing and Research Program" has been adopted. In all, a total of 57 tests have been carried out to determine the nicotine, tar, and carbon monoxide content in the main smoke stream of 57 domestic and imported cigarettes as well as the amounts of 50 different heavy metals and nitrosamine contents. The test results for all sampled tobacco products reveal that the nicotine and tar contents of 8 smuggled and 2 inferior tobacco products exceed the maximum amounts stipulated in the Tobacco Hazards Prevention Act. In addition, the indicated values on 4 tobacco product containers exceed the allowable error range of the test values and have therefore been forwarded to local health bureaus for investigations.

The WHO Framework Convention on Tobacco Control (FCTC) calls for the disclosure of information on websites on toxic ingredients (including additives) of tobacco products and emissions when smoked. In Taiwan, tobacco manufacturers and importers have been required to comply with these regulations and relevant provisions of the Tobacco Hazards Prevention Act since 2009. As of 2019, a total of 328 businesses had submitted filings on 7,187 tobacco products. Through the new "Tobacco Information Declaration System," tobacco suppliers can upload the "publicly-declared information" on websites, disclosing the composition of tobacco products and providing the pubic with real time information. From April 2010 when the website was established to 2019, a total of 226,563 people browsed the website, with 17,527 people in 2019.

5. Improvement of staff training

The HPA enhanced the problem analysis capability of colleagues involved in tobacco hazards prevention work to increase related knowledge for practice and plan formulation. Through city-county exchange and learning platform, it also increased the depth and breadth of smoking cessation services provided by medical professionals. In accordance with the different needs of people who want to stop smoking, the HPA also provides various smoking cessation services, and develops a smoking cessation collective care model to enhance the understanding of laws of inspection personnel and enforcement skills.

2019 results of training of smoking cessation staff

- One "County/city tobacco hazards exchange workshop" was held in central Taiwan and one in northern Taiwan, with 175 participants in all.
- Continuing training of smoking cessation treatment doctors saw 611 people trained and 218 smoking cessation treatment dentists trained; 13 people completed smoking cessation health education training, 343 people completed smoking cessation health education personnel training, and 160 people received smoking cessation pharmaceutical personnel training.
- Four basic regulations training courses for beginners were held with 208 participants; one advanced course was held, with 50 participants.

Prevention and Control of Betel Quid Hazards



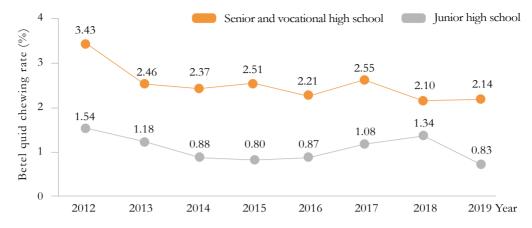
The International Agency for Research on Cancer (IARC) has already confirmed that betel quid is a Group 1 carcinogen. Betel quid chewing is one of the leading causes of oral cancer in Taiwan. Over 7,000 new cases of oral cancer have been diagnosed every year. Close to 90% of these patients are betel quid chewers. Compared to smokers and alcoholics, betel quid chewers are at a higher risk to develop oral cancer.

It is estimated that around 970,000 adults over 18 are betel quid chewers. Around 900,000 of them are male. A 10-year trend of male adult betel quid chewing rates indicates a decrease by 43.1% (Figure 3-3). Betel quid chewing rates of junior high school and senior/vocational high school students since 2012 to 2019 dropped to 46.1% and 37.6% respectively (Figure 3-4).



- 1. Sources: Behavioral Risk Factor Surveillance Surveys (BRFSS) from 2007 to 2017, 2018 Health Promotion Survey (HPS), and Adult Smoking Behavior Survey (ASBS)
- 2. Betel Quid Chewing Rate: Refers to individuals who have consumed betel quid within the past 6 months
- The HPA stop handling health promotion behavior surveys and adult smoking behavior surveys in 2019

Figure 3-3 Betel quid chewing rate among adult males over 18 in Taiwan



- 1. Source: Global Youth Tobacco Survey (GYTS)
- 2. Betel Quid Chewing Rate: Students that have chewed betel quid at least once in the past 30 days

Figure 3-4 Betel quid chewing rate among adolescents

In 1997, the Executive Yuan declared December 3rd as "World Areca Prevention Day" to raise public awareness of betel quid hazards. Government agencies at all levels implement measures for the prevention of betel quid hazards and strive to create betel quid-free environments in communities, on campuses, at military bases, and at workplaces with high betel quid chewing rates through cross-ministerial cooperation and society resources.



In 2019 betel quid chewing rate for men over the age of 18 is less than 7%.

Policy Implementation and Results

1. Multi-channel education campaign

Family members and friends who are betel quid chewers and smokers are encouraged through educational efforts on diverse channels to undergo oral cancer screening. In addition, betel quid-free and tobacco-free campuses are promoted to reduce the risk of exposure of adolescents to betel quids. Life skills in the field of betel quid and tobacco hazards prevention are incorporated into after-school tutoring programs with the aid of social welfare organizations.

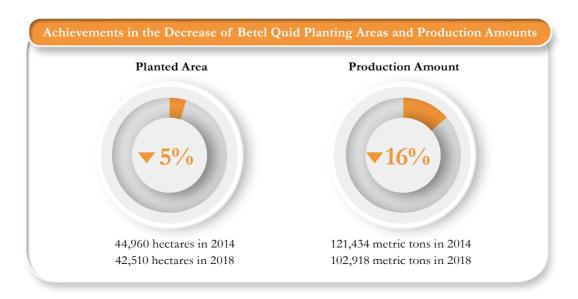
2. Increasing trans-disciplinary connection of government agencies to jointly prevent betel quid hazards

HPA establishes supportive betel quid-free environments through usage management, decrease of supply, and expansion of screening services through cross-departmental and cross-unit cooperation.

Search for construction companies that are willing to implement the mechanism through industry-level promotion • Betel quid-free construction site mechanism • Public works quality management refresher course of the Public Construction Commission, Executive Yuan • Construction Industry Health and Safety Promotion Commission, Ministry of Labor Education on tobacco and betel quid hazards prevention on construction sites & scheduling **CCAP** of oral mucosa examinations hospitals • CCAP hospitals and clinics and clinics • Local public health centers • NGOs Provision of a list of public projects Local building and contact person information Betel quid free construction site mechanism **Central Government Agencies** Local health • Health Promotion Administration bureaus · Occupational Safety and Health Administration of

the Ministry of Labor - Golden Safety Award

3. Decreasing supply and reinforcing of environmental inspections



Promoting Physical Activity



Physical inactivity is the fourth leading risk factor for global mortality and is associated with 6% of deaths annually. It is only surpassed by hypertension (13%), tobacco use (9%), and hyperglycemia (6%). In 2011, WHO pointed out that physical inactivity affects individual health (Figure 3-5), increases medical expenditures and social costs, and generates a huge burden for governments and societies.

According to the results of the Ministry of Education's 2019 Current Exercise Survey (Figure 3-6), the percentage of people regularly engaging in sports and exercise in Taiwan increased from 27.8% in 2011 to 33.6% in 2019, an increase of 5.8%.

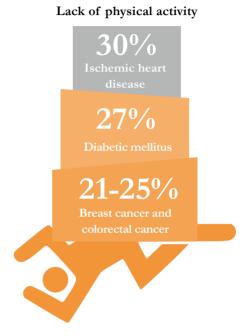


Figure 3-5 Impact of lack of physical activity on individual health



- 1. Sources: 2011-2015 Sports City Surveys from the Sports Administration (MOE) and 2016-2019 Current Exercise Survey
- 2. The definition of regular exercise is a minimum of 3 times a week and at least 30 minutes each time, with the heart rate reaching 130 beats per minute or the exercise being of sufficient intensity to make one sweat or breathe heavily.

Figure 3-6 2011-2019 Ratio of people above the age of 13 engaging in regular exercise in Taiwan

► Target Indicators

The 2019 target was 46.3% of citizens to exercise regularly.

Policy Implementation and Results

1. Cross-ministerial cooperation to promote national physical fitness

The Executive Yuan established the Executive Yuan Sports Development Committee, with Minister without Portfolio Chang Jing-lin as convenor. It cooperates on a regular basis with the Ministry of Health and Welfare.

The HPA held the Happy Aging Sport for Health seminar on September 4th, 2019 to which Professor Rebecca Hunter of the University of North Carolina, Miyachi director of the Institute of Health Promotion of the National Institute of Health and Nutriution, Japan, and Professor Lam Tai Hing of the Departent of Social Medicine of the School of Public Health of the University of Hong Kong shared experinces of promotion practice in the US, Japan and HK. The event was attended by 220 representatives from industry, academia, civil society and media, who engeded in excxhange on promotion experience and future outlook.

2. Multimedia programs to promote a wide range of physical exercise

With health bureau (center) personnel and community sports and health instructor as the targets of promotion, the HPA develops physical movement guides for people in different age groups, those with chronic disease and other special groups. It also makes handbooks and films that are shown on various media channels, allowing people to obtain related information from different channels.

Mass walks in support of WHA entry

On April 7th, the World Health Day–Mass Walk in Support of WHA Entry was held, calling on people to walk 24 million steps together (the walking distance from Taiwan to Geneva), to show the people's strong support for Taiwan's participation in the WHA.

Also, in coordination with the WHA, the "Walk the Talk" activity was held on May 19th. In July, together with the Ministry of Education, the Elder Sports for Health press conference was held. The Program helps the elderly to achieve health by correctly exercising.



Also, to promote walking as an exercise, the National Walk 1 Million Steps Happy Walking Event was held. It featured an online event plus three physical events in Taoyuan, Taichung and Kaohsiung. An incentive mechanism was adopted in combination with the mySports App as the tool for recording the accumulated steps taken every day. In all, around 50,000 people took part.

3. Promotion of health-related physical fitness and body weight in cooperation with units in different areas

School Establishment of health promoting schools | Promotion of healthy body

weight | Health-related physical fitness and healthy diets

Workplace Workplace health promotion | Implementation of regular exercise at the workplace

Community Construction of community hiking trails | Organization of physical activity courses

for community residents | Training of seed teachers

Hospital Promotion of green transportation | Planning of outdoor bikeways on the hospital

premises | Free bicycle rental services | Installation of bicycle parking racks on the

hospital premises | Organization of cycling activities for employees

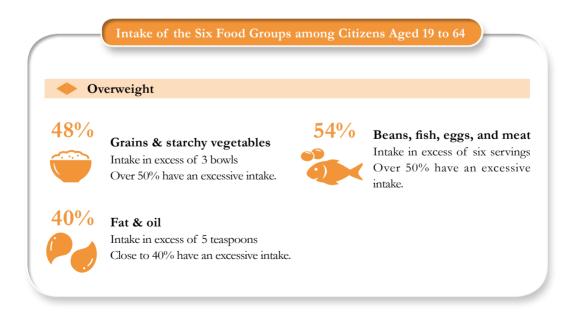
National Nutrition



Status Quo

The "Nutrition and Health Survey" in Taiwan for 2014-2017 shows that daily diets of citizens still fail to conform to the recommended standards and ratios.

A large amount of research shows that an unhealthy diet is one of the main causes of non-communicable diseases. It is hoped that by monitoring the health of citizens, setting health public policies, disseminating nutrition through diverse channels and advocating the importance of a healthy diet, the level of health of the people can be raised and chronic diseases prevented.



Intake of the Six Food Groups among Citizens Aged 19 to 64

Insufficient

88%

Fruits



Intake of less than one serving Over 90% have an insufficient intake. 85%

Vegetables



Intake of less than three servings Close to 90% have an insufficient intake.

99.4%

Dairy products



Intake of less than 1.5 cups Over 99% have an insufficient intake 91%

Nuts & seeds



Intake of less than one serving Over 90% have an insufficient intake

- 1. Source: Nutrition and Health Survey in Taiwan for 2014-2017
- 2. In accordance with the recommended number of servings for the six food groups based on a daily calorie demand of 2,000. The recommended daily intake of grains & starchy vegetables, beans, fish, eggs & meat, and fat & oil for adults aged 19-64 is three bowls, six servings, and five teaspoons, respectively.
- 3. In accordance with the Daily Dietary Guidelines, the intake of vegetables, fruits, dairy products, and nuts & seeds should reach three servings, two servings, 1.5 cups, and one serving, respectively.



Target Indicators

The prevalence rates of a daily vegetable intake of three servings and fruit intake of two servings reached 14.0% and 13.5% in 2019, respectively. Male adults had a daily salt intake of less than 9.4g, and female adults had an intake of less than 7.5g.



Policy Implementation and Results

1. Formulating public health policy

- (1) HPA has regularly conducted the nutrition and health survey in Taiwan, and published the results. It monitors nutrition status and body weight trends by systematic and sustainable methods, and establishes evidence-based national nutritional policies.
- (2) HPA actively promotes the enactment of the Nutrition and Healthy Diet Promotion Act and has submitted a draft to the Executive Yuan.
- (3) A ban on trans fat is promoted in cooperation with the Food and Drug Administration, while a ban on PHOs (partially hydrogenated oils) in food products was successfully imposed on July 1st, 2018.
- (4) The Nutritious Eating for the Elderly Health Education Manual and recipeteaching film were developed. The aim is that through food selection, cutting and cooking techniques and testing with simple tools, food that is of suitable softness for elderly people can be made.

Nutrition and Healthy Diet Promotion Act

2017

Reviewed and approved by the Legal Affairs Committee of the Ministry of Health and Welfare in November 2017.

Submitted to the Executive Yuan for the 5th time in December 2017.

2018

Submitted to the Executive Yuan for the 6th time in April 2018.

Review by the Executive Yuan in July 2018.

Resubmission to the Executive Yuan on August 17th, 2018 upon amendment in accordance with review opinions of the Executive Yuan.

Adjustment of text styles in accordance with the recommendations of the Legal Affairs Committee of the Executive Yuan on September 4th, 2018

(Executive Yuan discussions are currently being scheduled, and an effort to win the support of legislators continues.)

Implementation of iodine policies

Between 2014 and 2017, the iodine intake of citizens over 7 years of age only met the minimum standards prescribed by WHO. The HPA therefore actively promotes salt iodine labeling and policies governing increase of maximum iodine concentrations in salt.



Words like "Iodine is a required nutrient" must be clearly indicated on all packaging for table salt



Education of the public on the importance of iodine (implemented since July 1st, 2017)



Increase of iodine concentrations in table salt to 20- 33ppm

Simultaneous promotion of salt reduction and iodine fortification (implemented since July 1st, 2017)

Improvement of the iodine intake of citizens

Constant monitoring of iodine concentrations in the urine of citizens and the iodized salt coverage rate in school and household lunches

2. Constructing a health supporting environment

- (1) Food calorie and nutrition labelling has been promoted, healthy procurement principles set and the public and private sector encouraged to buy "healthy" food.
- (2) In 2019, with the elderly as the target group, the establishment of Community Nutrition Promotion Centers by local government continued to be promoted, and



On December 9th, 2019, the National Community Nutrition Promotion Center Results Observation Meeting was held.

centers were set up in remote areas to increase overall community nutrition care service capability. On December 9th, 2019, at National Taiwan University Hospital International Convention Center, the National Community Nutrition Promotion Center Results Observation Meeting was held, showing the outstanding results of various local governments.

Up to December 31st, 2019, more than 60,000 people have been served and almost 1,000 community eateries, elderly bases and organizations given guidance in providing healthy food suitable for the elderly.

3. Revising of various nutrition standards

In 2018, the Daily Diet Guide, Citizens' Dietary Indicators and other new-version nutrition criteria were issued. In 2019, the communication and promotion meeting for revision of calcium, iodine, vitamin D and carbohydrate intakes in the 8th version of Dietary Reference Intakes was held and addition of protein and fat sections completed. The draft was previwed in 2020.

4. Advocating of nutrition knowledge

In coordination with current events and festivals, press releases, press conferences and advocacy cards and other methods are used to spread the importance of a healthy diet. In 2019, My Plate balanced diet was actively promoted and eating out menu and formula songs and other promotional materials were made. A film submission event

was held and KOL opinion leaders were cooperated with; Physical adventure events and seed nutritionist training workshops and lectures were also held. Advocacy was enhanced through media adverts and city/county health bureaus and community nutrition promotion centers.



Obesity Prevention

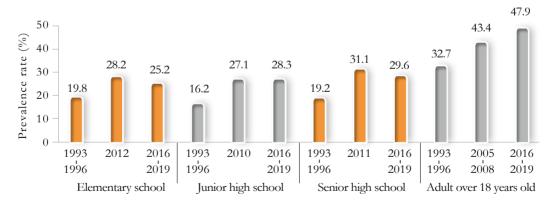


The HPA's "Nutrition and Health Survey 2016-2019" indicates that the prevalence of overweight and obese students at elementary school, junior high schools and senior high schools has gradually decreased. Obesity in adults has also been mitigated (Figure 3-8). The main cause of obesity is calorie intakes exceeding calorie expenditure, and other causes are unhealthy diets, lack of physical activity, and environmental factors.



- Westernized diet habits, food refining, and the intake of too many calories
- Watching TV, surfing the Internet, other static sedentary lifestyle, and insufficient amount of physical activity
- Sugary drinks, high-calorie unhealthy foods, and many other foods without calorie nutrition labeling or indication
- Insufficient mass transit system and sports and leisure facilities
- Less access to health education messages, limited financial capacity, and easy access to low-nutrition, high-calorie foods among vulnerable groups
- Unhealthy food advertising gifts with a lot of calories, fat and sugar

Figure 3-7 The main reason for the increase in the prevalence of overweight and obesity in Taiwan



- 1. Sources: Nutrition and Health Survey in Taiwan
- Standard BMI for elementary, junior high and senior high school students is based on the Ministry of Health and Welfare's 2013 "Recommended BMI for Children and Adolescents."
- 3. For an adult, a BMI of $\geq 24 \text{ kg/m}^2$ is overweight or obese.

Figure 3-8 Overweight and obesity prevalence in Taiwan

Target Indicators

Based on the non-communicable disease prevention global action plan from 2013-2020, the HPA designated 2025 as the year to fulfill the global voluntary target of "Stop the trend of rising obesity," by which time the overweight and obesity prevalence rate among school-aged children and adolescents will no longer be rising.



Policy Implementation and Results



Promoting obesity prevention and cooperation in all settings

- Building healthy cities, with health promoting hospitals, workplaces, schools and communities
- Implementing breastfeeding regulations in public places to enhance breastfeeding rates and reduce childhood obesity
- Conducting the "Nutrition and Health Survey in Taiwan" to monitor bodyweight trends



Comprehensive information and systems to improve the obesity causing environment

- HPA further strives to establish healthy diet supply systems. The Administration
 offers guidance to businesses in the development of healthy box meals, provides
 menus with clearly labeled calorie amounts, and implements healthy procurement
 and school nutrition standards. Healthy diet guidance is implemented in the vicinity
 of campuses urged to provide healthy diets and clearly label calorie amounts.
- The HPA has established physical activity resource integration centers, completed a
 physical activity information inventory and placed it on related websites. In addition,
 workshops have been held for those staff who facilitate the tasks, in order to increase
 the capabilities of community workers promoting physical activities.



Re-orienting health services

The incorporation of obesity prevention empirical guidelines into healthy hospital accreditation standards is implemented on a trial basis. In addition, a booklet titled "100+Questions on Obesity" and e-learning training videos have been released to reinforce proper referral and adequate treatment of obesity cases.



Strengthening community action

The HPA integrates inter-agency resources and builds a heathy body environment to drive a social atmosphere condusive to healthy bodyweight management.



Developing people's skills to implement healthy living

Educational tools, teaching materials, and health manuals with incorporated healthy body weight concepts were developed for children and adolescents. Health communication videos such as "Less Sugar," "Less Salt, Better Health," and "Body Exercise" were broadcast on TV and Youtube to enhance the literacy of citizens in the field of healthy weight management.

Accident and Injury Prevention

► Status Quo

The main couse of accidental death in Taiwan in the last 10 years have been transportation accidents, poisoning through exposure to and contact with a toxic substance, falling, exposure to smoke, fire and flame, and accidental drowning (Figure 3-9). In 2019, accidents were the second main cause of death of children and adolescents (Table 3-1). In the past three years, transportation accidents (including motor vehicle accidents) have been the main cause of accidental death of children and adolescents (Table 3-2, 3-3).

Also, the standardized death rate from falls of the elderly aged over 65 years old has gradually increased year on year. In 2019, a total of 3,190 elderly people died in accidents, with a death rate for people over 65 years old of 90.6 (every 100,000 people). This figure is clearly higher than for other age groups (Figure 3-10).

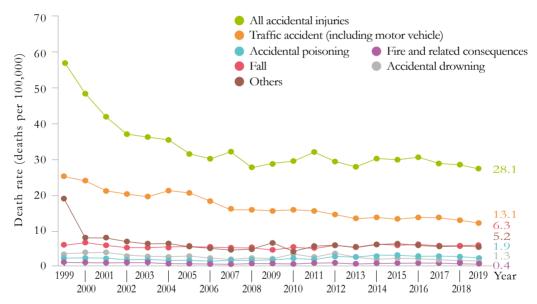


Figure 3-9 Main causes of deaths from accidents and their mortality in Taiwan from 1999-2019

Table3-1 The main causes of death of children and adolscents in 2019

Cause of Death	Children and adolescents under 18 years old	Children under 12 years old	Adolescents 12-17 years old
No.1	Originating from a specific condition in the perinatal period	Originating from a specific condition in the perinatal period	Accidental injury
No.2	Accidental injury	Congenital deformity and chromosomal abormality	Deliberate self-harm (suicide)
No.3	Congenital deformity and chromosomal abormality	Accidental injury	cancer

Source: 2019 Causes of Death Statistics, MOHW

Table3-2 2009-2019 distribution of accidental deaths of child and adolescent aged 0-17 years old

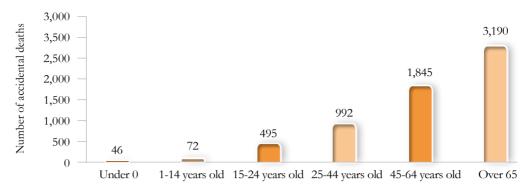
	Traffic accidents				Caused by	Other	Exposure	
Yeas		Motor vehicle accidents	Accidental poisoning	Accidental falls	fire and flame	accidental threats to breathing	to natural forces	Others
2009	179	166	6	12	16	35	112	20
2010	179	172	11	15	11	34	-	10
2011	158	148	6	27	7	33	1	14
2012	146	139	1	17	13	44	-	10
2013	145	139	4	15	12	39	-	13
2014	136	123	6	14	13	52	-	18
2015	94	83	6	14	11	42	1	15
2016	115	109	4	8	9	39	35	9
2017	132	120	3	23	9	43	3	8
2018	123	109	3	11	10	41	-	12
2019	97	90	3	8	5	38	-	16

Source: 2019 Child and Adolescent Accidental Death and Injury Statistics, Social and Family Affairs Division, Ministry of Health and Welfare

Table3-3 Three main causes of accidental death of child and adolescent aged 0-17 years old in the last three years

Cause of Death	0-19 years old	20-64 years old	65 years old above
No.1	Traffic accidents: 132 People	Traffic accidents: 123 People	Traffic accidents: 97 People
No.2	Other accidental threats to breathing: 43 People	Other accidental threats to breathing: 43 People	Other accidental threats to breathing: 38 People
No.3	Accidental drowning and submersion: 24 People	Accidental drowning and submersion: 28 People	Accidental drowning and submersion: 23 People

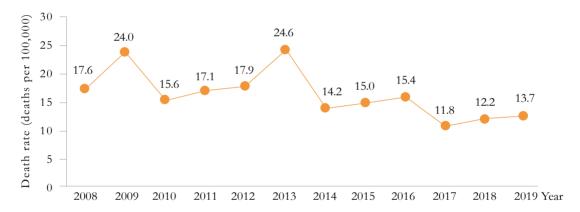
Source: 2019 Child and Adolescent Accidental Death and Injury Statistics, Social and Family Affairs Division, Ministry of Health and Welfare



Source: 2019 Causes of Death Statistics, MOHW

Figure 3-10 2019 Number of accidental deaths by age

Sudden Infant Death Syndrome (SIDS) is a leading cause of death among infants. According to causes of death statistics published by MOHW, it ranks as the 4th to 7th leading cause of death among infants every year.



Sources: 2019 Causes of Death Statistics, MOHW

Figure 3-11 SIDS Death rate in Taiwan 2008-2019

Policy Implementation and Results

1. Gradual decrease of accident injury mortality rates

In 2020 National Healthy People, injury prevention and safety promotion issues were included, with the aim of gradually reducing accidental injury and death. Accident related data banks were used to carry out statistical analysis to understand the current situation and long-term trends for accidental injury for use as reference in formulating prevention strategy and intervention effective assessment.

2. Preventing sudden infant death syndrome

Through the Ministry of Health and Welfare's cause of death statistical material, we continue to monitor the sudden infant death syndrome death rate and number of deaths. Referring to the evidence-based suggestions of the American Academy of Pediatrics, improvement measures for "avoiding sudden infant death syndrome" have been included in the Child Health Manual and are listed as child health education service items provided by doctors.

HPA promotion of infant and young child accidental injury prevention strategy

Preventing sudden infant death syndrome

Maternal Health Booklet The new editions of the Maternal Health Manual and Children Health Education Manual include a section on "Shaken Baby Syndrome." This informs caretakers about the risks of shaking a baby and details alternative techniques to comfort a crying baby, to avoid vigorous shaking or rocking to stop it from crying.

Children Health Manual "Tips for caring for newborns-safe sleep environment" and "Secrets for prevention of sudden infant death syndrome" have been included in the Children's Health Manual and listed as service items for provision of child health education and guidance.

Creating of a safe home environment for young children

Children's
Health
Education
Manual

The Manual includes "Often seen traps for infants and children in the home," providing carers with a guide to paying attention to and improving the home safety environment. A Preventing Accidental Injury assessment table, things to know about "Emergency handling of burns and gas accident injury" and "Dealing with emergency situations," are also provided.

Parents are encouraged to read picture books on health issues with their children, such as on accidental injury prevention. By telling infants and young children stories, at a young age, they will gradually have the knowledge that will benefit health and help them protect themselves. Parents and children can raise their level of health literacy by reading picture books together.

3. Building a safe home environment for young children to make the home safer for children

In line with the policies and laws of various agencies maintenance of child personal safety and home safety and other aspects of safety is cooperatively promoted to raise the quality level of child education and care and promote their safety and health.

4. Promoting differentiated fall prevention intervention models for seniors in communities

In combination with healthy city, healthy community bulding and community care bases, in accordance with the characteritics and needs of old people in the community, community elder health promotion is carried out. Through varied channels, elder fall prevention health education is promoted, advocating that elders do anti-fall exercises to enhance muscle strength, steps and balance and increasing people's fall prevention literacy. Through health bureaus and doctors, assessment of frailty is carried out and follow-up intervention service provided to high-risk groups to reduce falls and risk of fall injury.



Healthy Environment

Healthy Cities	60
Healthy Communities	62
Health Promoting Schools	64
Healthy Workplaces	66
Health Promoting Institutions	



In 2019, 12 cities/ counties and 13 areas in Taiwan joined the Alliance For Healthy Cities (AFHC).



In 2019, health bureaus in 22 cities/counties, 109 health centers and 17 community units were subsidized to implement the Age- friendly City and Community Program.



As of the end of 2019, 3,883 schools of high school level and under were implementing the Health Promoting School Program. A total of 152 universities had become health promoting schools

152 places



In 2019, a total of 1,778 businesses received healthy workplace certification.



In 2019, a total of 140 health care institutions were certified by the International Network of Health Promoting Hospitals and Health Services

1,778 places

140 places



HPA and the Clinical Health Promotion (CHP) journal cooperated in publishing "Health promotion hospitals and health services development in Taiwan" including 15 articles at HPH conference for the first time.

In 1986, WHO introduced five priority actions for health promotion in the Ottawa Charter: building healthy public policies, creating supportive environments, strengthening community actions, developing personal skills, and reorienting health services. These five actions are applicable to health promotion in various settings, including healthy cities and communities, health promotion schools, healthy workplaces and health promotion hosipitals.

Healthy Cities



Status Quo

In 1986, a total of 21 European cities met in Lisbon, and collectively decided to develop city health and promote healthy city plans. In response to the concept of a "healthy city," Taiwan first introduced the concept of a healthy city in 1995.



Healthy cities

Health values and principles are incorporated into urban planning. Health promoting public policies are formulated through cross-departmental and interdisciplinary cooperation, while diversified basic networks are created through the utilization of non-governmental resources and existing healthcare systems. The goal is to foster community participation and build partnerships to solve community health issues and realize healthy lifestyles.



Health promoting schools

Health promotion competence is integrated into campus life and education through the formulation of school health policies. In addition, a campus environment conducive to health learning is created through the integration and participation of community resources with the ultimate goal of improving the overall health of faculty and staff members and students.



Healthy workplaces

HPA works with employers, employees and society to promote the health and well-being of workers in the workplace. It emphasizes improving workplace organization and the work environment, encouraging employees to adopt healthy lifestyles as a basis for the development of their individual skills and professionalism.



Health promoting hospitals

Health promoting hospitals is a medical or heath service organization that aim to "improve the health benefits for patients, employees and community through the development of structures, cultures, decision-making and procedures." This is the organizational change as a strategy to improve health in the medical processes.

► Target Indicators

More than 90% of cities and counties in Taiwan participated in the promotion of healthy cities.

► Policy Implementation and Results

A total of 12 cities and counties and 13 regions received guidance in the promotion of healthy cities. As non-governmental organizations, they were permitted to join the Alliance for Healthy Cities (AFHC), which is actively supported by the WHO Western Pacific Regional Office (WPRO) as a non-governmental organization.

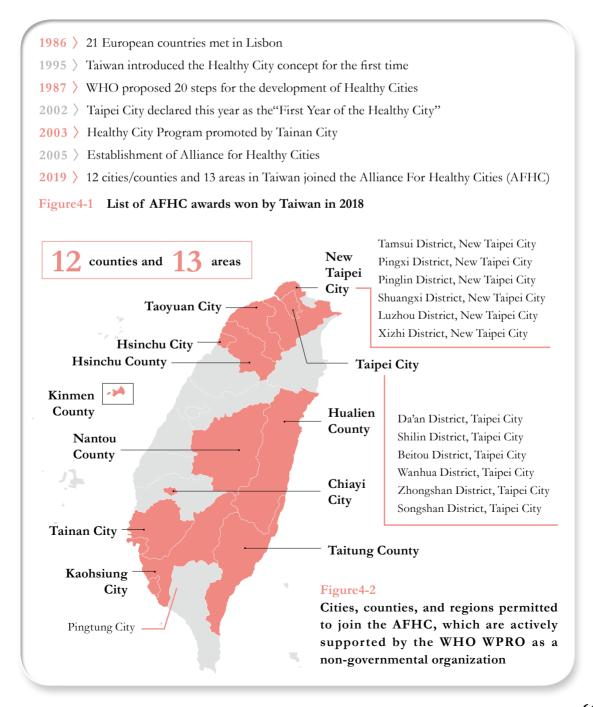


Table4-1 List of AFHC awards won by Taiwan in 2018

Award	Recipient
Award for Creative Developments in Healthy Cities –Planning for Resilience and Emergency Preparedness	Tainan Healthy City Association
Award for Creative Developments in Healthy Cities – Achieving SDGs through Healthy City Programs	Kaohsiung Healthy Harbor City Association
Award for Creative Developments in Healthy Cities –Good Health Systems towards Universal Health Coverage	Xinyi Health Promotion Association
Award for Creative Developments in Healthy Cities –Planning for Resilience and Emergency Preparedness	Xizhi Health Promotion Association
Award for Creative Developments in Healthy Cities – Achieving SDGs through Healthy City Programs	Taoyuan Healthy Promotion Association
Award for Creative Developments in Healthy Cities –Planning for Resilience and Emergency Preparedness	Healthy Promotion Association
Award for Creative Developments in Healthy Cities – Achieving SDGs through Healthy City Programs	Hsinchu City Healthy City Promotion Association

Source: Health Promotion Administration

Healthy Communities



Status Quo

HPA aims to induce community residents to value their personal health and develop health behavior through utilization of locally available internal and external resources. The goal lies in the joint development of a healthy community vision, the identification and solution of community health issues, and the creation of healthy communities.

1999	2002		2003	
The first "Community Health Building Center" in Taiwan was formally inaugurated in Xingang Township, Chiayi County.	Community Heal Units received g the promotion of initiatives.	guidance in	Executive Yuan adopted the "Healthy Lifestyle Community Program" as a key task.	
"Health-promoting community accreditation principles and standards" were formulated.		Implementation of the Community Health Building Program through integration of key health promotion issues and health issues with local characteristics were continued.		
2017	2019			
Age-friendly communities were created.	Health bureaus in 22 cities/counties, 109 health centers and 17 community units were subsidized to implement the Age-friendly City and Community Program.			

^{*}Awarded once every 2 years



Policy Implementation and Results

In 2019, health bureaus in 22 cities/counties, 109 health centers and 17 community units were subsidized to implement the Age-friendly City and Community Program:



Comprehensive inspections and improvements of an age-friendly and safe environment

Safety inspections were conducted for 2,824 households and environmental improvements were carried out for 1,689 households to ensure the age-friendly and safe home environments.



Promotion of healthy diets for seniors

A total of 169 healthy meal demonstration teaching events for seniors were attended by a total of 11,397 individuals. And 542 healthy diet lectures for seniors were attended by a total of 13,383 individuals.



Promotion of educational activities for the prevention of dementia

We organized educational activities on the prevention of dementia: 518 events attended by over 200 thousand participants.



Organization of physical health promotion classes for seniors in the community

A total of 889 community physical health and health promotion classes for seniors were organized. These classes were attended by 12,916 elderly citizens.



Organization of oral health seminars for seniors

We organized 404 oral health seminars for seniors with 14,795 participants.



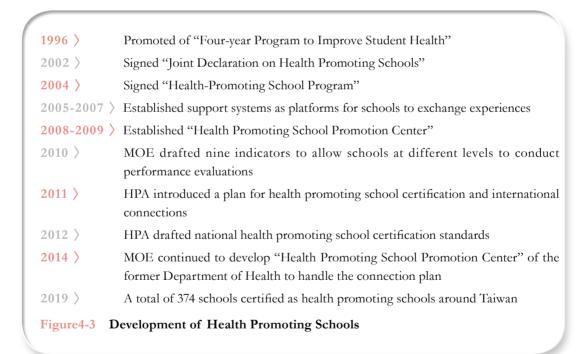
Volunteer participation in community health building

Number of volunteers to receive a volunteer service handbook and participate in community health building was 2,758.

Health Promoting Schools



The World Health Organization defines health promoting schools as "schools that are constantly strengthening their capacities as a healthy setting for living, learning and working." Since 2002, both the former Department of Health and MOE have worked in accordance with the six major components of health promoting schools set by WHO: school health policies, school physical environments, school social environments, community relationships, individual health skills, and health services. The goal of setting these components is to develop school health policies, foster consensus between teachers and students, promote community participation, and provide health services that ultimately create a school environment which nurtures a health living environment and improves the overall health of children and adolescents. In April 2002, the former Director of the Department of Health, Ming-liang Lee, and former Minister of MOE, Jong-Tsun Huang, signed a "Joint Declaration on Health-Promoting Schools."





Target Indicators

The accumulated number of schools that have passed the 4th Health Promoting Schools International Certification reached 374. The unveiling ceremony was held for five Gold Award winning schools.



Policy Implementation and Results



Comprehensive promotion of a health promoting schools program, with many schools opting to participate

By the end of 2019, as many as 3,883 schools under the level of high school/vocational high school were fully initiating the health promoting school program. A further 152 colleges and universities also opted to join health promoting schools.



4th Health Promoting Schools International Certification

The unveiling ceremony was held for five Gold Award winning schools in the 4th Health Promoting Schools International Certification: Lianshe Elememary School International Certification in Yunlin County, Beipu Elementary School in Hsinchu County, Puzi Junior High School in Chiayi County, Qingpu Elementary School in Chiayi County and Xinjia Elementary School in Tainan City. The successful health promoting model of each school was used to raise the profile of international certification commendation.



Six issues promoted by health promoting schools

The implementation strategy for health-promoting schools is based on the six main categories prescribed by WHO. This strategy is fully deployed on campuses to create a healthy and joyful learning environment. In 2018, important issues included: healthy body weight, oral healthcare, vision healthcare, tobacco and betel quid prevention, health insurance (including safe use of medication) and sex education (including HIV/AIDS prevention prevention), etc.



Development of the initial framework for Health Promoting Schools 3.0

The initial framework for Health Promoting Schools 3.0 was developed in accordance with the WHO and UNESCO's joint 2018 Global Standards for Health Promoting Schools, the UN SDG and evidence-based results of Health Promoting Schools.

Healthy Workplaces



Status Quo

In the 4th International Conference on Health Promotion in 1997, WHO clearly revealed that a healthy organization should include 4 major elements: health promotion, occupational health and safety, human resource management and sustainable development. As such, creating a healthy workplace means not only decreasing the occurrence of occupational diseases but also proactively protecting and promoting the health of every worker in the workplace.

2003

The "Workplace Tobacco Hazards Prevention Guidance Program" was implemented

Program" was implemented to provide in-death workplace counselling.

2006

"Healthy Workplace Promotion Center" was established in three regions to provide onsite consultation about healthy workplace environments.

2007

Healthy workplace accreditations Were initiated.

2012

The number of healthy workplace receiving accreditations was incorporated as an evaluation indicator of the "Work Program for Subsidized Local Promotion of Healthcare." The goal is to encourage public health bureaus and centers to work with workplaces to implement employee health promotion and create friendly and healthy work environments.

2015

"Tobacco Hazards Prevention Badge" was no longer issued in the context of healthy workplace accreditation. The "Health Initiation Badge and Health Promotion Badge" were still awarded.

2017

The Healthy Workplace Creativity Golden Pin Award competition was held for the first time.

2019

A total of 1778 units were certified as healthy workplaces.

Target Indicators

In 2019, there were 1,778 certified healthy workplaces in Taiwan and HPA handled the selection and commendation of excellent healthy workplaces.



Policy Implementation and Results

1. Advancing health promotion and tobacco hazards prevention in workplaces

HPA encourages workplaces to advance health promotion issues, including physical activity, healthy diets, tobacco and betel quid hazards prevention, healthy bodyweight management, four main cancer screenings, adult preventive healthcare services, chronic disease management, women's workplace health and mental health promotion.

- (1) Onsite guidance was provided to 189 workplaces in 2019 and six healthy workshop guidance workshops were held.
- (2) HPA actively promotes Healthy Workplace Certification, including the Health Initiation Badge and Health Promotion Badge. In 2019, a total of 1,778 workplaces passed the certification. The certification content is as follows:
 - a. Health Initiation Badge: the workplace that has achieved results in smoking prevention better than those required in the Tobacco Hazards Prevention Act, and the workplace has already begun activities related to health promotion.
 - b. Health Promotion Label: the workplace that used the WHO 2010 Workplace Comprehensive Health Promotion Promotion Model to assess and delineate workplace employee health problems, formulate an annual plan and take concrete action.
- (3) In 2019, we commended 32 workplaces as outstanding in this regard and 5 staff as Excellent Healthy Workplace Promoter.
- (4) The Healthy Workplace Creativity Golden Pin Award–Design Your Health! national competition was held. From 33 workplaces entered, 10 demonstration workplaces were chosen as finalists. A workplace video online vote was then held (receiving 14,819 votes). Three of the 10 finalists were awarded the National Excellence Award.

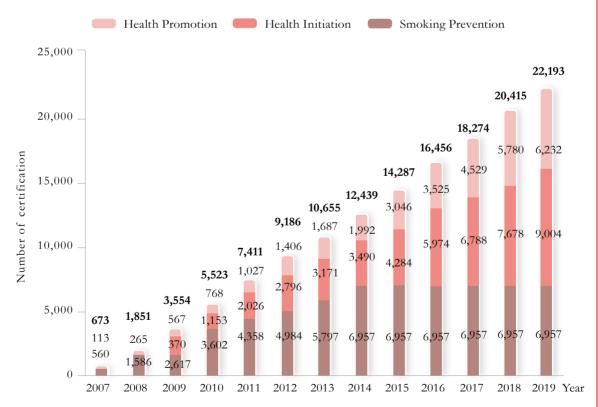


Figure 4-4 Cumulative number of certified healthy workplaces from 2007 to 2019

2. Conducting surveys of the health promotion and smoking status of the working population every two years and tracking the effectiveness of healthy workplace promotion continuously

Comparison of the results of the 2017 and 2019 work population health promotion and smoking hazards survey results

Workplace Tobacco Hazards The exposure rate of second-hand smoke has improved, but the proportion of smoking bans in indoor workplaces has decreased, and employees smoking rate has increased, especially for 15-to-19-year olds, which is significantly higher than other age groups.

Employee
Healthy
Behavior and
Health Status

The condition of employees eating less fruit, reducing exercise, and increasing the proportion of overweight and obesity, sleep insufficiency, physical discomfort, chronic diseases, etc. are all improved.

Workplace Health Promote Situation The facilities and activities provided by the workplace are higher than those since 2017. It is recommended that HPA assist small workplaces in the future to provide a healthy working environment.

Health Promoting Institutions



Status Quo

The WHO published the "Implementing Health Promotion in Hospitals: Manual and Self-Assessment Forms" to provide hospitals with a structure, system, process and quality assessment for evaluating their own health promotion policy. This acts as a program and guide to the implementation and continued improvement of health promotion services.

Over 597 hospitals representing 20 national or regional networks from countries across Europe, America, Asia, Africa, and Oceania have joined the International Network of Health Promoting Hospitals and Health Services (HPH).



Target Indicators

A total of 140 hospitals became members of the International HPH Network by the end of 2019.

Policy Implementation and Results

1. Health promoting hospital and international cooperation

(1) Training and growth of health promoting hospitals

- a. In 2019, Taiwan had 140 health care organizations that were successfully certified and entitled to join the International HPH Network, including 137 hospitals, 1 long-term care institution, and 2 public health centers (Figure 4-5, 4-6). The Taiwan HPH Network has remained the largest network within the international network since 2012.
- b. As of 2012, HPA sponsors a Program for the Promotion of Participation by Healthcare Organizations in Health Promotion for health bureaus in cities and counties to cooperate with healthcare organizations within their jurisdiction, in order to strengthen partnerships between health bureaus and healthcare organizations and integrate preventive healthcare service resources. In 2019, HPA subsidized 20 health bureaus cooperated with 94 healthcare organizations to participated in health promotion issues such as age-friendly healthcare, health literacy, and environment-friendly hospital, etc.

2002

Taipei City takes the lead in setting healthy hospital evaluation standards.

2005

Taipei Municipal Wanfang Hospital became the first hospital in Asia to obtain membership in the International Network of HPH Network.

2008

2006

We applied to the WHO International HPH Network to establish a "Taiwan Health Promotion Hospital Network" and become a full member of the network and the first online member in Asia.

We established the Taiwan Society of Health Promoting Hospitals.

HPH developed 6 networks (including US, Australia, Japan, South Korea, Hong Kong and Taiwan), with 239 member hospitals in 8 countries.

2016

As an "observer," we entered the Government Board and was responsible for promoting the Asia-Pacific region and conducting seminars in the Asia-Pacific region.

2019

2007

HPA and HPH "Clinical Health Promotion Journal, CHP" jointly published a special issue on Taiwan: "Health Promoting Hospitals and Health Services Development and Achievements in Taiwan." For the first time, 15 papers were published in a special issue at an international conference, sharing our domestic health promotion medical achievements.

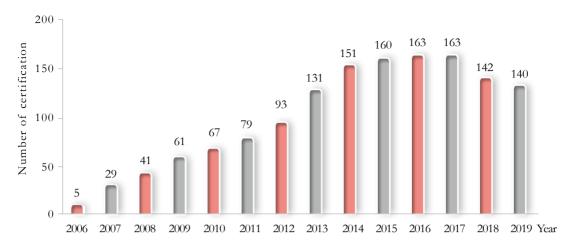


Figure 4-5 Taiwanese members of HPH Network 2006-2019

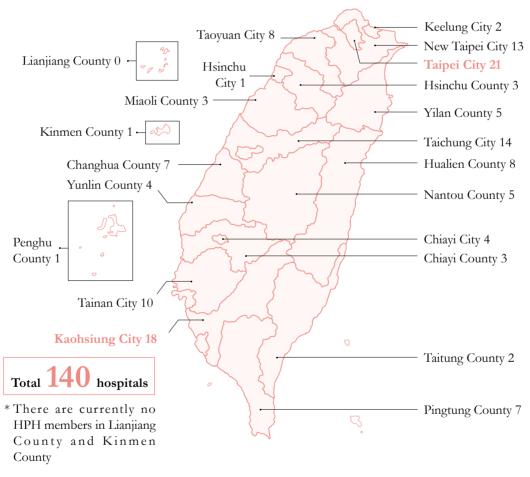


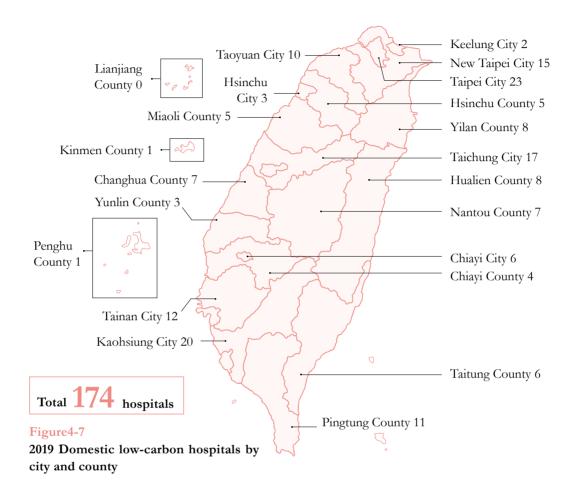
Figure 4-6 2019 HPH Network membership by city and county

2. Promotion of low-carbon hospitals for the medical industry to be dedicated to environmental protection

(1) Establishing a taskforce on HPH and environment

By the end of 2018, a total of 184 domestic and foreign healthcare institutions and organizations had joined "Taskforce on HPH and Environment," including

174 Taiwanese hospitals (Figure 4-7), 6 foreign hospitals, and 4 foreign healthcare institutions.



In 2010, HPA launched the "Medical Community as Vanguard to Save the Earth with Carbon Reduction" campaign in Taiwan, and 128 hospitals pledged their support for this campaign. It is estimated that the campaign will result in a reduction of carbon emissions by 13% (164,648 metric tons) between 2007 and 2020, which is equivalent to the annual carbon absorption capacity of 445 Daan Forest Parks or 34 New York Central Parks. An analysis of the energy conservation and carbon reduction data reported by low-carbon hospitals in Taiwan reveals that the total carbon reduction effect (reduction of CO₂ emissions) between 2007 and 2017 amounts to 54,165.9 metric tons (4.28%), which is equivalent to the carbon absorption of 146.4 Daan Forest Parks. If the stated goal of a carbon reduction of 13% is calculated on the basis of carbon emissions per hospital beds, annual carbon reductions of 2.052 metric tons per bed are required to achieve the aforementioned goal. By 2017, carbon emissions had been reduced by around 2.055 metric tons per bed, which represents a goal achievement rate of 100.1%.

In 2018, in line with the 1st stage Green House Gas (GHG) emission control objectives for the residential and commercial sector of the GHG Reduction Promotion Initiative enacted by the Ministry of Economic Affairs, the Ministry of Health and Welfare must achieve CO₂ emission reductions of 63,300 metric tons in

the 1st stage from 2015 to 2020. With 2011 as the base year, total reduction by 2019 amounted to 55,000 metric tons, which represented an achievement rate of 87.2%.

2009

The International HPH Secretariat adopts a resolution to commission Taiwan to direct the promotion of climate and environmental issues emphasized by WHO.

2010

The HPA established of a taskforce on HPH and Environment

2014

The four-year stage mission of the task force ended and its role was taken over by a civil group.

2019

The Sustainable Health Hospital Blueprint and Advanced Indicators and Guide were formulated to help hospitals move towards the objective of sustainable health.

(2) Formulating of the sustainable health hospital blueprint, promoting mitigation and reduction of climate change

In 2019, the Sustainable Health Hospital Blueprint and Sustainable Health Advanced Indicators and Guide were revised, setting short, medium and long-term strategy and objectives to help hospitals orient towards sustainable health, as well as reducing the impact of climate change on the medical system and people's health, and reducing greenhouses gas emissions.

(3) Capacity building and international exchange, raising the level of hospital environment-friendly literacy

- 1. In 2019, two Sustainable Health Hospital Education training sessions were held, with 46 participants from 39 hospitals.
- 2. The HPA signed an international cooperation MOU with Griffith's University of Australia, utilizing the institute's expertise with regards to climate change and environment and health to provide counseling and policy advice to the HPA, with respect to climate change mitigation, environmental health and public health.
 - Academic exchange between the two sides will also increase our ability to respond to and adjust to extreme climate.
- 3. Organized the Environment-friendly Hospital Summit and Workshop, engaging in cross-discipline exchange with domestic and foreign experts, discussing the blueprint and guideline's feasibility and applicability and incorporating the results of discussion in to future revisions of the blueprint and guidelines.



In October 2019, the HPA organized the Environment-friendly Hospitals summit, which was attended by domestic and foreign scholars, including Trevor Hancock, professor emeritus of the School of Public Health of the University of Victoria; Canada; Prof. Cordia Chu of Griffiths University, Australia and Ramon San Pascual, CEO of Health Care Without Harm Asia.

(4) Conducting self-assessment of environment-friendly actions by hospitals

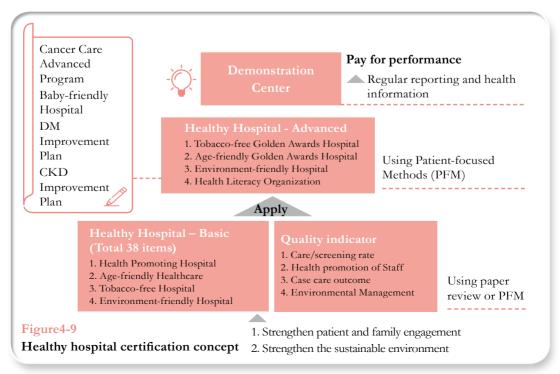
In 2012, in accordance with the Global Green and Healthy Hospital Agenda published by Health Care Without Harm (HCWH), we formulated the Self-assessment Forms for Environmentally-friendly Hospital Initiative with eight dimensions and 84 action items in line with Taiwan's situation. In 2018, the assessment was completed by 107 low carbon hospitals. Results showed that the average hospital execution proportion is concentrated on six of the dimensions (87-93%), with low carbon diet (77%) and green transport (71%) having relatively lower execution rate.

	Eig	ht Dimens	sions					
	Organization	Chemical reduction	Waste reduction	Energy efficiency	Water saving measures	Green transportation	Lowcarb diet	Green Buildings
Execution proportion	91%	89%	93%	87%	89%	71%	77%	93%

Figure 4-8 2019 Eight Dimensions in Self-assessment of Environmentally-friendly Hospital Initative

(5) Promoting of healthy hospitals

In 2019, a total of 202 hospitals (22 medical centers, 87 regional hospitals, and 93 district hospitals) acquired healthy hospital certifications. In the future, hospitals will be encouraged to apply for advanced certifications including "Tobacco-free Golden Award Hospital" and "Environment-friendly Hospital and Health Literacy Organization" on the foundation of basic healthy hospital certifications. In addition, nephrology health promotion organizations, cancer screening and care quality certifications, baby friendly hospitals, diabetes/chronic nephrology health promotion organizations will be promoted in sync.





Healthy Aging

Active Aging	76
Preventing Debility and being Dementia-friendly	78
Age-friendly Environment and Compassionate City	82



In 2019, in 22 cities/ counties, 109 health centers and 17 community units, in all 126 community health building units, were subsidized to build agefriendly communities.



3,936 people aged over 65 received smoking cessation counselling and 68,690 received smoking cessessation services

68,690 people

126 places



Promotion of the Frailty Prevention Service Network–Hub Plan. In all, 18 local governments and 82 health centers form this resources integration hub that integrates resources from various quarters.



10 dementia-friendly communities were established and 22 cities/counties nationwide were given subsidies to recruit 66,000 dementia-friendly angels and 5,500 dementia-friendly organizations. A total of 518 promotion activities of various kinds were held, reaching over 200,00 people.

140 places



645 medical care service institutions have become Age-friendly Health Care Certified

645
places

5

In 2002, WHO began promoting "Active Aging," in the hope of developing aging as a positive experience, while also encouraging seniors to not only focus on their physical and mental health, but also continue to play an active role in social, economic and cultural affairs. The goal is to promote spiritual growth and maintain an active lifestyle.

Taiwan has officially been an aging society since 1993. By the end of 2018, Taiwan was officially an "aged society" by international standard. Moreover, if current trends hold, Taiwan will become a super-aged society in 2025, when the number of those 65 years or older will account for approximately 20% of the population. Adding to this challenge, the population of Taiwan appears to be aging faster than that of any other developed countries. In addition to the rapid increase in the aging population, the size of the middle-aged population has also gradually increased. Their health has had a great impact on society, and thus we need particular focus on the topics of health promotion and disease prevention for middleaged and elderly people. As such, there is an urgent need for changes in the healthcare environments and services currently provided. It is hoped that by reducing the occurrence of illnesses among the middle aged and seniors, it will be possible to create a friendly city environment that optimizes the health and well-being of seniors. Through controlling or reducing the risks and other negative influences caused by diseases, we might upgrade their quality of life.

Active Aging



Status Quo

Average life expectancy in Taiwan was 80.0 years in 2016, with 76.8 years for men and 83.4 years for women. Longer lives present new challenges. As the "2017 National Health Interview Survey" demonstrated, more than 80% (84.7%) of seniors having been diagnosed with at least one chronic disease, among which more women than men (Figure 5-1).

Studies show that the most common chronic diseases among seniors are hypertension and diabetes mellitus, while women are vulnerable to osteoporosis.

Target Indicators

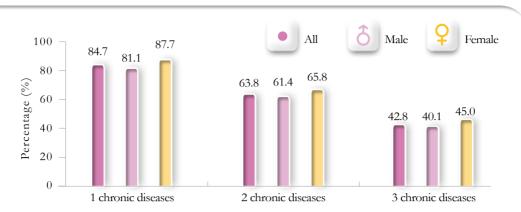
- 1. In 2019, the smoking rate of individuals aged over 65 fell below 10%.
- 2. In 2019, approximately 1,000,000 individuals aged over 65 used Adult Preventive Healthcare Services.
- 3. All 22 cities and counties in Taiwan promoted Agefriendly Cities.
- 4. In 2019, more than 500 institutes passed the Agefriendly Healthcare Institution Certification.

Policy Implementation and Results

Policies governing preventive healthcare services, integrated screening services, and health promotion for seniors are implemented in accordance with the unique characteristics and needs of seniors in communities. Relevant issues include healthy diets, exercise, fall prevention, drug safety of seniors, chronic disease prevention, health screening, and blood pressure measurement. In addition, HPA promotes Age-friendly Healthcare Institutions and Cities with the goal of creating age-friendly healthcare environments and services.

1. Elderly using preventive health care services on the rise

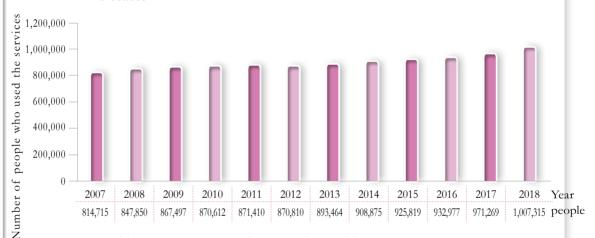
The government offers preventive healthcare



Sources: 2017 National Health Interview Survey

- 1. Sample size: 3,283 (1,531 male, 1,752 female)
- 2. The 17 types of chronic diseases include: hypertension, diabetes, heart disease, stroke, lung or respiratory disease (bronchitis, emphysema, pneumonia, lung disease, and asthma), arthritis or rheumatism, gastric ulcers or stomach illness, liver or gallbladder disorder, hip fractures, cataracts, kidney disease, gout, spinal bone spurs, osteoporosis, cancer, hyperglycemia and anemia.
- 3. Weighted percentages

Figure 5-1 Citizens aged 65 or above who report they have been diagnosed with chronic diseases



Source: Health Insurance Payments for Preventive Healthcare

Figure 5-2 Utilization of Adult Preventive Healthcare Services by seniors aged 65 or above between 2007 and 2018

services to seniors aged 65 or above once a year. Service contents include physical check-ups, blood and urine tests, and health counseling (Figure 5-2). The HPA also encourage local health bureaus to cooperate with primary medical institutions to integrate health care resources to provide community-based integrated screening services to improve service accessibility. A total of 1.007 million seniors received such services in 2018, which represents an increase by 3.7% (971,000 individuals) compared to 2017. This led to the detection of 210,000 (22.1%) new cases of hypertension, 91,000 (9.6%) new cases of hyperglycemia, and 226,000 (23.7%) new cases of hyperlipidemia.

2. Promoting senior health

(1) Integrating local resources to promote senior health

The HPA integrated local resources such as the concepts of healthy cities, safe communities, health promoting communities, community care centers and senior citizens learning centers. In addition, health promotion activities were conducted according to the specific characteristics and needs of seniors in communities. The aim is to strengthen their independence and allow them to live healthy, autonomous lives. When seniors are less dependent, they can also play a more active role in society. In 2019, HPA subsidized 22 cities and counties, including 109 public health centers, and 17 community units (a total of 126 community health building units), with communities as the main platform. Active aging and health promotion courses for seniors in communities were promoted.

(2) Using technology to care for the elderly-home care health promotion

The Ministry of Health and Welfare's 2017 Elderly Situation Survey Report for the elderly showed that the main form of leisure for people over 65 years old is TV watching (80.7%). The HPA thus established the Elderly Home Technology Interactive Platform, using TV as the vehicle to care for the elderly, delivering a variety of health information for the elderly to their homes. We provide not only interactive programs, but also community life information. Unaffected by time and space, old people can age actively and healthily in an environment in which they can interact with others at any time to avoid frailty cause from living alone, depression and reduction in activity. This began in 2019 and it is expected to be expanded to 6000 homes by June 2020.

(3) Enhancing preventive healthcare services for the seniors

In 2019, a total of 3,936 seniors aged 65 and older received tobacco cessation counseling hotline service and 68,690 received tobacco cessation services.

Preventing Debility and being Dementia-friendly



Status Quo

The WHO points out that regular physical activity of moderate intensity helps reduce the risk of cardiovascular diseases, diabetes, colon cancer, breast cancer, depression, and hip joint or spine fractures. Academic research indicates that adequate exercise also reduces the risk of debility and dementia. The WHO suggests that those aged 65 years and above should do at least 150 minutes of moderate-intensity physical activity throughout the week. It also recommends that seniors perform physical activity to promote balance and prevent falls three times a week.

As of 2019, HPA assesses frailty of seniors aged 65 or above in Taiwan via SOF (Study of Osteoporotic Fractures) and depression and fall prevention questionnaires. A total of 207,799 seniors underwent assessments. A preliminary analysis reveals that 24,732 (11.9%) seniors are in a stage of prefrailty, while 4,790 (2.31%) of the assessed seniors are in a

stage of frailty. As many as 9,282 (4.47%) of the assessed seniors had fallen within the past year, while 2,725 (1.31%) suffer from depression.



Target Indicators

100 % coverage was achieved in early stage debility prevention and health promoting services.



Policy Implementation and Results

1. Deepening sports health training

A sports intervention model that is evidence-based to reverse frailty has been developed. With medical and sports professionals as the targets, 16 hours of training courses are provided and a Resources Toolbag made and provided for use in community teaching by instructors who have completed training.

Basic training was provided for community incapacity prevention and delay personnel. From 2017 to 2019, a total of 4,173 instructors and 857 assistants completed training. In 2019, a total of 22 empowerment training courses were held, with 1,547 people taking the activity leading module and 1407 the health ptromotion module.

In addition, three evidence-based, interventionist, operable, and creative service plans with clearly defined contents, intervention targets, excellent extendability, and high cost-efficiency were developed in the "Debility Prevention and Delay Research Program."

2. Actively building community-oriented health management

With frail, sub-healthy and healthy elderly as the targets of service, the holding of 889 elderly health promotion courses in 17 cities/counties was subsidized, the contents including intervention model, healthy aging, and cognitive function training, with around 13,000 people served. Results analysis showed that 12-week intervention helped in terms of maintaining social interaction and emotional function and reducing the number of falls.

3. Promoting senior health through competitions

To increase the social participation of the elderly, health bureaus and centers work with community civil groups to encourage the elderly to form teams and take part in competitions to promote their physical activity and social participation. Competitions were held in 2019 in northern, central, southern and eastern Taiwan and then a national final held. In all, 3,410 people took part, and their average age was 74.5 years. In nine years, a total of more than 530,000 people have taken part.

In 2019, the Community Active Aging Photography Competition and Outstanding Group Commendation Meeting was held, awarding 15 groups with the Community Management Award, Creative Course Award and Sustainable Development Award. In total, 26 people received gold, silver, merit and honorable mention awards in the Community Active Aging Photography Competition. The awards commended community units for achieving good result in health promotion.

4. Advocating healthy life in old age

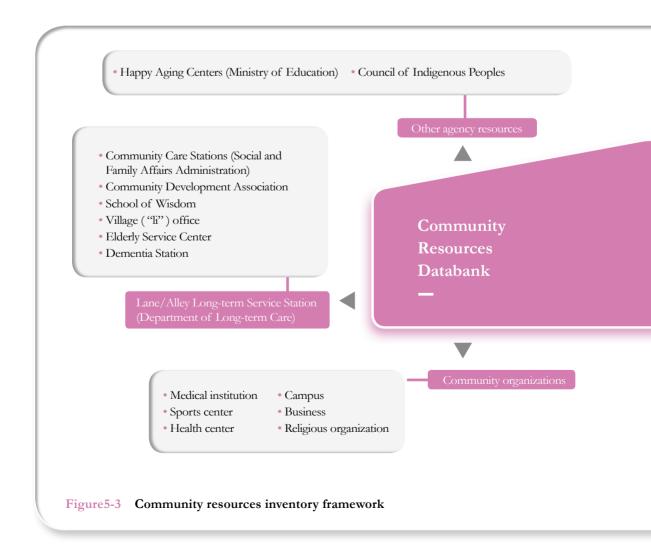
In 2019, the "Life In Movement" and "Movement Expert booklets" continued to be published, through domestic and overseas evidence-based research, teaching the elderly and other people how to use everyday exercise in a safe environment to enhance balance, muscle strength, suppleness and cardiovascular stamina.

5. Pomoting dementia prevention work

(1) The Dementia Prevention Promotion Program was implemented to establish 10 Dementia-friendly communities with subsidies to 22 cities/counties nationally to develop dementia-friendly living spheres in 2019. A total of 66,000 dementia angels

The four main components of dementia-friendly communities

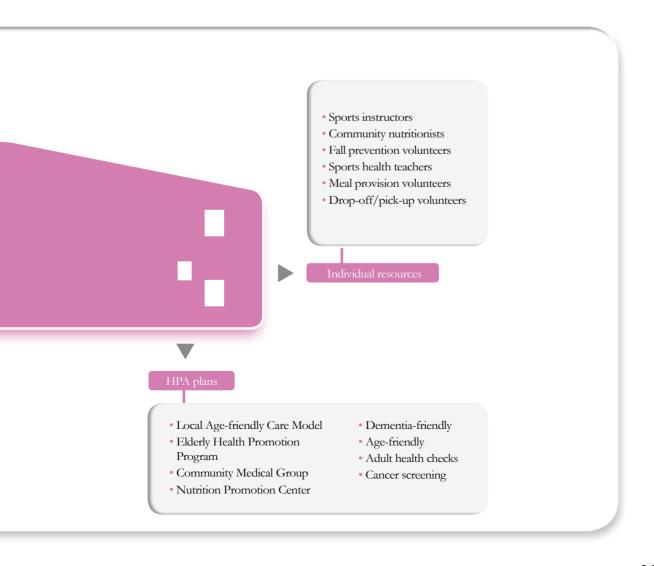




- and 5,541 dementia-friendly organizations were recruited. In all, 558 varied dementia-friendly advocacy events were held, reaching over 200,000 and forming a dementia protection network.
- (2) The Dementia-friendly Resources Integration Center was developed, collecting 271 dementia related papers, 268 health education teaching materials, 20 kinds of presentations and three short films that are provided to people to read, learn from and use.

6. Connecting incapacity prevention and delay resources-Hub Plan

The Incapacity prevention and delay resources—Hub Plan was implemented in 2019 to establish an integration model for elderly health care. The resources integration hub is formed by 18 local governments and 83 health centers and integrates the elderly health and frailty prevention resources, community organization and individual resources (Figure 5-3) provided by various units. It also forms cross-unit (area) partnerships with community medical care groups, hospitals, village chiefs and community stations to providing resources and services through resources connection and referral to respond to the problems caused by aging such as nutrition, insufficient exercise, chronic disease, declining bodily function and dementia.



Age-friendly Environment and Compassionate City



The HPA has promoted age-friendly cities since 2010. In 2019, it made age-friendly the focus of this campaign, to promote an age-friendly, dementia-friendly and caring community program. The building of a healthy public policy framework includes environment, services and policy. We need to improve hardware facilities and software to better connect communities, businesses, charities, religious groups, etc. to build community partnerships. In this way, the strength of the community is enhanced so that seniors, those suffering from dementia and chronic illnesses or receiving palliative care are no longer merely looked after, but also able to live independent and autonomous lives. They may even be able to participate in society such as being volunteers, sharing their experience and knowledge, or assisting homecare. The ability to continue to make a contribution creates the dream blueprint of "less illness, slower aging and living well," enhancing quality of life well into old age.

Policy Implementation and Results

1. Promoting age-friendly cities

In 2007, the WHO published "Global Age-friendly Cities: A Guide," in which eight domains of city living were identified as worthy of special emphasis in creating a friendly environment for the elderly (Figure 5-4). In 2010, the HPA chose Chiayi City as its pilot age-friendly city. By 2013, the HPA had already promoted age-friendly in 22 cities and counties in Taiwan, making it the first country in the world in which all cities and counties signed the Dublin Declaration to promote age-friendly cities.



Figure 5-4 Eight domains of focus in the WHO's "Global Age-friendly Cities: A Guide"

(1) Formulating public policy for age-friendly cities

Municipal and county governments are encouraged to incorporate the promotion of age-friendly cities into their administrative policies and establish age-friendly city promotion committees as decision-making centers for program implementation with the mayors/magistrates as chairpersons.

(2) Building an age-friendly supportive environment

To improve the urban environment, reduce barriers and increase social engagement,

HPA has developed plans that compound with the needs of elderly population in all 22 cities and counties in Taiwan.

(3) Increasing the powers of cities and counties to promote age-friendly cities

In 2018, HPA organized a "workshop on active-aging networks for university and college faculty members" to maximize the impact of age-friendly actions. Faculty members of geriatrics and gerontology departments at local universities and colleges were enlisted to participate in the creation of cooperation platforms and formation of partnerships. Implementation personnel of municipal and county governments were provided with advanced implementation strategies and experiences and 22 cities and counties were offered guidance in program implementation.

The HPA held the 2019 "Healthy City and Age-friendly City Award," with a total of 345 submissions. A total of 63 award-winning units were honored in a public ceremony.

2. Promoting institution certification and widespread adoption of age-friendly healthcare

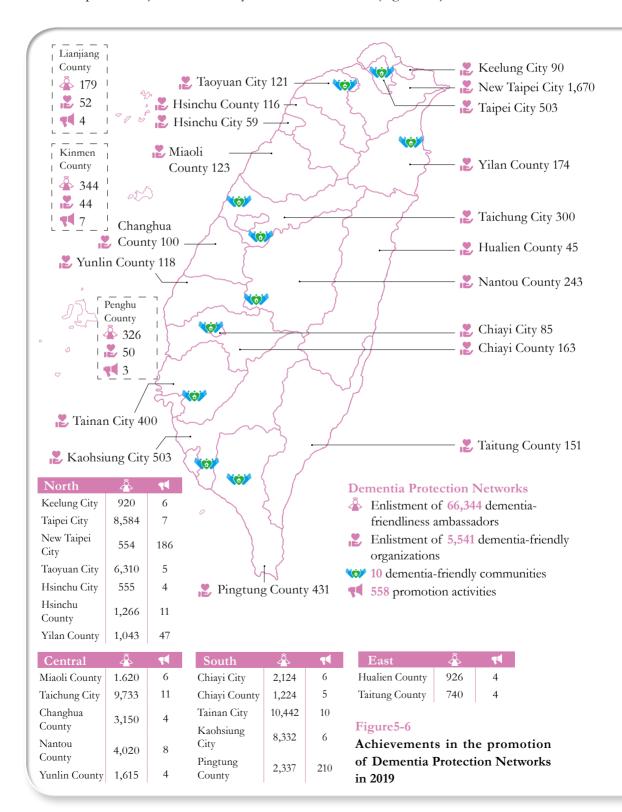
(1) The promotion of "Certification of Age-friendly Hospitals and Health Services"

HPA has developed "Taiwan's Framework of Age-friendly Hospitals and Health Services Version 1.0," based on the three main age-friendly health care principles from WHO's "Toward Age-friendly Primary Health Care" published in 2004 and the five standards of Health Promoting Hospitals (HPH). The framework encompasses four standards and 60 items. The core values of this framework are "health," "humanity" and "human rights," and the vision is to promote health, dignity and participation for persons of older ages. The framework was launched in 2010. In 2016, due to the simplification of the assessment policy, we consolidated



Figure 5-5 "Age-friendly Hospitals and Healthcare Certification" in Taiwan

the recognition of age-friendly hospitals and health services into Healthy Hospital Certification. For the service patterns of different health care institutions, we developed "Taiwan's Framework of Age-friendly Hospitals and Health Services Version 2.0–Local Health Centers Version and Long-term Care Institutions Version." This encompasses management policy, communication and services, friendly environment, health promotion (long-term care service institutions for employee and resident health promotion) and community services and referrals (Figure 5-5).



(2) Age-friendly hospitals and health services guidance and development

Promotion of the guidance and development began in 2011 with hospitals, and was extended to health centers and long-term care institutions in 2012, including professional training course. Age-friendly Health Care Institution Achievement are held annually to commend units with excellent performance and drive the trend for age-friendly healthcare.

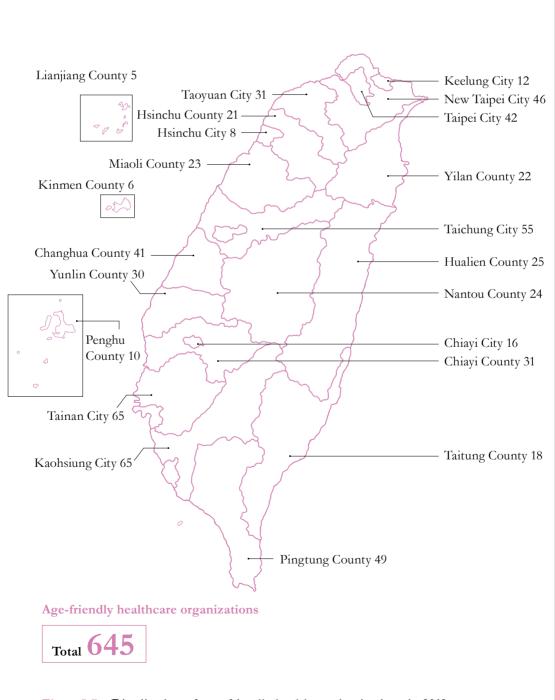


Figure 5-7 Distribution of age-friendly healthcare institutions in 2019



Non-Communicable Disease Prevention

Prevention and Control of Major Chronic Diseases	88
Cancer Prevention and Control	95



In 2019, there were 286 diabetic healther promotion centers and 196 kidney disease preventative health promotion centers.

286 places 196 places



HPA pushed for the establishment of 549 diabetes support groups, with 98.1% coverage achieved within the counties, towns, and cities of Taiwan.

54.8% of all women aged 30 to 69 underwent cervical cancer screening in the past three years.

54.8%

98.1%



Achieved a breast cancer mammogram screening rate of 40.0% among women aged 45-69 over the past two years.



Achieved a colorectal cancer screening rate of 40.9% among people aged 50-69 over the past two years.

40.0%

40.9%

In 2018, chronic diseases represented the leading cause of death (Table 6-1) in Taiwan. These diseases, which are a commonly encountered problem during the aging process, account for almost 60% of all deaths. HPA aims to achieve early detection through health screening and active creation of a health-supportive environment.

Prevention and Control of Major Chronic Diseases



Status Quo

According to the Nutrition and Health Survey in Taiwan (NAHSIT) conducted between 2016 and 2019, about 5.01 million people suffer from hypertension, 4.19 million suffer from hyperlipidemia, and an estimated 1.9 million people over the age of 20 suffer from diabetes (Figure 6-2, 6-3, 6-4). Among the top ten causes of death in Taiwan, diseases related to hypertension, hyperglycemia and hyperlipidemia include heart disease (ranked 2nd), cerebrovascular disease (ranked 4th), diabetes (ranked 5th), hypertensive disease (ranked 8th) and kidney disease (ranked 9th).

Chronic diseases represent the leading cause of premature death. HPA has formulated goals for the prevention of major chronic diseases (Figure 6-1). Metabolic syndrome, diabetes, cardiovascular disease, and chronic kidney disease (CKD) have been listed as major targets of prevention. In addition, HPA has initiated "the first stage of the National Cardiovascular Disease Prevention Program (2018-2022)." A crossdepartmental and cross-ministerial "Cardiovascular Disease Prevention Council" has been formed to enhance the health literacy of the public and healthcare systems with regard to cardiovascular diseases.

Preventive goals for major chronic diseases



- inprovement and maintenance of the health of middle-aged and elderly people
- The Prevention and delay in the occurrence of chronic diseases
- Enhancement of life quality for patients, family members, and caregivers

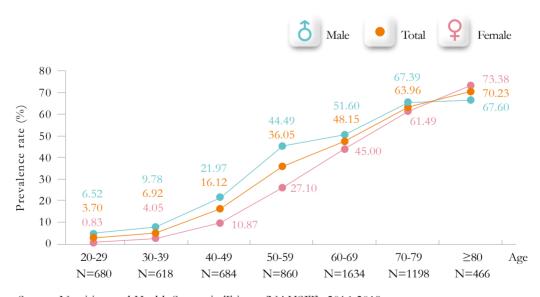
Figure 6-1 Preventive goals for main chronic diseases

Table6-1 10 Leading Cause of Death in Taiwan in 2019

	Cause of Death	Numbers of Death	Crude Death Rate*	Standardized Death Rate**
1	Malignant neoplasms	50,232	212.9	121.3
2	Heart disease (other than hypertensive diseases)	19,859	84.2	43.6
3	Pneumonia	15,185	64.4	30.0
4	Cerebrovascular disease	12,176	51.6	26.7
5	Diabetes mellitus	9,996	42.4	22.3
6	Accidental injury	6,640	28.1	20.0
7	Chronic lower respiratory tract disease	6,301	26.7	12.6
8	Hypertensive disease	6,255	26.5	12.9
9	Nephritis, kidney disease, and kidney pathology	5,049	21.4	10.7
10	Chronic liver disease and cirrhosis	4,240	18.0	11.2

Sources: Cause of Death Statistics, MOHW

^{**} The standardized death rate is based on the 2000 WHO world population and age structure

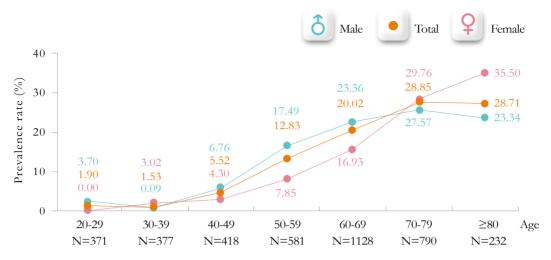


Source: Nutrition and Health Survey in Taiwan (NAHSIT), 2016-2019

- 1. Denominator: Sample with blood pressure measurement values in health check stations. Home blood pressure measurement values are adopted for conversion if no health check station measurements are available.
- 2. Numerator: Definition of high blood pressure: Systolic pressure ≥140mmHg, diastolic pressure ≥90mmHg, or patients on anti-hypertensive medications.
- 3. The results were weighted.

Figure 6-2 Prevalence of hypertension by gender and age, 2016-2019

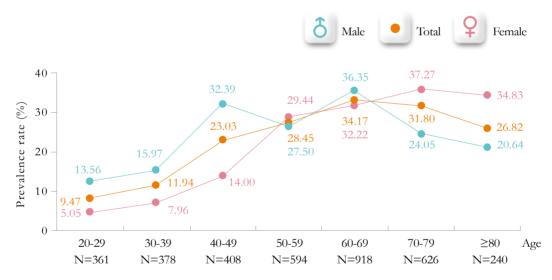
^{*} Death rate calculated per 100,000 people



Source: Nutrition and Health Survey in Taiwan (NAHSIT), 2016-2019

- 1. Denominator: Samples with fasting blood glucose test
- 2. Numerator: Definition of hyperglycemia: fasting blood glucose≥126mg/dL (7.0mmol/L) or patients on anti-hyperglycemic medications
- 3. The results were weighted.

Figure 6-3 Prevalence of hyperglycemia by gender and age, 2016-2019



Source: Nutrition and Health Survey in Taiwan (NAHSIT), 2016-2019

- 1. Denominator: Sample with excessive cholesterol or triglycerides
- 2. Numerator: Definition of hyperlipidemia: Total cholesterol≥240mg/dL, or triglycerides ≥200mg/dL, or patients on anti-hyperlipidemic medications (including self-proclaimed use of anti-hyperlipidemic medications or use of medications with anti-hyperlipidemic effects without self-proclaimed use)
- 3. The results were weighted.

Figure 6-4 Prevalence of hyperlipidemia by gender and age, 2016-2019

► Target Indicators

- 1. In 2019, there were 269 diabetic health promotion centers and 196 kidney disease preventative health promotion centers.
- 2. In 2019, HPA pushed for the establishment of 549 diabetes support groups, and achieved 98.1% coverage within the counties, towns, cities and regions of Taiwan.

Policy Implementation and Results

1. Raising health awareness among the public

(1) Diversifying health care promotion

We design educational leaflets, posters, and self-care manuals for the prevention of hypertension and strokes and promotion of adult health checks.

(2) Diversifying promotion channels

We organize press conferences, large-scale educational activities, and promotion through various channels for international chronic disease awareness days, with the aid of health bureaus, NGOs, and community resources.

- 1. In 2019, HPA spread awareness of topics such as prevention of metabolic syndrome, chronic kidney disease, diabetes and cardiovascular disease through various channels including television, radio and magazines. In addition, we also revised and printed handbooks and leaflets, including "Community Asthma Healthcare Manual," "Taiwan Chronic Obstructive Pulmonary Disease Comprehensive Manual," "Chronic Kidney Disease Health Management Manual," etc. Resources and medical institutes were also made available for health education and advocacy, reaching 43 million people.
- 2. Public concern and awareness on diabetes prevention was aroused through synchronized promotion of "The Family and Diabetes," the theme of the 2019 World Diabetes Day, in cooperation with the Diabetes Association of the Republic of China (Taiwan), the Taiwanese Association of Diabetes Educators, the Formosan Diabetes Care Foundation, the Taiwanese Association of Persons with Diabetes, and the Health Bureau of Kaohsiung City Government.
- 3. In line with the theme "Know Your Numbers" for World Hypertension Day 2019 (May 17th), we collaborated with Taiwan Hypertension Society and Taiwan Pharmacist Association to organize the "Blood Pressure Measurement Month" in May campaign since 2017, with over 80,000 people participating from 2017 to 2018. In addition, we partnered with the Taiwan Millennium Health Foundation to organize the "Be a Good Grandson for One Day on the 2019 National Health Day" campaign, advocating "waist circumference measurement, weight control, blood pressure measurement and hypertension, hyperglycemia and hyperlipidemia prevention" among young people to prevent chronic diseases.
- 4. On the occasion of Father's Day in 2019, we organized the "2019 Metabolic Syndrome Health Check and Advocacy" event featuring the theme of "Measure Your Health," encouraging the public to pay attention to the size of their own waist

- as well as that of those around them. In the month of the event, a total of 14 chain convenience stores and pharmacies provided measuring tape as well as running campaigns online and on social media, attracting 32.02 million visitors.
- 5. On the occasion of World Kidney Day 2019, we partnered with the Taiwan Society of Nephrology, local health bureaus and medical institutions to run a chronic kidney disease prevention campaign, enhancing people's awareness of kidney disease prevention and treatment. Six counties and cities organized the "Better Kidneys, Benefit Life" fair with a total of 3,257 people participating. Sixteen kidney disease prevention and health education lectures were hosted nationwide with 2,369 participants. Five chronic kidney disease care network seminars were hosted with 686 participants in order to raise public awareness of kidney disease prevention and treatment.
- 6. In line with the theme of "Don't Be the One" for the 2019 World Stroke Day (October 29th), we partnered with CVDPTF and Taiwan Stroke Association to organize a road running event and educational fair to share knowledge of stroke prevention, as well as urging people to manage hypertension, hyperglycemia and hyperlipidemia to prevent stroke and disabilities caused by a stroke. About 1,900 people participated in the two events.
- 7. On the occasion of "Go Red for Women" in 2019, we partnered with Taiwan Women's Link to invite celebrities to our Facebook event. We also organized 10 "Caring for Women's Heart" seminars with a total of 245 participants to generate more attention to cardiovascular health for women, as well as raising awareness of gender differences in cardiovascular diseases.
- 8. On the occasion of World Heart Day 2019, we worked together with the Taiwan Heart Foundation to organize the "my heart, your heart" fair to raise awareness of cardiovascular diseases. We also promote the same message through a variety of channels to further enhance health literacy.

2. Urging high-risk groups to pay attention to health promotion by improving their behavior and ability to manage their own health

(1) Convenient and intensive blood pressure measurement services

We have set up a large number of locations to provide convenient and accessible blood pressure measurement services, including administrative service units, community care locations, activity centers, pharmacies, hypermarkets and workplaces. Community pharmacists are also available for assisting people with blood pressure management. In 2019, there were about 3,200 blood pressure measuring points nationwide.

(2) Deepening the campus awareness for chronic disease prevention

In 2019, a total of 17 different types of primary and secondary schools across the country (with a total of 645 cases) adopted the "Major Chronic Disease Prevention and Case Management Handbook" published by the HPA while following the corresponding management model, aiming at empowering schoolchildren to improve their health knowledge including general health, health behavior, self-efficacy and healthcare. This improved the quality of chronic disease prevention and case-by-case management on campus, as well as ensuring the health and safety of schoolchildren.

(3) Operating short-range diabetic support groups

In order to enhance care accessibility for groups at high risk of diabetes, the HPA promoted diabetes patient support groups across Taiwan (Figure 6-5). Healthy diet, weight control and blood sugar monitoring events were also held.



Figure 6-5 Increase the accessibility of health promotion for high risk diabetics

(4) Providing nearby medical training courses

"Adult preventive healthcare training courses" and "evidence-based preventive medicine courses" were organized to reinforce the understanding of key concepts in the field of evidence-based preventive medicine among professional medical personnel. A total of 15 such events were organized in 2019.

3. Promoting self-awareness and self-management in health

(1) Accreditation of diabetes shared-care

HPA promoted shared-care networks for diabetes in 22 cities and counties, and also established an accreditation system for diabetes medical care staff. In addition, the "Standards for Accreditation of Diabetes Shared-care Networks for Medical Staff" were revised to include new classifications for pharmaceutical experts, simplifying the process of specialist nursing and nutrition accreditation, and extending the period of validity of this medical accreditation. In 2019, a total of 11,972 people were accredited for clinical care.

(2) Strengthening preventive management

In 2019, there were 286 diabetic health promotion centers, providing internship opportunities for 2,208 diabetes health education personnel, with a total of 551,471 cases participating in the National Health Insurance diabetes medical benefit improvement program. The goals include strengthening preventive healthcare through the community medical network, targeting chronic disease management such as early diabetes and early chronic kidney disease, formulating a chronic disease assessment and care procedure in the community medical network of primary clinics, as well as improving the management quality and capacity of chronic disease prevention and treatment services in primary hospitals.

(3) Awarding medical quality certification badge

In 2019, HPA designed and awarded the Diabetes Health Care Promotion Institution Badge, reassuring the public about their choice of medical centers. A 2019 Health

Promotion and Healthcare Institute Achievement Award Ceremony was also held, with fourteen benchmark best-in-class institutions commended and eight praised for their performance in caring for new diabetes patients. Special awards were given to 16 institutions. Awards for outstanding overall implementation were given to 6 institutions, and special awards to 15 institutions.

(4) Providing comprehensive dialysis treatment

Since 2004, HPA has entrusted the Taiwan Society of Nephrology with the advancement of health promotion institutions focusing on kidney ailments. In 2019, a total of 196 of these institutions with 291,461 follow-up outpatient patients received 63,155 new patients. Also, 45.4% of all dialysis patients have undergone placement of a vascular access for dialysis treatment, while 30.6% of all patients receive dialysis treatment for the first time in an outpatient department not requiring hospitalization or emergency care.

(5) Consolidating case-by-case management

In 2005, the "Chronic Kidney Disease Case Management Joint Care Information System" was established and integrated with other chronic kidney disease databases. In 2019, a total of 190 hospitals adopted the system with a total number 238,064 patients in their care.

(6) Advocating of Chronic Obstructive Pulmonary Disease (COPD)

In 2019, two COPD health education workshops for medical staff were organized to train health education personnel and improve the quality of patient health education and care. A total of 71 participants attended such workshops. In addition, as many as 13 health campaigns including COPD prevention, influenza vaccination and smoking cessation health education were organized in Northern, Central and Southern Taiwan, a total of 227 people attended.

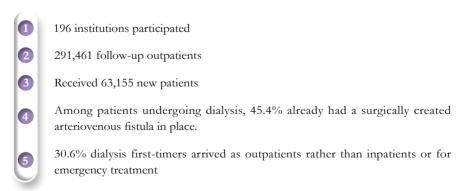


Figure 6-6 Achievements of health promotion institutions for CKD in 2019

Cancer Prevention and Control

Based on the Cancer Control Act implemented in 2003, the HPA regularly convenes cancer control meetings and cancer prevention policy advisory committee to coordinate and communicate among government departments. The "National 5-year Cancer Prevention Program" ran from 2005 to 2009. The second phase of cancer screening program followed suit from 2010 to 2013 targeting the expansion of cancer screening services as the main strategy. The third phase of the national cancer prevention program focuses on preventing cancer at its source (2014-2018). The fourth phase of the national cancer prevention program (2019-2023) has formulated 6 strategies to address the trend of austerity measures in international health expenditures and emphasize what data analysis and evidence can do for cancer prevention, including:



Establishing a sustainable cancer prevention and control system



Strengthening the quality of various services



Reducing inequality in all areas of cancer prevention and treatment



Strengthening health awareness of the public and cancer prevention personnel



Continuing to promote cancer screening and developing precise and personalized cancer prevention health services



Applying data and evidence to improve the effectiveness of cancer prevention and treatment

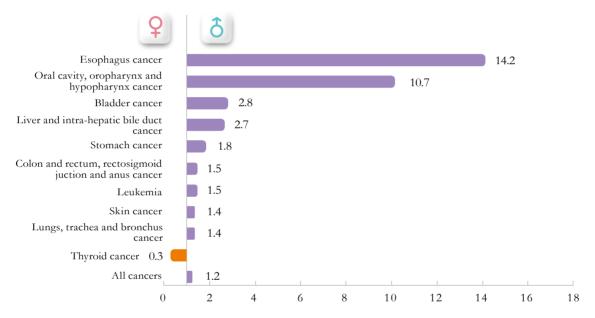


In 1979, the Ministry of Health and Welfare (formerly the Department of Health, Executive Yuan) issued an administrative order that asked hospitals with 50 beds or more to submit summarized reports containing the epidemiological details of all newly detected cancers as well as their diagnosis and treatment processes. The objective was to establish a nationwide cancer registration system. In 2003, the Cancer Control Act went into effect. Article 11 of the statute stipulates that "in order to build up a databank related

to cancer control, medical care institutions engaged in cancer control shall submit related information to academic research institutions commissioned by the central competent authority," in order to collect cancer related information.

1. Incidences of cancer

Data shows that 111,684 people were newly diagnosed with cancer in 2017 (59,297 men and 52,387 women), with the standardized incidence ratio of 305.4 per 100,000 population (335.7 men and 281.0 women). From the perspective of gender, men were 1.2 times more at risk of cancer than women. Due to the use of tobacco and betel quids, the incidence rates of esophageal cancer and oral cancer in men are respectively 14.2 and 10.7 times higher than that of women (Figure 6-7).



- 1. Sources: HPA, MOHW cancer registries in 2017 (excluding carcinoma in situ)
- 2. Age-standardized incidence rates were calculated using the WHO's world population agestructure in 2000. (Unit: per 100,000 people)

Figure 6-7 Sex rates in age-standardized incidence major cancers, 2017

As for the new cases of cancer, the top 10 cancers in 2016 were: (1) Colorectal cancer, (2) Lung cancer, (3) Female breast cancer, (4) Liver cancer, (5) Oral cancer, (6) Prostate cancer, (7) Stomach cancer, (8) Skin cancer, (9) Thyroid cancer, and (10) Esophageal cancer (Figure 6-8, 6-9, 6-10).

2. Cancer mortality

According to statistics from the Ministry of Health and Welfare, a total of 50,232 people died of cancer in 2019 (30,543 men and 19,689 women), accounting for 28.6% of all deaths. The standardized mortality rate for cancer was 121.3 per 100,000 population (158.8 men and 88.5 women). The top ten causes of cancer deaths were (1) lung cancer, (2) liver cancer, (3) colorectal cancer, (4) female breast cancer, (5) oral cancer, (6) prostate cancer, (7) pancreatic cancer, (8) stomach cancer, (9) esophageal cancer, (10) ovarian cancer. Cancer death data is shown in Figure 6-11, 6-12 and 6-13.

Primary Cancer Site/Age-standardized Incidence Rate (per 100,000 people)

1	Colon and rectum, rectosigmoid junction and anus	•	16,408	42.9
2	Lungs, trachea and bronchus	•	14,282	37.0
3	Female breast		13,965	$78.9*^{1}$
4	Liver and intrahepatic bile duct	•	11,225	29.3
5	Oral cavity, oropharynx and hypopharynx	•	7,797	22.0
6	Prostate gland	•	5,866	31.7* ²
7	Thyroid gland		4,053	13.1
8	Skin		3,804	9.5
9	Stomach		3,703	9.4
10	Esophagus		2,768	7.5
All	cancers	11	11,684	305.4

- 1. Source: HPA, MOHW cancer registries in 2017
- 2. Ranking is based on incidences.
- 3. Age-standardized incidence rates were calculated using the WHO's world population age-structure in 2000.
- 4.*1 Incidence rate per 100,000 female population; *2 Incidence rate per 100,000 male population

Figure 6-8 Incidence rate of 10 leading cancers in 2017

Primary Cancer Site/Age-standardized Incidence Rate (per 100,000 people)

1	Colon and rectum, rectosigmoid junction and anus	9,434	52.2
2	Lungs, trachea and bronchus	7,936	43.5
3	Liver and intrahepatic bile duct	7,800	43.5
4	Oral cavity, oropharynx and hypopharynx	7,058	41.2
5	Prostate gland	5,866	31.7
6	Esophagus	2,563	14.5
7	Stomach	2,304	12.4
8	Skin	2,089	11.3
9	Lungs, trachea and bronchus cancer	1,707	9.1
10	Non-Hodgkin lymphoma	1,491	8.7
Al	l cancers	59,297	335.7

- 1. Source: HPA, MOHW cancer registries in 2017
- 2. Ranking is based on incidences.
- 3. Age-standardized incidence rates were calculated using the WHO's world population agestructure in 2000.

Figure 6-9 Incidence rate of 10 leading cancers among men in 2017

Primary Cancer Site/Age-standardized Incidence Rate (per 100,000 people)

1	Female breast		13,965	78.9
2	Colon and rectum, rectosigmoid junction and anus	•	6,974	34.7
3	Lungs, trachea and bronchus	•	6,346	31.6
4	Liver and intrahepatic bile duct	•	3,425	16.2
5	Thyroid gland	•	3,118	20.0
6	Cervix		2,695	15.1
7	Skin	— 9	1,715	7.9
8	Ovary, oviduct, and broad ligament	→	1,521	9.2
9	Cervix	-	1,418	7.9
10	Stomach	-•	1,399	6.8
A11	cancers		52,387	281.0

- 1. Source: HPA, MOHW cancer registries in 2017
- 2. Ranking is based on incidences.
- 3. Age-standardized incidence rates were calculated using the WHO's world population age-structure in 2000.

Figure6-10 Incidence rate of 10 leading cancers among women in 2017

Primary Cancer Site/Age-standardized Mortality Rate (per 100,000 people)

1	Trachea, bronchia and lung	9,701	22.8
2	Liver and intrahepatic bile duct	7,881	18.8
3	Colon, rectum and anus	6,436	14.9
4	Female breast	2,633	13.1
5	Oral cavity	3,425	8.9
6	Prostate	1,538	7.1
7	Pancreas	2,497	5.9
8	Stomach	2,379	5.5
9	Esophagus	1,983	5.1
10	Cervix uteri and uterus, part unspecfied	683	3.5
All	l cancers	50,232	121.3

- 1. Source: Causes of Death Statistics, MOHW
- 2. Ranking is based on age-standardized mortality rate.
- 3. Age-standardized rates were calculated using the WHO's world population age-structure in 2000.

Figure6-11 Mortality rate of 10 leading cancer in 2019

Primary Cancer Site/Age-standardized Mortality Rate (per 100,000 people)

1	Trachea, bronchia and lung	6,190	31.6
2	Liver and intrahepatic bile duct	5,363	28.1
3	Colon, rectum and anu	3,661	18.6
4	Oral cavity	3,154	17.3
5	Esophagus	1,841	9.9
6	Prostate	1,538	7.1
7	Stomach	1,436	7.2
8	Pancreas	1,360	7.0
9	Non-Hodgkin lymphoma	735	3.8
10	Bladder	711	3.4
Al	l cancers	30,543	158.8

- 1. Source: Causes of Death Statistics, MOHW
- 2. Ranking is based on age-standardized mortality rate.
- 3. Age-standardized rates were calculated using the WHO's world population age-structure in 2000.

Figure 6-12 Mortality rate of 10 leading cancers among men in 2019

Primary Cancer Site/Age-standardized Mortality Rate (per 100,000 people)

1	Trachea, bronchia and lung	3,511	15.3
2	Colon, rectum and anus	2,775	11.8
3	Female breast	2,633	13.1
4	Liver and intrahepatic bile duct	2,518	10.5
5	Pancreas	1,137	5.0
6	Stomach	943	4.0
7	Ovary	683	3.5
8	Cervix uteri and uterus, part unspecfied	674	3.2
9	Non-Hodgkin lymphoma	540	2.3
10	Leukemia	470	2.3
Al	ll cancers	19,689	88.5

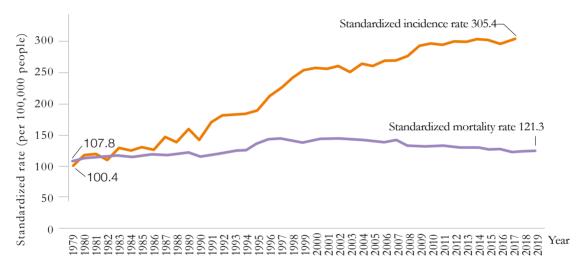
- 1. Source: Causes of Death Statistics, MOHW
- 2. Ranking is based on age-standardized mortality rate.
- 3. Age-standardized rates were calculated using the WHO's world population age-structure in 2000.

Figure6-13 Mortality rate of 10 leading cancers among women in 2019

3. Comparison of increase/decrease in annual cancer incidence and mortality in recent years

Cause of death statistics of the MOHW reveal that cancer has been the leading cause of death in Taiwan since 1982. In accordance with calculations based on the 2000 world population age structure, the age-standardized mortality rate of cancer in Taiwan gradually rose from 115 deaths per 100,000 people in 1982 to 144.3 deaths in 1997. The number dropped to 121.3 deaths by 2019. The standardized incidence rate of cancer has also increased year by year from 110.9 per 100,000 population in 1982 to 305.4 in 2017 (Figure 6-14), with a slight decrease in recent years.

According to the analysis of the standardized incidence rates of cancer from 2008 to 2017 (10-year change), all cancers in men increased by 5.8%, of which prostate cancer had the largest increase (28.9%) and stomah cancer had the largest decrease (20.0%). All cancers in women increased by 18.2%, of which thyroid cancer had the largest increase (75.4%) and cervical cancer had the largest decrease (33.1%) (Figure 6-15, 6-16).



- 1. Sources: HPA 2017 registered cancer data and 2018 Cause of Death Statistics, MOHW
- $2. \ Age \ standardized \ rate: based \ on \ the \ WHO's \ standard \ world \ population \ age-structure \ in \ 2000$

Figure 6-14 Cancer standardized incidence and mortality rates in recent years

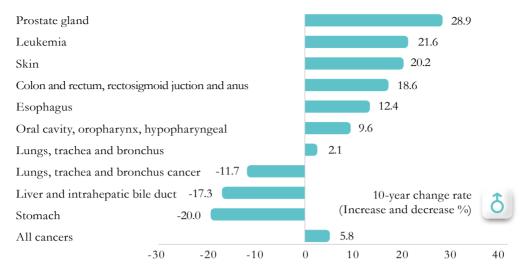


Figure 6-15 Age-standardized incidence rates of the 10 leading cancers among men, 10-year change, 2008-2017

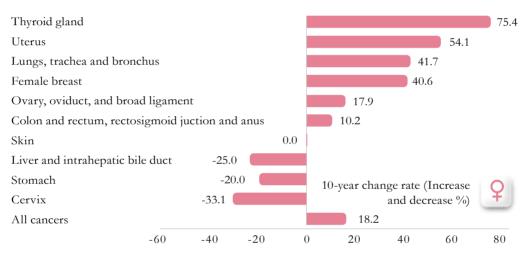


Figure 6-16 Age-standardized incidence rates of the 10 leading cancers among women, 10-year change, 2008-2017



Upgrading the cancer screening rate:

- 1. Achieved a cervical cancer screening rate of 54.8% among women aged 30-69 over the past three years
- 2. Achieved a breast cancer mammogram screening rate of 40.0% among women aged 45-69 over the past two years
- 3. Achieved a colorectal cancer screening rate of 41.0% among people aged 50-69 over the past two years

Policy Implementation and Results

1. HPV Vaccination

Studies have confirmed that cervical cancer is mainly caused by a persistent infection of human papilloma virus (HPV). Current HPV vaccines on the market have all been certified by the World Health Organization as safe and effective, capable of preventing at least 70% of cervical cancers caused by HPV infection (Figure 6-17). At present, 107 countries around the world offer routine HPV vaccination. The HPA has gradually introduced the vaccine in accordance with the recommendations of the World Health Organization, giving priority to girls with an economic disadvantage or residing on offshore islands and in mountainous aboriginal areas. Firstyear junior high schools girls have all received HPV vaccination since December 25th, 2018. As of the end of 2019, about 76,000 people have completed the first dose of HPV vaccination.

HPV vaccine position paper The primary subject of the vaccine would be 9-to-14-year-old girls who have not yet become sexually active. It is most effective.

Figure6-17 Human papillomavirus vaccines: WHO position paper, May 2017

2. Promotion of Screening for Leading Cancers

Evidence shows that widespread screening greatly reduces incidence and mortality rates. In particular, pap smears can reduce incidence and mortality rates of cervical cancer by 60-90%. Mammograms can reduce breast cancer mortality rates by 20-30%. Fecal occult blood tests can reduce colorectal cancer mortality rates by 20-30%; and oral mucosa tests can reduce oral cancer mortality rates by 40%. In recent years, the government has put a lot of effort into cancer screening (Figure 6-18).

3. Continued promotion of 4 cancer screening

(1) Enhancement of communication through multiple channels

Cancer screening services and cancer prevention and control-related health communication activities are actively expanded in cooperation with health bureaus and centers, hospitals and clinics, and NGOs, and promoted through diverse media channels and educational and promotional videos. A total of 3 recorded broadcasts of 30 seconds were produced in Mandarin, Taiwanese and Hakka to remind people of the importance of receiving regular screenings for 4 major cancers in the form of dialogue between friends.

1995 >	Pap smear screening offered to women over the age of 30
1999 >	Oral cancer screening offered to all smokers and betel quid chewers over 18 years of
	age
2002.07-	Breast cancer screenings were divided into two stages: high-risk women were first
2004.06 >	identified by means of questionnaires before undergoing mammograms
2004 >	Fecal immunochemical test offered to all citizens aged 50-69
2004.07 >	Mammogram screening offered to all women aged 50-69 in the context of preventive healthcare services
2009.11 >	Expansion of the scope of breast cancer screening to include women aged 45-69
2010.01 >	Screening subsidies extended to women aged 40-44 with a family history of breast cancer within the second degree of kinship (grandmothers, mothers, daughters, and sisters)
2010 >	HPA began to incorporate screenings for colorectal cancer and oral cancer into preventive health care services. Screenings for oral cancer were made available to people over the age of 30 who smoke or chew betel quids (including those who have quit)
2013.06 >	In order to safeguard the health of more people and meet the needs of different age ranges and societal groups, in June, 2013 the government changed the age of those eligible for colorectal cancer screening to 50-74, while the age of eligibility for oral cancer screening for aboriginals who chew betel quids (or have given it up) has been lowered to 18
2019 >	Continued to offer evidence-based cancer screening services
Figure6-18	Cancer screening promotional schedule

Furthermore, a phone survey showed that 70% of the respondents said they knew which types of cancer screening were subsidized by the government to be free of charge, and 84.7% of the respondents expressed satisfaction with the cancer screening services.

(2) Subsidies for hospitals to make cancer screening part of their organizational culture

In 2019, HPA commissioned 219 medical institutes to conduct "Cancer Quality Improvement Planning." Those hospitals established clinic cancer screening reminder systems and one-stop service windows for positive individual referrals. HPA also worked with local health authorities to undertake community screening and organized hospital health education and betel quid cessation classes. Efforts were also made to change the approach of hospitals that have tended to prioritize treatment over prevention. This revolutionized the medical culture and operational approach of hospitals.

(3) Main outcome of cancer screening

In 2019, a total of 5.01 million screenings were carried out for cervical cancer, breast cancer, colorectal cancer, and oral cancer. A total of 9,264 cases of cancer and 52,000 cases of pre-cancer were detected, and 61,000 lives saved. Details are listed below (Table 6-2).

1. Cervical cancer

In 2019, a total of 2.188 million pap smears were provided for women over 30 years old, discovering about 13,000 cervical precancerous lesions (including carcinoma in situ) and 1,000 cases of cervical cancer. The rate of women between the age of 30 and 69 receiving cervical cancer screening over the past three years reached 54.8% (cervical cancer screening database).

2. Breast cancer

In 2019, mammogram screenings were performed for 880,000 women aged 45-69, resulting in a screening rate of 40.0%. This led to the detection of 4,458 cases of breast cancer.

3. Colorectal cancer

In 2019, fecal immunochemical tests (FIT) were performed for 1.343 million citizens aged 50-69, resulting in the detection of 35,462 cases of precancerous lesions and 2,600 cases of colorectal cancer. The FIT screening rate reached 40.9% for citizens aged 50-69.

4. Oral cancer

In 2019, a total of 603,000 citizens underwent oral cancer screenings, which led to the detection of 3,518 cases of precancerous lesions and 1,098 cases of oral cancer.

Table6-2 Cancer prevention and control items and achievements				
Item	Subject	Screening policy		
Cervical cancer	Women over age 30	Pap smear test once a year (Recommended at least once every three years)		
Breast cancer	45-69-year-old women 40-44-year-old women with a paternal grandmother, maternal grandmother, mother, daughter, or sister who had been diagnosed with breast cancer	One mammogram screening every 2 years		
Oral cavity	 Those aged 30 or above who chew betel quid (or have given up) or smoke Aboriginal people aged 18-30 who chew betel quid (or have given up) 	One oral mucus screening every 2 years		
Colorectal cancer	People aged 50-74	One fecal immunochemical test every 2 years		

Table6-3 2010-2019 number of people who underwent screening for four major cancers (Unit: 10,000 people)

Cancer Screening Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cervical cancer screening	215	215	215	218	218	217	214	217	218	219
Breast cancer screening	53	56	67	70	73	77	79	85	86	88
Oral cancer screening	80	87	98	98	101	94	93	78	74	60
Colorectal cancer screening	102	79	112	103	124	118	126	128	131	134
Total	450	437	492	489	524	506	512	508	508	501

Table6-4 2010-2019 screening rates for 3 major cancers

Cancer Screening Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cervical cancer screening	72%	-	77%	76%	73.5%	74.5%	72.1%	72.5%	70%	54.8%
Breast cancer screening	21.7%	29.5%	32.8%	36%	36.7%	39.5%	38.0%	39.7%	39.9%	40.0%
Colorectal cancer screening	23.4%	33.5%	34.2%	38.2%	40.5%	42.0%	40.7%	41.0%	40.8%	40.9%

^{*} As of 2018, target value estimation methods have been adjusted and revised and regular monitoring is now based on screening quality indicators such as positive predictive values and detection rates.

Table6-5 2010-2019 number of people with precancerous lesions for 3 major cancers

Cancer Screening Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cervical cancer screening	11,985	10,369	9,637	9,996	10,756	10,474	10,071	9,655	10,072	12,903
Oral cancer screening	2,081	3,845	3,445	3,703	4,3 70	4,095	3,572	3,435	3,654	3,518
Colorectal cancer screening	21,102	17,479	23,775	26,207	36,112	33,529	34,725	35,090	34,052	35,462
Total	35,168	31,693	36,857	39,906	51,355	48,098	48,368	48,165	47,778	51,883

^{*} The number of cervical precancerous lesions from 2010 to 2019 does not include carcinoma in situ. The number of carcinoma in situ is included for 2019.

Table6-6 2010-2019 number of people with precancerous lesions for 4 major cancers

Cancer Screening Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cervical cancer screening	5,656	4, 797	4,045	4,191	4,186	4,014	3,833	3,951	3,992	1,108
Breast cancer screening	2,550	2,820	3,166	3,307	3,459	3,701	4,047	4,530	4,380	4,458
Oral cancer screening	1,659	1,428	1,232	1,274	1,395	1,361	1,322	1,231	1,312	1,098
Colorectal cancer screening	2,101	1,800	2,001	2,030	2,476	2,352	2,349	2,583	2,463	2,600
Total	11,966	10,845	10,444	10,802	11,751	11,428	13,091	11,859	12,147	9,264

^{*}The data above includes carcinoma in situ (the number of cervical carcinoma in situ has been included in the number of precancerous lesions in 2019.)

^{*} The cervical cancer screening rate data from 2010 to 2018 was conducted by telephone surveys. The 2019 data comes from the screening database (excluding screening at one's own expense).

(4) Quality improvement of cancer screening services

- 1. The Taiwan Society of Pathology was commissioned to carry out the qualification review and quality improvement of cancer pathology for suppliers in charge of cervical cell pathological diagnosis. In 2019, a total of 120 suppliers passed the review and 40 follow-up reviews were completed.
- 2. The Radiological Society of the Republic of China has been commissioned to conduct reviews of the qualifications of medical care institutions engaged in mammogram screening as well as follow-up reviews and quality enhancement tasks. By the end of 2019, a total of 212 medical care institutions had passed such reviews.
- 3. For institutions conducting fecal immunochemical test, the HPA commissioned the Corporation Aggregate Taiwan Society of Laboratory Medicine to conduct qualification checks and ensure service improvement work. A total of 157 institutions conducting fecal occult blood tests had been checked by the end of 2019. The group also completed 2 external quality control tests and extended onsite assistance to institutions that failed to meet standards.
- 4. In 2018, counties and cities were authorized to conduct oral mucosal examination training, with a total of 323 physicians from other departments trained for oral cancer screening services. Over the years, more than 7,000 people have been trained, offering people better access to oral cancer screening services.
- 5. In 2019, HPA also provided active on-site guidance for hospitals and clinics (8 public health centers) that are outliers in the field of oral cancer screening indicators to enable them to provide high-quality screening services. Such guidance efforts are listed as routine annual work tasks.

4. Quality of cancer treatment

(1) Promotion history of cancer diagnosis and quality certification

In 2005, HPA promulgated the Regulations for Cancer Care Quality Assurance Measures pursuant to the Cancer Control Act and entrusted hospitals with program implementation to enhance the quality of cancer diagnosis and treatment. In 2019, a total of 92 hospitals were entrusted to implement the "Program for Advancement of Cancer Care Quality in Hospitals." The HPA also makes constant efforts in the field of cancer care quality certifications (see Figure 6-19 for the implementation history) due to the fact that quality of cancer treatment has a huge impact on the survival rates of cancer patients. By 2019, a total of 60 hospitals nationwide have passed such certifications, which have been listed as a main evaluation criterion for applying medical centers. In addition, relevant information is posted on the official website as a reference for citizens seeking medical treatment.

2005 2008 2011

Commission of Official launch of the "cancer The la Accreditation" accreditation system in 2008, with the items system in 2008.

National Health
Research Institute to plan a "Cancer treatment quality accreditation" system in 2008, with the first version of accreditation standards based on structural and process indicators system

The launch of the second version of accreditation standards in 2011, with new items such as medical imaging quality, radiotherapy quality, clinical trial information, personnel training, and case-by-case management system added to the list

2015 2019

The launch of the third version of accreditation standards were launched in 2015 focusing on process and outcome indicators with a new benchmark for psychological consultation services added to the list

The launch of the fourth version of accreditation standards in 2018, using bonus points to encourage hospitals to provide palliative care for terminal cancer patients

A total of 60 hospitals receiving accreditation

Figure 6-19 Brief history of cancer treatment quality accreditation

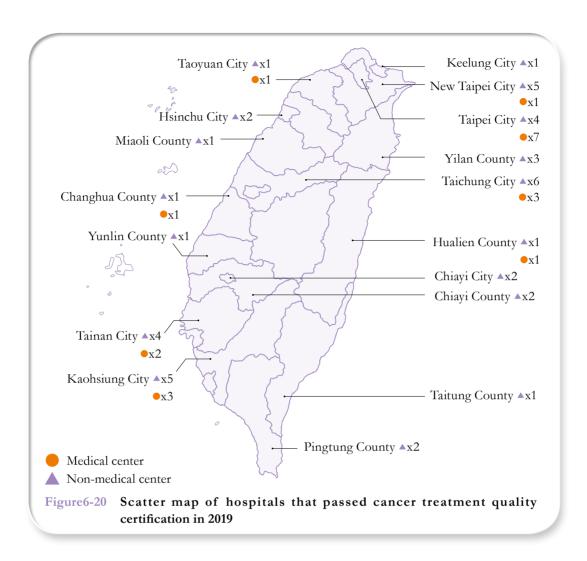
(2) Significant enhancement of cancer care quality

Pathology reports and imaging reports are provided as a key reference for diagnosis and treatment of cancer patients by clinical physicians. A total of 19 pathology report items and 20 imaging report items have been developed. In addition, eleven core measurement indicators for cancer treatment have been devised to facilitate monitoring of the treatment and care for the most common cancers in Taiwan. These core indicators are utilized by hopitals for independent internal monitoring of cancer care quality. In addition, expert groups analyze cancer treatment indicators based on cancer-related data files submitted by hospitals to monitor cancer control and prevention implementation conditions in each hospital and achieve the goal of care quality enhancement.

5. Cancer patients and palliative care

(1) Caring services for cancer patients

In 2019, a total of 74 hospitals set up "Cancer Resource Centers" to integrate internal and external resources, allowing dedicated registered nurses, social workers and psychologists to provide high-quality integrated cancer resource services that meet needs through institutionalized service processes in a timely manner. They also assist patients to communicate with different teams at the hospital so them can their family can be reintegrated into the community after treatment. Approximately 120,000 people received the services in 2019. In addition, the Hope Foundation for Cancer Care has been entrusted to train dedicated personnel for cancer resource centers, improve service capabilities for cancer patients, and assist in resource integration so that resources can be effectively linked and used.



(2) The importance of hospice and palliative care

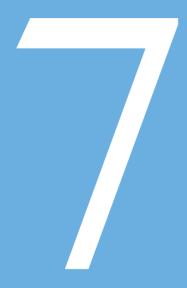
As of 1996, the Ministry of Health and Welfare is fully committed to the provision of hospice and palliative care. In 2000, it adopted a "Pilot Program for the Incorporation of Hospice and Palliative Care into NHI coverage."

In 2004, HPA implemented "Hospice Shared Care Services" on a trial basis in eight hospitals in cooperation with Taiwan Hospice Organization. In 2005, subsidies were extended to 34 hospitals. By the end of 2019, the number of hospitals providing hospice and palliative care services had increased to 343, including 80 hospitals providing inpatient hospice care, 159 hospitals providing hospice shared-care services and 124 hospitals providing home-based hospice care (Type A) (Figure 6-21). The utilization rate of hospice and palliative care of cancer patients increased significantly. In 2018, about 61.4% of all cancer patients received such services in the year prior to death.

To comprehensively improve the quality of palliative care, the HPA promoted the "Integrated Palliative and Holistic Care Training Program" from 2017 to 2019, including aspects such as children and the elderly, long-term care, cancer patient psychology, social care and spirituality. Guidelines and training materials have been created to enhance public awareness of palliative care. In 2019, as many as 91 professional training sessions were organized with 4,164 participants. In the same year, a total of 185 compassionate community sessions were hosted with 8,079 participants. Canadian compassion community experts were invited to host 4 handson workshops across Taiwan with about 180 participants. In October 2019, Prof. David Hui of the MD Anderson Cancer Center in the United States was invited to lead the "Workshop for Timely Palliative Care" with about 120 participants. The "Advanced Care Planning" was implemented on January 6th, 2019, with a total of 73 seminars organized and a total of 542 participants.



Figure 6-21 Hospitals providing palliative services in Taiwan at the end of 2019



Peculiar Groups

Women's Health	112
Rare Disease Prevention and Treatment	114
Disadvantaged Groups Health Promotion	116



Set up the toll-free "Menopause Consultation Hotline 0800-00-5107" to provide individual health consultation services. The tool-free consultation hotline has received more than 10,367 calls in 2019.

10,367 people



The Review Committee for Rare Diseases and Orphan Drugs, was established and reviewed, certified and declared 223 rare diseases, 108 rare orphan drugs and 103 nutritional supplements. It also reviewing applications for treatment subsidies.



The completion rate of reproductive health guidance and consultations reached above 99.76% for new immigrant spouses in 2019.



In 2018, preventive healthcare services for adults were provided to 158,088 individuals.

99.76%

158,088 people



A total of 4,238 contracted medical institutions can provide cessation service without copayment for indigenous people, covering 99.4% of townships and cities nationwide. The rate can reach 100% with the mobile medicine program.

100%

In 1998, World Health Organization published the "Life in the 21st Century: A Health Plan for All," in which the concept of "health equality" was specifically put forward. It also indicated that different strategies and response models should be used for groups of different genders, races, and incomes, physical disabilities. Bridging the health divide through the three key concepts of health promotion, health protection, we need to adopt different strategies, programs, measures as the primary task in the field of health equity.

Women's Health



Status Quo

With an aging society, the average life expectancy for women has reached 83.7 years in Taiwan, with middle-aged and elderly women over the age of 50 accounting for 37.3% of the total female population. The average age for menopause is around 50 years old, indicating that women still have a long life journey after menopause. According to the Nutrition and Health Survey in Taiwan (NAHSIT) conducted from 2014 to 2017, on 1,676 people over the age of 50, 7.8% have been diagnosed with osteoporosis in at least one part of the AP spine and dual femul. Among them, 5.8% are men and 9.6% are women. Not only do more women suffer from osteoporosis, the condition worsens with age. According to the results of the 2017 National Health Interview Survey (NHIS), the percentage of people reporting osteoporosis diagnosed by a physician increases with age, with a significant increase for post-menopausal women. About 1 in 5 women over the age of 50 suffers from osteoporosis (20.4%), with the rate reaching as high as 30.2% for those over 65. The survey also indicate out that 40.2% of women aged between 45 and 49, and over 88.1% of women aged between 50 and 54 have irregular menstrual period or menopause.



Policy Implementation and Results

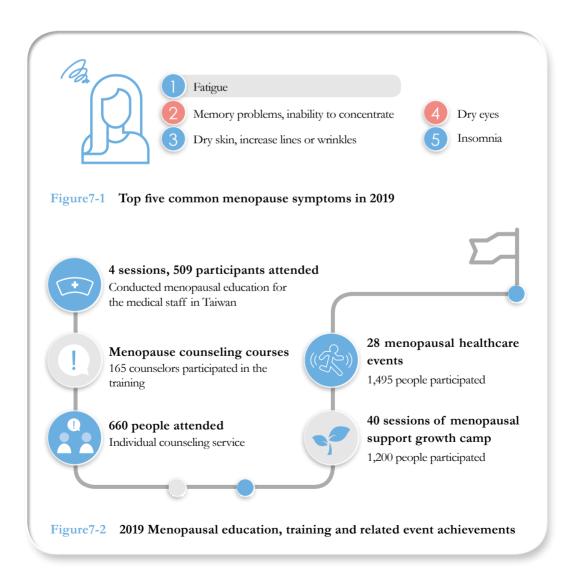
1. Menopause consultation hotline

HPA set up the toll-free "Menopause Consultation Hotline 0800-00-5107" to provide individual health consultation services. The tool-free consultation hotline has received more than 10,367 calls in 2019.

2. Counselor training courses and menopause support camps

To improve the counseling service quality of medical staff, nurses and volunteers for menopausal women and increase public awareness in menopause women, 165 counselors were trained and menopause healthcare activities were conducted. In 2019, these activities covered training information related to menopause such as social changes during the menopausal state, strategies for menopause symptoms, menopause self care, etc.

In 2019, menopause training was provided for medical personnel across the country. Training contents included menopause symptoms, healthcare information, and self-management strategies. Doctor-patient shared decision-making posters and videos based on the theme of "Do I need Hormone Replacement Therapy treatment?" have been promoted and distributed to 15 hospitals and clinics. The results of this campaign are shown in Figure 7-2.



Rare Disease Prevention and Treatment

► Status Quo

In order to encourage early diagnosis and treatment of rare diseases and help patients get the drugs and special nutritional foods for the maintenance of life, in 2000, Taiwan promulgated the Rare Disease and Orphan Drug Act, becoming the fifth nation in the world to introduce legislation specifically designed to protect rare disease patients. Three legal amendments were adopted in January 2005, December 2010, and January 2015, respectively. By the end of 2019, a total of 16,864 rare disease cases had been reported.

► Target Indicators

The objective is to build a comprehensive treatment network for rare diseases, thus helping patients to secure the care and subsidies they need, in turn upholding their right to medical treatment.

	Countries offering legislative protection for rare disease patients				
				* * * *	
	U.S.A.	Japan	Australia	EU	Taiwan
Year of Legislation	1983	1993	1998	2000	2000
Name of Law	US Orphan Drug Act modified the Federal Food, Drug and Cosmetic Act	Partial Amendments Law amended two previous Laws	Additions made to the Regulations to the Therapeutic Goods Act 1989	Regulation (EC) No. 141/2000	The Rare Disease and Orphan Drug Act
Definition of Prevalence of a Rare Disease	75/100,000	40/100,000	11/10,000	20/100,000	1/10,000
Legislative Protection	1. Research and development of drugs 2. Research and development of medical equipment and nutritional supplements required by rare disease patients	 Research and development of drugs Research and development of medical equipment required by rare disease patients 	Research and development of drugs	Research and development of drugs	Promoting rare disease prevention Providing drugs for us

Policy Implementation and Results

1. Assistance to patients in the acquisition of adequate services

(1) Ensure the right to medical treatment

Since September 2002, designated rare diseases have been included on a list of major injuries and illnesses entitled to special claims under the National Health Insurance program. This means that patients can receive treatment without making a co-payment. Furthermore, in accordance with Article 33 of the Rare Disease and Orphan Drug Act, the HPA is also responsible for appropriating budgets to subsidize the diagnosis and treatment of rare diseases along with orphan drugs not covered by National Health Insurance.

(2) Establish a review system

The Review Committee for Rare Diseases and Orphan Drugs was established. By the end of 2019, the Committee had reviewed, certified and declared 223 rare diseases. They had also listed 108 orphan drugs and 103 nutritional supplements, determined their indications, and reviewed applications for treatment subsidies.

2. Solid structure of medical network

The Special Nutrient Food and Emergency Orphan Drug Logistics Center was set up to supply 45 special nutrient foods and 11 emergency drugs. Moreover, medical subsidies are provided for rare diseases not covered by the National Health Insurance.

Implementation Results for the Rare Disease Medical Network in 2019

Over NT\$68 million

HPA subsidized the Special Nutrient Food and Emergency Orphan Drug Logistics Center to stock up and supply 45 special nutrient foods and 11 emergency drugs with the budget of approximately NT\$68 million.

HPA provided medical subsidies for rare diseases not covered by the National Health Insurance.

16 schemes

HPA subsidized 16 Rare Disease Prevention Schemes.

14 centers

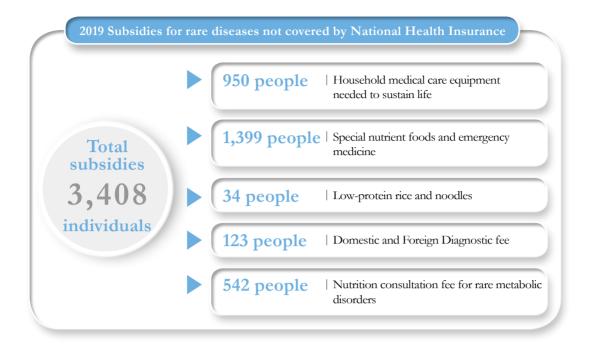
The genetics counseling centers of 14 medical centers passed the review to provide medical services for genetic and rare diseases.



Over 5,000 people

Nine undertaking units (belonging to 8 medical centers) were contracted to offer services such as psychological support, reproductive care, and care consultation for patients and their families, with over 5,000 people served in 2019.





The rare disease prevention schemes are subsidized in line with the Regulations for the Incentives and Subsidies for Rare Disease Prevention and Treatment. Genetics counseling centers of 14 medical centers passed the review to provide medical services for genetic and rare diseases. In addition, care assistance is provided in accordance with the Regulations for Healthcare Services for Rare Disease and Rare Genetic Defects, with 9 undertaking units (belonging to 8 medical centers) offering services such as psychological support, reproductive care, and care consultation for patients and their families.

3. Active advocacy through various media

Research, education and advocacy for rare disease prevention and treatment is an ongoing project. In 2019, a total of 12 briefings were organized for patients, suppliers and medical institutions. Advocacy events hosted by patient groups were equally subsidized. Inspirational videos of 3 to 5 minutes about rare diseases were created and shared on platforms such as the Internet and Facebook. Exhibitions for the popular science and life education of rare diseases were jointly organized with the Taiwan Foundation for Rare Disorders.

Disadvantaged Groups Health Promotion

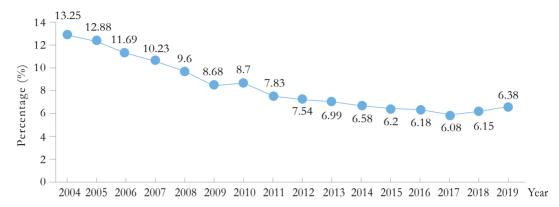
Reproductive Health for New Immigrants



In 2019, the number of foreign and Chinese spouses reached 557,450, with spouses from foreign countries and China/Hong Kong/Macao accounting for 34.22% and 65.78%, respectively. Their newborns accounted for 6.38% of all births in 2019 (Figure 7-3).

► Target Indicators

The completion rate of having reproductive health guidance and consultations reached 99.76% or more for new immigrant spouses in 2019.



Sources: Department of Statistics, Ministry of the Interior

Figure 7-3 Percentage of births with a foreign parent, 2004-2019

Policy Implementation and Results

1. Reproduction care and registered healthcare card management

NHI card issue management is promoted through health bureaus/centers in each city and county (Figure 7-4). Referrals and treatment services are provided for detected high risk groups or abnormal cases. In 2019, cards were issued to 6,674 individuals, representing a card issue rate of 99.76%.



Sources: HPA Maternal and Child Health Management System

Figure 7-4 2012-2019 New immigrant reproductive health card issue rate

2. Interpreter training to reinforce communication

To minimize language barriers for new residents in need of medical care, local health bureaus are encouraged to apply for the "Project for Interpreter Training for New Residents" from the "New Immigrant Development Fund" of the Ministry of the Interior to assist staff of health bureaus (centers) with interpreting for the reproductive health guidance.

3. Prenatal subsidies and comprehensive healthcare

HPA provides subsidies for prenatal examinations to foreign mothers who have recently immigrated and are not yet covered by Nation Health Insurance. In 2019, total subsidies of NT\$ 5,060,362 were awarded in around 9,992 cases.

4. Formulation and issuing of health education materials in multiple languages

"Pregnancy Health Manuals" and "Child Health Manuals" were released in five languages and distributed to health bureaus in all cities and counties to be forwarded to medical care institutions for the provision of reproductive healthcare services.

Healthcare for Yu Cheng Patients



In 1979, in Taichung and Changhua, contamination of rice bran oil from polychlorinated biphenyl (PCB, used as a heating medium in the deodorization stage of rice bran oil refining) and its thermal denatured byproducts through splits in pipes led to over 2,000 residents suffering from PCB poisoning (Yu Cheng Patients).

According to research, PCB poisoning may cause long-term damage to the liver, immune system, and nervous system, as well as more immediate effects, such as chloracne, pigmentation, and eyelid gland dysfunction. The government establishes a healthcare system for Yu Cheng patients and continues to provide services in order to safeguard their right to healthcare (Figure 7-5).



Establish a healthcare system for Yu Cheng patients and continue to provide these services in order to safeguard their right to healthcare.



By the end of 2019, a total of 1,883 cases were registered by the HPA, including 1,244 first generation of Yu Cheng patients and 639 second generation of Yu Cheng patients.

1979 > The government is actively committed to the provision of various healthcare services including health insurance coverage for copayment for outpatient and emergency treatment and free annual health checkups. First-generation Yu Cheng patients are partially covered for hospitalization expenses. Special outpatient services for Yu Cheng patients, care visits, and health education are provided. 1997.03 > The government provides partial subsidies for outpatient and emergency treatment in NHI contracted hospitals and clinics for Yu Cheng patients. 2011 > The government formulates "Implementation Guidelines for Healthcare Services for PCB poisoning patients" and provides various healthcare services for Yu Cheng patients. 2015.02.04 > Yu Cheng Patients Health Care Services Act was promulgated. In addition to the continued provision of original services, the prescribed birth year limit of firstgeneration Yu Cheng patients is raised from 1979 to 1980. When Yu Cheng patients who are listed as service recipients die before this Act takes effect, surviving spouses and linear descendants can apply for one-time solatium of NT\$ 200,000. In addition, a Yu Cheng Patient Healthcare Promotion Committee was established. 2016.11.16 > We amended Article 4 and 12 of the Yu Cheng Patients Health Care Services Act to relax the criteria for recognition as a Yu Cheng patient with poison exposure documents as the main review requirements. Eligibility for annuity is extended to include parents if no spouse or linear descendant exists. The application deadline is extended to August 9th, 2020. 2019 > Continue to provide healthcare services, protect patients' rights to medical care and provide legal assistance in accordance with the Yu Cheng Patients Health Care Services Act.

Figure 7-5 The course of government assistance to Yu Cheng patients



Protection of rights and interests

Since 1979, following the occurrence of PCB poisoning (Yu Cheng), the government actively provides various healthcare services, in order to protect the medical rights and interests of patients.



Healthcare

The staff of local health bureaus (centers) conducts home visits to encourage and assist Yu Cheng patients in accessing free health checks at the hospital. In 2019, a total of 672 Yu Cheng patients received the service (with a 35.69% participation rate).



Medical subsidies

By the end of 2019, HPA subsidized outpatient copayments for 21,592 Yu Cheng patients, and inpatient copayments for 114 patients, as well as organized one training session for 72 health unit staff members.



Payment for blood relatives

Regarding payment for blood relatives of Yu Cheng patients, the acceptance dates for applications runs from August 10th 2015 to August 9th 2020. As of the end of 2019, a total of 268 Yu Cheng patients' solatium had been paid by the government.



Collective promotion

In 2019, the Ministry of Health and Welfare continued to organize the Council of Healthcare for Yu Cheng Patients with representatives from the Health Promotion Administraion, the Ministry of Labor, the Ministry of Education, Yu Cheng patients, experts and scholars, and representatives from the Taiwan Yu Cheng Victims' Support Association to promote healthcare for these patients.

Promoting Healthcare for the Physically and Mentally Disabled



Status Quo

As of 2019, according to the monthly social welfare statistics of MOHW, a total of 1,186,740 people were regarded as physically and/or mentally disabled. The majority of sufferers are male (55.76%). With regards to age, 43.25% of sufferers are over 65 years of age, and 17.51% are between 50 and 59 years of age. According to the recorded disability classifications, 30.35% suffer from physical disabilities, and 13% of them suffered the misfortune of having lost vital organs.

The government provides adult preventive healthcare services once every three years for citizens aged 40-64 to facilitate early interventional health management and early detection of risk factors such as hypertension, hyperglycemia, and hyperlipidemia, chronic cardiovascular and hepatic disease, and nephrosis. Polio patients aged 35 or above, indigenous citizens aged 55 or above, and seniors aged 65 or above are entitled to adult preventive healthcare services once a year.

Hospitals certified as health-promoting hospitals as well as age-friendly hospitals and health services can take the initiative to provide holistic healthcare and resources for health education, building a friendly environment that will help improve the right to health of the physically and mentally disabled.



Target Indicators

Establish public health policies and create a healthy environment in order to promote health, provide the most appropriate prevention healthcare services, and protect the medical rights and benefits of all patients.



Policy Implementation and Results

1. Institution certification and mental and physical care

By the end of 2019, a total of 645 healthcare institutions (207 hospitals, 358 public health centers, 79 long-term care service institutions, and 1 clinic) had passed age-friendly certifications. Relevant criteria include universal design principles, obstacle-free design for the mentally and physically disabled, and age-friendly design with the goal of providing holistic care for the mentally and physically challenged.

2. All kinds of screenings and important services

Preventive healthcare services are provided to facilitate the most appropriate preventive measures, early detection and intervention for each life stage of the physically and mentally disabled, including reproductive healthcare, preventive healthcare for children and adults, cancer screening, etc. Among them, adult preventive healthcare services were accessed by 158,088 physically and mentally disabled people in 2018, with the overall utilization rate of 24.3%.

Health Promotion for Indigenous People



Status Quo

Statistics released by the the Council of Indigenous Peoples reveal that Taiwan has around 570,000 indigenous citizens, accounting for 2% of the total population. The HPA provides preventive healthcare cycles covering all stages and areas of the human life. In addition, local governments receive subsidies in accordance with regional characteristics (including indigenous areas), population distribution, and changes in disease and lifestyle patterns. The "Community Health Building Program" has been adopted to facilitate community participation in gaining a better understanding of local health demands so as to find joint resolution of community health issues through integrated coordination of local resources in communities.



Target Indicators

We continue to enhance the provision of adult preventative health services to indigenous people and acquire an understanding of the utilization Status Quo.



Policy Implementation and Results

1. Reproductive healthcare guidance

In 2019, local communities were subsidized to promote hygiene care projects to provide indigenous women with comprehensive birth care guidance on the pregnant and puerperal periods, infant care and counseling, and related resource referral services, with an achievement rate of 100%.

2. Tobacco cessation medical services

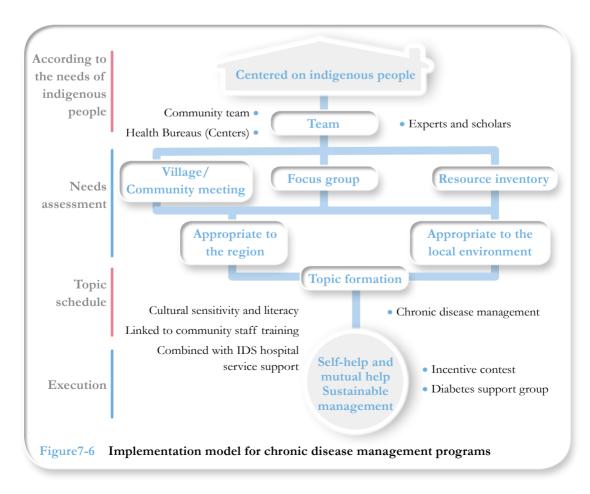
As of the end of 2019, there were 3,826 contracted medical institutions to provide cessation service without copayment for indigenous people, thus covering 99.4% of townships and cities nationwide. Through mobile medicine program, the coverage can reach 100%.

3. Betel quid-free supportive environment

Partnering with the college youth service team, we have provided tobacco and betel quid health hazards prevention and advocacy services in indigenous villages and towns with a high rate of betel quid use. In 2019, a total of 14,000 indigenous people over the age of 18 received oral mucosal examinations, with 77 people with precancerous lesions and 11 with cancer discovered.

4. Chronic disease management

Adult preventive healthcare services were provided to approximately 46,000 indigenous adults over 55 years of age. Indigenous people suffer from an unusually high rate of hypertension, high blood glucose and hyperlipidemia compared to the general population. In 2019, subsidies were provided to Haiduan Township in Taitung County, Xiulin Township in Hualien County, and Mudan Township in Pingtung County to carry out the "Pilot Program for Chronic Disease Management for Indigenous People" to empower indigenous communities and people in terms of health needs assessment, local resource inventory, medicine management, case management, adult



preventive healthcare services, medical treatment, as well as enhancing the National Health Insurance's integrated delivery system (IDS) project. The model is shown in Figure 7-6.

5. Community health building

In 2019, the "Community Health Building Project" subsidized 22 county and city health bureaus, 109 health centers and 17 community unit to handle the "Elderly Friendly City and Community Project," which is mainly through health bureaus to integrate local resources to create a friendly community for the elderly. The construction area covers the aboriginal areas in 11 construction sites, including (1) Fuxing District, Taoyuan City (Fuxing District Health Center), (2) Taiwu Township (Taiwu Township Health Center), (3) Mudan Township, Pingtung County (Mudan Township Health Center), (4) Hualien City, Lian County (Hualien City Health Center), (5) Xincheng Township, Hualien County (Xincheng Rural Health Center), (6) Ji'an Township, Hualien County (Ji'an Township Health Center), (7) Shoufeng Township, Hualien County (Shoufeng Township Health (8) Yanping Township, Taitung County (Beinan Township Health Center), (10) Jinfeng Township, Taitung County (Jinfeng Township Health Center), (11) Taima, Taitung County Lixiang (Taimali Health Center).

Table7-1 Enhancing preventive healthcare service contents for indigenous people

Time		Important services			
July 1 st 2010		We provide indigenous people who are 55 years or older with adult preventive healthcare services once a year, in contrast with the 65 years of age required for the general population.			
2011		We print the "Adult Prevention Healthcare Service Manual–Aboriginal Version," and distributed it at 55 indigenous public health centers to indigenous people who fulfilled the checkup qualifications.			
		We provide HPV vaccination program to girls who live in indigenous regions, offshore islands, low-income households, and gradually extended vaccination to girls who live in middle-low income households. The national HPV vaccination program to all 13 years old girls had been introduced by the end of 2018.			
2012		To increase the maternal health of indigenous women and the health of their children, local communities have been subsidized to promote hygiene care projects that include the health of indigenous child-bearing women (aged 20-45) in the administration and provide comprehensive guidance on maternal care of the pregnant and puerperal periods, baby care, etc., as well as counseling and referral services.			
2013	March 1st	For people who receive tobacco cessation services in mountainous regions and offshore islands, their medication copayment can exempt.			
	June 1 st	Indigenous people who chew betel quid (including those who have quitted) can receive one oral cancer screening every two years from as early as 18 years of age.			
November 1 st 2015		For indigenous people who receive tobacco cessation services not in mountainous regions or offshore islands, their medication copayment can exempt.			
June 1 st 2019		The rules have been relaxed so that indigenous people between the age of 40 and 60 are entitled to one hepatitis B and C screening in conjunction with adult preventive healthcare services.			



Health Promotion Infrastructure

Health Literacy	126
Cloud-based Health Promotion Information	128
Health Communication and Nudge	130
Health Surveillance	131
International Cooperation	138



The existing system had uninterrupted operations in 2019. We engaged in cross-domain co-creation of the key features, services and system specifications required by the new version of the website and app in the future, as well as seeking innovative service solutions for sustainable operations.



We completed reviews for a total of 62 health-related materials.

62 materials



The HPA developed National Health Interview Survey (NHIS in cooperation with National Health Research Institutes, with most recent survey completed in 2017. The number of interviewees reached 21,111, representing a response rate of 72.8%. The survey was followed by statistical analysis conducted in 2018 as a reference for the planning of national health promotion and healthcare services.

72.8%



A total of 14 international conferences were organized at home and 19 important international conferences and workshops were attended.

14 conferences hosted

19 conferences attended

8

With rapid advancements in media and web technologies, the acquisition and distribution of health information has been transformed from a passive to an active pursuit. In order to provide public health services geared towards health promotion to meet public demand, local health bureaus must serve the people whilst simultaneously emphasizing quality, availability, accessibility, timeliness and cost efficiency. Public bodies must regularly and systematically undertake health surveillance work, continuously collect data related to citizens' health and risk factors, and make optimal use of health communication channels. These actions provide a foundation for health promotion strategies.

The HPA is eager to share its accomplishments in health promotion with the international community. We draw upon various media sources, including the internet, to facilitate international communication and cooperation, thus realizing our vision of a global village.

Health Literacy



Status Quo

In order to improve health literacy regarding tobacco hazards, cancer, chronic disease prevention, women and children's health, active aging, and health weight management, HPA upgrade the health literacy of citizens through the following three strategies (Figure 8-1).

- Upgrading the accessibility of health information
- Developing health evaluation tools and adopting focused communication tactics
- Expanding the accessibility of preventative healthcare services and treatment services, in order to raise the level of individual health knowledge and decision-making

Figure 8-1 Empowerment strategies



Policy Implementation and Results

1. Bringing health information closer



Analyzing information requirements and evaluating communication channels

Health literacy is disseminated through diverse channels including the creation of educational materials on cancer, chronic disease, and tobacco hazards prevention, maternal and child health, and healthy bodyweight management based on research, assessments, testing, revisions, and monitoring as well as the release of manuals on child health, marital health, healthy lifestyles through exercise, and fall-prevention tips for seniors.



Coordinating with important festivals and deepening local advocacy

Information is published in line with the holidays and important issues of the year to promote non-communicable disease prevention through working with schools, communities, Internet, magazines, radio stations, TV, vehicle advertisement and convenience stores.



Establishing and developing smart technology and communicating health literacy

Social media platforms such as Facebook and Line are leveraged to target young people to increase health literacy and promote HPA information, clear up mis-information and share accurate knowledge, with the online digital learning platform providing continuing education for health professionals.



Developing suitable and diverse regional communication methods for all communities

Due to discrepancies in consumption of digital media brought about by urbanization, we work with regional broadcast radio stations, cable television system owners, community groups and television voicemail or text message providers to establish systems to provide people with important health information.



Preventing health communication, and upgrading the quality of teaching materials

The teaching materials are upgraded and verified by experts using the assessment tools for health education materials, with health literacy indicators set up as the basis for future material development.



Preventing non-communicable disease and doctor-patient shared decision making

We were able to produce decision making supplementary tools to be used by patients and doctors to improve patient or people health literacy, promote greater involvement in health decisions, and upgrade personal healthcare quality.

2. Developing tailored strategies for health literacy and evaluation tools

Simplified information, in depth explanation



Local viewpoints, evaluation and adjustment



Differentiated strategies for upgrading literacy

The institution's health education information has been simplified to facilitate understanding for end users.

The National Health Literacy Action Plan has been developed to formulate strategies based on 7 major aspects, including health information quality, digital technology, life space, medical field, professional manpower, focus groups and health issues, as well as research and development.

According to the results of evaluation surveys and by different regional and group characteristics, we have adopted different promotional strategies. We work within relevant fields and targeted groups to create media advocacy for topics such as healthy diet through salt and saturated fat reduction, regular exercise, health weight, and tobacco hazard prevention.

3. Expanding the accessibility of preventive healthcare services to facilitate decision-making

- Adult preventive healthcare services: early detection and early treatment, to provide health consultations and improve awareness for self-care and health literacy
- Provision of toll-free phone counseling services to the public through professional recommendations

Cloud-based Health Promotion Information



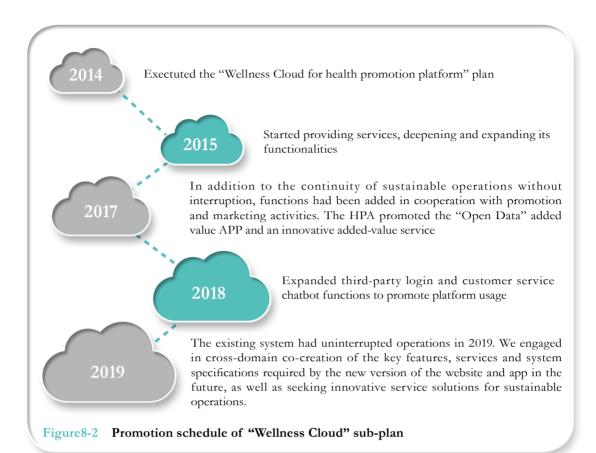
Status Quo

The widespread availability of information and communication technologies, Wi-Fi, and mobile devices, has made our daily lives more convenient. Smart health management has also been enhanced through the adoption of cloud technology applications in different fields such as exercise, diets, and weight control. Steady progress is being made toward holistic, comprehensive, and universal health promotion services.



Policy Implementation and Results

In the context of the Taiwan Health Cloud Program of the Ministry of Health and Welfare, the HPA has adopted the "Wellness Cloud for health promotion" Sub-Plan (schedule shown in Figure 8-2) to effectively incorporate health management with mobile services by leveraging outstanding local cloud technologies. These programs aim to provide the public with accurate health information and preventive healthcare services to boost the development of the health promotion service industry through industry-government-academia collaboration with the ultimate goal of promoting the health of local citizens.



► The achievements of this project were as follows

1. The expansion and maintenance of the Wellness Cloud for health promotion Platform and Mobile APP

We provided the public with a convenient, all-in-one, smart, and comprehensive health management tools (Figure 8-3). This APP helps to increase the usage population and help improve national health knowledge and skills. The platform helps individuals to cultivate healthy new lives in order to implement the objective of holistic and national health.



- Personalized interactive health education information
- Personalized health records and self-management tips (such as exercises and diets)
- Personalized physiological measurement data and management (such as height, weight, blood pressure, body temperature, etc.)
- Health check-up records for health management
- Social network and preventive healthcare screening reminders and services



APP

Figure 8-3 Multi-functionality of health management tool platform

2. The portal of preventive health information system

HPA provides the public with services associated with this portal. Upon online identity authentication, queries of personal preventive healthcare records including child health checkups, prenatal checkups, adult health exams, and cancer screenings are available in the platform.

Health Communication and Nudge



Status Quo

HPA utilizes multiple channels to communicate health information. The Administration has also set up an official website and 11 health-themed subsites, a Facebook Fanpage, a Line living sphere, and a Youtube channel to release a national health e-newsletter with the goal of utilizing the distanceless and borderless qualities of the Internet to provide local citizens with health promotion services and information anytime and anywhere.



Policy Implementation and Results

HPA has developed "Review Indicators and Usage Guidelines for Health Literacy-friendly Materials" as a reference for creation of such materials with the goal of providing the public with accurate, accessible, and easy-to-implement health information. These guidelines encompass the six dimensions of contents, terms and style, structure and editing, value literacy, visual images, and layout. In 2019, HPA completed reviews for a total of 62 health-related materials.

1. Diversity of transmission methods

A "Health Communication Material Selection Activity" was organized to motivate all circles of society to develop high-quality health promotion materials, enhance the quality of domestically produced materials, and popularize their use by all circles of society. A total of 628 works were submitted for these activities. In all, 351 of these works conformed to the "Health Literacy-friendly Material Review Indicators." All these materials were made available to the public on the HPA website and the Health 99 Education Resource Website. HPA also organized an award ceremony and press conference titled "Award Ceremony in Nature: Come Picnic with Us" to showcase award-winning works of this year's selection activity.

2. Application of nudge Strategy

Nudge theory was proposed by 2017 Nobel Economics Prize winner, University of Chicago Business School Professor, Richard Thaler. All over the world, the theory was applied in many public policy areas.

The HPA has incorporated the nudge strategy in various policies since 2017. For example, through insights into the diet of college students and people from different workplaces, the four stages of the Double Diamond Design Process (discovery, define, development and deliver) were adopted in 2019 to develop the strategy of balanced nutrition, as the reference for promoting balanced nutrition on campus and in the workplace in the future. Moreover, 7 local health bureaus were coached to develop specialized smoking cessation programs targeting different groups by leveraging the same method and process to improve program effectiveness. In-depth research of the service ecosystem composed of site workers in the construction industry who use betel quid and other stakeholders has been conducted to develop and verify innovative practices, as well as give feedback to fine-tune the direction of future policies.

The HPA created illustrated cards with information regarding prolonged sitting and interval working from the perspective of the users to promote workplace health. We have organized workshops to brainstorm new features the Maternal and Child Health App can provide, with the goal of offering women with an even more practical and useful app. In addition, we have combined user-centered experience and interviews with four major categories of persona to engage in cross-domain co-creation of the key pages, features and system specifications the new health information website requires.

Health Surveillance



HPA has established National Health Surveillance in the fields of maternal and child health, diets and nutrition, prevention and control of non-communicable diseases, and active aging to provide an objective reference for policy formulation and assessment of program effectiveness. HPA also implements health surveys for population at all stages of the lifespan, creation of databases, and statistical analysis to strengthen innovation in the fields of technologies and methods to bring Taiwan in sync with international trends.

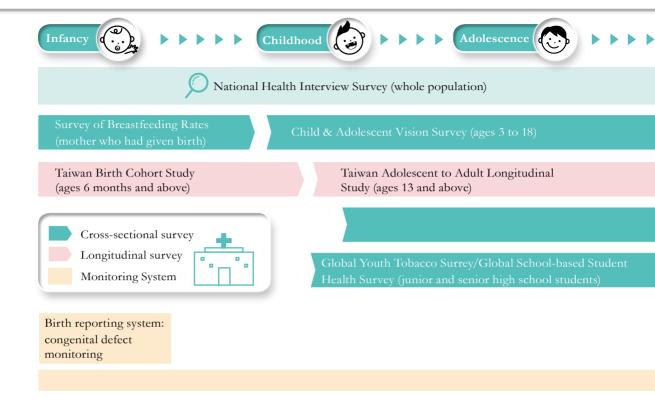
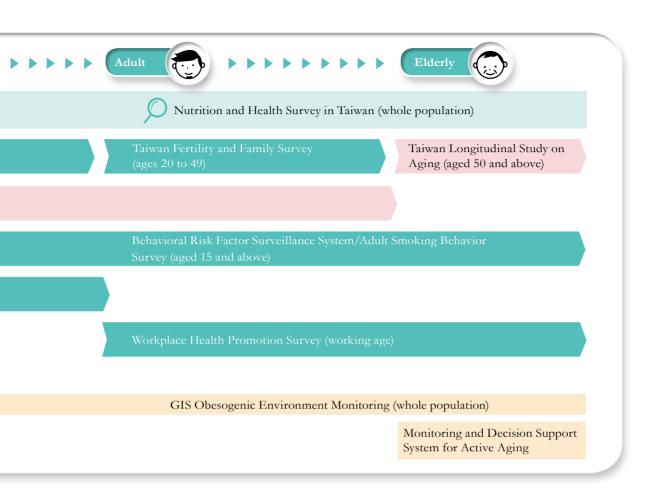


Figure 8-5 Important monitoring surveys over the years

Policy Implementation and Results

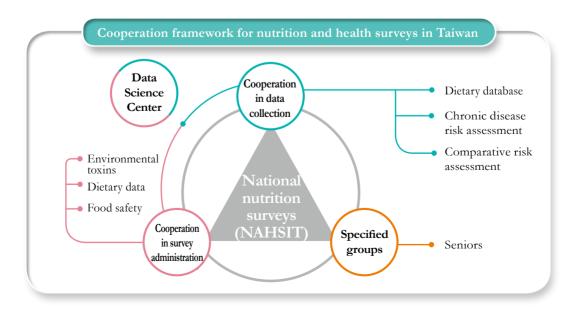
Goal-oriented national health surveillance data is collected and analyzed in accordance with national health administration reference needs. The goal lies in the gradual perfection of national health and non-communicable disease surveillance mechanisms and constant enhancement of surveillance system performance. Personal interviews of community residents, telephone surveys, and self-administered questionnaire surveys are jointly implemented (Figure 8-4) to collect unobtainable information from existing registration or reporting system to provide objective evidence for policy formulation and effectiveness assessment (Figure 8-5).





1. National Health Interview Survey

Changes and trends in citizens' health conditions and service needs are monitored and relevant factors are explored to gain a clear understanding. HPA has developed National Health Interview Survey (NHIS) in cooperation with National Health Research Institutes. The first of these surveys which are administered in four-year intervals was completed in 2001. This cross-sectional health interview survey is currently the largest survey conducted in a single year in Taiwan. The most



recent survey was completed in 2017. The number of interviewees reached 21,111, representing a response rate of 72.8%. The survey was followed by statistical analysis conducted in 2018 as a reference for the planning of national health promotion and healthcare service (Figure 8-6).

2001 > Development of National Health Interview Survey
2005 > Completion of datasets with national and city/country representiveness
2009 > Full adoption of a computer-assisted personal interview system (CAPI)
2013 > ISO 9001 certification acquired for survey standards and operations
2017 > Online transmission of computer-assisted personal interview data
2019 > 2019 Planning for the 2021 survey and strengthening the application of multiple sources of data

Figure8-6 Milestones of National Health Interview Surveys in Taiwan

2. Nutrition and Health in Taiwan Survey

Since 1980, Taiwan conducts Nutrition and Health Surveys as a reference for nutrition and non-communicable disease policy making. Since 2013, HPA administer this survey with the purpose to establish stable, long-term, and real-time national monitoring data in the four-year cycle. During the period, the national representative data can be obtained. The survey include questionnaires, physical examinations, and biochemical tests. In 2018, the elder samples and questionnaire contents were increased in order to monitor elder people's sample representativeness for groups with different background characteristics.

3. Taiwan Children and Adolescent Cohort Study

As of 2003, HPA conducts "Taiwan Birth Cohort Study" to gain a clear understanding of child growth, development, and health conditions in Taiwan and explore the impact of social environments on child health and development. The research subjects are a probability sample of infants born in 2005. A baseline survey was conducted at age 6 months with follow-up surveys at age 18 months, 3 years, 5.5 years, 8 years, and 12 years. Telephone Survey with 13-year-olds were conducted from 2018 to 2019, with results from the past survey leveraged to complete the speial topic discussion on "Children's Screen Time and Implications on Health Policies" at the annual meeting of the Taiwan Public Health Association. Four papers based on survey results with policy implications were published with policy translation suggestions provided.

In 2015, HPA further conducted the "Taiwan Adolescent to Adult Longitudinal Study" with a randomly selected sample of junior high school students, senior/vocational high school students, and junior college freshmen as research subjects based on the fact that a longitudinal study is required to gain a deeper insight in the complex factors affecting health behavior formation, development, and change among adolescents. A representative longitudinal cohort study for adolescents has been initiated with a baseline survey sample of 18,645 individuals. In 2019, surveys of senior high school and university freshmen were completed.

4. Taiwan Longitudinal Study on Aging

In order to respond to the potential impact of the aging population on the economy, medical care, family and society, the HPA selected random samples of middle-aged and elderly people over 60 years old from all non-aboriginal townships in Taiwan for survey in 1989, with follow-up surveys every 3 to 4 years afterwards. In 1996 and 2003, the age group was lowered to 50 years old. Eight rounds of surveys had been completed by 2015. To make up for the missing samples from aboriginal townships in the original survey, as well as insufficient sample size caused by losing contact and death over the long period of time, a baseline survey was conducted with a new nationally representative generation of samples over 50 years old.

To track samples of the existing and new generations, follow-up surveys were completed in 2019 on survivors of the aforementioned sample generations. A total of 6,490 people were interviewed with a rate of 84.3%.

5. Adolescent Smoking and Health Behavior Survey

The development history of Adolescent Smoking and Health Behavior Survey is shown in Figure 8-7. Initially, surveys were administered for junior high school and senior/vocational high school (junior college year 1 to 3) students on a rotational basis. Questionnaires were filled out anonymously and collectively administered in sampled classes.

As of 2011, adolescent smoking behavior surveys are carried out for junior high school and senior/vocational high school and junior college students representing the entire country and all cities and counties in the same year, while adolescent health behavior surveys for the sample representing the whole country are still conducted on a rotational basis among the junior and senior schools. In 2019, the latter survey was conducted on senior/vocational high school and junior college students. Through

Since > 2004

In order to continue monitoring the status and long-term trends of adolescent smoking and other health behaviors, since 2004, we have been conducting adolescent smoking behavior surveys based on the Global Youth Tobacco Survey designed and developed by the WHO and the US Centers for Disease Control.



We have further referred to the Youth Risk Behavior Survey conducted by the US Centers for Disease Control and Global School-based Student Health Survey by the WHO. We focused on the important health behaviors that cause death, disease, disabilities, or social problems. The range of topics investigated covered tobacco, alcohol, betel quid chewing, and other health behaviors and lifestyles.



To link up with the world and for collection of internationally comparative data, the HPA made use of the experiences accumulated across the years for redesign of the surveys and started working with the U.S. Centers for Disease Control to conduct the Global School-based Student Health Survey in Taiwan.

Figure8-7 Development course of Adolescent Smoking and Health Behavior Surveys

these two surveys, we can understand the current status and changing trends of teenagers' smoking and health behaviors, and provide reference for relevant units to promote teenagers' and school smoking prevention policies and children's health promotion service plans.

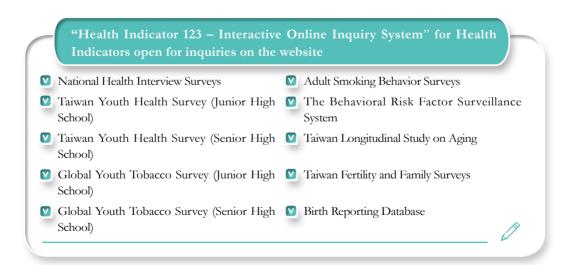
The aforementioned two surveys were conducted between March and June 2019. A total of 42,193 respondents. A total of 5,195 respondents completed the adolescent smoking behavior and health behavior surveys, representing a response rate of 88.6% and 86.8%, respectively.

6. Adult Smoking Behavior Survey

As of 2004, HPA administers Adult Smoking Behavior Surveys with reference to the design and contents of US "Behavioral Risk Factor Surveillance System," "National Health Interview Surveys," and "Global Adult Tobacco Surveys" to gain a better understanding of current conditions and trends in the field of adult smoking behavior, second-hand smoke exposure, and relevant factors as a reference for the monitoring and evaluation of smoking hazards prevention effects and relevant policies. In 2018, the survey frequency was modified to every other year.

7. Application of surveillance survey data

HPA compiles the analysis results of surveillance survey data into published result reports. In addition to participation in related symposia and publication of articles in journals, research projects are carried out in accordance with relevant administrative



Adult Smoking Behavior Survey

2019 Milestones

Due to an increase in the population of mobile phone users, the coverage rate of the sample survey based on local calls (including landline) is clearly lacking so the survey has been suspended. The survey frequency and sampling method will be adjusted in 2020 to improve the coverage rate and representatition of data on smoking behavior.



needs. A website titled "Health Indicator 123 – Interactive Online Query System for Health Indicators" was set up to rapidly provide interested parties with descriptive analysis results for surveillance survey data. Queries of the following ten databases with over 700 health indicators are currently available.

In order to effectively reach the goals of "protecting personal health privacy, promoting health information sharing, and reducing overlapping resources," in 2011, Ministry of Health and Welfare established the Health and Welfare Data Science Center (originally called the Collaborative Center of Health Information Application). In 2012, the HPA has continually provided the raw data of series of health survey to the center for use. Currently, we have transferred 7 reporting databases and 10 surveys. The project to set up three thematic databases was also commissioned. The contents are seen in Figure 8-8. According to the data classification principles of Ministry of Health and Welfare for personal data protection, we also expand the pool of resources and increase the overall usage rate of the databases in order to provide the overall value of monitoring and investigating resources.

7 Reporting Databases

Cancer registration databases, cancer screening databases, birth reporting databases, reported rare disease databases, artificial reproduction databases, national genetic diagnosis system databases, and adult preventive health service databases

10 Items of Survey Database

Fertility and Family survey, Taiwan Birth Cohort Study, Tobacco Survey of Students, Global School-based Student Health Survey, Adult Smoking Behavior Survey, Taiwan Longitudinal Study on Aging; Taiwan Survey on Hypertension, Hyperglycemia, and Hyperlipidemia, National Health Interview Survey, and Behavior Risk Factor Surveillance System

3 Thematic Databases

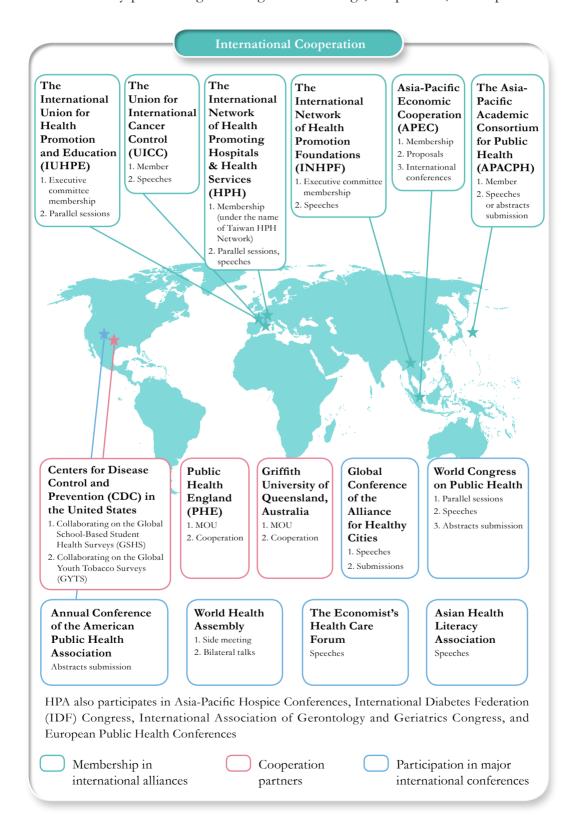
Accident thematic database, middle age and elderly health and disability thematic database

Figure 8-8 Data imported to Health and Welfare Data Science Center by HPA

International Cooperation



As well as attending the APEC and WHO and other technological conferences, the HPA has also actively pursued a greater degree of exchange, cooperation, and experience



sharing between its various projects and the WHO Center for International Cooperation, international academic institutions and foreign governments. The HPA is currently a member of six major international health promotion alliances. It has signed a cooperation agreement with Public Health England and collaborates with the Centers for Disease Control and Prevention (CDC) in the administration of relevant surveys.

In 2019, we conducted a total of 14 international meetings and attended 19 important international seminars, workshops, meetings and forums. A total of 53 guests from 18 countries visited the HPA.



Policy Implementation and Results

Becoming the global focal point: Attend large-scale International Conferences 2019 Global Health Forum in Taiwan

The 2019 Global Health Forum in Taiwan was held on October 20th and 21th at the Taipei International Convention Center with the theme of "Urban Life of the 21st Century: Sustainable, Safe and Healthy?" The discussions highlighted the important roles played by the global and local ecosystems, as well as the quality of urban environment, in public health as the urban population continues to grow. Sustainable development indicators related to urbanization such as SDG 3 (Good Health and Well-being), SDG 11 (Sustainable Cities and Communities, making cities and human settlements inclusive, safe, resilient and sustainable) and SDG 13 (Climate Action) were also covered. A total of 1,266 participants from 33 countries attended, including leaders of important medical and health organizations around the world, ministers, deputy ministers and representatives of the Ministry of Health from different countries, medical officials and experts, as well as officials of environmental protection agencies from Taiwan and officials of health and environmental protection agencies from United States. Participants explored how to build a healthier urban environment with existing resources from the perspectives of health and environment, demonstrating the concepts of engaging in cross-border, cross-departmental and cross-field cooperation to realize the vision of a heathy earth and healthy life.

(2) APEC Conference on Smart Healthcare for Non-Communicable Diseases (NCDs) and Their Risk Factors Prevention and Control

The HPA hosted the APEC Conference on Smart Healthcare for Non-Communicable Diseases (NCDs) and Their Risk Factors Prevention and Control with a subsidy granted by APEC on April 30th and May 1st. Official experts and scholars from 12 countries including Singapore, Malaysia, Thailand, Mexico, Vietnam and the United States attended the conference.

The conference featured a demonstration of interactive smart care experience display for diabetes prevention, including AI diabetes fundus image analysis technology, diabetes care app and cloud management. Alpha the Humanoid Entertainment Robot, was also present to lead a workout, showing by example that the local biomedical technology industry is aligned with the industry internationally, allowing local and foreign guests to experience and understand the benefits of smart care. The two-day seminar was attended by 249 domestic and foreign guests from industry, government and academia to brainstorm how to integrate information and communications technology (ICT) to implement smart care and improve the management of chronic diseases, as well as the prevention and intervention of risk factors.

2. Stepping onto the Global Stage: Important International Meetings, Speeches, or Forums

(1) 27th Health Promoting Hospital Conference

The 27th Health Promoting Hospital Conference and the GOLD Forum Event were held in Warsaw, Poland from May 29th to 31st, 2019. The Director-General of the HPA was invited to give a speech at the conference and chaired the session of "Application of Integrated Healthcare Services in Hospital Settings: the HPH Approach." In addition, the Ditmanson Medical Foundation Chia-Yi Christian Hospital was awarded the Outstanding Fulfillment of HPH Standards at the conference. A total of 6 hospitals in Taiwan (including Far Eastern Memorial Hospital, Taipei City Hospital Renai Branch, Kaohsiung Medical University Chung-Ho Memorial Hospital, Taichung Veterans General Hospital, China Medical University Hospital and Chung Shan Medical University Hospital), were honored with Tobacco-Free Hospital Gold Award Services (out of a total of 13 winners worldwide). The conference was participated by 480 hospital representatives and scholars from 16 countries, with 316 attendants from Taiwan. A total of 368 papers from Taiwan were presented at the conference, accounting for 50% of the total number of 731. The scope the papers cover included government policy promotion and hospitals' actual implementation results in health promotion, making Taiwan the country with the largest number of participants and papers of the conference. In addition, the conference and the editorial office of Clinical Health Promotion jointly published the Health Promoting Hospitals and Health Services Development and Achievements in Taiwan publication, summarizing medical institutions' progress in various health-promoting issues after the introduction of Health Promoting Hospitals (HPH), including tobacco prevention and control, age-friendly health care, healthy workplaces, climate intelligence and health literacy, sharing the experience with medical institutions and policy makers from all over the world.

(2) 2019 Framework Convention on Tobacco Control Workshop

On September 25th, 2019, Academia Sinica was commissioned to host the 2019 Framework Convention on Tobacco Control Workshop. The workshop covered three themes, including eliminating illegal trade in tobacco products, global tobacco control strategies and control of



Alpha the Humanoid Entertainment Robot leads a workout.

emerging tobacco products. Distinguished guests of the workshop included Prof. Filip Borkowski, Deputy Director of the EU Health and Food Safety Department, Prof. Patricia Lambert, planner behind the FCTC Medium-Term Strategic Framework (MTSF), Prof. Roger Magnusson from the University of Sydney Law School, and Professor Kelvin Man Ping Wang from the University of Hong Kong. They shared experience with domestic experts and scholars on tobacco control strategies, legal regulations and policies, etc.

(3) The 15th Tobacco Induced Diseases Annual Conference

The Tobacco Induced Diseases Annual Conference is one of the most important international conferences on tobacco-induced diseases and implementation of tobacco control, with the goal of strengthening the prevention and control of tobacco-induced diseases in the world through exchanging experience and research in the area from physicians, dentists, nurses, health administrators and scholars and experts.

The conference was held in Tokyo from October 13th to 15th, 2019. Proposal for four oral presentations was submitted by the HPA with 4 papers accepted by the conference, including: (1) Participate in the discussion of the impact of improvement of Tobacco-free Hospitals' Cessation Services with a Pay-for-performance Subsidy in Taiwan. (2) Assessment of Taiwan Tobacco Control Performance Based on WHO MPOWER Guidelines; (3) Use of Electronic Cigarettes and Heated Tobacco Products Among Junior and Senior High School Students in Taiwan; and (4) The Tobacco Message Exposure with Examples from Popular Movies in 2018 to share Taiwan's results and enhance international visibility.

(4) 2019 International Conference on Tobacco Hazards Prevention in Taiwan

The Taiwan Medical Alliance for the Control of Tobacco was commissioned to organize the 2019 International Conference on Tobacco Hazards Prevention in Taiwan on November 15th, 2019 with the theme of "Does Tobacco Harm Reduction Strategy Help End Tobacco Hazard?" Foreign experts and scholars on tobacco hazard prevention were invited, including Ronnachai Kongsakon, chairperson of the 13th Asia Pacific Association for the Control of Tobacco (APACT), Yumiko Mochizuki, former chairperson of the WHO Tobacco Free Initiative and Dr. Ying Jiang from the Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health, Japan. The speech topics included: "E-cigarette: Angel or Devil? The Experience of Thailand," "Outbreak and Regulation of Emerging Tobacco Products in Japan: Long-term Tracking in the Workplace," and "Novel Tobacco Products: The Japan Experience with IQOS." The conference combines experience at home and abroad to clarify the situation of emerging tobacco products, providing reference for relevant agencies to formulate tobacco hazards prevention and control policies.

(5) 7th AHLA International Health Literacy Conference in 2019

The theme of the 7th AHLA International Health Literacy Conference was Health Literacy in Smart Universal Healthcare. The HPA shared its experience in promoting health literacy and the National Health Literacy Action Plan with an oral presentation of National Health Literacy Action Plan Development in Taiwan and a poster display of Integration of Synchronous Distance Learning and Team Based Learning to Provide Community Health Professionals with Health Literacy Training.

(6) 51st Asia Pacific Academic Consortium for Public Health Conference (APACPH) in 2019 hosted workshop and parallel forum with the Ministry of Public Health, Thailand

In August 2019, Taiwan and APACPH joined hands in setting up the Collaborating Center for Health Promotion (CCHP). During the 51st annual conference, the HPA worked with the Ministry of Public Health from Thailand to host a preconference workshop with the theme of "Health Promotion Core Competency, Innovations and Health Literacy" with Thai and Malaysian participants of the 2018 workshop in Taiwan sharing their case studies. The Thai Ministry of Public Health also recommended Thai official and non-official representatives to share the local plans they are running. A parallel forum with the theme of "NCDs: Success and Challenges" was held, where the HPA Director-General shared Taiwan's national plan for the prevention and treatment of chronic diseases and exchanged opinions with APEC members.

We have created an opportunity for practical exchanges and international cooperation in the Asia-Pacific region through CCHP in order to develop health promotion manpower with key partners of the New Southward Policy, build a systemic and proactive mechanism, and understand issues that have a current or future impact on health to reduce risks, with the goal of working together to improve the core competence and health promotion in the Asia-Pacific region and global health workforce.

3. Sharing International Experience: International Cooperation Plan

As of 2004 and 2012 repectively, HPA collaborates with the U.S. Centers of Disease Control (CDC) in the administration of "Global Youth Tobacco Surveys (GYTS)" and "Global School-based Student Health Surveys (GSHS)" to Strengthen the international integration of adolescent smoking and health behavior monitoring surveys to facilitate cross-cultural comparative studies on relevant issues.

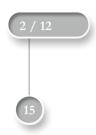
In addition, since 1999, the HPA has worked with Georgetown University and Princeton University to conduct the Social Environment and Biomarkers of Aging Study (SEBAS). We collected data regarding the health and well-being of middle aged and elderly people in Taiwan. Through this study, we explored the life stress, social environments, and health conditions of elderly people in Taiwan, to enhance our understanding about the factors that are associated with the health of middle aged and elderly people in Taiwan.

Against the backdrop of global population aging, a key prerequisite for a thriving and sustainable society is to improve the health of seniors and enhance their productivity. The HPA also participated in the "Aging Readiness and Competitiveness Project" sponsored by the American Association of Retired Persons (AARP) and US Foreign Policy Analytics. National reports were issued based on data published by national governments and interviews of personnel in industry, government, academic, and research units. The report earned positive comments and Taiwan is recognized to be the first country in the world to embrace across-the-board promotion of the agefriendly city concept. And Taiwan has also achieved Universal Health Coverage (UHC) and is the 13th country to adopt dementia policies. The release of this national report has also raised the international visibility of Taiwan's efforts in the field of elderly policy implementation.

Appendix

HPA	Chronological Highlights in 2019	145
HPA	operations website and APP chart	151

HPA Chronological Highlights in 2019



Previewed the draft amendment of articles 4, 5, and 7 of Regulations of the Tobacco Health and Welfare Surcharge Distribution and Utilization. We will adjust the distribution rate of tobacco health welfare, upgrade resources use efficiency, in order to fulfill the purpose of financial management. Effective on April 1st 2019.

Previewed Article 13 of Regulations for the Testing of Yields of Nicotine and Tar Contained in Tobacco Products and the Labeling of Cigarette Containers. Article 2 draft amendment with chart. Effective on June 1st 2020.



Present Tsai met the delegates of International Federation of Gynecology and Obstetrics (C.N. Purandare). Deputy Minister Hsueh Jui-yuan of Ministry of Health and Welfare, together with Director Shi Chong-Jiang of Department of Medical Affairs, MOHW and Director General Wang Ying-wei of HPA were also present. We acknowledged the International Federation of Gynecology and Obstetrics' for their assistance torwards women from the remote regions of many counties, effectively lowering the death rates of pregnant women. We hope to continue to speak out about Taiwan's efforts to protect the rights and benefits of women and children during such international events.



Deputy Director General Yu Li-hui of HPA, together with 6 people from the Department of Medical Affairs (MOHW), National Health Research Institute, and New Taipei City Government Health Bureau visited Japan. We observed their women and children healthcare policies and related medical and healthcare services. During our visit, we were received by the Director of National Center for Child Health and Development Dr. Igarashi and doctors from the Pediatrics and Gynecology Departments. We also visited Nagoya City Government and Komaki City to understand the practical operations of mother and infant health services.



HPA, K-12 Education Administration, Ministry of Education, and Yunlin County Government collectively hosted "Yunlin County Lian-Shi Elementary School 4th Annual Health Promoton School International Certification Golden Award Unveiling Ceremony. Director General Wang Ying-wei, Deputy Director Yu Lihui of HPA, Chief Lin Liang-ching of K-12 Education Administration, and Head Consultant Chang Ching-liang of Yunlin County Government were all present to advocate health promotion schools and Yunlin Health.



HPA and Penghu County Government Health Bureau collectively hosted "2019 National Healthcare Meeting" The themes of the meeting focused on We Involve, We Participate, and We Engage. We invited local government health bureaus from all over the world to participate. Approximately 260 people were present. Not only did we award the outstanding health bureaus/offices, through remote connection, for the first time all the staff of the health bureaus/offices in Taiwan participated in this event, and experienced the communication method of on-line meeting.

4 / 7

World Health Day is on April 7th each year according to the World Health Organization, in order to recognize Universal Health Coverage, abbreviated as UHC. In 2019, the events of World Health Day combined with UHC themes, and simultaneously responded to "Walk the talk!" held on May 19th. From April 7th to May 19th, we continued to record the health steps of people participating in the event. We simultaneously connected with county, city, and local organization health walking events. There were 24 million steps in total (From Taiwan to Geneva, approximately 9,682 km, approximately 24 million steps). We used overall actions to encourage people to support Taiwan in joining WHO, and enter WHA, in order to increase the international visibility. People from 29 countries participated in this event. Over 75 organizations and 32 overseas offices, with a total of 67,000 people participating. 860 million steps were taken, which exceeded the goal of 24 million steps by 35.8 times.

12

HPA and Griffith University signed a Memorandum of Understanding (MOU). We hope that the school's expertises in climate change, environment, and health will provide us with consultations and recommendations in the three facets of climate adjustment and health, environmental health, and health sectors. Through academic and cultural exchanges, we hope to achieve the goal of collective development.

15

HPA, Hsinchu County Government, and K-12 Education Administration collectively "Hsinchu Country Beipu Elementary School 4th Annual Health Promotion International Certification Golden Award Unveiling Ceremony." Director General of HPA, Wang Ying-wei, K-12 Education Administration Director General Lin Liang-ching, and Hsinchu County Mayor Yang Wen-ke collectively participated in molding health promotion schools. Through students to patents, nutrition to exercise, concepts to actions, we fully invigorate health promotion as a way of living.

18

HPA and Chiayi County Government and K-12 Education Administration collectively hosted "Chiayi County Puzi Middle School and Jingpu Elementary School 4th Annual Health Promotion School International Certification Golden Award Unveiling Ceremony." HPA Director General Wang Ying-wei and Deputy Director Yu Li-hui, K-12 Education Administration Director Peng Fu-yuan, and Chiayi County Mayor Weng Chung-liang collectively participated in molding health promotion schools, and signed the "Golden quality health, collective community union" agreement, so the health events held in schools can be spread to families and communities.

4 / 30

5 / 1

HPA hosted "APEC Conference on Smart Healthcare for Non-Communicable Diseases and Their Risk Factors Prevention and Control" at Chang Yung-Fa Foundation." We invited experts and scholars from 12 countries such as, Singapore, Malaysia, Thailand, Mexico, Vietnam, and the United States. We conducted experience sharing of diabetes intelligent technology and expert healthcare. In the two-day seminar, a total of 249 people from the industrial, government, and scholar circles participated. Together we discussed how to integrate ICT, use intelligent healthcare to upgrade chronic disease management, and their risk factor prevention and intervention

7

HPA and Tainan City Government and K-12 Education Administration collectively hosted "Tainan City Xinja Elementary School 4th Annual Health Promotion School International Certification Golden Award Unveiling Ceremony." Member of Legislative Yuan Yeh Yi-jing, Director General Wang Ying-wei, Chief Lin Liang-ching, and Tainan City Mayor Huang Wei-che all participated. We hope through international certification learning, we can achieve the goal of being the domestic benchmark of health promotion schools in Taiwan, and become the learning standard of other countries.



HPA participated in the "16th World Congress of the European Association for Palliative Care hosted by European Association for Palliative Care". We exhibited the poster of Evidence-based Professional EducationPrograms for Hospice and Palliative Care in Taiwan. We shared our experience and inspiration in palliative care with the world.



HPA participated in the "27th International Conference on Health Promoting Hospitals and Health Services" and "2019 Gold Forum Event" HPA Director General Wang Ying-wei participated in the health promotion hospital international network government board meeting and tobacco-free network meeting. In addition, HPA hosted one workshop and oral presentation, and worked together with the Clinical Health Promotion Journal to publish a special Taiwan supplement issues for the first time.



In order to cooperate with the goal of eliminating Hepatitis C. Starting on June 1st 2019, people who are 40 to 60 years old with aboriginal status can use adult preventive healthcare services to receive one Hepatitis B and C screening service lifetime.

Promulgation of the amendment Article 13 and 2 (attached graphs) of Regulations for the Testing of Yields of Nicotine and Tar Contained in Tobacco Products and the Labeling of Cigarette Containers. Effective on July 1st 2020.



Ministry of Health and Welfare and Ministry of Education hosted the "Happy Aging Love Exercise "Silver" Health" Press Conference. In 2019, we collectively promoted the "Exercise "Silver" Health" Project. We sent exercise instructing manpower to communities where elderly people usually go to, to allow them to obtain exercise health. Ministry of Health and Welfare Minister Chen Shih-chung called on old people to exercise together and gain health

22

Public announcement on "Genetic Disease of Newborn Congenital Metabolic Disorders Screening Items," including Phenylketonuria, Homocystinuria, Galactosemia, Congenital Hypothyroidism, Glusose-6-Phosphate Dehydrogenase Deficiency, Congenial Adrenal Hyperplasia, Maple Syrup Urine Disease, Mediumchain acyl-CoA dehydrogenase, Glutaric Aciduria type I, Isovaleric acidemia, Methylmalonic acidemia, Citrullinemia Type I, Citrullinemia Type II, 3-Hydroxy-3-Methylglutaryl CoA Lyase, Holocarboxylase Synthetase Deficiency, Propionic acidemia, Primary carnitine deficiency, Carnitine Palmitoyltransferase I Deficiency, Carnitine Palmitoyltransferase II Deficiency, Very Long-chain acyl-CoA Dehydrogenase Deficiency, and Glutaric aciduria type II, a total of 21 items were made effective since October 1st 2019.

24

HP and K-12 Education Administration hosted Seminar on inclusion of health educational materials with integrated lfe skills in textbooks" We invited National Academy for Educational Research, textbook publishing companies, expert scholars, and school teacher representatives, in order to provide important reference for publishing companies that focus on health and sports related fields so life skills and health education information can be included in textbooks.



HPA Director General Wang Ying-wei visited Surabaya, Indonesia to participate in the Asia Pacific Hospice Conference. In the conference, we shared the development expert of compassionate communities in Taiwan, and exchanged with many foreign experts.



Hosted the "Happy Aging-Senior Health Vitality Show" press conference. Minister Chen Shih-chung and Director General Wang Ying-wei participated. The oldest participant was a 104-year old senior from Tainan City. The seniors were filled with vitality and enthusiasm. The regional competitions were held on August 19th, 23rd, 28th, and September 6th in Tainan City, Changhua County, Hualien County, and New Taipei City. The final was held on November 5th.



Minister Chen Shih-chung and others visited Puerto Varas, Chile to participate in the SOM3. In the meeting, Director General Wang Ying-wei reported the achievements of the APEC Conference on Smart Healthcare for Non-Communicable Diseases and Their Risk Factors Prevention and Control held from April 30th to May 1st 2019 to the health work group. We won APEC funding for a new proposal. The proposal was approved by the APEC health work group. During that time, we exchanged and discussed our experience with other countries that participated in the APEC.



HPA and Sports Administration, Ministry of Education hosted the "Happy aging exercise "Welcoming health" Exercise and Health Policy Seminar. We invited domestics experts from the United States, Japan, and Hong Kong to make speeches, posters, and booth exhibitions.



On September 25th, we held the "Break Myth and Labeling! for everyone to discuss Dementia. From September 28th to 29th, we held the "Dementia Friendly Heart to Heart, Let's Hope" event at Huashan 1914 Creative Park in Taipei.



HPA participated in the 2019 Taiwan Public Heath Annual Event at NTU College of Public Health. We exchanged experience on child health and national nutrition. We also exhibited important policy related courses and materials at the booths. We invited teachers from related fields to use developed materials to give lessons or work together to develop new materials.



HPA hosted the "Environmentally Friendly Hospital Apex Meeting and Workshop" at the Howard Hotel Civil Service International House. In the summit meeting, we invited domestic and international speakers to share their health related experience on climate changes and health. Together we discussed blueprint planning of environmental friendly hospitals. In the workshop, we invited middle and high level managers from domestic low carbon hospitals. Approximately 30 peope participated. We focused on the feasibility and applicability of blueprints in group discussions.



HPA hosted the "2019 Taiwan Cancer Registry International Seminar" at the Chang Yung-Fa Foundation. It was the 40th anniversary of the Taiwan Cancer Registry System. The theme was New Challenges and Changes. We invited famous international experts from Denmark and domestic scholars, England, the Netherlands, Italy, United States, Japan, and South Korea. We shared cancer information application experience and the newest medical progress. On October 19th, Deputy Minister Shueh Jui-yuan, together with "2019 Taiwan Cancer Registry International Seminar Guests and Contribution Award Winners", visited Vice President Chen Chien-jen at the Office of the President. On October 19th, Vice President Chen spoke at the seminar and gave out the "Cancer Registry Contribution Award" to 9 award winners. Director General Wang Ying-wei gave out certificates of appreciation to 97 medical experts and scholars who assisted with policy promotion. Present Lee Ming-yang in Taiwan Society of Cancer Registry represented 97 awards. Approximately 450 people participated the seminar.



HPA, US Environmental Protection Agency, and Executive Yuan Environmental Protection Administration hosted the 2nd Annual Asia-Pacific Children's Environmental Health Symposium. In the meeting, we invited New Southbound national health and environmental department representatives, and also invited MOHW Chief Secretary Cheng Shuen-ping to make a speech.



MOHW and HPA held the "Global Health Forum in Taiwan." The theme was "Urban life of the 21st century: Sustainable, Safe and Healthy?" 83 important medical and health organization leaders and health department representatives from 33 countries participated. 1,266 people participated.

21

HPA held the "Urbanized care for disadvantaged- rare disease healthcare, medicine, and medical payment." Experts and scholars from Canada, Australia, Japan, Korea, Singapore, and Taiwan. We were invited to discuss issues and share experiences related to rare disease policy measures and execution experience, clinical research and registry on drugs, and medical payment status During the conference, Taiwan Foundation for Rare Disorders, Mackay Children Hospital and Taipei Veterans General Hospital were awarded "Rare Disease Prevention Work Contribution Awards."



HPA hosted Healthy City 2.0 Summit in Taiwan at the Shangri-La Hotel. We invited international and domestic experts from United Nations' Dr. Agis D. Tsoros, Canada's University of Victoria Professor Trevor Hancock, Australia's Griffth University Professir Chu Ming-ro, and National Cheng Kung University Professor Chen Mei-hsia. They made speeches focusing on the promotional experience of healthy city, and hope to have more inspiration on the promotion and development of Healthy City 2.0.



HPA hosted the Acute Care for Elderly Workshop at the 11th IAGG Asia/Oceania Regional Congress. We invited Canada's Director of Geriatrics at Mount Sinai and the University Health Network Hospital, Dr. Samir K. Sinha and Health Provincial Lead of Geriatric Emergency Medicine, University of Saskatchewan Health Authority Dr. Brittany Ellis. HPA subsidy ACE trial hospital representatives and age-friendly healthcare institute. A total of 140 people from 75 hospitals participated in the discussion.

11 / 5

HPA provided elderly people with an energetic and artistic stage. We held the "2019 Happy Aging-Senior Health Vitality Show" elderly vital aging competition national final. Vice President Chen Chien-jen, MOHW Deputy Minister Shueh Jui-yuan. HPA Director General Wang Ying-wei cheered on the seniors. 20 winning teams from the regional competitions and outlying islands competed. The average age was 74.5 years. With the total age of over 50,000. 42 people were over 90. The oldest was 101. The seniors showed creativity in dancing, singing, and drama. They exhibited confidence and charisma.



Eda Group received the "World Health Literacy Association" permit. In 2020, we will host the first "Global Health Literacy Summit" in Kaohsiung so we can speak out for promotion of health literacy. Vice President Chen Chien-jen met with Director Kristine Sørensen and Chief Secretary Sabrina Kurtz-Ross. We hope through international work and actions, we can upgrade world health literacy.



The 7th AHLA International Health Literacy Conference was held in Vietnam. HPA researcher Liu Jia-sho orally presented and used posters to promote health literacy and "Taiwan health literacy action program" experience. In addition, AHLA International Health Literacy Association announced WHO Europe branch's Measuring Population and Organizational Health Literacy, and agreed to work together on the "2020 M-POHL AHLA Survey."



HPA participated in the 51st Asia-Pacific Academic Consortium for Public Health annual meeting. On November 20th, Japan Branch and Thailand's Ministry of Health and Welfare collectively hosted "Health Promotion Core Competency and Innovations and Health Literacy" workshop. On November 21st, HPA Director General Wang Ying-wei was invited to give a speech. He shared our national chronic disease prevention plan, and exchanged with Asia-Pacific member countries.

HPA held the "2019 Annual Elderly Health Management-Community Happy Aging Photography Competition and Outstanding Group Awarding Ceremony." Director General Wang Ying-wei awarded 15 outstanding groups, and 26 community happy aging photography competition award winners.

The HPA held the 2019 National Walking-1 million Club event, with three physical events in Taoyuan, Taichung and Kaohsiung, respectively, supported by online events. A staged incentive mechanism was used and mySports App used as a sports tool to record the accumulated number of steps each day, jointly creating an atmosphere to encourage people to walk for exercise. In total, around 50,000 people walked.

HPA participated in the "2019 International Diabetes Federation Congress" in Busan, South Korea. Topics include diabetes clinical medicine and healthcare policies. Approximately 12,000 experts and scholars from 180 countries participated. Domestic diabetes and health education associations set up exhibition booths. In addition, Director General Wang Ying-wei was invited to give a speech. He shared the promotional achievements of diabetes prevention in Taiwan.

HPA hosted "Use Technology to Care for Elderly-I watch TV, TV watches me" press conference at the MOHW main hall. Minister Chen Shih-chun and Director General Wang Ying-wei announced the "Elderly household technology interaction platform plan." Through TV webcam live functions, we allow elderly people in households to interact and connect with community events. Family members can use mobile APP to directly interact with elderly. Through technology platforms, we can upgrade elderly health literacy, increase social connections, and promote health.

HPA held the "National Community Nutritional Promotion Center Achievement NTU Hospital Observation Seminar" and Press Conference. Minister Chen Shih-chun awarded all the local government health bureaus for their outstanding performance in promoting community nutrional healthcare service work. We provided experience exchange with the members. In addition, booths in the exhibition showed electronic media interactive educational resource tools, and actual educational materials developed by local governments. All the participants participated and interacted with enthusiasm.

HPA held the "2019 Healthy City and Age-friendly City (Community) Award." This year, a total of 345 works were submitted. After the first and primary and final reviews, Director General Wang Ying-wei gave out 63 awards. This year, the theme was "Cross-field integration and sustainable development. We marketed healthy Taiwan and promoted the achievements of active aging. We also continue to include "care" in policies, and create an environment that is "Age-friendly, dementia-friendly and compassionate communities.

HPA held the "Elderly Diet Quality New Concept, Delicious Food" Press Conference. We issued elderly nutrition quality educational health manuals. People can scan QR codes to connect to recipe educational videos or websites. We hope that, through food material selection and changing culinary techniques, using the most often used tableware for testing, food that is suitable in terms of "hardness" for elderly people can be made by the elderly themselves. They can "eat healthy" everyday, and nutrition will come.











HPA operations website and APP chart



Website of HPA

Provision of different types of information related to HPA services and websitesections for different health-related topics in line with public needs.



Adolescent Sex E-school

Provision of accurate sex information and educational materials for queries by adolescents, parents, and, teachers and online replies by professional personnel to questions asked by citizens.



Website of Health 99

Provision of different types of health education materials created by the Ministry of Health and Welfare and its affiliated agencies and nongovernmental healthcare organizations including the latest health-related news, columns, and rumors.



Website of Smokers' Helpline

This website provides smoking cessation hotline information, professional mental counseling for smokers, service descriptions, the latest findings, Q&A, and event information.



Website of Information of Healthy Workplace

This website disseminates information on methods for implementation of health promotion campaigns at workplaces all over Taiwan as well as healthy workplace certifications and applications.



Website of Smoking cessation management

Provision of smoking cessation service information including application for smoking cessation services, smoking cessation information, and lists of healthcare institutions contracted for smoking cessation services



Cancer Registry Interactive Query System

Provision of data on cancer incidence and epidemiology for queries by the general public, academic circles, and health units as a reference for cancer prevention and control programs and relevant assessments by health administration units and hospital jurisdictions.



Information Website for Tobacco Product Ingredients

Pursuant to the provisions set forth in Article 8 of the Tobacco Hazards revention Act, tobacco product ingredients, additives, and emissions reported by manufacturers and importers shall be disclosed periodically and voluntarily to give the public a better understanding of tobacco product ingredients and associated hazards.



Maternal Care and Counseling Website

This cloud-based maternal care platform enables new generation expectant mothers to access pregnancy and childbirth-related knowledge and cloud-based management tools during pregnancy periods and prenatal checkups in a convenient manner.



Health Indicator 123-Interactive Queries of National Health Indicators

This website provides information on health indicators for queries by healthcarepersonnel, citizens, media workers, and personnel engaged in health-relatedfields.



Name of Publication 2020 Health Promotion Administration Annual Report Publishing Organization Health Promotion Administration, Ministry of Health and

Welfare

Publisher Ying-Wei Wang

Address No 36, Tacheng St., Datong Dist., Taipei City

Website https://www.hpa.gov.tw/
Telephone +886-2-25220888

Editing Health Promotion Administration, Ministry of Health and

Welfare

Design & Printing Wish Creative Design Co., Ltd.

Telephone +886-2-25536152

Date of Publication October 2020

Date of First Publication October 2008

Nature of Publication Annual Report

This annual report is also available on the HPA website: https://www.hpa.gov.tw/

Price NT\$230

For sale at: Government Bookstore | 1F, 209, Songjiang Rd., Taipei

City | +886-2-25180207

https://www.govbooks.com.tw

Wu-Nan Culture Square | 6, Zhongshan Rd., Taichung

City | +886-4-22260330

https://www.wunanbooks.com.tw

GPN: 2010301334 ISSN: 23120843

All copyrights are owned by the HPA, whose consent or written authorization is required for the use of the book in full or in part. All queries should be directed to the HPA (Telephone: +886-2-25220888)



Health Promotion Administration, Ministry of Health and Welfare Address: No. 36, Tacheng St., Datong Dist., Taipei City

Website: https://www.hpa.gov.tw/ Telephone: +886-2-25220888







HPA Annual Report



ISSN 2312-0843 GPN 2010301334 Price: NT\$ 230

This report is funded by the Tobacco Health and Welfare Taxation