ISSN:1999-601-2

Cherish Life . Promote Health

2010

BUREAU OF HEALTH PROMOTION
Annual Report

Bureau Of Health Promotion, Department of Health, Executive Yuan, R.O.C. (Taiwan)
December 2010

Cherish Life Promote Health 2010

Plant the flowers of life with love

Lovingly plant the flowers of life

Plant the seeds of happiness in everyone's heart so that the beautiful flowers of life grow in every corner…

Every flower of life is precious and needs to be looked after carefully if it is to thrive and grow healthily to maturity

On average someone dies of cancer in Taiwan every 13 minutes and 10 seconds.

Cancer has been at the top of the 10 leading causes of death for 28 years in succession in Taiwan.

Cancer doesn't just strike the old, it is also the third leading cause of death of adolescents.

Strengthen cancer prevention, improve the health of the people and together create colorful, beautiful lives.

2010

BUREAU OF HEALTH PROMOTION

Annual Report

CONTENTS





CONTENTS

Preface

Cherish Life Promote Health

Health is an universally accepted human right. To improve physical, mental and social health in Taiwan, the Bureau of Health Promotion upholds the vision of "Cherish life and Promote health". In accordance with the five action strategies of the WHO "Ottawa Charter" of 1986, the Bureau actively sets public health policy, builds healthy cities and areas, promotes healthy lifestyles and strengthens preventive health services and health promotion work, and at the same time, striving to reduce health inequality and move towards health for all.

Medical care and medical technology can, help a damaged body recover, however, health promotion can actually prevent or delay the occurrence of disease, extend healthy life and give people better quality of life. To promote public health, in addition to carrying out long-term monitoring of and research into the health of the people of Taiwan to provide an evidence base on which to set policy, health promotion policies have been planned for women, infants, children and adolescents, and healthy aging for the middle-aged and old, providing complete health promotion and prevention services for the people at each stage of their lives. Furthermore, to assist the people of Taiwan to nurture healthy lifestyles, avoid the harm of tobacco, alcohol and betel nut, eat healthily, do regular exercise, and maintain a healthy body weight, this Bureau actively sets health promotion and hazard prevention policies, and actively builds a supportive environment for health to help people live healthier lives. In the area of the noncommunicable disease prevention, cancer and chronic disease prevention work is actively carried out and, on an evidence base, free screening tests are provided so that abnormalities can be detected and treated early. Also, the Bureau actively promotes palliative care, giving terminally ill cancer patients effective medical assistance and a helping hand in the last stage of their lives.

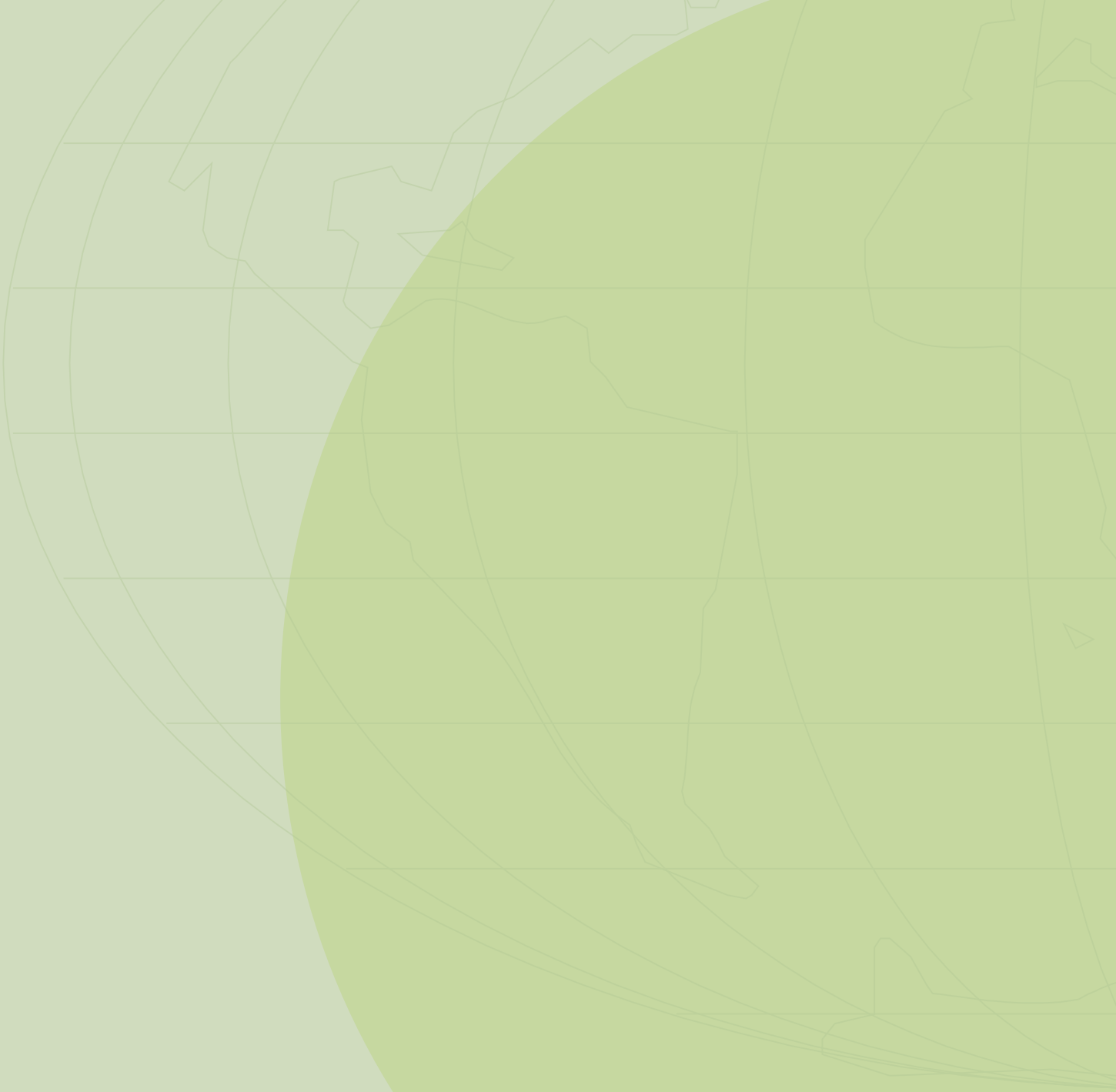
Over the previous year the Bureau has achieved fruitful results, including the implementation of the amended Tobacco Hazards Prevention Act, banning smoking in workplaces with more than three employees, increasing the Tobacco Health and Welfare Surcharge from NT$10 to 20 per pack, with the money raised injected into helping smokers quit and in other hygiene and health work, and now also requiring tobacco

companies to provide product information. Women's breast cancer screening has been expanded from the 50-69 year age group to 45-69, benefiting many women with a family history of breast cancer; The "oil disease (Yusho) special clinics" have been established to provide better health care consultation. The colors of baby stool card have been increased from six to nine to increase biliary atresia screening sensitivity. In terms of healthy areas in Taiwan, 3 cities/counties and 4 districts have newly joined the Alliance for Healthy Cities (AFHC). Currently there are 11 international safe communities, 17 international safe schools, and 61 health promoting hospitals in total that have received "WHO Collaborating Centre" certification. In addition, the "WHO Winter School 2009 in Taiwan" was successfully held in December. It was the first time such an activity has been held outside of Europe by the WHO-CC HPH Secretariat.

In the future, the Bureau will continue to advocate, coordinate and promote health, further encourage the growth of a mainstream healthy culture, continue to push for the establishment of the "Health Promotion Act" to give a basis for national health promotion policies and encourage the public to join with us in formulating health promotion actions that are localized and meet different needs. We would like to give everyone a better understanding of the progress of our health promotion work through the presentation of all the results of the Bureau's various works over the previous year in this annual report. From this, we sincerely hope our readers would join with the Bureau in building a healthier Taiwan.

Shu-Ti Chiou

Director-General, Bureau of Health Promotion,
Department of Health, Taiwan
December, 2010



Cherish Life
Promote Health

Chapter 1

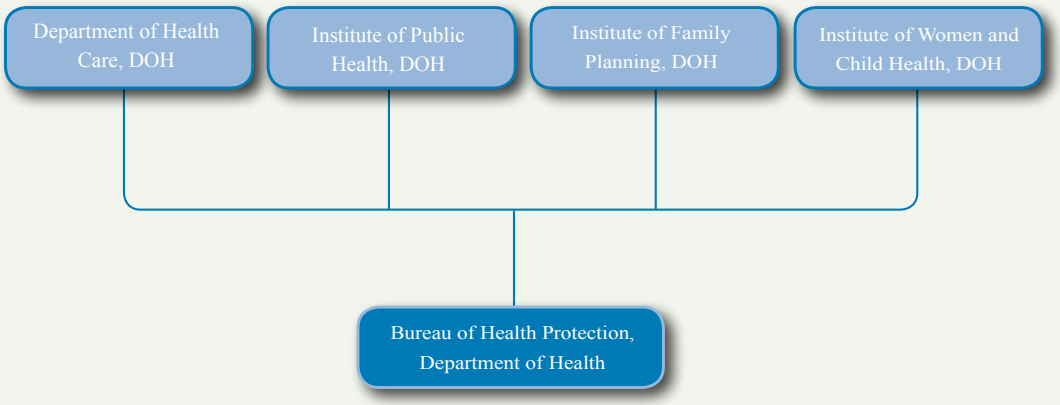
Introduction

Chapter 1 | Introduction |

1. Evolution

In 1999 in coordination with the Local Government Act and the downsizing of Taiwan Provincial Government, the Department of Health (DOH), Executive Yuan, absorbed "Taiwan Provincial Health Department" and it was reorganized and became the DOH Central Taiwan Office. The Institute Family Planning, Institute for Public Health and Institute for Women's and Child Health, originally under the Taiwan Provincial Health Department, also became DOH subsidiary bodies on July 1, 1999. To integrate health promotion work and achieve health for all the Department of Health Care, the Institute Family Planning, Institute for Public Health and Institute for Women's and Child Health were merged and became the "Bureau of Health Promotion on July 12, 2001, the product of the first administrative agency reorganization after the downsizing of Taiwan Provincial Government, and responsible for health promotion and noncommunicable disease prevention work.

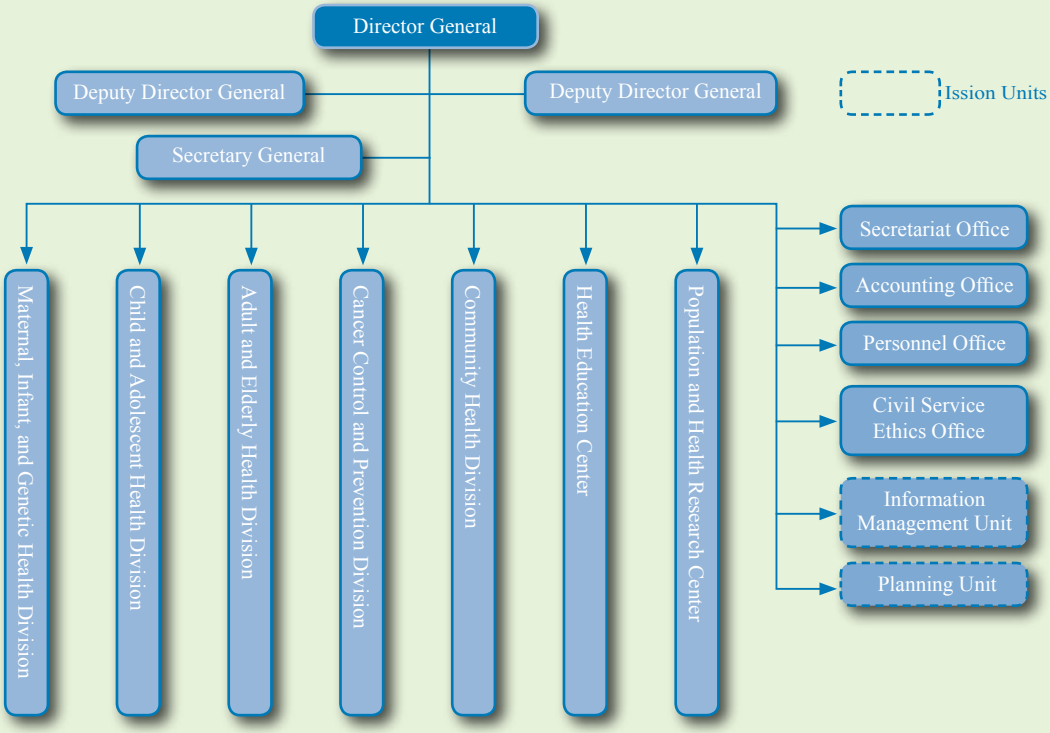
Figure 1-1 Bureau of Health Promotion's Evolution



2. Organizational structure

The Bureau of Health Promotion has five divisions and two centers: Maternal, Infant, and Genetic Health Division, Child and Adolescent Health Division, Adult and Elderly Health Division, Cancer Control and Prevention Division,Community Health Division, Health Education Center and Population and Health Research Center and four administrative units (Secretariat Office, Accounting Office, Personnel Office, Civil Service Ethics Office) and two mission units (Information Management Unit and Planning Unit) (Fig. 1-2). Their mission is to set health promotion policies and laws and regulations and build a health-friendly environment, plan and carry out reproductive health, mother and baby health, child and adolescent and middle-aged and elderly people's health promotion work, tobacco and betel nut etc. harm prevention, cancer, cardiovascular disease and other main noncommunicable disease prevention and carry out national health monitoring and research and development, and handle special health issues.

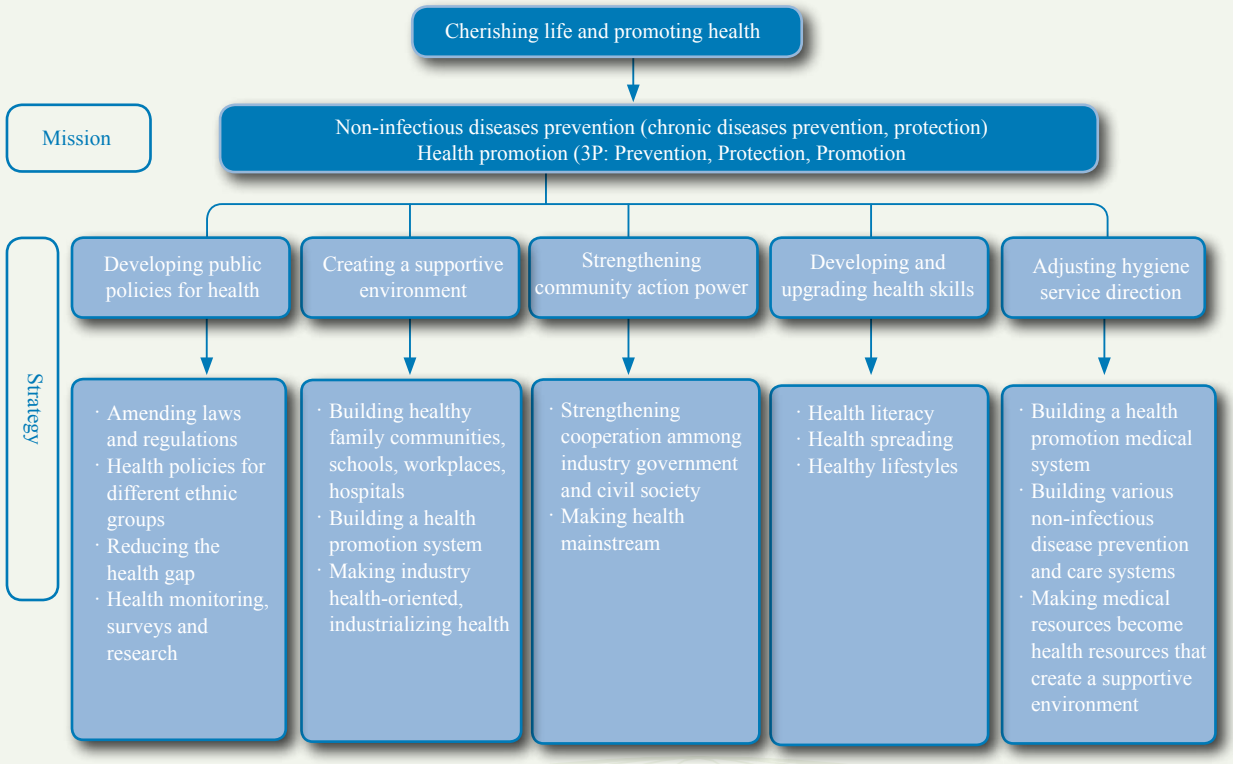
Figure 1-2 Organizational chart of the BHP



3. Health Promotion – Vision and Challenges

Health is a universally accepted human right. To increase physical, mental and social health in Taiwan, the Bureau of Health Promotion follows the "Cherish life and Promote health" idea and in accordance with the Alma-Ata Declaration of 1978 and the Ottawa Charter of 1986, the five action plans: making healthy public policies, creating supportive environments, strengthening community actions, developing personal skills and reorientating health services (from passive treatment to active prevention,) forming across-the-board action to build a healthy environment and promote health, planning and implementing health promotion and non-infectious disease prevention work, aiming to raise population health and reduce the health inequality, achieving the objective of "health for all." (Figure 13.)

Figure 1-3 BHP vision and strategies



Chapter 2

Healthy Birth and Growth

Chapter 2 | Healthy Birth and Growth |

Social change and multicultural influences have transformed social attitudes as well as family functions and structures. They have brought about changes in the system of treatment and care, in the economy and in transportation, and in the social and material environment. Intermarriage between people of different nationalities and cultures has all occurred. The divorce rate has become prominent, as grandparents raise children, and fast food culture grows and academic pressures increase. In this context, questions of health have become more diverse and complex for pregnant women, infants, children and young adults. Some problems have increased in seriousness, such as the elderly producing children, delayed development in children, premature birth, teenage smoking and teenage pregnancy. The focus, therefore, of this administration has been to create a blueprint for promoting maternal health, infant, child, and adolescent emotional and physical development, and strengthen the health care system, to create a healthy and safe environment.

Section 1 Maternal health

Current Status:

In Taiwan, the average age for one's first child in 1989 was 25; in 2009 that increased to 29.3 years of age. According to an analysis of the structure of maternal age groups, the number of those aged 20-24 having their first child decreased from 29.5% to 11.1%. The 25-29 age group decreased from 44.6% to 35.1%; the 30-34 age group increased from 17.4% to 37.8%; the 35-39 age group went from 3.4% to 12.6%. There is a quite obvious trend toward having a child later in life.

Moreover, in 2008, the maternal mortality rate was 6.5 in 100,000. Compared with major countries in the rest of the world, the maternal mortality rate in Taiwan was comparable to Norway, Finland, and Canada. In comparison with the United States, New Zealand, England, France and Belgium, it was lower. And it was higher than that of the Netherlands, Switzerland, Spain, Germany, Austria, Australia, Sweden, Italy, Denmark, and Ireland. With neighboring Asian countries it was comparable, but higher than that of Japan.

Work Objectives:

1) To achieve a rate of over 90% of pregnant woman having prenatal examinations

2) With regard to those who choose to have children later in life, this increases the chances of fetal chromosomal anomalies. Hence the need for increased prenatal screening for genetic disorders in high-risk groups of pregnant women, in the areas of both service and quality. Its expected target would be a clinical genetic testing rate of over 90% for those pregnant women over age 34, and a rate of over 98% for pregnant women in high-risk groups to receive prenatal genetic diagnoses and individual tracking.

Policy implementation and results

1) Systematize reproductive health services

1. Prenatal examinations for pregnant women

Through financial support from the National Health Insurance, this office contracts with hospitals to offer 10 prenatal screening services to pregnant women, to discover possible complications that may arise at any stage of the pregnancy and guarantee the health of the pregnant mother and unborn child. The utilization rate for these services since 2001 has stayed in the neighborhood of 90%. In 2009, the utilization rate was 88.4%, of which around 40% was at local clinics. The remainder, however, was at medical centers, and local and regional hospitals. (Figure 2-1) Also, the figure for one examination and at least four were 98.16% and 95.88% respectively.

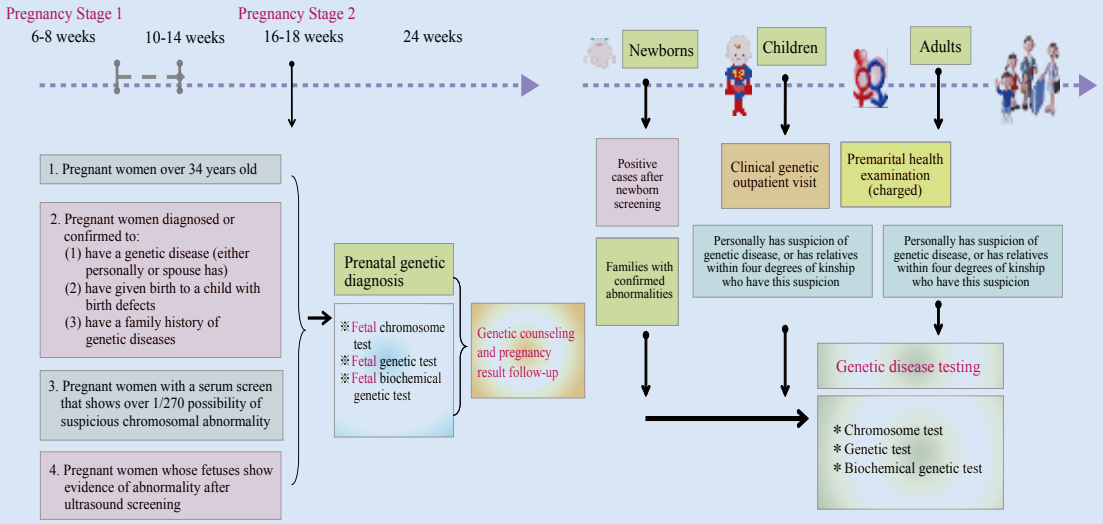
2. Comprehensive genetic testing

One hallmark of advanced countries has been preventive medicine. Genetic testing has been adapted to this concept of preventive care. In primary prevention, testing is done in the stages before marriage, before pregnancy, before birth, at birth and thereupon through one's adult life. Another kind of prevention involves providing reproductive choice. Secondary prevention provides for the prevention of genetic disorders, and reduces the occurrences of congenital birth defects. The network for prevention of genetic diseases is shown in Figure 2-2. The outcomes of genetic testing services at various reproductive stages are as follows:

Figure 2-1 Utilization rate of prenatal examinations

Note: Data from 2002-2005, taken from the Bureau of National Health Insurance reported results, calculated as (denominator is number of live births x 9 births checked). Data from 2006-2009 based of this Bureau's approved payment files (denominator is number of live births x 10 subsidized prenatal checks)

Figure 2-2 Prevention network for genetic diseases



A. Screening for thalassemia in pregnant women

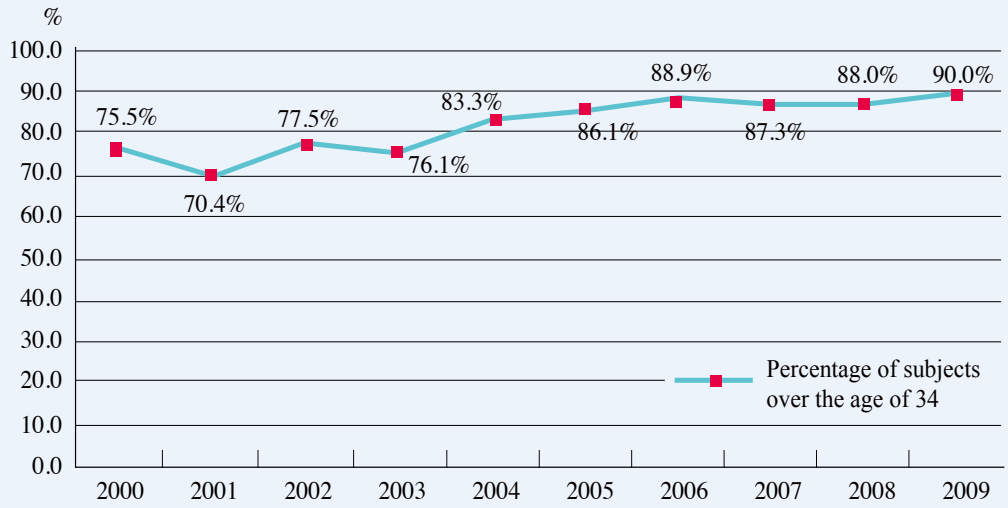
If prenatal blood testing finds abnormalities, the spouse is then checked. If both are found to have abnormalities, the blood sample is then sent to one of six government-approved thalassemia genetic testing centers. If both the husband and wife are confirmed to be either alpha- or beta-thalassemia carriers, blood is collected from the villi, amniotic fluid, or umbilical cord, depending on the stage of pregnancy, for prenatal genetic testing. In 2009, 1,151 people received thalassemia screenings, among which 415 fetuses were received prenatal genetic testing. Prenatal care was provided to the mother with abnormal fetuses in accordance with her wishes.

B. Prenatal genetic diagnosis of high-risk pregnant women

In accordance with the "Reduction and Exemption or Subsidy of Genetic Health Measure Fees", pregnant women in the high risk group (i.e. those over 34 years old, with an abnormality found in a current or past pregnancy, or with a history of family genetic disorders in her or her spouse's family) can receive prenatal genetic disease examinations at a reduced cost.

In 2009, 38,170 people were subsidized, of whom 27,571 were women over the age of 34. The examination rate of pregnant women of advanced age was upto 90%, with an increase of 14.5% since 2000 (Figure 2-3). In 2009, 796 people using these services discovered that they had abnormalities. This constituted 2.08% of the total number of people tested that year. In order to provide timely and appropriate care for pregnant women, cases with abnormal test results were followed up immediately by medical institutions, or by public health centers, and were provided diagnoses and counseling, or referrals to genetic counseling centers or related facilities for treatment.

Figure 2-3 Prenatal diagnosis rates of pregnant women over the age of 34, between 2000 and 2009



To ensure the quality of institutions that perform prenatal genetic diagnoses, this office follows the "Guidelines for the Evaluation of Institutions Performing Genetic Disease Examinations." Evaluation of these institutions is done on a regular basis. Institutions passing the evaluation must undergo subsequent evaluation every three years. By 2009 there were 27 clinical cytogenetic laboratories, and 9 genetic laboratories that passed the evaluation. In order to guarantee the quality of genetic counseling, diagnosis, and therapy, key provisions were stipulated for the accreditation of genetic counseling centers; accreditation of genetic counseling centers is done periodically and on a national level. By 2009, a total of 11 genetic counseling centers have been approved.

C. Genetic disease testing and counseling related to reproductive health

Genetic disease testing and counseling are provided to people with reproductive health problems, people who possibly have a genetic disease and heir families, newborns whose congenital metabolic disease screening tests are abnormal and people suspected of suffering from a genetic disease. In 2009, 11,558 people were checked, and of these 545 people were found to have chromosomal disorders, 971 people were found to carry thalassemia, and 582 people had other abnormalities.

2) Comprehensive regulations and systems for reproductive health

1. Establishment of the Artificial Reproduction Act

A succession of laws has been enacted to protect the rights of infertile couples, donors, and children conceived thraigh artificial reproduction. These laws also ensure that the technology for artificial reproduction is utilized and developed appropriately. The "Artificial Reproduction Act", enacted on March 21, 2007 was followed by "Regulations for Query on Kinship of Artificial Reproduction Child", "Regulations for Artificial Reproduction Institution Permit", "Regulations for Verification on Kinship

of Sperm/Oocyte Donors and Receptors", "Regulations for Artificial Reproduction Information Notification and Administration", and a "Notice of Maximum Payment Limit of A Donor's Expenses by the Recipient Couple". As of September of 2010, 66 institutes for artificial reproduction had been approved.

2. Proposal of draft amendments to the Genetic Health Act

Work on amendments to the Genetic Health Act has been carried out since 2000 to promote reproductive health and to ensure the health and safety of pregnant women and their unborn child. It was renamed the "Reproductive Health Act"; rules for prevention and cure of genetic diseases were revised and enlarged, and the regulations for medically induced abortion were revised to clarify exactly what consultation services are to be provided by medical institutions. The amendments were passed to the Legislative Yuan for review on February 22, 2008.

3. Provision of counseling services for medically induced abortion

To improve the quality of women's health, in 2009 a "Plan for Training Human Resources in Reproductive Health Counseling Services" was put forward by the Taiwan Association for Caring and Counseling for Loss, a publicly funded organization. From 2005-2008, in north, central, south and east regions, it established "Abortion Counseling System and Service Methods", which invited participation from medical center medical staff, social workers, psychologists, and local health departments from all areas, organizations as well as educational institutions. 159 people took part in this training, and participants all gave the training course a rating over 82%.

4. Quality Assessment for Prenatal Examination

The quality of prenatal examination was assessed through a comprehensive assessment of the effectiveness of screening services. in 2009 A "Quality Assessment Plan for Prenatal Examination / High-Risk Pregnancy Prenatal Care Improvement Model Improvement (Epidemiological Research)" was commissioned, using analysis of secondary data from the National Health Insurance, looking at high-risk pregnancies on a national level from an epidemiological point of view, and offering suggestions for the improvement of the care model for high-risk pregnancies. Among the results of the study, for pregnant women in the nation who receive the subsidized 10 prenatal examinations, the number of examinations averages about 8. The first examination takes place around the 10th week of pregnancy, which matches with the recommendation of having the first examination by the 12th week of pregnancy. With regard to the most important examination (namely the first 5), those who made use of 3 to 4 subsidized examinations ran obviously higher risks of extremely low fetal weights (OR=3.7), low birth weights (OR=1.2), and prematurity (OR=1.1). Out of those who only utilized two examinations, their risk was even higher. Being over 35 years of age was one important independent factor in the majority of high-risk pregnancies, and women in this group had relatively worse birth outcomes.

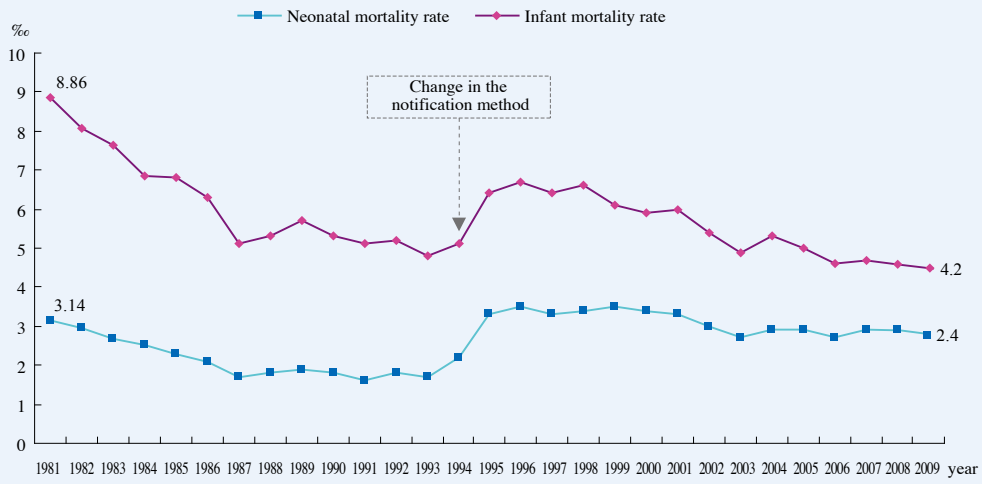
Section 2 Infant and child health

Current Status:

The cause of death in newborns and infants is chiefly originates in the perinatal period. For this reason, the infant mortality rate is commonly seen as an important index when assessing the health of both mothers and children in a nation or a region. Taiwan's neonatal mortality rate has dropped from 3.1% in 1981 to 2.4% in 2009. Infant mortality dropped from 8.9% in 1981 to 4.2% in 2009 (Figure 2-4). Compared with the rest of the world, Taiwan's infant mortality rate is comparable to that of Canada and England. It is slightly lower than that of the United States, but higher than France or Germany. With respect to neighboring Asian countries, it is higher than Japan's, South Korea's or Singapore's. It is lower than that on Mainland China, Malaysia, and the Philippines.

Although the two indices mentioned above have been declining over the years, in the last two years the rate of premature delivery has not, however, seen a corresponding decline. It increased from 3.8% in 1989 to 9.85% in 2009. There was a clear rise in the rate of premature births with low birth weight (less than 2500 grams), increasing from 4.4% in 1989 to 8.69% in 2009. Related to this is the incidence of delayed development and low birth weight, or congenital metabolic disorders; early detection can allow for treatment to lessen the unfortunate incidence of developmental delay or mental retardation. At present, screening for congenital metabolic abnormalities is over 99%, however, reporting of developmental disabilities leaves room for improvement. According to data from the Ministry of the Interior Department of Statistics, there were 16,167 children between the ages of 0 and 6 who were developmentally disabled, and of this number, 5569 were reported by hospitals, and 3057 were reported by social welfare agencies. Most of these were between the ages of 2 and 6, accounting for

Figure 2-4 Neonatal mortality rates and infant mortality rates in recent years



Source : Statistics Office, Department of Health

74%. Moreover, newborns with congenital hearing defects accounted for 3%. In 2009, there were 547 medical establishments with birthing facilities, and out of these 264 hospitals provided screening of newborns for hearing disorders: this accounted for 48.26%. And 84.79% of pre-school-aged children had screening tests for hearing disorders.

To promote healthy growth of infants and children, this office has actively promoted breastfeeding. In 1989, the proportion of mothers who exclusively breastfed in the first month after giving birth stood at 5.4%; this increased to 56.7% by 2009. The total rate of breastfeeding (exclusive and non-exclusive) in the first month went from 26.6% in 1989 to 81.3% in 2009.

In order to promote the healthy growth and development of infants and children, discover abnormalities in early stages, and provide for early treatments and cures, a comprehensive health care system is essential. This office has, in addition, set the following objectives:

Work Objectives:

1) Achieve over 99% yearly screening rate of newborns for congenital metabolic disorders

2) Raise the utilization rate for children preventive health services to 68.6%

3) Breastfeeding rate: In accordance with the recommendations of the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), exclusive breastfeeding should take place up to six months, after which other suitable foods should be introduced, keeping breastfeeding in use up to two years or more. The following targets should be met by the end of 2010: an exclusive breastfeeding rate of 60% for the first month of life.

Policy implementation and results

The health challenges of the next generation will be many and various, for infants and for children. When setting policies aimed at construction a complete social services system, the special characteristics of groups need to be taken into account and resource integration needs to be tried to build a complete health service system and, even more importantly, an environment supportive of health and safety must be maintained. To this end the following policy directions are planned:

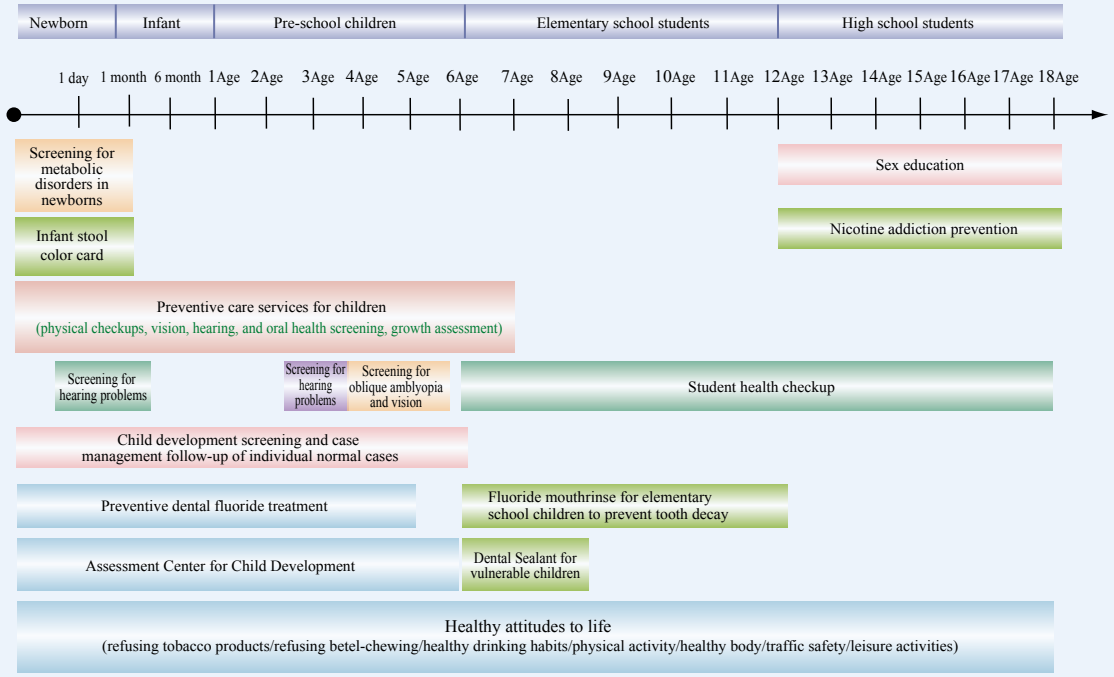
1) Integration of organizations and resources

The Department of Health Children's Health Promotion Committee was established on March 29, 2006 to develop forward-looking health policies for children, and facilitate communication and cooperation between government and NGO's. Its tasks include researching policies concerning child health, policies for the physical and mental development of infants and children, coordinating children's health policy between ministries and government departments, reviewing priorities in this area, improving the service network for child health and safety, and promoting children's health education. It also encourages research and development in pediatric health technologies.

2) Building a comprehensive health care services

A summary of the major national policies regarding children's health care is presented (Figure 2-5) with some of the services they provide:

Figure 2-5 Infant and child health care policy



1. Implementing the birth reporting system

Since 2004, all hospitals with delivery wards have implemented a complete online birth reporting system. This system simultaneously sends birth records, according to nationality, to the Ministry of the Interior's Department of Household Registration, and from there they are sent to the National Immigration Agency and to each city/township district Household Registration Office. This will enable each public health and public administrative unit to grasp data on population trends and high-risk groups among newborns (including congenital birth defects), and provide the necessary services in each case quickly, accurately and comprehensively. The Healthcare Certification Authority (HCA) system was implemented in order to strengthen data security and to lower the possibility of unauthorized access to the data. In 2009, the number of births totaled 194,489, of which 192,465 were live births (a live birth rate of 98.96%); there were 2,024 stillbirths (a stillbirth rate of 1.04%). The birth reporting rate was 99.9%. The data collected and the statistical results can serve as a basis for reproductive healthcare policies, strategies, and services.

2. Newborn screening services

Since 1985 newborn screening services has been promoted nationwide. Over the past few years the yearly screening rate has attained over 99%, enabling treatment and cure of screening test results that came back positive, and reduction of sequelae. In 2009, 192,249 people were screened (a screening

rate of 99.9%). 3,436 people were tested positive for G6PD-deficiency, commonly known as favism; there were 146 positive tests for congenital hypothyroidism; 9 cases of congenital adrenal hyperplasia, 14 cases of phenylketonuria(PKU), 9 cases of homocystinuria(HCU), 4 cases of isovaleric acidemia, IVA, 1 case of maple syrup urine disease(MSUD), no cases of galactosemia, 1 case of methylmalonic academia(MMA) and glutaric acidemia Type1(GA1), and no cases of medium chain Acyl-CoA dehydrogenase deficiency(MCAD) (Table 2-1).

3. Preventive child health care services

This office, through a medical center specially contracted with the national health insurance subsidizes preventive healthcare services for children under 7, to ensure continuity of healthcare management and healthcare guidance, and discovers early cases of abnormalities in order to provide early prevention and cure. Since 2002 the use rate of this child health service has stayed around 70%, around half of services provided at local basic level clinics and the other 20% at medial centers, regional hospital or district hospitals. In 2009 this service was provided 1.25 million person/times and the use rate was 71.1%.

To ensure quality, as well as a more complete utilization of child preventive medical services, this office is promoting a "Child Preventive Healthcare Service Program for a New Generation". The program aims to review the less frequently used items and services in order to strengthen child

Table 2-1 Number of abnormalities screened among newborns in 2009 (192,249 persons screened)

Item screened	Incidence	Number of abnormal cases
Glucose-6-Phosphate dehydrogenase deficiency (G-6-PD)	1：61	3,436
Congenital hypothyroidism (CHT)	1：2,029	146
Congenital adrenal hyperplasia (CAH)	1：10,910	9
Phenylketonuria (PKU)	1：30,152	14
Homocystinuria (HCU)	1：109,440	9
Isovaleric acidemia	1：61,264	4
Maple syrup urine disease (MSUD)	1：265,477	1
Galactosemia (GAL)	1：281,417	0
Methylmalonic acidemia (MMA)	1：159,286	1
Type 1 glutaric acidemia (GA 1)	1：41,917	1
Medium-chain acyl-CoA dehydrogenase deficiency (MCAD)	1：88,492	0
Total		3,621

development screening, and to integrate the medical resources of primary care, to provide more diversified services. Additionally, the program approves city and county health bureaus to set up preventive healthcare outreach services for kindergartens and preschools, to help with monitoring and statistical analysis of the outcomes of preventive healthcare services for children. In addition, institutions referring suspected cases of developmental delay will be awarded incentives, to increase the functionality of referrals, correct diagnosing and reporting.

4. Raising the level of knowledge of health professionals

A special supplemental DVD has been produced to improve the skills and knowledge of parents and first-line medical personnel about child development screening, called "Developmental Screening for Babies, DVD, 2nd edition", and a "Practice Curriculum for Joint Assessment of Developmental Delays".

5. Commissioning a "Child Development Assessment Center" in hospitals

A child development assessment can provide accuracy, accessibility, and thoroughness in cases of suspected developmental delay, and can allow suspected cases to receive the services of the joint assessment as quickly as possible. With this in mind, this office has set up assessment centers in 25 counties according to the criteria of population of children under 6 years old, and accessibility of medical care. As of 2010, a "Child Development Assessment Center" as established in 25 counties and cities, with two centers in 7 counties and cities (Taipei County, Taoyuan County, Taichung County, Taichung City, Kaohsiung, Hualien County, Taitung County). Nationally there are 33 assessment centers.

6. Establishing a breastfeeding-friendly environment to increase the breastfeeding rate.

A. Establishing Baby Friendly Hospital" accreditation system to change the practices and habits of healthcare facilities, including putting an end to the supply of low-cost or free formula, to create an environment in which breastfeeding becomes the norm. In this way, newborns can have the best possible start in life. Hospitals receiving the mother and baby-friendly accreditation jumped from 38 in 2001 to 113 in 2009. In certified medical institutions, the rate of exclusive breastfeeding one month after birth increased from 27.4% in 2002 to 46.8% in 2009. (Table 2-2)

B. Setting up an information hotline (0800-870870) to address questions related to breastfeeding. In 2009, 6,132 calls were handled by the hotline. A breastfeeding website has also been set up to provide both medical professionals and the general public with information about breastfeeding, and it has received over 400,000 page visits.

C. Training seed instructors on breastfeeding knowledge to improve the professional skills of medical personnel in educating mothers about breastfeeding. In 2009, a total training initiative was launched for breastfeeding seed instructors and personnel. Six training sessions were held, and over 47 breastfeeding seed instructors were accredited. 578 medical professionals participated in the basic breastfeeding curriculum.

Table 2-2 Results of accreditation on for mother-infant frendly hospital

Item \ Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of hospitals receiving certification	38	58	74	77	81	82	94	94	113
Breastfeeding rates, 1 month* (%)	—	69.0	69.8	77.3	79.7	82.1	81.9	84.0	87.8
Exclusive breastfeeding rates, 1 month* (%)	—	27.4	22.8	35.1	37.0	39.9	41.8	44.7	46.8
Coverage rate of accredited hospitals (%)	—	—	—	39.2	40.8	41.3	47.4	46.3	53.9

*** Percentage among subjects surveyed of one-month old babies still breastfed (includes exclusive breastfeeding or a mixture of breastfeeding and formula)**
**** Percentage among subjects surveyed of one-month old babies still exclusively breastfed (fed only breast milk and vitamin, mineral, or medicines)**

D. Continuing to strengthen the collaboration across ministries and departments to create breastfeeding-friendly work place. This includes working with city and county health bureaus, to help companies set up breastfeeding rooms. In 2009, this office collaborated with the Labor Affairs Council to hold joint "Statutory Gender Equality in Employment and Sexual Harassment Prevention Seminars." 1,970 people took part in 22 seminars that aimed to establish a friendly workplace environment for breastfeeding mothers.

7. Promoting legislation supporting breastfeeding in public places

A. In 1989 the World Health Organization and UNICEF published a joint statement to "Protect, Encourage, and Support Breastfeeding", and in 1990 acknowledged that breastfeeding is an important factor in ensuring child survival, and is an important indicator of development. For this reason, a national breastfeeding policy was called for, emphasizing the development of legal protection of the rights of breastfeeding women. As of 2009, Scotland and 43 states in the United States have introduced legislation to protect the rights of women to breastfeed in public places, and in 2009, 28 states in the United States have determined not to treat public breastfeeding as a crime of indecency.

B. "The Art governing Breactfeeding in Public places" draft was completed. Consulting meetings were held with experts. The draft alse consulted Relevant government departments, and consultations with women's rights committee members in the Executive Yuan, a gender impact assessment. A meeting was held in the Executive yuan to deliberate the bill in October 2009.

Section 3 Adolescent health

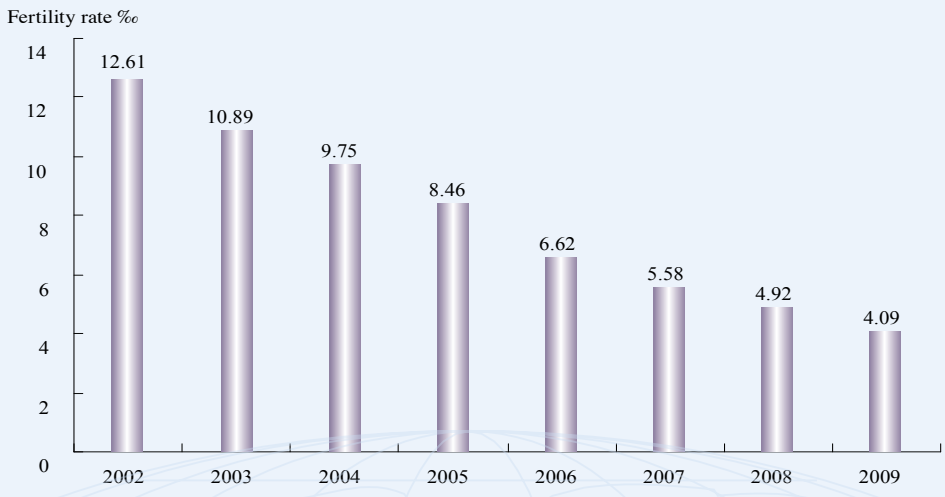
(1) Adolescent sexual health

Current Status:

A deluge of pornography has accompanied social progress and opening and adolescent sexual attitudes and behaviors have also become more open. Premature sexual activity can lead to risks of teenage pregnancy, teenagers having children, abortions, and sexually transmitted disease infections. According to a 2007 survey on the health behavior of senior high school, vocational school and junior college students, the percentage of using contraception during recent sexual intercourse was 68.9% for males and 76.5% for females. Moreover, according to surveys conducted by this office in 1995, 2000 and 2007, the incidence of sexual intercourse on campus among senior high school, vocational school and junior college students was 10.4% (1995), 13.9% (2000) and 14.7% (2007) for males and 6.7% (1995), 10.4% (2000) and 12.7% (2007) for females. These numbers clearly indicate an upward trend in sexual activity among adolescents. According to the 2009 statistics of the Ministry of the Interior, adolescent fertility rate among girls 15-19 years of age was 4.09 per thousand, which was a significant drop from 13 per thousand in 2002. (Figure 2-6). In comparison with other countries, in 2005 Taiwan's adolescent fertility rate for girls was 8.5 per thousand. Although this was less than the United States (50 per thousand), England (25 per thousand), Canada (13 per thousand), nevertheless it was higher than Japan (4 per thousand), Holland (5 per thousand), and Sweden (7 per thousand).

Premature sexual behavior may lead to unexpected pregnancies for adolescents, who are not yet financially stable, or physically and emotionally mature. Adolescents having children may influence personal development, as well as produce an adverse effect on child-raising and family structures. Thus underage pregnancy is an important health issue that cannot be ignored.

Figure 2-6 Fertility rate among adolescents aged 15 through 19 (per thousand)



Work Objectives :

The fertility rate among girls aged 15 through 19, together with adolescent contraception use, are important indicators of sexual health of adolescents. The anticipated goal is to progressively reduce the child-bearing rate among girls 15-19 years of age by 0.05‰, per year, and progressively increase the rate of contraception among adolescents by 1% per year.

Policy and results:

Subtle physiological and psychological changes take place in the transformation from adolescence into adulthood. At this juncture, it is important for qualified professionals to provide complete physical and mental health care services, including diagnosis, treatment, referrals and counseling, as a way of expressing proper concern for the health and development of adolescents, with the hope that it may lower the incidence of underage pregnancy and increase the use of contraception.

Relevant strategies and results are introduced below:

1) A plan for adolescent video counseling workshops

1. A website aimed at adolescents (http://www.young.gov.tw), provides teenagers with information about sexual health. The website has received over 362,000 visits, and has provided consulting services via email to 746 people.
2. An adolescent video consulting service via the "Teen Web- Secret Garden" webpage provides young people with counseling workshops through videos. The video service has been provided for 3,115 people. In the north, central and southern regions there have been 3 video counseling workshops, and 15,000 promotional leaflets have been sent to schools at all levels.

2) A "Plan for an Adolescent Sexual Health Promotion Station"

This is to allow young people to receive advice through the Internet blog, MSN and phone platforms with which they are familiar, so that they can then be referred to needed individual youth counseling or receive medical services when needed. The toll-free and MSN counseling has been used 336 times, and the blog has had 23,596 page visits.

3) Adolescent -friendly medical professionals/clinic planning

13 hospitals have been assisted with the setting up of a " Teen Happiness No. 9 Clinic" to provide preventive care and reproductive health services. The clinic has serviced 984 cases, and has served 702 people by phone.

(2) Prevention and control of tobacco hazards on campus

Current Status:

In 2008, the smoking rate among junior high school students was 7.8% (10.3% for males and 4.9% for females), and the rate for studentsing in 7th, 8th, and 9th grades were 5.6%, 8.5% and 9.2% respectively. There is an obvious upward trend in the smoking rate as the grade year increased. High

school smoking rate was 14.8% (male 19.6%, females 9.1%). According to the results of the Global Youth Tobacco Survey, the rate of adolescent smokers in secondary school was 7.8%, which is lower than the United States (13.0%), Singapore (9.1%), and New Zealand (17.6%). It was relatively close to that of South Korea (8.8%). Although the rate of smoking among junior high schoolers was relatively low compared to the rest of the world, in 2008 the rate of school-age smoking increased slightly in comparison to 2006. This demonstrates that the problem of adolescent smoking is still a significant one for today's young generation.

Work Objectives:

To decrease the school-age smoking rate and exposure rate to Environmental Tobacco Smoke (ETS) .

Policy and results:

1) An amendment to the Tobacco Hazards Prevention Act of January 11, 2009, stipulates creation of smoke-free campus. Important provisions are as follows:

1. Article 12: Persons under the age of eighteen shall not smoke.

2. Article 15: Smoking is completely prohibited in the following places: (1)schools at all levels up to and including high schools, children and youth welfare institutions and other places of which the main purposes are for educations or activities of children and youth; (2)indoor areas of universities and colleges, libraries, museums, art galleries, and other places where the culture or social education institutions are located;

3. Article 20: Government agencies and schools shall actively engage in educations and publicizing campaign against tobacco hazards.

2) In order to actively lower the youth smoking rate, several objectives have been formulated in conjunction with the Ministry of Education: a lowering in the student smoking rate, lowering the smoking rate among the administrative staff, and lowering the exposure rate to second-hand smoke on campus. In accordance with April 6, 2009, the Ministry of Education has asked a "tobacco control plan on campus " be implemented in schools at all levels.

Table 2-3 Historical comparison of adolescent smoking rates

Adolescent survey		Junior high school students			Senior high and vocational school students		
		2004	2006	2008	2005	2007	2009
Smoking rate	Total	6.6%	7.5%	7.8%	15.2%	14.8%	14.8%
	Male	8.5%	9.7%	10.3%	21.1%	19.3%	19.6%
	Female	4.2%	4.7%	4.9%	8.5%	9.1%	9.1%

Source: BHP "Investigation of Adolescent Smoking Behavior"
"IGlobal Youth Tobacco Surveg" conducted by Bureau of Health Promotion.

3) 4,500 copies of a six-volume, double DVD publication entitled "Youthful Vitality: Quitting Smoking Youth Education Series", were issued nationally to all levels of schools under high school level, to education bureaus (departments) and health bureaus (centers), to enhance the teaching materials associated with efforts to reduce youth smoking.

4) The "Health-Promoting School Promotion Center 2008-2009" plan was used as a platform to raise the level of health in accordance with the Ottawa Charter of 1986 in 3,868 national schools under high school level.

A health promotion plan will promote the following guiding principles in the work to control smoking on campus:

1. Build healthy public policy to control tobacco use on campus: develop a prevention and control plan in concert with the Education Ministry, and establish quantitative targets, and counseling and assessment methods.
2. Create supportive environment: perform random on-site inspections and investigations in accordance with the Tobacco Hazards Prevention Act, and use advocacy and promotional methods to encourage businesses near schools to "Refuse to Sell Tobacco Products to Children Under 18."
3. Strengthen community action: in concert with civic groups or community volunteers, monitor stores situated near campuses to make sure they do not sell to children under 18, promote civic groups' participation in district non-smoking plans, monitor retailers who sell tobacco products, and use public opinion to monitor those under 18 years of age.
4. Develop personal skills: research and develop educational materials related to tobacco hazard prevention and stopping smoking, train seed "quit smoking teachers," provide education and information to teachers and students to prevent smoking/help smokers quit, refuse to smoke and understand tobacco hazards, and refuse second-hand smoke/show smokers how to quit.
5. Reorient health services: to address the smoking of staff and students, use out-patient referrals to help people quit, and use quit-smoking hotline services as well as classes to help quit smoking.

5) Outcomes of the "Comprehensive Campus Tobacco Control" plan

In 2009, this plan was piloted at five schools: An Keng Elementary School in Taipei County, Ji Sui Junior High School, Wu Gu Junior High School, Kaohsiung Municipal Vocational High School, and Kaohsiung Municipal Chung-Cheng Vocational High School. Up-to-date teaching materials and lesson plans were integrated into the elementary and junior high school curriculums for health and physical education. It was also integrated into arts and humanities areas, high school health and nursing fields, as well as the curriculum in defense and military training. Seven major issues were covered: information about smoking, building self-respect, techniques in decision-making, managing pressure, the range of media and the law, refusal skills, and smoke-free environments, all of which increased the student's ability to say no. The results indicated that elementary and junior high school students increased both their knowledge and effectiveness in refusing tobacco products.

Chapter 3

Healthy Living

Chapter 3 | Healthy Living |

Taiwan has made significant progress in anti-smoking activities in 2009, following the implementation of new regulations of the Tobacco Hazards Prevention Act and an adjustment to increase the Tobacco Health and Welfare Surcharge. With the enactment of these new provisions, and by the mobilizing of the bureau, Taiwan is following in the global steps of tobacco control and the WHO Framework Convention on Tobacco Control recommendations and paving the way toward a smoke-free environment. Taiwan has achieved new milestones in tobacco control.

In the World Health Organization's strategy for global nutrition, physical exercise, and health, two of the most significant factors contributing to non-communicable diseases that need to be addressed are lack of physical exercise and poor nutrition. Therefore, supportive and appropriate environments for physical exercise are to be provided in government, social and workplace units to encourage people everywhere to exercise regularly and to increase overall national health.

Also, children, and especially small children, without the capacity to care for themselves, rely on the attention paid by their caregivers and on adequate safety environments. For this reason, to help primary caregivers in the home, the Bureau of Health Promotion, through county and city health department officials, has carried out inspections on household safety environments, and increased approvals of safe public areas and safe schools, to decrease the rate of accidents and injuries, and to create a safe and healthy environment.

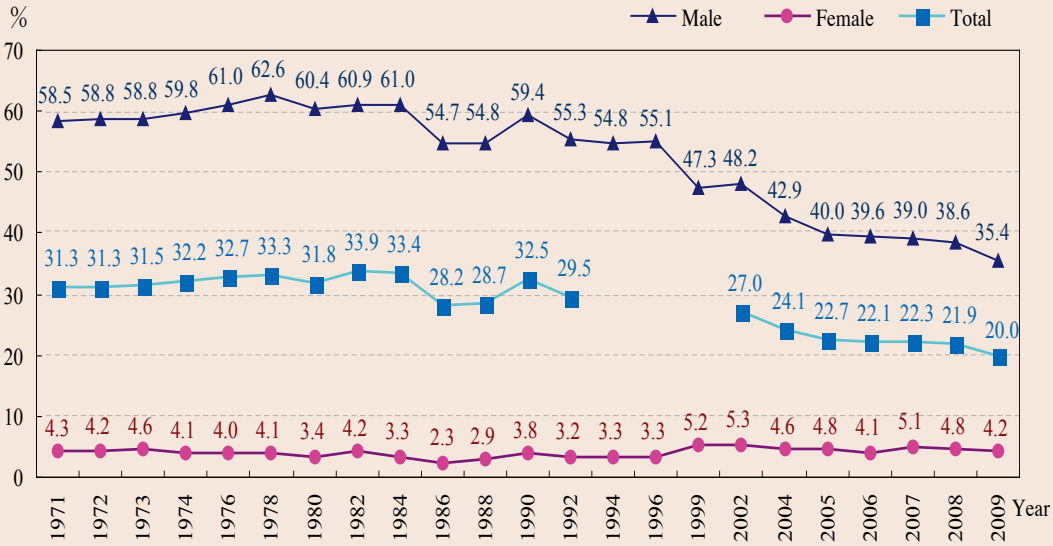
Furthermore, hearing loss, nearsightedness/lazy eye, and tooth decay are the most-encountered pediatric problems, and they can have an adverse effect upon later quality of life. For this reason BHP is promoting early screening, improving daily habits, and cultivating healthy attitudes, to prevent these three kinds of abnormalities and avoid influencing the child's whole development. This will increase the health of our citizens and guarantee a better quality of life.

Section 1 Tobacco hazards prevention and control

Current Status

Inspiration from the WHO FCTC and the advanced need among local people led the government to amend the Tobacco Hazards Prevention Act after 10 years of enforcement. Goals that officials took into account when drafting changes to the amendment included raising the health and welfare surcharge on tobacco products, enhancing tobacco control measures, expanding smoke-free locations and working to better protect youths and fetuses. After passing through three major parliamentary elections and 10 years, the amendment finally passed its third reading on June 15, 2007, and the president signed it into law on July 11 of the same year. It took effect on Jan. 11, 2009, after an 18-month buffer period for completing preparations and informing people of the new changes. The new regulations that came with implementation made 2009 a major year for the Tobacco Hazards Prevention Act-the year included a key legislative, a milestone in the country's efforts to control tobacco, and was a time in which Taiwan's tobacco regulations moved forward in step with the rest of the world.

Figure 3-1 Smoking Rates in Taiwan among Adults, from 1971



Data sources:

a. The Taiwan Tobacco and Wine Monopoly Bureau gathered the data from 1973-1996.

b. Professor Lee Lan gathered the data from 1999.

c. The data from 2002 were found in the Bureau of Health Promotion's 2002 Survey of Knowledge, Attitude, and Behavior toward Health in Taiwan.

d. The Bureau of Health Promotion gathered the data from 2004-2009 in the Adult Smoking Behavior Survey.

e. For results from 1999-2009, a smoker was defined as a person who has smoked more than 100 cigarettes (five packs) and who smoked within the past 30 days.

As of January 11, 2009, when rules of the Tobacco Hazards Prevention Act went into effect, public recognition of the rules concerning smoke-free public places was over 90%. Workplace second-hand smoke decreased from 32.1% to 16.1%. The smoking rate of adults over 18 was 35.4% for men, and 4.2% for women. After the new policy was enacted, the overall smoking rate declined by 10% (Figure 3-1). However, the rate of adolescents who smoked showed an increase with age, a trend that cannot be ignored. (For detailed data on rates of junior and senior high school students, see Chapter 2 and Chapter 3).

The main emphasis of work in 2009

1. Implementing the new regulations of the Tobacco Hazards Prevention Act and increasing the tobacco health and welfare surcharge; 2. A non-smoking supportive environment; 3. Providing many kinds of smoking-cessation services; 4. Tobacco control surveillance and research; 5. Training of staff and developing international contacts; 6. Implementing the Tobacco Hazards Prevention Act. Details are listed below.

Objectives

Reduce the rate of smokers over 18 years of age to 19.4% in 2010.

Policy implementation and results

1. Putting the Tobacco Hazards Prevention Act into practice and adjusting tobacco taxes

Eight new regulations were drawn up in the Tobacco Hazards Prevention Act that went into effect on January 11, 2009. It was a milestone in protecting the health of citizens and furthering the work of tobacco hazard control. A central part of this was the banning of smoking in indoor workplaces and in all public places. Violators could be fined a maximum of NT$10,000. This reminds people that they must comply with the new requirements, and that the law will lead to a better, smokeless environment.

The amendment to increase the health and welfare surcharge on tobacco products passed its third reading in the Legislature on Jan. 12, 2009, and the president signed it into law on Jan. 23, 2009. On June 1 of the same year, the government raised the health and welfare surcharge on each pack of cigarettes from NT$10 to NT$20, and the allocation of the tax was expanded. Originally it was used to contribute to securing the National Health Insurance plan and for central and local government programs to counter the hazardous effects of tobacco, plus health protection efforts by health departments and social welfare programs. In addition, it was used to enhance efforts to investigate and seize bootleg cigarettes, strengthen programs to guard against people trying to evade tobacco taxes, and provide guidance and care for workers involved in tobacco farming and related industries. Expanded allocation of the tax include improving cancer prevention and care, raising medical treatment standards, subsidizing areas where medical treatment was lacking, cutting medical fees, helping the economically disadvantaged people their health insurance costs and providing financial support to combat rare diseases. The purpose of expanding the use of the tax is to strengthen health care and support for the disadvantaged.

2. Supporting Tobacco-Free Environments

The objective of tobacco control and prevention is to reduce the rate of smoking, as well as the rate of exposure to second-hand smoke. A multi-faceted approach using media education and activities is being used to push this work forward, supporting smoke-free environments in community areas, restaurants, schools, workplaces, and even army units.

1) A strengthening of public information work as well as inspection and law enforcement according to the new rules of the Tobacco Hazards Prevention Act, involves a total ban on smoking in public transportation, taxis, rapid transit systems, passenger waiting areas, markets, restaurants, hotels, any workplaces over three or more people, as well as indoor public places.

2) Smoke-free environments in various types of areas:

1. Schools: 3,868 schools at all levels will become Health Initiative Schools. The Education Ministry announced a “Campus Smoking Control Plan” on April 6, 2009, to advance the work of smoking prevention on campuses. It published 4,500 copies of its “Staying Young: Handbook for Quitting Smoking” to strengthen its youth smoking initiative.

2. Communities: A 17-point plan to help stop smoking at the community level will be handled by counties and cities, with financial support provided. Tzu Chi Hospital in Taipei will use volunteers to advocate non-smoking in communities, public parks, and natural areas, and the example of people who have given up smoking will be shared with others through the Da Ai TV channel. The Dahu Township Health Bureau in Miaoli County will create an anti-smoking home support network, and promote anti-smoking concepts at home by using one of its well-known local products, strawberries, along with parent-child education.
3. Army units: The Ministry of National Defense will set its smoking prevention policy through the headquarters of each army unit. It will actively intervene in smoking-cessation treatment programs as well as tobacco hazard prevention monitoring and research. In 2009 the smoking rate among 8,405 new recruits were tracked up until their discharge in 2010, and was found to have declined from 44.2% down to 40.6%. This is one indicator of the effectiveness of the army's anti-smoking program.
4. Workplaces: Workplace self-certification has been promoted. A total of 1,031 workplaces were certified after being inspected, and on-site guidance was given for 181 workplaces, in order to create smoke-free work environments. Results of a national study of workplaces commissioned by the Department of Health revealed that the rate of employee smoking was 18.2%, down 1.8% from 2008. The rate of exposure to indoor second-hand smoking was 14%, down 12% from 2008.

3) Collaborated with the National Science and Technology Museum to design the first on-campus Tobacco Hazard Prevention exhibition, using interactive technology, called the "Non-Smoking Express," was shown in schools. In 2009, it was shown in 17 high schools and was viewed 58,851 times. A survey revealed that up to 90% of visitors were satisfied with the exhibition; the most interesting ones were found to be "How I Will Be in 10 Years", "Tobacco Hazards In the Balance: Common Sense and Saying No", and "Pig Lung Pump", all hands-on interactive exhibits.

4) Installed "Thank you for not smoking (indoors)" signs, in 3,800 strategic locations, and undertook a "Smoke-Free Places Project". This involved using short advertisements on buses, local clinics, and stores, as well as outdoor signs to spread the message about the new anti-smoking rules. Multi-media efforts were made to reach people in their daily lives, using television ads such as "Quit Smoking Hotline – Sponge Episode" (where a sponge is used to represent how much toxin a smoker's lungs absorb), and radio ad "Quit Smoking Hotline – Husband, Wife, and Girlfriend," television and newspaper/magazine reports, video screen walls in office buildings, advertisements in shopping areas, transport vehicles and other channels, have all contributed to public consciousness of tobacco hazards, and encouraged people to stop smoking.

3. Multiple quitting-smoking services

Smokers can avail themselves of the help of clinical treatment, free consultation via toll-free helpline, and smoking cessation classes, in their efforts to quit smoking. Indoor public areas and work areas, according to the law, should completely ban smoking as of 2009, not only as an motivation for people to quit, but also to provide support for those who have already done so.

1) Services at Smoking Cessation Outpatient Clinics: In 2009, 2,113 medical institutions were contracted to provide Outpatient Smoking Cessation Services. Through December 2009, there were a total of 408,062 patients who had visited the Outpatient Smoking Cessation Services. Out of this

figure, there was a volume of 186,694 total clinical visits and 70,423 people were treated in 2009. The six-month success rate was 22.5%.

2) Smoking cessation helpline: The Taiwan Smokers' Helpline(TSH) was set up in 2003. The service gives smokers a convenient, accessible outlet that is confidential. It offers professional psychological consultation with toll-free smoke cessation counseling services. Between 2003 and 2009, the service received 424,115 enquiries. In 2009 the service received 83,839 enquiries, and the six-month success rate was about 30%.

3) Community "quit smoking" classes: In 2009 there were 265 classes, and approximately 5,000 people participated.

4. Research and monitoring

Long-term smoking behavior monitoring systems have been established to review the effectiveness of tobacco prevention work. This includes a telephone survey of public school student and staff smoking behavior, investigations into the smoking behavior of students and staff in middle schools and high schools, and monitoring of nicotine, tar, and CO in tobacco products. Research was carried out in 2009 into the effectiveness of smoking cessation programs, reporting of tobacco product constituents, assessment of media campaign, monitoring of tobacco product information, and evaluation of legal effectiveness and other topics.

A "Developments in Testing and Research of Tobacco Products" study was completed on 30 kinds (180 items) of domestic and imported tobacco products. Nicotine and tar content was analyzed, and all were found to confirm to legal requirements. Market data was collected on each item in order to understand the market for tobacco products. After June 4, 2009 in accordance to, the task of reporting on the materials used in tobacco products, 65 companies completed the reporting process on 1,452 different tobacco products. In addition, these were collected in a tobacco industry materials reporting database, and were made available to the general public on a website.

5. Personnel training and international contacts

The Bureau of Health Promotion helped implement in 25 cities and counties the Tobacco Hazards Prevention Practical Exchange Workshops in response to the new amendment to the Tobacco Hazards Prevention Act. They increased the analytical ability of personnel at local health departments in regard to tobacco hazards prevention work while providing a platform for exchanges and study between representatives from different counties and cities. A total of 222 health bureau personnel have participated. In addition, there have been 7 training courses for employees charged with enforcing the law, and up to 350 inspectors and law enforcement officials have participated in the courses. 800 copies of the main points of the Tobacco Hazards Prevention Act have been distributed to county and city health bureaus. Also, a "Doctor Training Plan for Outpatient Treatment of Smoking-Cessation Patients" has been implemented, and 379 doctors have received the training and been certified. This has increased the number of physicians available for outpatient treatment of smokers trying to quit. With regard to promoting international contacts, see Chapter 7, Section 3.

6. Implementing the Tobacco Hazards Prevention Act

Many important tasks are involved in the implementation of the relevant regulations of the Tobacco Hazards Prevention and Control Act:

1) Hiring of 696 temporary personnel was carried out to assist with "conducting on-site inspection and guidance" for no-smoking signs at county and city levels, and 749,254 inspection checks were carried out. With regard to law enforcement and inspection, 652,448 sites were inspected nationally in 2009;there were 16,399 violators. 14,643 disciplinary actions were initiated, and a total of NT$27,891,749 was collected in fines.
2) A public advice and complaint hotline, "Tobacco Hazards Complaint Reporting Hotline, 0800-531-531," was set up in December of 2008 to handle reports or give advice regarding the new law. In 2009, 20,508 phone calls were received that asked for advice, and 3,011 calls were received to report offenders. All were handled by county and city health bureaus.
3) Public information work has been strengthened to increase public knowledge about the new tobacco regulations' penalties. Relevant information about the Tobacco Hazards Prevention Act has been conveyed using television ads, news special reports, radio, as well as print media (newspapers and magazines), outdoor media, the Internet and promotional items. In December 2009, a telephone survey found that up to 90 percent of the population had been reached by the anti-smoking information campaign.
4) The requirement of the new Tobacco Hazards Prevention Act for cigarette packs to include health warnings using text and images is in line with the World No Tobacco Day (May 31st). A poll about the use of warning labels on cigarette packs found that the label "Smoking leads to lung cancer and emphysema" was the most effective in warning smokers of the health risks of smoking. Up to 50% of all smokers reduced their consumption of cigarettes because of the new warning label policy. The latter was also effective in warning people of the dangers to their friends and loved ones of second-hand smoke.
5) To assess the effectiveness of the new tobacco rules, four telephone surveys were conducted as part of a "Study of the Effectiveness of Public Information Campaigns Before and After the Tobacco Hazards Prevention Act". They found that public knowledge of the tobacco ban in public transport, hotels, shops, restaurants, and workplaces with three or more people, stood at 30% in July of 2008. By December of that year, the percentage of the public that knew of this ban had risen to 80%. By March of 2009, 90% of the people surveyed knew, and by December 2009, that rate was above 90%. Public awareness of the law requiring signage, as well as that pregnant women and children should not smoke, was about 80%. A survey of the state of enforcement of the Tobacco Hazards Prevention Act also showed a 92.9% pass rate.

A 2009 telephone survey about adult smoking behavior discovered that the rate of adult smokers decreased from 21.9% in 2008 to 20% in 2009. Rates of exposure to second-hand smoke in indoor public areas went from 27.8% in 2008 to 7.8% in 2009. This shows that with the implementation of the Tobacco Hazard Prevention and Control law, there has been an obvious decrease in smoking, as well as exposure to second-hand smoke. An anti-smoking and smoking-prevention culture is already starting to take shape.

Section 2 Physical activity

Current Status

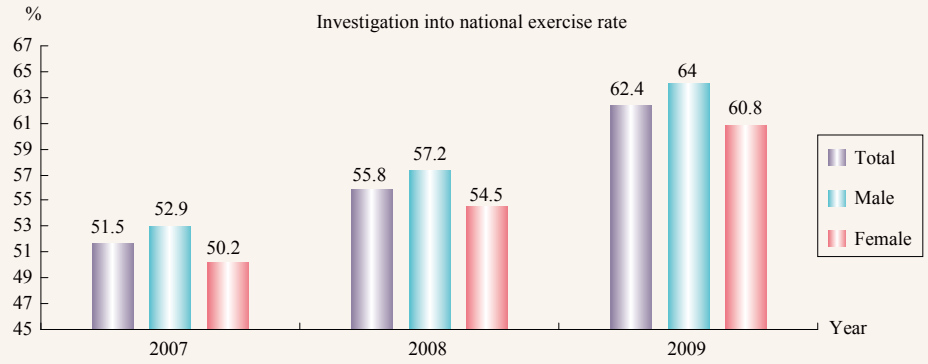
According to the World Health Organization's strategy for global nutrition, physical activity, and health, a lack of exercise and inappropriate nutrition constitute the two essential factors in non-communicable disease. Lack of exercise is a main risk factor for cardiovascular disease, cancer, and stroke. Not only does it seriously damage individual health, it also increase in national medical care expenditures and related social costs.

A 2007 "Study to Monitor Risk Factors in Health Attitudes" aimed at ROC nationals over 18 years of age indicated that the rate of subjects who had exercised in the previous week stood at 51.5%; in 2008, this rate had climbed to 55.8%, and by 2009 it stood at 62.4% (Figure 3-2). Clearly, national exercise rates are climbing. By continuing promoting physical fitness, advocating an active lifestyle, and supporting regular exercise to promote an increase in national physical health, the whole nation can reduce the incidence of chronic illness.

Objectives

To promote national physical health, in order to increase the number of people engaging in regular exercise by 0.5% anually.

Figure 3-2 Rate of ROC nationals over 18 years of age engaging in exercise



Policy implementation and results

1. Advocating concepts of an active lifestyle

1) To cooperate with the Ministry of Education, health-promoting school and healthy bodies (including physical activity and good nutrition,) were established allowing children and adolescents to study the relevant knowledge in class, as well as cultivate habits of good nutrition and exercise.

2) Advocating inclusion of "healthy walking" in everyday life. In partnership with local government, the "National Healthy Walking Day" event was held, to encourage people all over the country to improve their health by walking. In addition, the Kaohsiung National Science and Technology Museum presented "Physical Fitness Education Special Exhibition: Moving Forest" to advocate the benefits of physical activity. In all, 17,564 people have visited the exhibition.

3) Instill a culture of physical fitness by walking through centralized procurement of various media channels, including radio broadcasts, television shows and the Internet. These channels could widely advertise the concept of "Ten thousand steps a day, your health is here to stay."

2. Partner with organizations and civic groups to promote physical fitness

1) Partner with the Hope Foundation and other civic groups and enterprises to jointly advocate healthy walking activities. Subsidized a "2009 New Year's Health Walk" event, and published a pictorial book "A Wonderful Path".

2) In 2009, through the pilot plan for health promotion and a follow-up subsidy program, 56 community health promotion plans were subsidized to encourage citizens to engage in many kinds of physical fitness activities, in order to make a healthy lifestyle a reality.

3. Advocating a supportive environment for physical exercise

1) Convened a "Discussion Forum for the Evaluation of Active Community Environments," strengthened supportive environments for physical fitness, publicized community walking paths, and encouraged the use of the community facilities for physical fitness activities.

2) Advise local governments continue to hold "Office Worker Health Initiatives" and various kinds of physical activity events.

4. Promoting individual skills

This agency's website has published information on 192 community walking paths recommended by county and city health departments, providing communities with a network of healthy walking routes. It has also revised the information on the "Healthy Energy Convenient House" website, and provided information on physical activities.

Section 3 Injury Prevention

Current Status

Since 1989, the mortality rate for accidents / injuries has gradually declined, except the period of the earthquake on September 21, 1999, and the Typhoon Morakot in 2009 (rates for those were 58.9 /10^5, and 31.9 / 10^5 respectively). The long –term trend, however, is one of gradual declines, from 31.1/10^5 in 2007 declining to 30.8/10^5 in 2008 (Figure 3-3). Among the ten major causes of death for Taiwanese people, accidents and injuries rank the sixth. Since the introduction of compulsory safety helmets for motorcyclists, the vehicle accident mortality rate fell from 33.0/10^5 in 1996 to 15.0/10^5 in 2009, The 2009 figures presents moderate drop from 2008, which had 15.9/10^5.

The main causes of accidental death and injury between 1987 and 2009 were traffic accidents, accidental falls, drownings, accidental poisonings, and death by fire (Figure 3-4). When comparing the age groups of children and adolescents respectively over the last three years, age 0 and age 15-19 were the two groups with the highest rate of mortality due to accident or injury (Figure 3-5).

Obviously, children (especially infants) generally lack the capacity to avoid accidents and injuries, and so rely on the attention of their caregivers as well as the safety of their environment. For this reason, The BHP has partnered with local government and other ministries to help primary home caregivers, by undertaking home safety inspections.

Policy implementation and results

1. Laws and policies

In accordance with an amendment to the Interior Ministry's "Children and Youth Welfare Law" and to its "Children's Safety Act", safety has been promoted through inter-departmental cooperation,

Figure 3-3 Yearly mortality rate due to accident and injury in Taiwan (1985-2009)

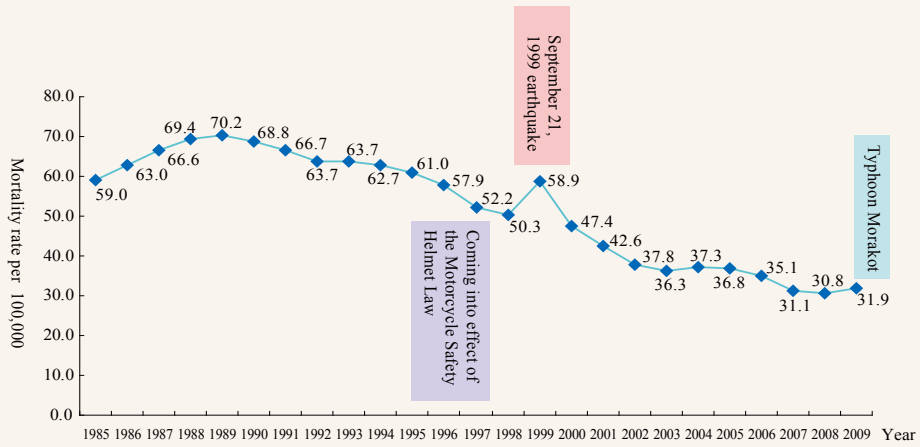


Figure 3-4 Yearly mortality rate in Taiwan according to principal causes of death (1987-2009)

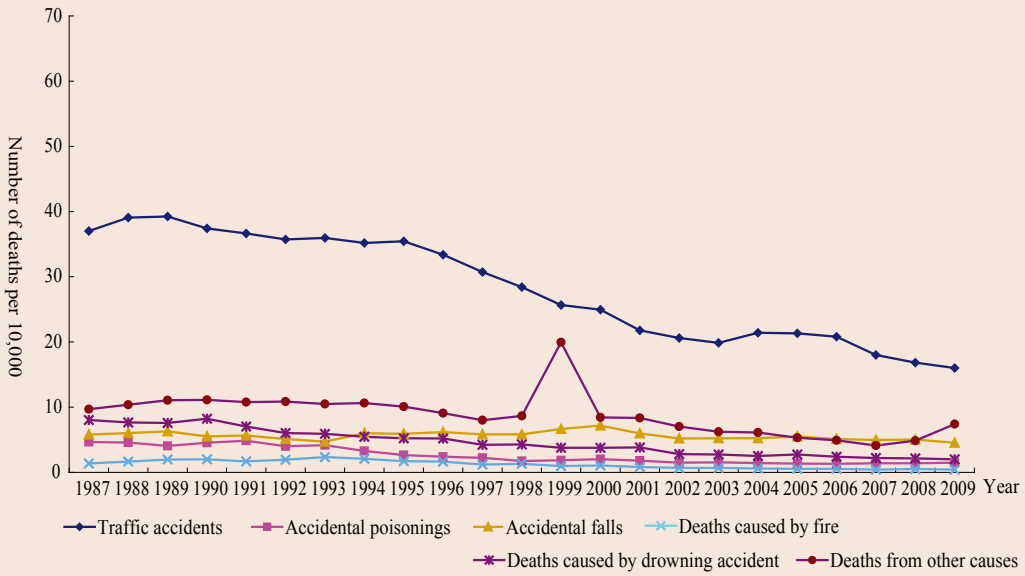
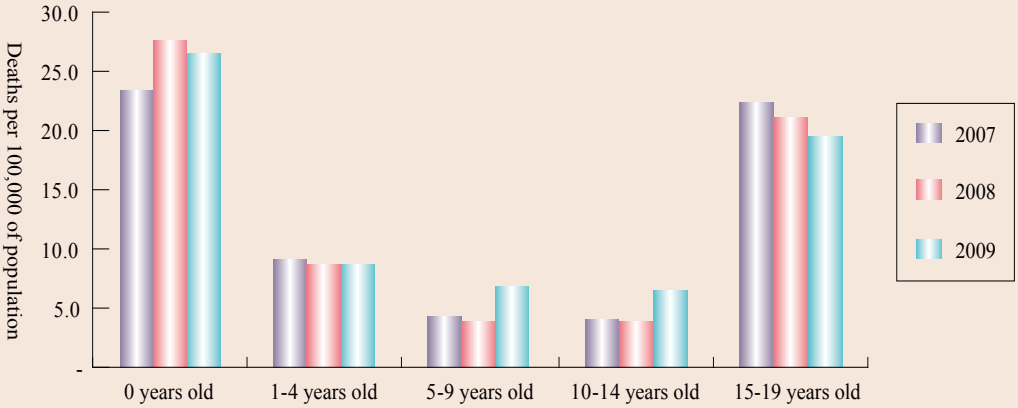


Figure 3-5 Mortality due to accident and injury among children and adolescents 0-19 years of age (2007-2009)



raising the quality of childhood education and care. In addition, the Ministry of Transportation has been asked to a promote regulations requiring cyclists to wear helmets.

2. Creating a safe home environment for children:

The county and city health departments, arranged for 14,326 household environment safety inspections, and advised on initial steps for improvement.

3. Creating a Taiwan Community Safety Network, and extending the school safety plan

In 2002, Taiwan began to follow the World Health Organization's Safe Community Program, and implemented a safe community plan. There were four internationally certified safe communities in 2005, three in 2008, four in 2009 (a total of 11 in all).

In 2006, a pilot program for school safety started and as a result, a total of 17 schools had been certified to meet international safety standards (six schools in 2007, nine schools in 2008, and two schools in 2009). With this international certification, community and school safety is enhanced, the rate of accident and injury is lowered, and both health and safety in daily life are much better.

4. Training of relevant personnel

To increase awareness among local health bureau officials of accidents and injuries, the "Accident and Injury Prevention, and Safety Promotion, Work Seminars" and "Plan for Child Safety Promotion and Mental and Physical Health Promotion for Immigrants" were implemented.12 training sessions for home-visit counselors were held to train personnel of nine county/city health departments in the use of "Complete Home Safety Checklist for Immigrants." 1,102 home visits were carried out.

5. Analysis of Monitoring

Using Health Bureau survey data for causes of death, the causes of accident and injury were analyzed. Also, a "Data Monitoring Plan for Child Accidents and Injuries for Yilan County" was commissioned to analyze the circumstances of each category of accident and injury.

Section 4 Vision health

Current Status

Myopia is a major pediatric health problem in Taiwan. A nationwide survey conducted in 2006 found that among school-aged children, although the rate of prevalence of myopia (-0.25D) has gradually declined, prevalence of high myopia (-6.0D) was still greater than other East Asian countries, Europe, and America (see Table 3-1, 3-2). Because high myopia increases the risk of development of other ophthalmological complications, childhood vision screening is crucial for early detection of impaired vision and timely treatment. On the other hand, as the national population ages and chronic diseases increase, vision problems and age-related eye diseases among the elderly are becoming increasingly important in eye medical care. Relevant policies and related healthcare measures should be established as early as possible.

Objectives

According to a 2006 study, prevalence of myopia among elementary school students stood at 19.6%, a decrease of 0.8% from the rate in 2000 of 20.4%. The rate is projected to drop by 0.15% every year between 2007 and 2010, with the target rate below 19%. Among sixth graders, myopia prevalence was 61.8%, an increase of 1.2% over the rate in 2000 of 60.6%. The rate is projected to drop by 0.5% every year between 2007 and 2010, with the target rate below 60%.

Policy implementation and results:

This Bureau has actively promoted a plan for screening pre-school-aged children for myopia and amblyopia, to enhance the work of safeguarding the health of childhood vision through early detection and treatment. Eye screenings address the needs of children in the community from four- to five-year-olds up until school age. When a screening reveals an abnormality, the case is followed up, so that the best possible care is provided within this valuable window of opportunity. In this way, childhood vision defects can be remedied and vision health maintained. The bureau has partnered with the Ministry of Education and the Ministry of the Interior's Children's Bureau in a plan to safeguard the visual health of pre-school-aged and school aged children, to lower myopia rates and to prevent high myopia arising from the very early onset of myopia. With the aim of achieving complete visual health preventive care for preschool children, the Bureau has set up and developed a public information, education, screening,

Table 3-1 Percentage of students aged 6-18 years with myopia

Grade / Year	1986 (%)	1990 (%)	1995 (%)	2000 (%)	2006 (%)
First grade	3	6.5	12.8	20.4	19.6
Sixth grade	27.5	35.2	55.8	60.6	61.8
Ninth grade	61.6	74	76.4	80.7	77.1
Twelfth grade	76.3	75.2	84.1	84.2	85.1

Table 3-2 Prevalence of myopia in different regions

Region	Age	Prevalence (%)
Europe and the USA	Entire population	2
Hong Kong（2006）	High school students	6
Singapore（2001）	College students	15
Taiwan（2006）	18-year-olds	16.8

and referral service network, through the Association of Ophthalmology, and using local administrative authorities' and community resources. Some of the strategies and outcomes are listed below.

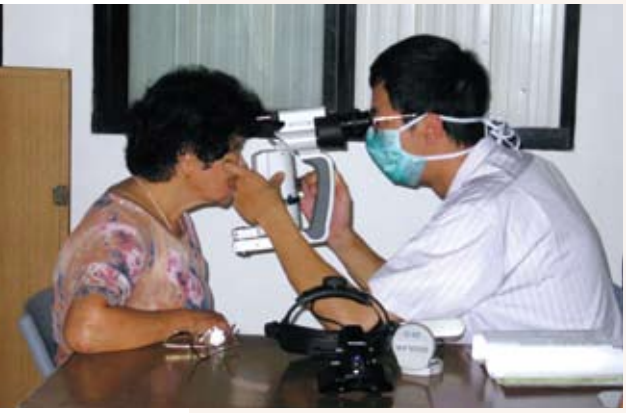
1. Eyecare services for preschool children

1) Capitalizing on the Bureau's preventive health care services for pre-school children, pediatricians and family physicians conduct tests of the children's pupils, visual fixation, eye position (checking for amblyopia using the "cover test"), random spot stereogram, and other tests.

2) For early detection and treatment of cases of visual abnormalities, in 25 counties and cities nationwide screening services for myopia and amblyopia for pre-school-aged children from 4 to 5 are provided. In 2009, 335,113 children were screened, and 45,834 abnormalities were detected. The follow-up rate for cases of visual abnormalities was over 95%.

2. To provide basic data about myopia in Taiwan, as well as provide reference material for its prevention and treatment, related research on ophthalmologic diseases was commissioned. This took the form of the studies "Evaluation of Simplified Community Screening Tools for Blindness-Causing Eye Diseases, and Recommendations for Further Progress", "Survey of Myopia and Other Eye Diseases in Students Aged 6-18", and "Discussion Myopia and Other Vision Impairments and Related Factors in Pre-School-Aged Children".

3. To provide care and treatment for people in remote or mountainous areas, nine hospitals were given funding to carry out eye care health plans in areas that lacked related medical resources. They provide vision screening for the elderly as well as screening services for eye abnormalities. To guarantee the public healthy eyes and vision, they also combine community resources with health education in schools, to promote healthy vision, care, and treatment. In 8 counties and cities, there have been 146 screenings of a total 8,045 people. Of these, 5,996 people were found to have abnormalities (mostly senior citizens over 65, and including presbyopia and other diseases). Community health events were also held: out of 85 meetings, 5,713 people participated. There were 58 on-campus myopia prevention events, drawing the participation of 10,296 people.



4. In coordination with the Ministry of Education, the Ministry of the Interior's Children's Bureau, and other departments, visual health education and fostering a supportive environment will be added to the evaluation criteria for health care institutions.

5. As the World Health Organization has designated the second Thursday of October to be "World Sight Day", the Bureau has collaborated with ophthalmology associations and public welfare groups to organize a "Take Care of Your Healthy Vision: National Eye Protection" events. Press conferences, a promotional hike with 10,000 participants and eye health seminars have been held and free eye checkups offered.

Section 5 Hearing health

Current Status

Hearing plays an important role in infant development. A hearing deficit will not only influence a child's language development, but also his or her ability to communicate with the outside world. It can also lead to later problems with intellectual abilities, socialization, and emotional development. Hearing problems can have a profound impact on these things. The first three years of life are a key developmental period, but hearing impairments at this age are difficult to detect because the child will not know how to express them, and parents frequently will not notice them either. For this reason, screening tests are an effective means of discovering infant hearing disorders. In 2007, 28.70% of hospitals in Taiwan ran infant hearing screening tests, a figure that rose to 48.26% by 2009. The coverage rate of pre-school-aged children rose from 30.3% in 2002 to 84.39% in 2009.

Policy implementation and results

1. In 2009, a "Service Plan for Initial Infant Hearing Screening Tests for Medical Treatment Facilities" was implemented. 100 medical facilities having maternity departments, but which had not yet provided infant hearing screening tests were given this service. In northern, central, and southern regions, three "Seminars on Newborn Hearing Screening Tests and Early Treatment" were given to raise awareness of the importance of newborn hearing screening tests.
2. Set up a "Treatment Follow-up Service for Screenings of Pre-School-Aged Children with Hearing and Language Impediments". In 2009, there were 164,636 children screened, a screening rate of 84.79%. All clinically verified abnormalities were followed up with treatment; the follow-up treatment rate was 98.43%. The 3,723 people who were screened for language disorders were followed up with a questionnaire, and those suspected of having speech problems were given a complete evaluation by a speech therapist. The 297 children (77.1%) diagnosed with speech articulation problems were provided counseling.
3. In 2009 a plan was put into effect to expand public awareness of early speech and hearing therapy for hearing-impaired. Partnered with the Children's Hearing Foundation, a free consultation hotline has been provided. In terms of service volume, it has provided counseling to 1,100 people per month, and its website has received 5,237 visits per month.

Section 6 Oral health

Current Status

1. The situation with regard to tooth decay

Over the years, nationwide surveys indicate that the index for decayed, missing or filled teeth (the DMFT Index) for 12-year-old children in Taiwan rose from 3.76 in 1981 to 4.95 in 1990. Based on this trend, it was estimated at that time that the index would reach 7.0 in 2000. The Department of Health in 1991 established a large budget to fund children's oral health initiatives, and this investment eventually produced results: the DMFT Index fell to 3.67 in 1996, 3.31 in 2000, and 2.58 in 2006 (Figure 3-6). But much effort is still needed to meet the WHO's goal of a DMFT Index of under 2 for 12-year-olds by 2010.

Figure 3-6 DMFT index for permanent teeth for 12-year-old children in Taiwan

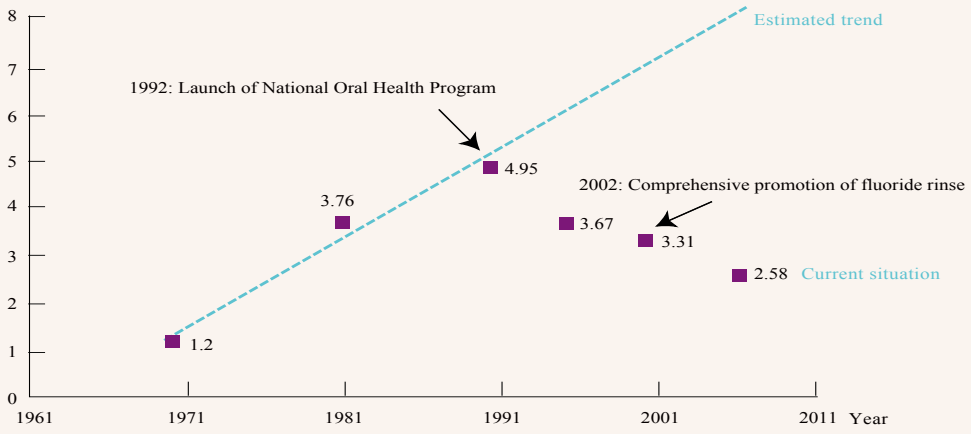


Table 3-3 DMFT index for 12-year-old children of various countries

Nationality	Age	DMFT for 12-year-old children
Taiwan	2006	2.58
United States	2004	1.19
Japan	2005	1.71
South Korea	2006	2.2
Hong Kong	2001	0.8
Singapore	2002	1.0

2. Periodontal disease

Periodontal disease is a common oral health problem in Taiwan, and serious forms of the disease can cause alveolar bone loss, loose teeth, and tooth loss and other health problems. Without timely intervention or corrective treatment, an individual can lose teeth, or suffer a loss of oral function, which can have a severe impact on the quality of life. A national survey carried out in 2008 showed that the rate for 35 to 44-year-olds with periodontitis (i.e. with a CPI of 3 to 4) was 54.22%. The prevalence of periodontitis increases with age, and it is more common among men than women. Prevalence of periodontitis in those aged 35-44 is compared with that of other countries in Table 3-4.

Table 3-4 Prevalence of periodontitis in people aged 35-44 in various countries

Nationality	Age	Prevalence (%)
China	1997	36
Hong Kong	1991	74
Japan	1992	56
Australia	1996	37
New Zealand	1989	48
Norway	1983	65
Italy	1985	48
England	1988	75
France	1989	23
Germany	1997	46
Canada	1995	73
Taiwan	2008	54

Source: WHO Oral Health Country/Area Profile Program.

Objectives

The Bureau has put various children's oral health policies in place to bring the DMFT Index for 12-year-olds down to an expected target of 2.2 in 2010.

Policy implementation and results

Since the implementation of the "Oral Health Act" in 2003, the government has actively carried out national oral health promotion work. In 2006 it implemented a "Oral health five years strategic plan" with the aim of raising awareness of oral health and lowering the incidence of oral diseases.

Below is a summary of relevant strategies and outcomes:

1. Lowering of the rate of tooth decay among children

1) Professionally applied fluoride treatment under 5 years old

The World Health Organization considers fluoride the safest, most effective, and most economical means of preventing caries. The medical literature of many countries indicates that application of fluoride gel can effectively reduce tooth decay by 28%. The Bureau actively promotes the use of fluoride in canes prevention and since July 2004, it has offered free fluoride applications to children under 5, once every six months. In 2009, 251,580 applications were given to children, a utilization rate of 15%. This is an increase of 1.8% over 2008.

2) A comprehensive fluoride mouth rinse program for elementary school children

From 2001, this program has been comprehensively promoted in 25 of Taiwan's counties and cities. In 2009, the Bureau subsidized the program, which was carried out by the Taiwan Dental Association. In all 2,658 schools and 1.6 million students participated; the child participation rate was 98.5%. All of the students in Taiwan's remote mountainous regions participated. In addition, school childrens' oral health training courses were held for dentists and training courses also for college oral hygiene teams. Through partnership with county and city dental associations, arrangements were made for dentists to visit schools to monitor the quality of the schools' implementation of children's post-meals tooth brushing, fluoride-rinsing, and oral health education.

2. Promote the operation policy of the "Committee for Oral Medicine" and "Oral Health care task for the disabled" to assist with policy formulation and implementation.

Chapter 4

Healthy Environment

Chapter 4 | Healthy Environment |

The 1986 Ottawa Charter for Health Promotion of the World Health Organization (WHO) outlined a five-point action plan that included building healthy public policies, creating supportive environments, strengthening community action, developing personal skills, and re-orienting health care service priorities. The five items in this action plan advocate several areas of action: 1) Healthy cities: integrate health promoting values and criteria into city planning to improve issues in municipal health. With inter-departmental cooperation at all levels and across regions, new public policies will be created to promote municipal and community health, and active participation in the work of health promotion. 2) Healthy communities: develop on intrasfructure network of community resources and existing health care organizations to emphasize community participation and partnerships. Community operations can solve community health problems, and help make for healthy living. 3) Healthy workplaces: Employee health can be improved when preventive measures are implemented. But in addition to that, concrete recommendations to promote workplace health can be developed with employee participation, so that they are consistent with the nature of the employee's work, and the organizational culture of the workplace. 4) Healthy schools: promote the health of children and adolescents in a comprehensive way through school health policies, building consensus between students and staff, promoting community participation, and providing health services, to create healthy schools and campuses. 5) Health-promoting medical institutions: blend health promoting values and criteria into the organizational culture and daily routines of hospitals, modifying the orientation of the principles of health care, allowing employees, patients, and their families, as well as those in the community, to participate in health promotion initiatives.

Section 1 Healthy Cities

Current Status:

The WHO's "Healthy Cities" plan, in effect since 1997, seeks to integrate the concept, values, and priorities of healthy cities into city planning, by understanding the health needs of municipal residents, to ameliorate the health problems of cities. Healthy public policies are established to promote municipal and community residents' health through inter-agency cooperation and at all levels of government, to actively participate health promotion and to improve the quality of health care.

Echoing the WHO's "Healthy Cities" concept, in 2003 the bureau began to implement Tainan Healthy City Plan. A partnership of teams of experts and local government examined the health needs of local residents, and set up a mechanism of cooperation between governmental departments, professional disciplines, and academic institutions, to formulate governmental health care policies. In 2005, Tainan became a member of the WHO Alliance for Healthy Cities in the Western Pacific Region. Its success spurred other cities to actively participate in the program, and between 2006 and 2007, the bureau commissione experts to assist Miaoli County, Hualian County, the City of Kaoshiung City, and the City of Taipei City to implement of the Healthy Cities program. Between 2007 and 2009, Healthy City targets were established on a national level, and a platform was set up for information exchange to encourage and assist counties and cities to join the Alliance for Healthy Cities in the Western Pacific Region. and further international exchanges.

Policy implementation and results

1) Promotion of Health Cities Program

Assistance and consulting services are being provided to train and encourage counties and cities in the implementation of the Healthy Cities Program. In 2009, training and consultation exchanges were provided to Hsinchu County (City), Nantou County and Yunlin County. Twelve counties (cities) were encouraged to join the Alliance for Taiwan Healthy Cities to show cosideration for the relative issues, and to promote Healthy Cities Programs.

2) Establishment of Health City Information Exchange platform

A special website was set up to collect relevant information about national and international designated Healthy Cities, and a publication, "2009 Prize-Winning Taiwan Healthy Cities, Issue 1", was issued for benchmarking. In addition, the "2009 National Healthy City Workshop and First Annual Healthy City Awards Ceremony" was held on October 1, 2 in Chiayi City(Figure 4-1). Vice President Vincent Siew was in attendance to present the award, and there were over 200 participants from county and city government, academia, and community. Two awards were given for excellence, and 24 awards were given for achievements in innovation.

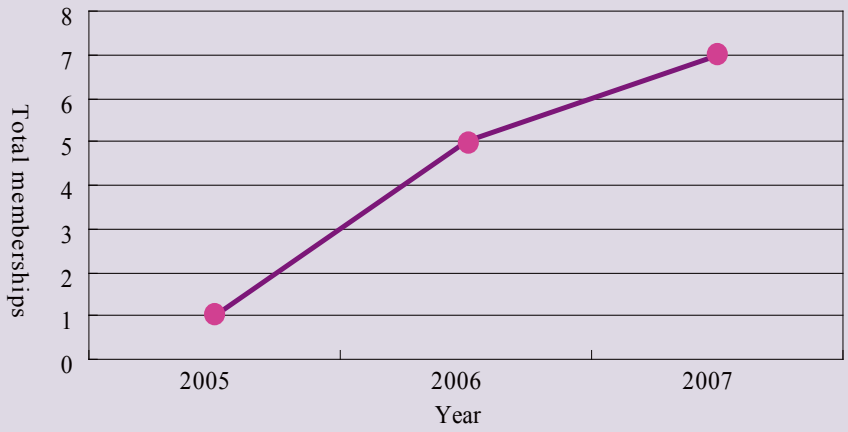
3) Enhance international Exchange

By 2009, the counties and cities that had gained permission to join the WHO Alliance for Healthy Cities (AFHC) in the Western Pacific Region in the name of a non-governmental organization, which included 3 counties, Tainan City, Miaoli County, and Hualian County; and 4 districts of Taipei City and Taipei County; Danshui Township; Ta'an District, ShihlinDa'an, Shilin District, and Beitou.

Figure 4-1 The "2009 National Healthy City Workshop and First Annual Healthy City Awards Ceremony"

Furthermore, Chiayi City, Kaosiung City, Pingtung County, Shuanghis Township in Taipei County, and Zhongshan District, Songshan District, and Wanhua District in Taipei City were guided and assited for joining the Alliance for Healthy Cities (AFHC) in the Western Pacific Region.

Figure 4-2 Annual mberships of WHO Alliance for Health Cities (AFHC) in the Western Pacific Region



Section 2 Healthy community

(1) Safe communities

Current Status:

In 1989 the WHO formed the "WHO Collaborating Centre on Community Safety Promotion" at the Karolinska Institute in Stockholm, Sweden, to assist communities around the world in formulating accident and injury prevention plans, to provide a rigorous and transparent system for assessment and certification, to publicize the concept of safe communities, and to form a worldwide "Safe Community" Network. By 2009, 176 communities around the world had gained the "Safe Community" certification.

In 2002, Taiwan complied with the WHO's criteria for safe communities, and promoted various safety initiatives that were in accordance with community characteristics and requirements. By 2005, four communities passed the certification of the Evaluation of Internal Safe Community: Neihu District in Taipei City, Tungshih Township in Taichung County, Alishan Township in Chiayi County, and Fengbin Township in Hualien County. From 2006 to 2009, Taiwan Safe Community Expansion Center was created following the international model, with Safe Community support Centers established in northern, central, southern, and eastern regions, 12 to 32 communities were assisted in promoting Safe Community Plans each year. In 2008, Zhongzheng District in Taipei City, Shihkang

Township in Taichung County, and Shoufeng Township in Hualian County received international Safe Community certification. In 2009, Zuoying District in Kaohsiung, Singang Township in Chiayi County, Dongshan Township in Yilan County, and a committee of indigenous people in association with Heping Township in Taichung County, to which guidance was given in cooperation with the Council of Indigenous Peoples, all received the international Safe Community certification. By degrees, a Taiwan Safe Community Network was being formed, with a total of 11 communities nationwide receiving the international Safe Community certification.

Work Objectives:

To increase the number of internationally certified safe communities from 2009's number of 11 to 13 in 2010, to construct safe communities and create healthy environments; establish a comprehensive safe community training system, strengthen international contacts, increase the effectiveness of safe communities, and decrease the incidence of accidents and injuries.

Policy implementation and results:

1) Developed communities on a foundation that has been demonstrably effective throughout the world, and that is based on concepts of health and safety

1. In adopting health and safety promotion strategies that have been used internationally, organizations and promotional frameworks are set up based on communities and their needs. Promoted diversified initiatives for accident and injury prevention and safety promotion.
2. Integration with other health promotion initiatives was gradually developed. For example, the Fengbin Safe Community pushed for drug safety for elderly while working with hospital health advocacy groups. The community safety program was included in Hualien's Healthy City development plan. The Tungshih Safe Community promoted school safety by helping the local elementary school past the international Safe School certification.
3. Implementation of the health promotion initiatives which consists of both the bottom-up autonomy of community residents, and the top-bottom investment and advocacy by government departments.
4. Resources were pooled for effective use in supporting government policies by a cooperative institutional matrix that combined government ministries and different disciplines.
5. Support also comes from academic institutions, such as the Taiwanese Injury Prevention and Safety Promotion Association, and Tzu Chi University.

2) Current development proposals

Currently, issues prioritized by this bureau include inspection of playground facilities; environmental safety in shopping malls; residential safety monitoring; road safety advocacy (including an anti-drunk driving initiative, and advocacy of the wearing of safety helmets, as well as of road improvements); agricultural safety (safe use of pesticides, agricultural tools and machinery); safety on school campus; constructing safe water recreational areas and working to prevent drowning accidents; inspecting electrical safety in private residences; safety initiatives for the elderly (including telephone

hotline for the elderly who are alone and frail, and providing for fall-prevention); monitoring for carbon monoxide poisoning; recreational travel and recreation safety promotion; and prevention of heat exhaustion, and others.

3) Representative successes of community advocacy in 2009

1. The Zuoying Safe Community

To cope with the crowds and high traffic in the vicinity of a three-track train station, the Bureau partnered with a large hospital in the community to identify, through monitoring and analysis, danger zones in the streets, to improve road safety in the community. Moreover, since this community was in transition from an agricultural area to a residential area, the population structure is also changing. Both the elderly and the very young are remaining at home, consequently community volunteers and college students from the community are carrying out safety checks in residential and community living environments.

2. Chiayi County, Singang Township

Promoted a word-of-mouth campaign to prevent heat exhaustion health hazards, in associate with the Fu Yuan Service Association, families in the community, agricultural cooperatives and older citizens' associations. In addition, to provide an opportunity for recreational exercise, as well as to educate about prevention of falls, held weekly dances with dancers from the Cloud Gate Dance Foundation as well as educators from the community. Driving test preparatory classes for new residents were also held to help them understand Taiwan's traffic safety regulations. Through educational events, to help them adjust to the culture and social life of the Taiwanese and also help to ease psychological pressures as well.

3. Yilan County, Dongshan Township

In 2004, the Health Center launched a Community Safety Plan. The programs it advocated focus issues were: home safety, safety issues connected with vacations and stays away from home, campus safety, farm safety, and traffic safety. Handrails were installed in bathrooms for older citizens in the community, and the effectiveness of this latter measure in preventing falls has been evident. The rate of falls in bathrooms decreased from 33.86% to 25.12% when the program was put into effect of installing handrails and in the bathrooms of elderly and this prompted Yilan County Government to install such handrails in the bathrooms of elderly living alone and low-income elderly people in twelve townships.

4. Taichung County, Heping Township

In 2007, the Executive Yuan Council of Indigenous Peoples began to give financial support to the Health Promotion Association of Heping Township, which partnered with business leaders to install reminder alarms in hot springs areas, to alert citizens not to stay too long in the hot springs and to get out and move around regularly, to prevent people feeling unwell because of the heat and to avoid cardiac incidents as well. Also, hot springs with relatively lower temperatures were provided to people with disabilities or the very old, to prevent accidents associated with bathing.

(2) Health Promotion Community

Current Status:

To promote greater concern for community health among the public in line with the WHO's Healthy Cities concept, the DOH launched a "Community Health Building Program" in 1999 which aimed to integrate the existing health care system with NGO resources to create a diversified infrastructural network that stressed community participation and the building of partnerships, Working through communities, the program sought to combine the public's traditional passive acceptance of directives from above with active bottom-up participation by community residents in order to solve community health problems and promote healthy living.

In 2002, BHP began assisting "community Health Building Program" units in promoting healthy living in the hope of improving community health problems. In May 2003, the Executive Yuan launched the "Challenge 2008: Nation Development Plan," which listed the "Community Healthy Life Program" as one of its top priorities. In 2008, to encourage communities to continue health-building activities, BHP drafted "Health Promotion Community Certification Standards" and set in motion a "Health Promotion Community Certification Trial Project," both of which were consistent with the vision of sustainable development.

Policy implementation and results:

1) In 2009, the Bureau subsidized 34 communities in 20 counties and cities to take part in the "Trial Plan for Certification of Health Promotion Community". In all, 186 restaurants, 1,184 community associations, 120 schools, and 39,189 families collectively took part in the "Excercising is Living" and "Healthy Diet" programs. In addition, 96 new walking paths were constructed and 245 exercise and activity spaces were planned to create a supportive environment for the project. In all, 161,645 person-times participated in 1,721 health promotion activities. By the end of 2009, 48 communities had received the "Health Promotion Community certification".

2) In 2009, 22 subsidized community units from 15 counties and cities received the "Health Promotion Community certification" took part in "Health Promotion Community Incentive Grants Program". The promotion of the "5 Veggies and Fruits a Day" and "Excercising is Living" activities were continuously promoted, as well as initiatives for cervical cancer and breast cancer prevention. In all, 374 organizations participated in promoting the "5 Veggies and Fruits a Day" program, and 411 community organizations promoted the "Excercising is Living" program. 245 community groups joined to promote prevention of cervical and breast cancers. A total of 2,709 volunteers were trained, and 212,172 people participated in community health program activities.

3) A community-based "Community Intergration Plan" for 99 communities in 22 counties and cities was impemented to promote "Smoke-free communities". "Betel quid-free communities" and "safe community". The results are as follows.

1. In conjunction with 149 community organizations, smoke-free environments were promoted, including creating 578 smoke-free families, 271 smoke-free stores, 8 smoke-free restaurants, and 38 smoke-free campus, along with 48 smoke-free workplaces.

2. Set up 27 classes to help people betel nut consumption. 269 people participated in the classes, and 114 people quit completely. The quit rate was 42.3%. It also helped 39,925 people to receive oral cancer screening, and 1,186 people were suspected positive cases, which were then referred for early treatment.
3. Partnered with 730 community organizations to create safe communities, with safety initiatives for private residences, roads, and parks, increasing safety in the daily lives of citizens. In all, 154 sites deemed environmentally unsafe were improved (such as road safety improvements, etc).
4. The health bureaus of the three counties of Miaoli, Yilan, and Yunlin were given grants to put in place a "Community LOHAS Project, Move more and Eat Healthier. For this project, six nutritionists and four fitness professionals were hire to provide interventions of nutrition instruction for 3,254 people, and do physical activities interventions for 1,525 people. A total of 8,655 associations and 153 medical facilities jointly promoted the "5 Veggies and Fruits a Day" and "Excercising is Living" programs. Also, they participated in surveys to evaluate the changing community environment, and prepared activity maps, provided consulting to community organizations and business leaders within their jurisdiction, and provided counseling in diet and exercise. In all, 44,297 people participated in these health-promotion activities.
5. To develop manpower for health promotion communities, the "2009 Health Promotion Community Achievement Releasing Meeting" praised 25 outstanding "Health-Promoting Community Certification" communities, 3 "Smoke-Free Communities", 19 "Betel quid-Free Communities", 6 "Safe Communities", and 34 outstanding workplaces. It drawed approximately 370 participants from communities, industries, and the local health bureaus attended the Achievement meeting. The can learn from eavh other through the experience and promotion stategies shared by counties and cities.

(3) Follow-up of health hazards

Current Status:

The Executive Yuan's National Council for Sustainable Development set up the "Health and Welfare Working Group", convened by the Department of Health with this Bureau acting as intermediary. In 2009, meeting were held and in coordination with the Council, completed Policy Program Ordinance and a new version of the "Sustainable Development Standard System".

Policy implementation and results:

1) The Tainan CPDC Anshun Plant Industrial Pollution Incident

This Bureau continued to assist the Tainan City Government in its plan for handling the health issues of residents living near the China Petrochemical Development Corporation's Anshun Plant. In accordance with the division of work set out by the China Petrochemical Development Corporation Anshun Plant Contaminated Site Task Force, the Department of Health (DOH) is responsible for the

two tasks of carrying out health assessments of residents, and assisting them in obtaining health care. DOH also participates in relevant meetings of the "Consultative Task Force for Medical Treatment Related to the China Petrochemical Development Corporation Anshun Plant Contamination" convened by the Tainan municipal government, providing professional advice. DOH provides professional advice and counseling to the Ministry of Economic Affairs regarding the claims by a group seeking compensation for employees of the Anshun Plant who were exposed to contaminants.

2) A task force on nuclear power plants and the health of nearby residents was formed by this Bureau

The Atomic Energy Committee and the Taipei Provincial Government, made up of recommended academic experts. It held discussions concerning the completeness of the radiological medical facilities of the Jinshan Hospital, located near a nuclear power plant, as well as health checkups for residents of the Beihai Four Townships. This used for the basis of the residential health policy drawn up by Taipei County. Experts were also sent to take part in an Oversight Committee for Environmental Impact Assessment Review of Nuclear Power-Related Projects, to assess the environmental impact of nuclear power plants. They provided professional advices concerning nuclear power plant environmental impact assessment documents, as well as the future implementation of operational management plans.

3) Electromagnetic fields: Health risk assessments and management

To enable the public to gain an accurate understanding of exposure to non-ionizing radiation and to evaluate its safety, the WHO launched the "International EMF Project" in 1996, in which more than 54 countries and eight international organizations participated. This Bureau continues to gather reports and recommendations issued by the WHO, the EU and other advanced nations on risk of electromagnetic fields as reference for policy-making and health risk communications. This Bureau also collaborated with relevant ministries and departments to strengthen communication with the public on the health risks of electromagnetic fields. For example:

1. Planned domestic studies on the health risks of electromagnetic fields. An "Epidemiological Study of the Health Effects of Electromagnetic Field" was included in the National Science Council's 2009-2013 National Networked Communication Program. In 2009, planned the following studies: "Electromagnetic Field (Wave) Exposure and Pediatric Epidemiology"; "Pilot Study of Sampling and Measurement Methods for Human Exposure to Electromagnetic Fields (Waves)"; "Protesting the Building of Base Stations and Electromagnetic Fields (Waves): Establishing and Assessing Modes of Communication".
2. Commissioned Yang Ming University to collect and report on the most recent international research on the health risks posed by electromagnetic radiation, and held community communication activities on the topic in Taipei, Taichung, and Chiayi. Educations for health personnel were also held in Hsinchu, Tainan, and Hualian Counties.
3. With the help of the Environmental Protection Administration, the National Communications Commission, the Taiwan Power Company, and inter-agency resources and funding, a thirty-minute DVD was produced, entitled "Understanding Electromagnetic Fields".

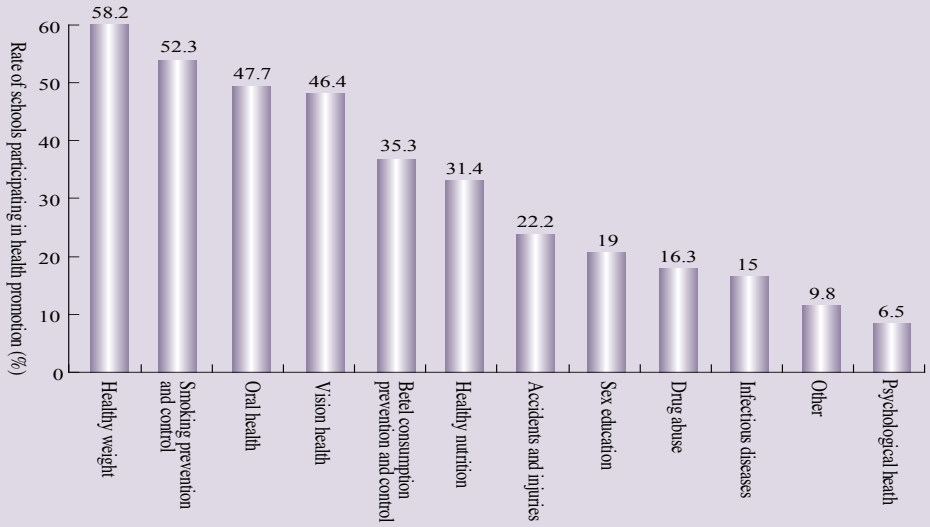
Section 3 Health Promoting Schools

Current Status:

The WHO's definition of a healthy school is one in which a "A school that is constantly strenthening its capacity as a healthy setting for living, learning and working." The United States, United Kingdom, New Zealand, Hong Kong, and Singapore have all actively promoted the project of Bureau of Health Promotion adheres to the concept of the World Health Organization and is working together with the Ministry of Education to promote a healthy promoting schools plan, to create campuses that are supportive of healthy lifestyles. This is proceeding according to six categories defined by the WHO: school health policies; school Physical environmental; school social environment; community relationship personal health skills and health services. The overall health of children and young adults is being advanced through setting school health policy, building cooperation between students and staff, promoting community participation, providing health services, and building a healthy campus environment. By the end of 2009, 3,868 junior high and high schools throughout the country adopted campus non-smoking rules, as well as addressed health-related issues of myopia, oral health, and health weight control.

Smoking prevention and control, oral health protection, vision care, and a healthy weight are four of the issues that are continually addressed in the school health promotion plan. The results of a 2001-2002 NAHSIT Nutrition and Health Survey in Taiwan among Taiwanese elementary school students aged 6-12 showed that the rate of overweight children was 15%, and that for obese children was 12%. In other words, one out of every four children had a body mass in the category of overweight or obese. A 2006 survey of school children by the Ministry of Education discovered that obesity rates rose with the grade level. For data concerning smoking behavior, oral health, and visual health, see the data in Chapter 3.

Figure 4-3 Statistics for various health issues promoted by schools



Health issues Source: this Bureau's "2008-2009 Plan for a Healthy Schools Promotion Center", (N:154.response from benchmark school questionnaire survey)

Policy implementation and results:

1) Advocating healthy schools with the Ministry of Education, through inter-departmental integration of resources

This Bureau and the Ministry of Education combined its inter-departmental resources to introduce the Health promoting Schools program. Participation in this program grew from 318 schools in 2005 to 773 schools in 2007. In 2009, there was comprehensive participation of 3,868 schools, ranging from elemental, high schools and middle schools to vocational schools.

2) Strategies and issues within healthy schools

The focus of work in 2009 was in increasing the effectiveness of training teams in all counties and cities, developing the work methods of the training teams, and helping each school's health promotion initiatives in the areas of childhood obesity, smoking prevention, oral health, vision health, and prevention of betel nut chewing (see figure 4-3 for statistics on the health issues promoted by schools).

3) Health Promoting Schools: advocacy results

Throughout 2005, a support system was gradually put in place, and the "Healthy Schools Promotion Center" was established, a one-stop resource center providing continuous support and service to city/county governments, and schools at all levels, to ensure the long-term implementation of the Health Promoting Schools Program. The main tasks and achievements as of 2009 were as follows:

1. Enhance the Healthy Schools Promotion Center's functions as a one-stop resource

A. Provided guidance to counties and cities to establish counseling teams, and develop a localized counseling system. Hired 98 academic specialists, with two to three specialists for each county and city providing guidance to local counseling teams. 1,059 counseling sessions were completed.

B. Arrange for training of relevant personnel, including one training course for central and local counselors in consensus building; four training classes for school principals, teachers, school nurses; and a total of seven courses for Education Ministry (Bureau) personnel in "District Strategy Workshops Advocating Healthy Schools". Two sessions were at model certified-excellent schools. An academic conference on Healthy Promoting Schools was also held in 2009.

C. The Health Promoting Schools website was expanded, and monthly site visits now average 14,490. Satisfaction with the counseling network among county, city, and school personnel is rated at 82%.

D. Development of teaching materials and lesson plans: a suite of teaching materials called "Smoking Prevention Toolkit", a case handbook for health-promotion activities; an anti-youth smoking textbook, and a four-part series on quitting betel nuts. In all, 12,855 copies were distributed.

E. Developed new health teaching materials: "Touching Love and Life: Emotional Stories of Health-Promoting Schools", collecting the relevant experience of 25 county and city health-promoting schools,with 52 stories.

F. Selected five representative schools to integrate a smoking education unit into its curriculum, and demonstrated an increase in anti-smoking attitudes among students, as well as an increase in a feeling of self-assertion and the smoking rate decreased as well. In addition, 1,000 copies of the "Smoking Prevention Toolkit" DVD were made, and a 6,628 copies of a family reader for smoking prevention was in use in classrooms at all levels.

Section 4 Health Promoting Workplaces

Current Status:

Most people spend at least one third of their day time at work, which highlights the importance of health promotion in the workplaces. In recent years, as Taiwan's workplaces face a rapid industrial transformation and diversity in employment patterns, it is necessary to adjust the health emphasis in workplaces. In promoting healthy workplaces, three major aims are occupational disease prevention, protection of safety and health of workers and health promotion. Another emphasis involves developing special workplace health promotion issues through employee participation in conjunction with workplace guidelines and organizational cultures to establish healthy workplace environments and improve employees' health.

Policy implementation and results:

1) Health promotion and tobacco hazard prevention in workplaces

The Bureau commissioned the establishment of three Centers for Workplace Health Promotion seperately in northern, central and southern Taiwan in order to help establish healthy workplaces with on-site counseling, providing workplace-related consultation, health education, and training services. In 2007, the "Self-Certification of Healthy Workplaces" program was launched, and the standards were established. In 2009, an additional item was incorporated in the accreditation criteria on the implementation of a smoking ban in indoor workplaces with three or more employees, to reflect the newly amended Tobacco Hazards Prevention Act. Ceremonies to award outstanding healthy workplaces were organized to encourage smoke-free working environments and health promotion.

1. This Bureau collaborated with professional consultation teams to offer on-site guidance to 181 companies and seven occupational or industrial unions on active advocating workplace health promotion and tobacco hazard prevention.
2. The Healthy Workplace Self-Certification program was actively promoted in 2009 with a total of 1,703 workplaces were certified (a 44.7% increase compared to the 1,177 approved in 2008). The majority of these were in the service industry with 352 businesses (20.67%), and manufacturing, with 258 ones (15.15%). Among these, 141 businesses (8%) were large enterprises with over 300 employees, and the other 1,562 (92%) were small and medium-sized ones with fewer than 300 employees. Also, 32 companies were recognized as outstanding healthy workplaces (Figure 4-4).
3. A nationwide survey on healthy workplace environments revealed that the smoking rate for employees in workplaces in 2009 was 18.2%, 1.8% lower than in 2008. The rate of exposure to second-hand smoking in workplaces was 14%, a 12% decline from 2008. The yearly results of an occupational smoking survey is given in Figure 4-5.

2) Promoting physical checkups for labor

At their annual meeting in 2008, the Department of Health and the Council of Labor Affairs amended Article 15 of the "Regulations on Designating Health Care Institutions for Physical Examinations of Labor", so that medical staff from designated medical institutions are required to receive training in occupational medicine, occupational health nursing, and occupational safety and

Figure 4-4 Distribution of healthy workplaces by sector in 2009

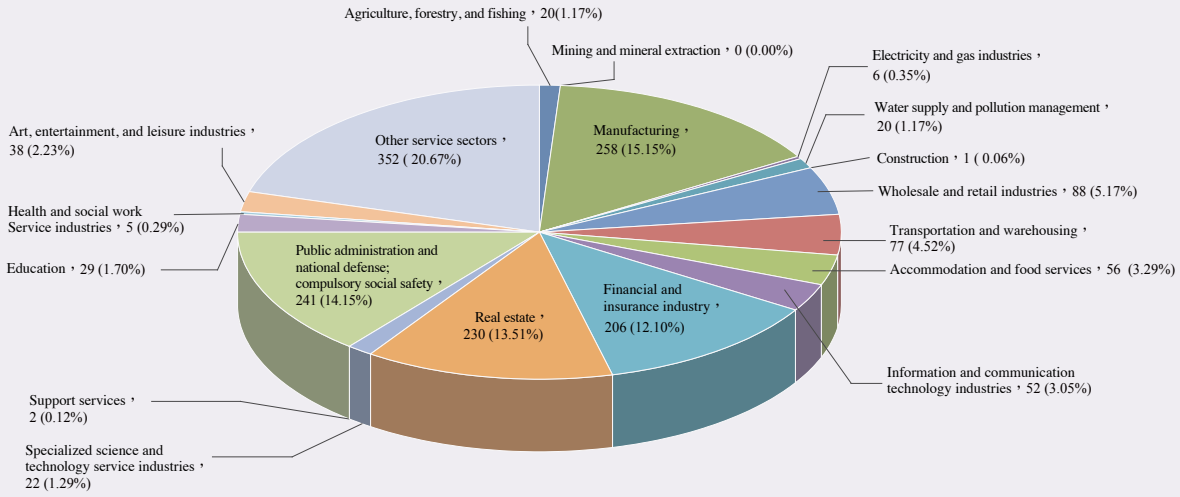
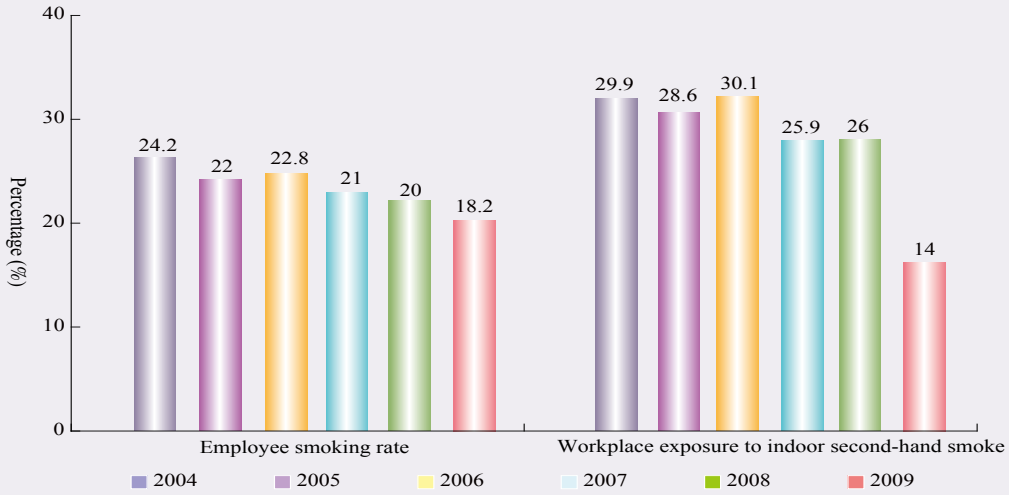


Figure 4-5 Yearly results of tobacco hazard surveys



health stipulated by central government departments and health agencies The new law authorized labor or health agencies at all levels to organize relevant training. To ensure that the training standards and results are consistent, this Bureau organized two core teaching programs in 2008: an occupational medicine course for physicians, consisting of 14 classes with 28 training hours; and another occupational health nursing course consisting of 10 classes with 19 hours of core training. In 2009, a core curriculum for training doctors in occupational medicine was developed, available on this office's website and provided for the reference of the Council of Labor Affairs, 25 county and city health departments.

Section 5 Health Promoting Hospitals

Current Status:

1) International

The 1986 Ottawa Charter for Health Promotion presented five strategies for promoting public health. These were: establishing a healthy public policy, creating supportive environments, strengthening community action, developing personal skills, and adjusting the orientation of health services. However, "adjusting the orientation of health services" is an important foundation on which to develop health promoting hospitals in the future. The concept of a health promoting hospital is concern about health promotion, its values and norms, and integrates them into the hospital's organizational culture and routine work, so that all hospital employees, their dependents, as well as patients, patients' family members, and members of the community at large participate in the same goal of health promotion.

In 1988, the WHO in Europe launched a "Healthy Hospitals Initiative", selecting the Rudolfstiftung Hospital in Vienna as a representative model hospital to enact its plan to adjust the direction of hospital services. It played the role of health-promoting advocate in the community, and brought the effective change. In 1990, an international network of health promoting hospitals was established; in 1991, the "Declaration of Budapest on Health Promoting Hospitals" was announced, advocating 17 themes and objectives for international network hospitals to comply with. In 1997, the "Vienna Health Promoting Hospital Proposal" put forward six fundamental principles for health promoting hospitals, and four major strategies for implementation.

The international network of health promoting hospitals published annual in 2006, "Implementing health promotion in hospitals: Manual and self-assessment forms", which included five standards, and 24 sub-stardards, as well as 40 measurable items, and 18 performance indicators, to help in the performance assessment of health promoting hospitals. It provides hospitals with a means of self-assessing their health-promotion structures, systems, processes, and the quality of their results. It can be a basis for planning, implementation, as well as continuous improvement.

By December 2009, there were 38 countries, 36 national or regional networks, and 760 hospitals participating in the WHO's International Health Promoting Hospital Network. Its members are spread throughout Europe, America, Asia, Africa and Oceania.

2) Domestic

In 2002, Taipei City took the lead in setting accreditation standards for healthy hospitals. "Healthy Hospitals Accreditation" was enacted by all of the public and private hospitals in the entire city, and included all of the relevant criteria in the items for evaluation. In the same year, the Bureau commissioned preliminary research for the establishment of health promoting hospitals, using certain general hospitals as test cases. It collaborated with hospitals to create a plan for promoting health in the workplace. In addition, it advocated health promoting policies within hospitals for community health initiatives, working together to provide diabetes care, outpatient smoking cessation services,

and “mother- baby friendly” hospitals. Taipei Municipal Wanfang Hospital, began its health promoting hospital program in 2002, and in 2005, it became the first hospital in Asia which qualified for the international Health Promoting Hospital network.

In 2005, the Bureau integrated research into health promoting hospitals with its science and technology research plan. In 2006, the bureau commissioned academics to assist with four hospitals, which successively obtained international Health Promoting Hospital certification.

On November 26, 2006, Dr. Shu-Ti Chiou, Assistant Professor of Yang Ming University, applied through the WHO’s health promoting hospital network to establish a Taiwan health promoting hospital network. A cooperative agreement was signed between the WHO-CC Secretariat, and this network which was the first network member in Asia. It had equal ranking with national members and had the same rights, duties, and voting rights. It was authorized to carry out health education and promotion in Taiwan, and handle arrangements for participation into the international network. In 2007 the Taiwan society of Health Promoting Hospital was founded.

In 2008, the coordinator of Taiwan’s network was selected by the WHO’s international health promoting hospital network to join its goverance board, which was a part of decision-making core. In the meantime Dr. Chiou was taking a great responsibility for expansion of this program in the Asian region.

Policy implementation and results:

1) Participated in WHO’s international network of health promoting hospitals

1. Bureau director-general Chiou Shu-ti has actively participated in the activities of the international network. She actively participates in the annual Health Promoting Hospitals general meeting, the Governance Board of the international network, and maintained Taiwan’s position in the decision-making core of the international network; participates as a lecturer in WHO Schools; has served in various committees responsible for standards at Health Promoting Hospitals, their staff and workplaces, at the Non-Smoking Alliance, and academic journals. She has taken on assignments delegated by the international network, and is responsible for the new “Health-Promoting Hospitals, Climate Change, and the Environment” task force.
2. In May 2009, while Dr. Shu-Ti Chiou still working at Yang Ming University, she successfully applied the General Assembly for Taiwan’s hosting of the 20th International Conference on Health-Promoting Hospitals in 2012. This is the first conference held outside of Europe.

2) Continuous training to national hospitals in participating in the WHO’s International Network of Health Promoting Hospitals

1. In January 2010, there were 61 hospitals in Taiwan that had received WHO certification, the fourth country among International Network members in number of hospitals (Table 4-1). It was also the fastest-growing network in the world.
2. Illustration of Taiwan member grew in HPH Network(see Figure 4-6), and the distribution of Taiwan members. (Table 4-2)

3. Taiwan actively participated in submitting conference articles to the International Health-Promoting Hospital Network annual conference, with the second highest submission rate in the world (Table 4-3).

3) Collaborated with the Secretariat of the WHO's International Network of Health Promoting Hospitals in its "2009 WHO Winter School"

The WHO-HPH Winter School 2009 was successfully held in Taipei, Taiwan on Dec. 8-10, 2009.(Figure4-7,4-8) It was arranged jointly between the HPH Network of Taiwan and the WHO Collaborating Centre for Evidence-Based Health Promotion in Hospitals & Health Services. The

Table 4-1 Hospital Member of International Network

	Country/region	Number of hospitals		Country/region	Number of hospitals
1	Germany	79	9	Estonia	21
2	Ireland	74	10	Canada Montreal	17
3	Italy Lombardia	69	10	Finland	17
4	Taiwan	61	10	Italy E-Romagna	17
5	Switzerland	36	10	Spain	17
6	Sweden	35	14	Greece	16
7	Poland	30	15	Tuscany	15
8	Austria	22	15	France	15

Source: Secretariat of the WHO-CC HPH (http://www.wh-cc.dk/)

Table 4-2 Taiwan member of Health Promoting Hospital Network

County or city	No	County or city	No	County or city	No
Keelung City	1	Taichung County	4	Kaohsiung City	4
Taipei City	13	Changhua County	2	Kaohsiung County	1
Taipei County	9	Nantou County	1	Pingdong County	2
Taoyuan County	3	Yunlin County	4	Yilan County	1
Hsinchu County	1	Chiayi City	3	Hualian County	1
Miaoli County	2	Chiayi County	2	Taidong County	1
Taidong City	3	Tainan County	2	Penghu County	1

Figure 4-6 Growth of Health Promoting Hospitals in Taiwan

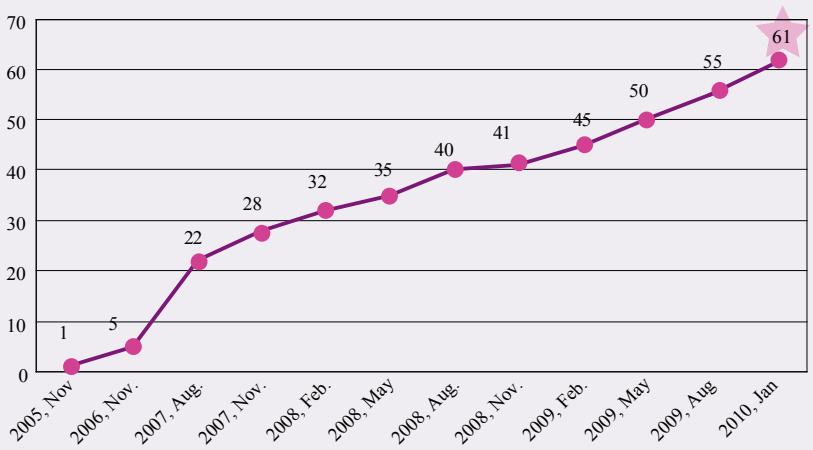


Table 4-3 Participation in international HPH conferences

Year/place	conference			WHO School	Number of Taiwanese participants
	General Assembly speech	Oral presentations	Poster papers		
2007 / 04 / 11 Hungary, Vienna	0	2	6	Number of participants 9 (45.0%)	11
2008 / 05 / 14 Berlin, Germany	0	8 (8.8%) Chairman: 1	19 (14%)	Number of participants 14 (35.9%) ; Lecture: 1	24
2009 / 05 / 06 Crete, Greece	1	15 (13.8%) Chairman: 1	38 (17.3%) No. 2 best poster voted by members of the General Assembly	Number of participants 5 (25.0%) ; Lecture: 1	34

WHO-HPH School was the first of its kind in Asia, and it drew in attendance from more than 270 participants and 64 participants at the workshop event. Ahead of the WHO-HPH School, a great effort had been made by the local organizers to draw in participants from neighboring Asian countries, so among the participants, 32 representatives came from Korea, Japan, Singapore and Thailand. From within Taiwan, at least 81 Taiwan hospitals joined the conference event. The speakers at the event included Professor Hanne Tønnesen, the Director of WHO-CC for Evidence-Based Health Promotion in Hospital & Health Services, Jeff Svane, Technical Officer of WHO-CC, Professor Carlo Favaretti,

Coordinator of the Italian HPH Regional Network, and Consultant Mr. Tune Hein from Strategic Management and Organizational Development. The theme topics included development of HPH strategies, hospital organizational change, quality management and evidence-based health care. In the roundtable discussions, efforts were made for Taiwan to establish a WHO Collaborating Centre for Quality Management of Health Promotion in Hospitals.

Figure 4-7 「2009 WHO Winter School」 press conference

From left; Dr Hui-Ting Huang, (President, society of General Director of Taiwan Health Promoting Hospitals); Dr. Hanne Tonnesen (Secretary General of the International Health; Promoting Hospitals Secretariat) Dr Shu-Ti Chiou (Director Gerenal of Burean of Health Promotion, Taiwan Coordinator); Mr. Jeff Svane (Technical officer of the International Health Promoting Hospitals Secretariat.)

Figure 4-8 Article in the December 8, 2009 Taipei Times about the 2009 WHO Winter School

TAIPEI TIMES

WHO to hold first Taipei workshop on health promotion

SERVICE: The workshop, to be held tomorrow and on Thursday, will discuss development strategies for promoting and managing health care

STAFF WRITER, WITH CNA
Tuesday, Dec 08, 2009, Page 3

Chapter 5

Healthy Aging

Chapter 5 | Healthy Aging |

The WHO advocates "active aging" with the aim of making the aging process a positive experience by encouraging elderly citizens to not only pay attention to their health but also pursue intellectual growth by staying active in social, economic and cultural affairs in order to keep a spiritual growth and maintain an active lifestyle.

Since 1993, Taiwan has officially become an aging society, with 7.1% of the total population aged 65 or older; since 2009, the number of elderly citizens has reached 2.457 million or 10.6% of the total population. As the number of the elderly rapidly increases and the number of middle- aged citizens steadily climbs year by year, the status of their health produces a wide impact on society; thus health promotion and disease prevention issues for the middle-aged and elderly population are gaining prominence. It is hoped that by decreasing the incidence of diseases among the middle-aged and elderly population, the threats and other negative influences caused by diseases can be controlled or reduced so that the middle-aged and the elderly can enjoy a better quality of life.

According to statistics, among the ten leading causes of death in Taiwan in 2009 (Table 5-1), chronic diseases such as malignant neoplasms, heart diseases, cerebrovascular diseases, diabetes, nephritis, nephritic syndrome and nephrosis, and hypertenslve disease (Note a) are all common problems encountered in the aging process. These diseases account for about 60% of total mortality. Thus the government needs to heed the severity of the situation and provide health screenings, early detection of diseases and preventive measures for major chronic disease and cancer prevention, in order to proactively create a supportive environment for healthy aging in Taiwan.

Table 5-1 The Ten leading causes of death in 2009

Ranking	Cause of death	Number of deaths	Gross mortality rate[b]	Standardized mortality rate[c]
1	Malignant neoplasms	39,917	173.0	132.5
2	Heart diseases (excluding hypertensive disease)	15,093	65.4	47.7
3	Cerebrovascular diseases	10,383	45.0	32.8
4	Pneumonia	8,358	36.2	25.3
5	Diabetes	8,229	35.7	26.6
6	Accidents and injuries	7,358	31.9	27.7
7	Chronic respiratory diseases	4,955	21.5	14.9
8	Chronic hepatitis and cirrhosis	4,918	21.3	16.6
9	Intentional injurie (suicide)	4,063	17.6	14.7
10	Nephritis, nephritic syndrome, and nephrosis	3,999	17.3	12.5

a. Hypertensive disease ranks as the 11th main cause of death
b. The mortality rate is measured in deaths per 100,000
c. Standardized mortality rate is according to the WHO world population structure benchmark
Source: Statistics Office, Department of Health

Section 1 Health policies for middle-aged and elderly citizens

Current status:

In 2009, the life expectanay at birth was 75.9 for men, and 82.5 for women. According to the 2007 "Survey on Health and Living status of the Middle-aged and Elderly in Taiwan", over 88.7% of elderly people reported having had medical treatment for at least one chronic disease. Elderly women report higher rates of chronic disease than elderly men (Table 5-2). The study revealed that older men commonly suffer from hypertension and diabetes, while among elderly women osteoporosis is common.

Increasing the ability of older people to self-manage their own health and chronic diseases is an important public health policy that can safeguard the quality of life of senior citizens.

Objectives:

Performance targets and goals for geriatric health promotion have been formulated, as shown in Table 5-3, that take into account global trends and international experiences, national legislation, the state of the country, empirical data as well as future trends, that also are in line with international geriatric health policies.

Policy implementation and results:

For the early detection, intervention and treatment of chronic diseases, a policy for providing adult preventive health services as well as integrated screening services and blood pressure checks is being pursued. Moreover, in order to promote the health of the elderly, a community senior citizen health promotion initiative is being undertaken, based in local health stations to integrate the community resources in four counties and cities (a total of 8 communities).

Service outcomes:

1) Adult preventive health services:

Services are offered free of charge once every three years to people aged between 40-64 and once every year to people over 65 years old; the services include physical examination, blood test and urine tests, and health consultation. A total of 1.76 million people received the services in 2009 (including

Table 5-2 Diagnoses of chronic disease among people 65 and older

Subject	1 chronic disease	2 chronic diseases	3 chronic diseases
Total	88.7%	71.7%	51.3%
Male	85.8%	65.6%	43.9%
Female	91.7%	77.8%	58.8%

Sources: 1. 2007 Survey on Health and Living Status of the Middle-Aged and Elderly People in Taiwan (No. 6)
2. 17 chronic diseases are included here: hypertension, diabetes, heart disease, stroke, lung or respiratory disease (bronchitis, emphysema, pneumonia, lung disease, asthma), arthritis or rheumatism, gastric ulcer or stomach illness, liver or gall bladder, hip fractures, cataracts, kidney disease, gout, spinal bone spurs, osteoporosis, cancer, high cholesterol or anemia.

Table 5-3 Targets and performance indicators for geriatric health promotion

Indicators	2007 baseline value	2009 achievable value	2012 target value	Sources of reference value
More elderly people doing exercise in past two weeks	52.3% Male 54.7% Female 48.9%	62.6% Male 63.5% Female 61.7%	58.0% Male 57.5% Female 51.5%	2009 Behavioral Risk Factor Surveillance system
More elderly people taking at least five servings of vegetables and fruits per day	24.0% Male 24.7% Female 23.0%	31.4% Male 33.2% Female 29.4%	33.4% Male 35.2% Female 31.4%	2009 Behavioral Risk Factor Surveillance system
Lower smoking rate of the elderly	17.2% Male 27.5% Female 4.0% below	12.1% Male 20.6% Female 2.0%	12.0% Male 20.0% Female 3.0% below	2009 Telephone Survey on Adult's Smoking Behavior
Lower secondhand smoke exposure rate for the elderly	17.7% Male 23.4% Female 12.0% below	5.4% Male 8.0% Female 2.2%	5.5% below Male 8.0% Female 3.0% below	2009 Telephone Survey on Adult's Smoking Behavior
Increasing mammogram breast cancer screening rate of women aged 50-69 years old in past two years	10.3%	15.7%	20.0%	2009 Breast cancer screening database analysis (exclusive of repeated cases)
Increasing Fecal Occult Blood test rate of people aged 50-69 years old in past two years	11.2% Male 8.6% Female 13.8%	10.4% Male 7.7% Female 13.0%	41.0% Male 32.0% Female 50.0%	2009 Colorectal cancer screening database analysis

Figure 5-1 Adult preventive health examination use-based on gender

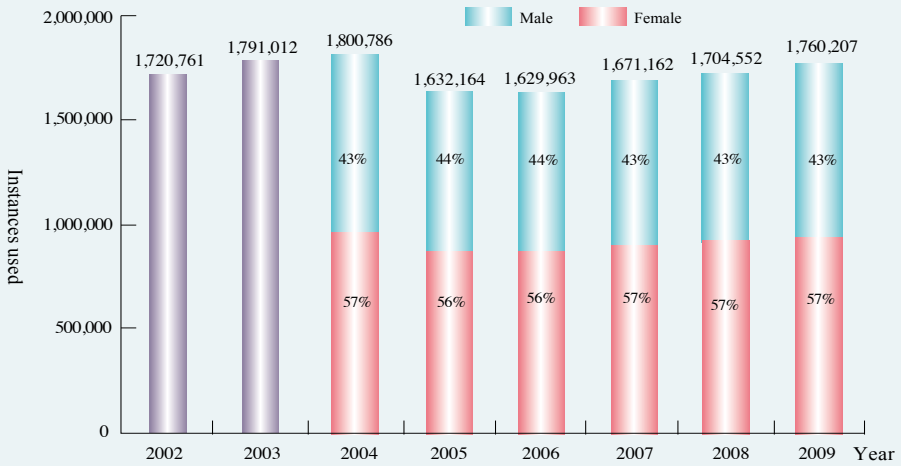
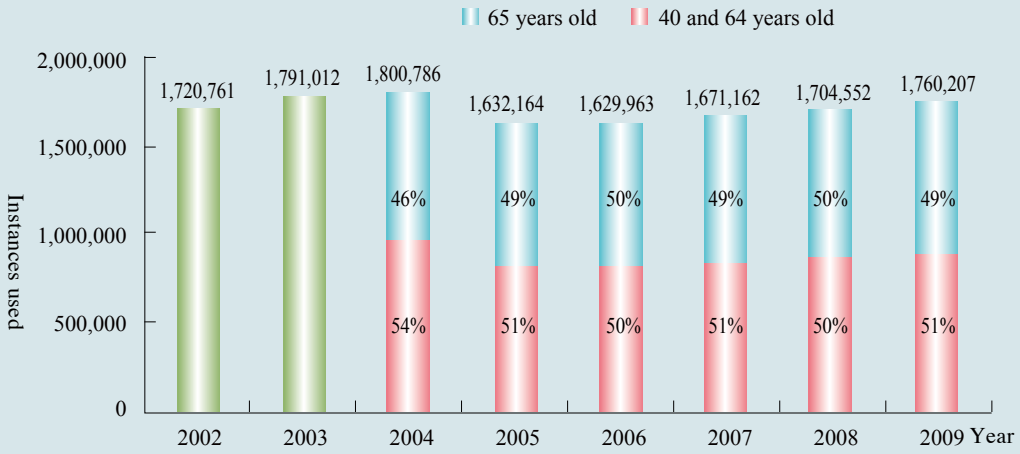


Figure 5-2 Adult preventive health examination use-based on age group



870,000 people over 65 years old) (Figures 5-1 and 5-2). The rate of new detection of abnormal blood pressure, blood glucose and blood cholesterol was 21.6%, 7.9% and 12.7% respectively. (New detection is defined as having no personal history of hypertension, diabetes or high cholesterol, but anomalies are found in the testing process.)

2) Integrated screening services

Since 2002, county and city were encouraged to integrate local medical and health care resources through combining adult preventive health care services, cancer screenings and other existing screening items to promote integrated onsite community service. In 2009, twenty-two counties and cities have joined the service crew and approximately 1,690,000 people have been served between 2002 and 2009.

3) Health promotion for the elderly

1. Expanded resources for integrated community health promotion for the elderly

During 2007 and 2008, training was expanded to develop integrated community geriatric health promotion initiatives based in health stations. In northern, central, southern, and eastern national regions, Keelung City, Changhua County, Kaohsiung County, and Yilan County were selected, and with each choosing two communities. In terms of results, the program involved 24 community units (including community-building units, service centers taken care of by the Ministry of the Interior, temples, and activity centers). 885 participants were over 65 years of age, a rate of coverage of 53.2%. With regard to the healthy nutrition program of eating five vegetables and fruits per day, those who had eaten three servings of vegetables numbered 809 people; those consuming 2 fruits per day numbered 661 people; 799 people had engaged in continuous exercise. 618 people had been assessed for fall prevention; 758 homes had safety inspections after which 484 received improvements; and 673 people had been assessed for mental health using the Chinese Health Questionnaire (CHQ-12). People were encouraged as well to promote health within their communities, and the achievements of this expansion of health promotion initiatives were compiled into a booklet. The best from among the senior citizen

community health promotion initiatives were selected, and out of these 15 were chosen, and their operational outcomes were published in a handbook, in order to encourage diverse local health initiatives.

2. Integrated central and local resources for promoting the health of the elderly

A convention was held to promote the results of the senior citizen community health promotion initiatives. A total of 120 people from 67 organizations ranging from the Interior Ministry, the Ministry of Education, the Ministry of Health, and community organizations came together to share in the achievements and exchange experiences, to promote vertical and horizontal integration of central and local resources.

3. Enhancing preventive health services for the elderly

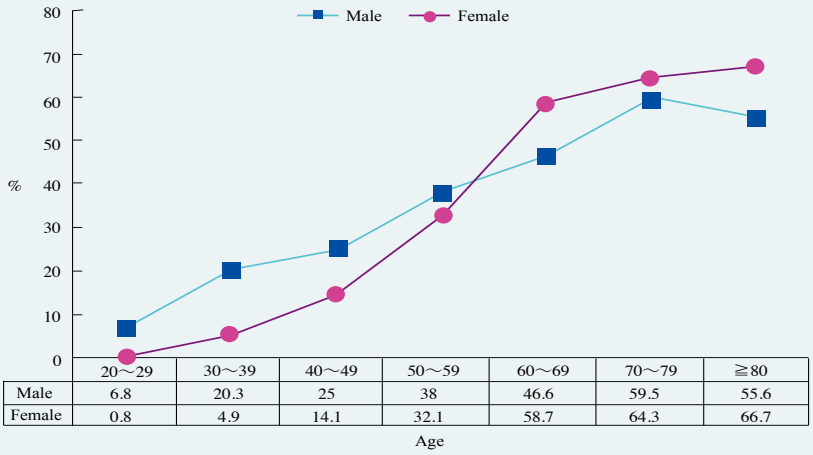
A total of 443 consulting service interventions were completed for elderly people in the areas of tobacco hazard prevention and quitting smoking; 342 individual cases were managed. Oral health for the elderly was strengthened, servicing 600 people. Cancer screening for the elderly was provided; approximately 230,000 women from 50 to 69 were provided mammograms, and 294,000 people aged 50-69 were provided fecal occult blood tests.

Section 2 Prevention of major chronic diseases

Current status:

According to a study completed in 2007 on the prevalence of hypertension, hyperglycemia, and hyperlipidemia in Taiwan, almost 40% of people over 20 years of age suffer from the 3H (hypertension, hyperglycemia, and hyperlipidemia). Among the ten leading causes of death in Taiwan, those

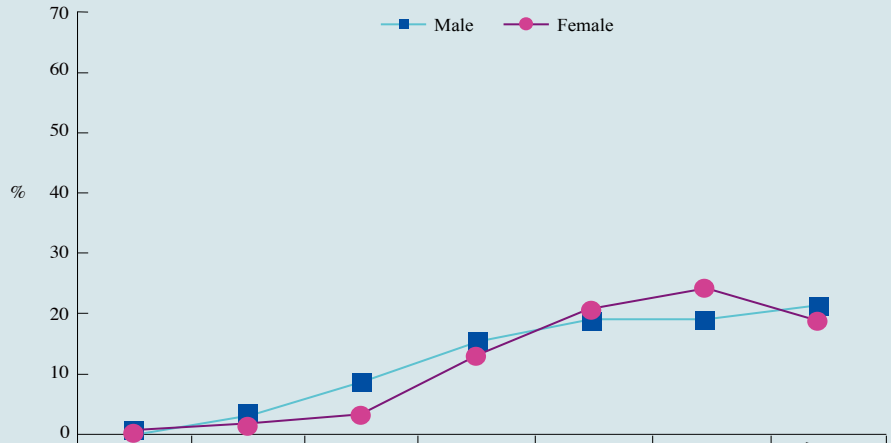
Figure 5-3 Prevalence of hypertension by gender and age in Taiwan in 2007



	20～29	30～39	40～49	50～59	60～69	70～79	≧80
Male	6.8	20.3	25	38	46.6	59.5	55.6
Female	0.8	4.9	14.1	32.1	58.7	64.3	66.7

Note: A person with hypertension is defined as having systolic pressure at or above 140 mmHg, diastolic pressure at or above 90 mmHg, or who is taking medication for high blood pressure

Figure 5-4 Prevalence of hyperglycemia by gender and age in Taiwan in 2007



	20～29	30～39	40～49	50～59	60～69	70～79	≧80
Male	0.3	3.2	8.6	15.4	19.3	19.3	20.3
Female	0.3	1.7	3.2	13.4	20.7	23.9	19.1

Age

Note: A person with hyperglycemia is defined as having a blood sugar level greater than or equal to 126 mg/mL after fasting for more than eight hours, or is taking medication to lower blood sugar levels.

Figure 5-5 Prevalence of hyperlipidemia by gender and age in Taiwan in 2007

	20～29	30～39	40～49	50～59	60～69	70～79	≧80
Male	8.8	25.4	29.7	30.3	20.1	20.2	15.1
Female	3.8	7.6	11.4	27.2	31	31.7	20.3

Age

Note: A person with hyperlipidemia is defined as having a serum cholesterol level at or above 240 mg/dL, or a serum triglyceride level at or above 200 mg/dL, after fasting more then eight hours, or who is taking medication to lower blood lipid levels.

involving the 3H are prominent, including heart disease at 2nd place, cerebrovascular disease at 3rd place, diabetes in 5th place, and in 10th place kidney diseases. The mortality figures for diseases related to the 3H are comparable to the mortality rates due to cancer.

Moreover, incidence of hypertension, hyperglycemia, hyperlipidemia, kidney diseases and metabolic syndrome rises with age. For women over 50, this rate is higher than that in men. People with 3H have a higher risk of cardiovscular scular disease, kidney disease and death than normal people. (Figure 5-3, 5-4 and 5-5).

Objectives:

BHP has made metabolic diseases, diabetes, cardiovascular disease, and kidney disease as the focal point of chronic disease prevention and control. Although chronic diseases do not pose an immediate threat to life, they are the primary causes of early death. The causes of chronic diseases are diversified and complex, and the occurrence is usually a gradual process. Chronic diseases can happen at any stage of life, and the onset will be accompanied by physical restrictions or disorders, undermining the quality of life and produce a long-term negative impact on health that deteriorate with time. Thus BHP has established the important goals in the prevention of chronic diseases as follows:

1) To enhance and maintain the health of middle-aged and elderly people.

2) To prevent and delay occurrence of chronic diseases.

3) To improve the quality of life of patients, their families, and their caregivers.

To raise public awareness of chronic diseases, prevention and control, annual target was set for people 18 years old and above in terms of the ideal waist circumference value, blood sugar level, knowledge of blood pressure, and chronic kidney disease prevent and control.

Policy implementation and results:

To achieve the above-goals, important chronic disease prevention policies were proposed based on the “three-stage, five-level” preventive, as well as health promotion concepts in public health. Besides the necessary health; apart from the necessary health education and investigational studies, other major prevention policies include the following:

1) Metabolic syndrome prevention and control

1. Advocating maintaining an ideal waist size to prevent metabolic syndrome.
2. Conduct metabolic syndrome prevention training for administration heads, nurses, and dieticians in elementary, middle, and high schools.
3. To assist community blood pressure measurement stations to incorporate waist circumference checks, in the drive to prevent metabolic syndrome.
4. Coordinate with the Bureau of National Health Insurance to encourage primary medical institutions to participate in the “National Health Insurance Metabolic Syndrome Care Program”.

2) Diabetes prevention and control

1. To hold health education promotional activities in coordination with the World Diabetes Day of the United Nations (UN).

2. To establish a diabetes health promotion institution certification system and empower the self care ability for both diabetes high-risk groups and diabetes patients.
3. To assist diabetes patients self-help groups transform into diabetes supportive growth groups. To encourage diabetes high risk groups to join such organizations and work with the patients to improve self-care abilities.
4. To organize diabetes care training for nurses, dieticians and administration heads in elementary, junior and senior high schools.
5. To raise the quality of medical personnel.
6. To assist counties and cities in the promotion of the diabetes share care networks in collaboration with the Bureau of National Health Insurance. To encourage medical institutions join the "Program for Improved benefits for the treatment of Diabetes under the National Health Insurance Scheme" to raise the quality of care.

3) Cardiovascular disease prevention and control

1. Use of various channels for cardiovascular disease prevention and health education and advocacy to encourage people to achieve a healthy lifestyle.
2. For cardiovascular disease prevention and health education and advocacy activities, combined with the world hypertension day and world heart day, etc.
3. Popularize blood pressure measurement stations and provide people with convenient and accessible blood pressure measurement services.
4. Provide Adult Health Examination services, early detection of hypertension, hyperglycemia, hyperlipidemia, kidney disease, with early intervention and treatment.
5. Enhance the capacity of patients to care for themselves and delay onset of complications.

4) Chronic kidney disease(CKD) prevention and control

1. Enhance public education through various media to target causes of the disease that can be changed, such as medication habit, diabetes and hypertension control.
2. Early detection in high-risk groups of chronic kidney disease, providing appropriate management, and enhancing the correct medication habit.
3. Integrate primary health care and community resources for carrying out kidney health and prevention of kidney disease work, following up cases of kidney function abnormality, and form a care network.
4. Develop kidney health and disease management teaching materials to give patients the means to self-manage their disease and slow down the progression of CKD.

Results of various types of work:

1) Raising of public awareness-production of teaching materials and handbooks

1. Diversified health education: developing health education materials and manuals

In addition to developing leaflets, posters, self-care manuals, cardboard cutout displays of people, and DVDs to promote prevention and control of metabolic syndrome, diabetes, coronary artery disease,

hypertension, and chronic kidney disease, "Successful Aging" learning materials were also developed for the use of medical staff for educational and promotional purposes, as well as for the general public.

2. Promotion through various media channels

On international chronic disease days such as World Diabetes Day, World Hypertension Day, World Heart Day, World Kidney Day and World Asthma Day, health bureaus, NGOs and community combined resources were to hold press conferences, and large-scale promotional activities. Campaigns were carried out through schools, communities, the Internet channels, magazines, radio, television channels, vehicle ads and convenience stores.

A. On the occasion of the third annual United Nations World Diabetes Day in 2009, this Bureau held various activities with the Diabetes Association of the Republic of China, Cardinal Paul Shan Kuo-Hsi, S.J., and various important personages, in concert with other events around the world. A candle-lighting ceremony was held, along with bicycle rides, walks, park excursions, and seminars. The events were covered 17 times by the television media, 18 times in radio broadcasts, and 16 newspaper reports. A total of 50 advertisements using electronic media were broadcast. Taiwan's achievements can be seen on the United Nations Diabetes website at: http://www.worlddiabetesday.org/en/node/4761/

B. In line with the 2009 World Hypertension Day, this topic promoted a "Salt and High Blood Pressure: Two silent killers" program, and, on World Heart Day, promoted a "work with heart" program. Also, organized, with the Taiwan Society of Cardiology, and the Taiwan Heart Foundation respectively, a "Healthy, Stable Blood Pressure through Low Sodium" and a "Workplace Health Starts from the Heart" educational exposition. These events advocated controlling salt (sodium) intake and emphasized the importance of prevention and control of cardiovascular disease.

C. In response to World Kidney Day, the Bureau of Health Promotion, together with the Taiwan Society of Nephrology, organized a "Love and Protect Your Kidneys for a Healthy Life" event, which took place on March 8th, 2009 in Changhua, Taipei, Hsinchu, Chiayi, Tainan, Kaohsiung, and Hualian. A large-scale advocacy event was held, which provided kidney function screenings and blood sugar analyses, to remind people of the importance of kidney health. There were in all 4,909 participants. The achievements can be seen on the website of the World Kidney Day website. Also, on September 27th, a "Walking for Kidney Health" event was held at the Chiang Kai-Shek Memorial Hall, which provided education about protecting kidney health, and free kidney function test services. There were 5,000 participants.

2) Encourage high-risk groups to place importance on health promotion, increasing prevalence of healthy behaviors, and enhancing health self-management abilities

1. To popularize blood pressure measuring stations, apart from hospitals that provide blood pressure services, approximately 1,200 blood pressure measurement stations in various community locations were established through county and city health departments and using local resources. The locations of the blood pressure measurement stations include administrative service units, community care centers, activity centers, pharmacies, stores and workplaces. The community blood

measuring stations added a waist measuring service and provided advice on prevention of metabolic syndrome.

2. Continued to provide training on prevention of metabolic syndromes to elementary, junior high and high school administrators, school nurses, and nutritionists. From 2007 to 2009, 1,838 schools participated. Of this number, 931 were elementary schools, 410 were junior high schools, and 497 were high schools. 17 schools participated in a campus health-promotion competition.
3. To increase the influence of health promotion efforts on diabetes high-risk groups, guidance was offered to 455 diabetes patient self-help groups in 25 counties and cities throughout Taiwan and members of high-risk groups were invited to improve their self-care ability together with diabetes patients; 314 groups successfully transformed into diabetes support growth groups which are spread out in 260 villages, townships and cities covering 71% of Taiwan townships and cities. 4,974 high-risk people (839 more people than in 2008) showed improvements in various areas: 578 people improved proper consumption of staple foods; 568 people exercised more than 30 minutes per day; 337 people showed improvements in their waist measurements; and 400 people were able to reduce their weight by 2 kg or more. In addition, 151 diabetes health promotion organizations were able to address the needs of groups at high risk for diabetes, improving the blood glucose readings of 3,808 people, the blood pressure of 5,484 people, the cholesterol readings of 3,639 people, the waist measurements of 2,025 people, weight reduction of more than 2 kg by 2,637 people, and exercise of more than 30 minutes per day by 4,030 people.
4. Recruited community offices (workplaces) or apartment dwellings to hold advocacy meetings and lectures promoting regular high blood pressure screenings and reduction of daily sodium consumption. Almost 10,000 people participated, and training units later became blood pressure monitoring stations that are still in operation.
5. Subsidized 10 health bureaus in the creation of a plan for "Kidney Disease Primary Prevention and Control" in Keelung City, Taichung County, Nantou County, Chiayi County, Chiayi City, Tainan City, Kaohsiung City, Kaohsiung County, Pingtung County, and Taitung County. The plan provided for training and education of medical personnel as well as public advocacy. Using integrated preventive health services as a platform, it provided urine screening, intervention and follow-up of abnormalities to the people of the community. There were 395 screening events that had 68,032 participants. In conjunction with community groups and local resources, held 198 kidney disease educational events at which 13,113 people participated. Also, in 2008 the Changhua County health bureau developed rapid glomerular filtration rate tools, and provided instructional materials in five indigenous languages (those of the Ami, Bunun, Rukai, Puyuma-Jianhe and Zhiben-languages).

3) Increasing individuals' abilities to manage their own diseases

1. This Bureau provided guidance to 25 counties and cities in Taiwan to help in their work toward prevention of metabolic syndrome and diabetes. It assisted communities in establishing blood pressure check stations and waist circumference measurements, and helped 480 communities in promote prevention of metabolic syndrome. It held an international symposium in conjunction with the Taiwan Association of Diabetes Education, which drew the participation of 7,000 medical

professionals. Diabetic care training sessions were organized for school nurses and dieticians in elementary, middle, and high schools, and 1,193 people participated, and a manual was created, "Handbook for Diabetic Care in School" By 2009 there were 151 diabetic health promotion organizations, providing 809 hygiene education personnel with observational training in diabetes care education. 161,584 diabetes cases were accepted into the National Health Insurance Scheme's improved medical benefits program for diabetes care with increasing activities of independent diabetes support groups and 107 seed counselors trained for support groups, 24,828 people participated in diabetes support groups nationally (an increase of 4,538 people from 2008), accounting for 2% of the national population receiving medical treatment for diabetes. Held a contest for groups promoting behavioral changes, in which awards were presented to 22 groups; held an activity to find blood sugar buster, i.e., people who have been successful at controlling their sugar levels (ABC, glycated hemoglobin, blood pressure, lipids all in a healthy range) and selected 187 people, out of which 57 were specially chosen and shared their experiences in a special handbook. Among the achievements of these initiatives include: 1,155 people are now monitoring their blood glucose levels by themselves; 1,095 people have adopted correct nutrition; more than 1,176 people are now exercising 30 minutes a day, every day; 1,360 people lost 2 kg or more; 432 people attained HbA1c (glycated hemoglobin) levels of 7 or less; and 281 people attainedHbA1c levels of greater than 9.5%. Held competitions to raise public awareness of blood glucose levels where questionnaire response rate was 94.7%, with 50,670 individual participants, and 100 prizewinners. 100 organizations participated and 6 organizations won awards.

2. In an effort to slow down the progression of CKD and assist patients fully prepare for dialysis treatment, an interdisciplinary professional care team model has been established across departments and specialists. Since 2004, the Taiwan Society of Nephrology has been entrusted to operate the "Kidney Disease Health Promotion Institute" which was joined by 89 medical institutions in 2009 and received 16,043 newly enrolled patients. Of kidney disease sufferers who undergo dialysis, 1,505 (55.7%) have an arteriovenous fistula before their dialysis treatment. 1,067 patients (35.9%) have gone to outpatient clinics to receive their first dialysis treatment instead of resorting to hospital stays or emergency services. These are significant increases.
3. A chronic kidney disease case management information system was set up in 2005 to help treatment centers in their case management, treatment, and referrals. It allows referral data logging and inquiries, and it is integrated with other chronic kidney disease databases. By the end of 2009, a total of 113 centers were using it, with 37,611 cases logged.

4) Increasing the effectiveness of disease prevention and control, and enabling research into major chronic diseases

1. National stroke registry network was established, with stroke patient registration in hospitals in the north, central, southern, and eastern regions of the country. From 2006 to 2009, a total of 40 hospitals participated and more than 48,000 case registrations were completed. Analysis of the registration data has revealed the following: A) Two of the most significant risk factors for stroke are high blood pressure and insufficient physical exercise; B) Anti-platelet agents are the major medications for stroke cases during both their hospitalization and after their discharge, and they

are prescribed in more than 80% of cases; C) With respect to the rate of recurrence, the recurrence rate of 1.2% of ischemic strokes within the first three months was highest; transient ischemic attacks and subarachnoid hemorrhage also had the highest rates within the first month, at 1.2% and 1.9%, respectively; D) In comparing the prognoses of post-stroke patients, those who made regular clinical return had the best prognoses, and those who did not make regular return had worse prognoses; E) With respect to the seven quality indicators in the U.S. guidelines for stroke care, an analysis of the quality of national stroke care shows room for improvement.

2. The "Research Plan for Chronic Kidney Diseases Prevention and Control" is a four-year comprehensive study, expected to be completed in 2011. By 2009, its results were as follows:

A. An epidemiological and risk factor assessment plan: 1) Set up 4 integrated kidney disease national databases, and established of an analysis and monitoring system. 2) Collected data on chronic kidney disease cases, high-risk groups, and healthy controls with 1,500 subjects each group, and undertook a case-control study.

B. Research plan for early Diagnosis Technologies and Local treatment Standards: 1) Established two animal models of nephritis, and found several possible biomarkers. 2) Screened for diabetic nephropathy using high-sensitivity test strips, with a high degree of accuracy. 3) Established formula to calculate kidney function using inulin clearance rates which is more accurate than the present international formula.

C. Developed complete treatment methods and models of care: 1) For those whose primary disease is not diabetes, age is a significant factor of a better survival rate for peritoneal dialysis as compared with hemodialysis, however in people over 70 and for those whose primary disease is diabetes, the survival rate using peritoneal dialysis is relatively lower 2) Analyzed multi-disciplinary treatment and care teams in the areas of medication, hospitalization, and cost-effectiveness and found good results. 3) Formulated a prevention and control model for children and adolescents with chronic kidney diseases, and a comprehensive method of chronic kidney disease prevention and care.

D. Studied the medical benefit and transplant system: 1) Using analysis data from National Health Insurance concerning chronic kidney disease patients, hemodialysis patients, and peritoneal dialysis patients, it was found that expenditure for medical treatment for each respective category was NT$20,000, NT$450,000 and NT$300,000 per person per year. 2) Public awareness of the need for organ donation is inadequate, and traditional ideas and scruples are an obstacle to transplants and organ donation.

Section 3 Cancer prevention and control

The "Cancer Control Act," which came into effect in 2003, stipulates that this Bureau periodically convene the Central Cancer Prevention and Control Conference, as well as Cancer Prevention and Control Policy Consultation Commission meetings, in order to facilitate vertical and horizontal coordination and communication of operations. The Bureau has also drawn up the "National Cancer Control Five-Year Program" as a working guideline for 2005 to 2009. The program involves collecting and integrating pertinent cancer prevention and control information, promoting cancer prevention

publicity, conducting screening services, improving cancer diagnosis and treatment quality, and providing hospice and palliative care as well as cancer patient services. The long-term objective is to lower cancer mortality rates. In line with President Ma's policy objectives, to reduce cancer mortality rates, in 2009 a "Second National Cancer Control Program – Cancer Screening (2010-2013)", the chief strategy of which is expanding cancer-screening services.

Current status:

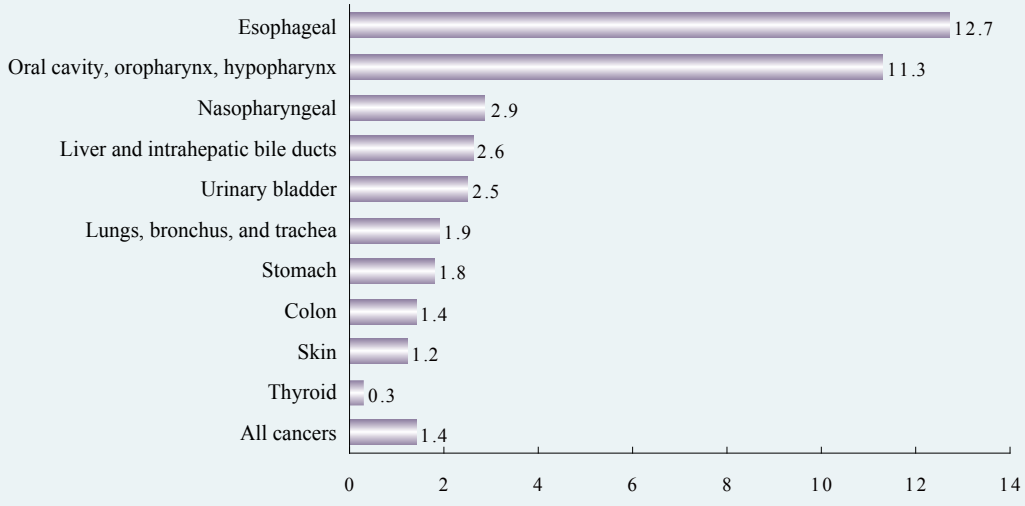
In 1979, the DOH gave an executive order requiring hospitals with 50 beds or more to report the epidemiology as well as diagnosis and treatment summaries of new cancer cases in order to establish a cancer registry system. Article 11 of the Cancer Control Act stipulates: "In order to build up a databank related to cancer control, medical care institutions of cancer control shall submit information relating to newly diagnosed individual cancer case and his/her stage as well as related diagnosis and treatment information to academic research institutions commissioned by the central competent authority." This article established the legal basis for cancer registry.

1. Cancer incidence situation

The 2007 cancer registry data shows that newly diagnosed cancer cases in that year were 75,769 (43,330 males and 32,439 females) with a crude incidence rate of 330 per 100,000 people (373.3 for males and 285.8 for females) and a standardized incidence rate of 270.1 per 100,000 people (312.1 for males and 229.8 for females) with a median age of 63 (65 for males and 59 for females). A comparison of the standardized incidences for cancers between the genders shows that males were 1.4 times more likely than females to develop cancer and were 10 times as likely to develop esophagus and oral cancer, as males were more likely to smoke or chew betel-quid (Figure 5-6).

According to the standardized incidence rates, the top 10 cancers in 2007 for Taiwanese were (1) female breast cancer (2) colorectal cancer (3) liver cancer (4) lung cancer (5) prostate cancer (6) oral cancer (7) stomach cancer (8) cervical cancer (9) skin cancer and (10) cancer of the uterus. The

Figure 5-6 Gender comparison of age-standardized incidence of major cancers (2007)



rankings were the same as that of 2006, except that colorectal and liver cancer switched places (see Tables 5-5, 5-6, and 5-7 for cancer incidence data in Taiwan).

Table 5-5 Incidence of the top 10 cancers in Taiwan (2007)

Rank	Primary site	Number of cases	Crude incidence rate (per 100,000)	Age-standardized incidence rate
1	Breast	7,502	66.1	53.1
2	Colon and rectum	10,511	45.8	37.1
3	Liver and intrahepatic bile duct	10,110	44.0	36.4
4	Lungs, bronchus, and trachea	9,059	39.5	31.6
5	Prostate	3,367	29.0	23.5
6	Oral cavity, oropharynx, hypopharynx	5,458	23.8	19.5
7	Stomach	3,612	15.7	12.5
8	Cervical	1,749	15.4	12.2
9	Skin	2,427	10.6	8.4
10	Uterus	1,165	10.3	8.3
	All cancers	75,769	330.0	270.1

Notes: 1. Ranking is from low to high after the standardized incidence rate
2. Age-standardized rates were calculated according to the 2000 world standard population

Table 5-6 Incidence of the top 10 cancers in males in 2007

Rank	Primary site	Number of cases	Crude incidence rate (per 100,000)	Age-standardized incidence rate
1	Liver and intrahepatic bile ducts	7,210	62.1	52.8
2	Colon and rectum	6,040	52.0	43.4
3	Lungs, bronchus, and trachea	5,898	50.8	41.6
4	Oral cavity, oropharynx, hypopharynx	5,006	43.1	36
5	Prostate	3,367	29.0	23.5
6	Stomach	2,311	19.9	16.2
7	Esophageal	1,685	14.5	12.1
8	Urinary bladder	1,457	12.6	10.3
9	Skin	1,314	11.3	9.3
10	Nasopharyngeal	1,167	10.1	8.4
	All cancers	43,330	373.3	312.1

Table 5-7 Incidence of the top 10 cancers in females in 2007

Rank	Primary site	Number of cases	Crude incidence rate (per 100,000)	Age-standardized incidence rate
1	Breast	7,502	66.1	53.1
2	Colon and restum	4,471	39.4	31.1
3	Lungs, bronchus, and trachea	3,161	27.9	21.9
4	Liver and intrahepatic bile duct	2,900	25.6	20.5
5	Invasive cervical cancer	1,749	15.4	12.2
6	Thyroid	1,407	12.4	10.4
7	Stomach	1,301	11.5	8.9
8	Uterus	1,165	10.3	8.3
9	Skin	1,113	9.8	7.6
10	Ovarian, fallopian tube, or uterine broad ligament	1,047	9.2	7.6
	All cancers	32,439	285.8	229.7

2. Cancer mortality situation

According to the DOH's statistics on causes of death, 39,917 Taiwanese died of cancer in 2009 (25,284 males and 14,633 females), accounting for 28% of all deaths. The crude cancer mortality rate was 173 per 100,000 people (217.4 for males and 127.8 for females) while the standardized mortality

Table 5-8 The top ten cancer-related causes of death in 2009 among the people of Taiwan

Rank	Cause of death	Number of cases	Crude incidence rate (per 100,000)	Age-standardized incidence rate
1	Lung cancer	7,951	34.5	25.9
2	Liver cancer	7,759	33.6	26.2
3	Colorectal cancer	4,531	19.6	14.8
4	Breast cancer	1,588	13.9	10.6
5	Stomach Cancer	2,282	9.9	7.3
6	Oral cancer	2,249	9.7	7.6
7	Prostate cancer	936	8.0	5.9
8	Esophagus cancer	1,489	6.5	5.0
9	Pancreatic cancer	1,480	6.4	4.9
10	Cervical cancer	657	5.7	4.2
	All cancers	39,917	173.0	132.5

rate was 132.5 per 100,000 people (171.6 for males and 95.1 for females). The top 10 cancer causes of deaths in Taiwan for 2007 were: (1) lung cancer, (2) liver cancer, (3) colorectal cancer, (4) breast cancer in women, (5) stomach cancer, (6) oral cancer, (7) prostate cancer, (8) esophageal cancer, (9) pancreatic cancer, and (10) cervical cancer. (For data on Taiwanese cancer deaths see Tables 5-8, 5-9, and 5-10.)

Table 5-9 The top ten cancer-related causes of death in 2009 among males in Taiwan

Rank	Cause of death	Number of cases	Crude incidence rate (per 100,000)	Age-standardized incidence rate
1	Liver cancer	5,467	47.0	38.0
2	Lung cancer	5,336	45.9	35.5
3	Colorectal cancer	2,562	22.0	17.2
4	Oral cancer	2,103	18.1	14.6
5	Stomach Cancer	1,457	12.5	9.5
6	Esophagus cancer	1,369	11.8	9.4
7	Prostate cancer	936	8.0	5.9
8	Pancreatic cancer	871	7.5	5.9
9	Leukemia	571	4.9	4.1
10	Non-Hodgkin's lymphoma	542	4.7	3.7
	All cancers	25,284	217.4	171.6

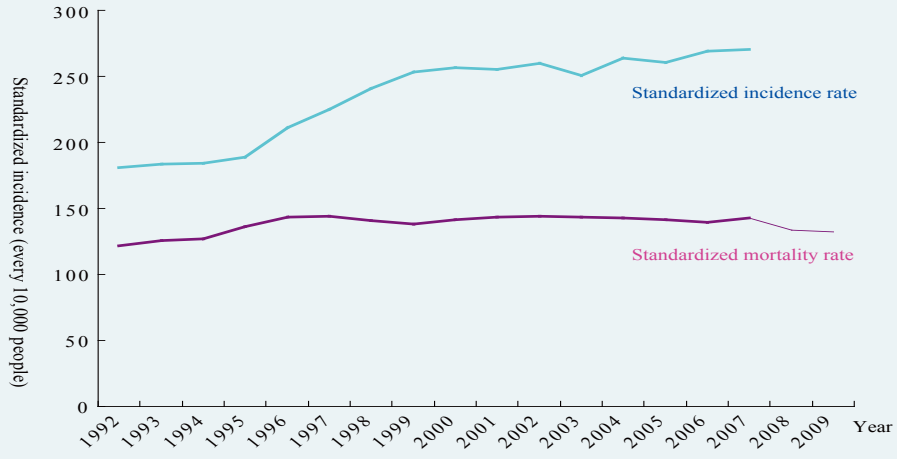
Table 5-10 The top ten cancer-related causes of death in 2009 among females in Taiwan

Rank	Cause of death	Number of cases	Crude incidence rate (per 100,000)	Age-standardized incidence rate
1	Lung cancer	2,615	22.8	16.9
2	Liver cancer	2,292	20.0	14.9
3	Colorectal cancer	1,969	17.2	12.5
4	Breast cancer	1,588	13.9	10.6
5	Stomach Cancer	825	7.2	5.2
6	Cervical cancer	657	5.7	4.2
7	Pancreatic cancer	609	5.3	3.9
8	Ovarian cancer	435	3.8	2.9
9	Non-Hodgkin's lymphoma	372	3.2	2.4
10	Leukemia	353	3.1	2.5
	All cancers	14,633	127.8	95.1

3. Cancer incidence and mortality rates over the years

The Department of Health's statistics on causes of death show that cancer has been among the top ten causes of death in Taiwan since 1982. Using the year 2000 world standard population, it can be seen that the cancer standardized mortality rate for Taiwanese has risen year by year from 118 per 100,000 people in 1982 and reached a peak in 1997 at 144.3. In the following decade, the average was between 138 and 144, with the 2009 rate at 132.5. The cancer standardized incidence rate rose from 111 per 100,000 people in 1982 to 270.1 in 2007 (Figure 5-7).

Figure 5-7 Long-term trends of standardized incidence rates and mortality rates for all cancers in Taiwan



Note: ICD-10 used from 2008 for cause of death statistics

An analysis of the changes in the five-year period from 2003 to 2007 in the cancer standardized incidence rates reveals that all types of cancers for males rose by 7.7%, among which prostate cancer (33.3%) and skin cancer (22.7%) saw the biggest increases, while stomach cancer experienced the largest decrease at 6%. In the same period, all types of cancers for females rose 7.4% with thyroid cancer (30%) and cancer of the uterus (28.7%) seeing the biggest increases. However, the cervical cancer decrease the most (25.8%) (Figures 5-8, 5-9).

Objectives:

1. Increase cancer screening rates

A. The cervical cancer screening rate within three years among women aged 30-69 achieve 58%.
B. The mammography screening rate within two years among women aged 45-69 achieve 11%.
C. The colorectal cancer screening rate within two years for people aged 50-69 achieve 10%.
D. The oral cancer scereening rate within two years for people aged 18 and above who smoke or chew betel products achieve 28%.

2. 35% of cancer patients receiving palliative treatment in the last year of their lives

Figure 5-8 Age-standardized incidence of top 10 cancers for males over a 5-year period (2003-2007)

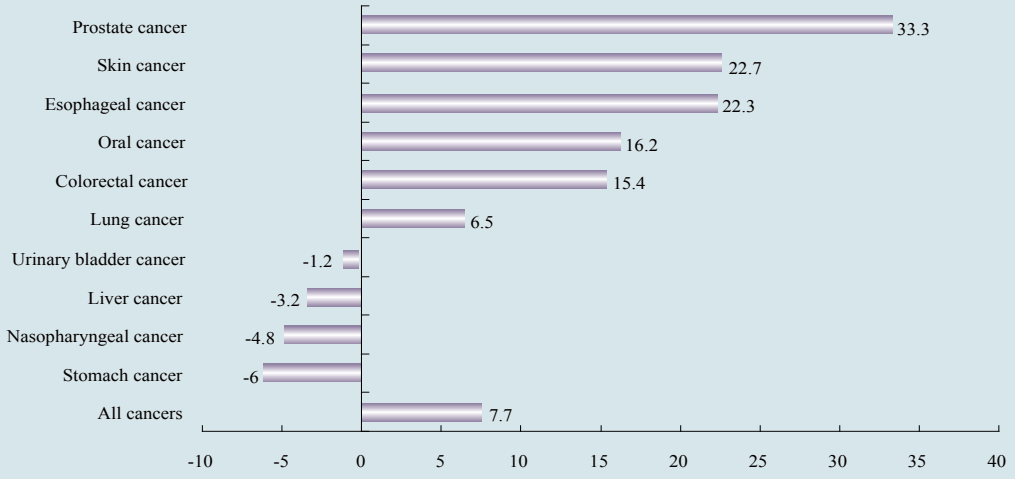


Figure 5-9 Age-standardized incidence of top 10 cancers for females over a 5-year period (2003-2007)

Policies and results :

1. Betel quid hazard prevention and control

The International Agency for Research on Cancer has confirmed that betel nut is a Category 1 carcinogen, while domestic scholars constantly warn that betel quid chewing is the leading cause of oral cancer in Taiwan. Approximately 90% of oral cancer patients chew betel quid regularly; the risk of getting oral cancer from chewing betel quid is higher than that of smoking and excessive alcohol intake.The number of betel quid user in Taiwan has already topped 1.39 million; male oral cancer has

became the fastest growing cancer in Taiwan with the standardized incidence rate attaining 16% in the past five years. Oral cancer is the most common cancer among males between 25 to 44 years old. In an effort to reduce the threat of oral cancer in Taiwan, major publicity campaigns were launched in 2008 and 2009 in an extensive effort to lower the rate of betel chewing among Taiwanese citizens.

Past efforts in combating the hazards brought about by betel quid chewing: government ministries and departments simultaneously implemented a five-year "Management Plan for the Betel Quid Problem" in 1997. The Executive Yuan also adopted suggestions from NGOs to set December 3rd as "Betel Quid Chewing Prevention Day". From 2008 to 2009, efforts continued at all governmental levels to expand public information work using the media and related activities throughout Taiwan, as well as cooperate with government departments, and private groups, to promote betel quid chewing prevention in all areas. The efforts have paid off, in 2009 the betel quid chewing rate decreased to 14.6%.

A summary of these betel nut-chewing prevention and control measures is as follows.

1) Discouraging betel quid chewing

1. A soft approach: oral cancer patients share their stories

"The Lost Smile", a documentary released in 2007 about people whose betel chewing led to oral cancer, received widespread acclaim from activists and the general public alike, and it raise public awareness of the link between betel quid chewing and oral cancer. In 2009, the film continued to be made available on the Internet, and it was promoted in hospitals, schools, communities, workplaces, and military installations. BHP also invited grassroots artist Chia Chia Pon to collaborate with oral cancer sufferers and their families to make a public advocacy commercial "Voice", and made an audio book containing the life stories of oral cancer patients called "The Happiness of Rebirth". Its aim is hot only to arouse the health-consciousness of betel quid users through the resolute vitality of the actors and the warmth of family affection, but also to get the public's attention and make people think about the link between betel quid chewing and oral cancer.

2. Connect with the community through new media channels

An betel-quid-free campaign has been launched throughout communities and workplaces in Taiwan's counties and cities by leveraging the influences of local health centers, medical institutions and communities. A traveling exhibit chronicling the achievements of the 10-year effort to control betel quid chewing was also organized. Moreover, to get in contact with more target groups, the promotional flyers have been handed out continuously for three years at gas stations, since 2009 which has received an enthusiastic response from local health centers and the general public. In 2009, the campaign was expanded to include the two major gas station chains, with almost 200 distribution points, which is a twofold increase over 2008.

3. Schools

In 2009, BHP partnered with popular organizations to promote the subject of prevention and control of betel quid chewing in 54 schools. A related curriculum was developed to allow young students to understand the health hazards of betel quid and to educate them on how to prevent these

hazards. Schools with a high incidence of betel quid chewing were targeted, (and strategies for enhancing students' ability to say no were enhanced.) In addition, promotion of betel quid hazard prevention and control was increased to school staff and employees as well.

2) Creating a betel-quid-free culture in communities and workplaces

1. Anti-betel quid efforts through stronger partnership with NGOs

In order to utilize community resources effectively, health bureaus of counties and cities served as platforms to integrate NGOs devoted to preventing and controlling hazards brought about by betel quid chewing, such as the Sunshine Social Welfare Foundation, the Cancer Prevention and Education Foundation, and local hospitals (such as the Hualien Armed Forces General Hospital and the Chi Mei Medical Center), together with over 50 community organizations in Taiwan. Social values that discourage betel quid chewing, as well as a supportive environment, are being promoted as betel-free areas are advertised, workplace rules are established, seminars and classes on quitting betel are provided, and services and support are provided for oral cancer patients.

Moreover, health department staff have expanded the curriculum to teach prevention and control strategies, communication tools and techniques, and skills to raise community advocacy of betel-quid-free environments, and enhance the effectiveness of betel quid prevention and control.

2. Promoted inter-departmental initiatives to expand oral cancer screening services

There were breakthroughs in inter-ministerial and inter-departmental cooperation in 2008. The bureau coordinated with the Council of Agriculture to classify the betel as an agricultural product and assist betel palm farmers in changing crops. Through regular meetings with the Department of Health, the Council of Agriculture and the Environmental Protection Administration, relative administrative units in their jurisdiction were coordinated to work with health departments in holding betel quid hazards prevention publicity campaigns and providing oral cancer screening services. Moreover, negotiations were undertaken with the Council of Labor Affairs to make oral cancer screening part of labor health examination packages, thus expanding the target groups for screening. In 2009, the Council of Labor Affairs agreed that workers' physical checkups could include mouth cancer screenings for people over 30 in high-risk groups, conditional upon the informed consent of labor.

2. Formulating an HPV vaccine policy

Studies have confirmed that cervical cancer is caused by infection of the human-papilloma virus (HPV). In 2006 and 2008, two HPV vaccines, Gardasil and Cervirax vaccines went on the market, which can prevent the spread of HPV. To raise public awareness of the link between HPV and cervical cancer, the following initiatives were begun in 2009:

A. Carry out HPV vaccine and cervical cancer prevention education for the general public

1) Raise public awareness of cervical cancer prevention and the HPV vaccine through various media, including television, newspapers, magazines, and radio broadcasts.

2) Release two pamphlets to the public, "Secret Notes for Women" and "Getting Rid of HPV"

through health department channels to explain the connection between HPV and cervical cancer, raise awareness of the HPV vaccine, and show ways to prevent cervical cancer.

B. Provide professional education and training

1) For nurses in public health, provide "Understanding the HPV vaccine and HPV vaccine precautions" education and training.

2) Make education and training materials available on the web, for professionals in all fields to consult.

3. Promote major cancer screening

Studies have confirmed that extensive Pap smear screening can lower the incidence and mortality rates of cervical cancer by 60-90%, while undergoing a mammography once every one to three years can reduce breast cancer mortality rate for females between 50 and 69 years old by 21-34%. Undergoing a fecal occult blood test (FOBT) once every one to two years can decrease the colorectal cancer mortality rate for people between 50 to 69 years old by 15-33%, while a visual inspection of oral mucosa can decrease the oral cancer mortality rate by 43%. In view of these findings, the DOH has been offering Pap smear once a year for women over 30 years old since 1995 and oral cancer screening once a year for betel quid chewers or smokers over 18 years old since 1999. Mammographies have been offered once every two years for women between 50 and 69 years old since 2002; on November 17, 2009, mammographies were expanded to the 45-69 year old age range. Fecal occult blood tests have been provided once every two years to people between 50 and 69 years old since 2004.

Table 5-11 Various screening results

Item	Subject	Screening Policy	2009 Screening Results
Cervical cancer	Women over age 30	At least one Pap smear every three years	• 58% of women aged 30-69 had a Pap smear within the previous three years • 69% of women interviewed by telephone had a Pap smear within the previous three years
Breast cancer	women aged 45-69	Mammography once every two years	11% of women aged 45-69 had a mammography within two years
Oral cancer	Smokers or betel quid chewers aged 18 or above	Oral examination once a year	28% of smokers or betel chewers over age 18 had an oral inspection within the previous two years
Colorectal cancer	People aged 50-69	One fecal occult blood test every two years	10% of people aged 50-69 had a fecal occult blood test within the previous two years

Major cancer screening results for 2009 are as follows:

A. Cervical cancer screening

Cervical cancer is one of the most common cancers for women in Taiwan, with about 2,000 women developing invasive cervical cancer every year. Extensive Pap smear screening in advanced nations and research analysis have revealed that high coverage of Pap smear can lower the incidence and mortality rates for cervical cancer by 60-90%.

Policies and results:

Since 1995, National Health Insurance has provided women over 30 years old with a Pap smear once a year. Results of this bureau's telephone surveys in 2008 show that 69% of women between 30 and 69 years old had undergone Pap smears within the past three years. According to an analysis of the Pap smear screening report database, as of 2009, approximately 58% of women had a Pap smear at least once within the previous three years.

To encourage women from low-income households to receive Pap smears, a Pap smear incentive program was started to provide financial assistance. 11,349 women were provided Pap smears, and precancerous lesions were found in 152 of these. In collaboration with the Ministry of Justice, a Pap smear trial plan for inmates at correctional facilities was initiated through the health bureaus to prisons in Taoyuan, Taichung, Kaohsiung, Hualian, and Yilan. Approximately 2,000 women inmates were given pap smears and 37 people were found to have precancerous lesions.

From 1995 to 2008, the frend of standardized mortality rate for cervical cancer decrease of 57% with 11 deaths per 100,000 people in 1995 to 4.7 deaths per 100,000 people in 2008. After the implementation of a national pap smear screening program, the age standardized incidence rate for invasive cervical cancer decrease of 49% dropped from 24 cases per 100,000 people in 1995 to 12.2 cases per 100,000 people in 2007. These results show that the long-term promotion of pap smear screening has successfully achieved a reduction in the mortality and incidence rates of cervical cancer.

B. Breast cancer

Breast cancer has the highest cancer incidence rate, and the fourth highest mortality rate for women in Taiwan. According to statistics from the cancer registry, the number of people suffering from breast cancer jumped from 2,844 in 1995 to 7,502 in 2007, an 87% increase in the standardized incidence rate. The number of deaths from breast cancer also increased from 918 in 1995 to 1,541 in 2007, a 10% increase in the standard mortality rate. In Europe and the United States, mammography has been used as a screening tool for a number of large-scale random clinical studies, which have shown that a mammography once every one to three years can reduce the breast cancer mortality rate by 21-34% in women between 50 and 69 years of age.

Policies and results:

In response to the sharp rise in the breast cancer incidence rate, this Bureau piloted a two-stage breast cancer-screening program in July 2002 for women aged 50 to 69. The first stage used questionnaires to select high-risk groups, the members of which were referred for mammographies in

the second stage. Effective from July 2004, women aged 50 to 69 were covered by national health insurance to receive mammography once every two years; from 2006, mammography subsidies have come from the public affairs budget. In 2009 the screening service was expanded to include 45-69 year old women. By 2009, the number of women in the 50 to 69 age group who had undergone mammography within the past two years reached 396,600 a screening rate of 11%. The screenings found that roughly over 50% cases of breast cancer were in stage 0 or stage 1, which is higher than the 37% registry rate in the cancer registry, a clear indication that screening helps the early detection of breast cancer.

C. Colorectal cancer

Colorectal cancer has the second highest cancer incidence rate, and the third highest mortality rate among Taiwanese people. In 2006, it became the cancer with the highest number of newly diagnosed patients for the first time. Studies indicate that undergoing a fecal occult blood test once every one to two years can reduce the mortality rate of colorectal cancer in people aged 50 to 69 by 18-33%.

Policies and results:

In order to achieve early detection of colorectal cancer cases and decrease the incidence rate, free fecal occult blood testing has been offered once every two years for people between 50 and 69 years old since 2004. In the past two years 510 thousand people have undergone the tests with a screening rate of 10%. The screenings found that around 42% cases of colorectal cancer were at stage 0 or stage 1, which is higher than the 21% registry rate in the cancer registry, a clear indication that screening helps the early detection of colorectal cancer.

D. Oral cancer

In the past decade, the number of newly diagnosed patients of oral cancer in Taiwan has jumped from 2,731 to 5,458, with the number of deaths rising from 1,298 to 2,249, an astounding rate of increase.

Research conducted in India by the World Health Organization shows that visual inspection of the oral mucosa every three years for people over 35 years old who smoke or drink regularly can reduce mortality rates by 43%. The objective of oral cancer screening is to find precancerons lesions (such as non-homogenous leukoplakia or oral submucous fibrosis), not cancerous ones which can effectively be prevented from progressing to oral cancer through education and betel quid-chewing cessation.

Policies and results:

In order to expand oral cancer screening to more high-risk groups, BHP commissioned a curriculum for “Education and Training in Oral Mucosa Health Examinations”. It was directed to dentists, otolaryngologists, doctors in charge of laborers’ checkups, and other health professionals. 45 training sessions were held in northern, central, southern, and eastern regions, improving the quality of oral mucosa health examinations. Approximately 1.44 million smokers and betel quid chewers over 18 years old received the screening (a screening rate of 28%). Among this number, 1,248 people were diagnosed with oral cancer.

4. Cancer diagnosis and treatment quality

A. Enhancement of screening quality

To improve the quality of each item of cancer screening, BHP commissioned the Taiwan Society of Pathology to organize cervical cytopathology diagnosis unit certification, and a Pap smear quality enhancement program. The Taiwan Society of Laboratory Medicine was commissioned to organize certification and inspection of institutions using fecal occult blood testing, to raise the performance standards. Also, the Radiological Society of the Republic of China was commissioned to organize certification for institutions using mammographies, as well as an image quality enhancement program. The Breast Cancer Society of Taiwan was commissioned to create a sonography quality enhancement program. And the Taiwan Dental Association was authorized to organize a screening training program.

B. Certification of diagnosis and treatment quality

The quality of cancer treatment and care greatly impacts the survival rate of patients. For this reason, BHP commissioned the National Health Research Institutes in 2005 to establish an accreditation system for cancer diagnosis and treatment quality. On October 4th, 2007, the new criteria were used with hospitals having 500 or more newly diagnosed cancer cases, to elevate the level of diagnosis and treatment in Taiwan, and to ensure that cancer patients have a superior treatment environment that is safe and effective.

From 2008 to 2009, 40 hospitals received the accreditation. Accreditation results are be included in the hospital's overall evaluation, to ensure that hospitals are in compliance with the "Quality Assurance Standards for Cancer Care". The certification results were posted on the Internet for public reference.

5. Cancer patients and palliative care services

A. Services to cancer patients

As medical technology advances, cancer patients have been surviving longer, which has brought about the need for more continuous and multifaceted integrated care services. To assist cancer patients cope with physical, mental, family and social problems, BHP has implemented a cancer patient service plan since 2003.

In 2009, this office subsidized 15 medical institutions and NGOs in carrying out a direct services program which provides cancer patients with direct services that allow the patients and family members to receive comprehensive cancer support and care. Service content includes telephone education and consultation, voluntary hospital visits, psychological counseling, study camps for new patients, team work, physical and mental rejuvenation travel, volunteer training and pertinent educational materials. Services were used 153,000 times.

In order to establish a cooperative mechanism between hospitals and NGOs, this office subsidized a cooperative project between the Hope Society for Cancer Care and hospitals in 2009 to create a cancer resource one-stop service, which allows professional caregivers or social workers to follow a standardized service procedure in providing cancer patients and family members with quality resources and information that meet their demands in a prompt manner. Amidst the turmoil brought about by cancer, the service portals helps patients and family members regain a control of their lives and start

the treatment in the shortest time possible, while serving as a bridge of communication between the patients and medical facility staff. The ultimate goal is to assist patients and their families achieve a smooth transition back into society after treatment.

B. Palliative care services

The Department of Health has been promoting hospice services since 1996, and in 2000 came up with a pilot program to include hospice care under the National Health Insurance program. In the same year the "Hospice and Palliative Care Act" was enacted, making Taiwan the first Asian nation with a natural death legislative bill. In order to provide Palliative services to cancer patients who are not in a hospice ward, the Bureau began cooperating with the Taiwan Hospice Organization in 2004 in a pilot program with eight hospitals to provide joint hospice care network. At the beginning of 2005, it was extended to support 34 hospitals, and by the end of 2009, a total of 41 hospitals provide hospice hospitalization services, 64 provide hospice home care services and 65 provide shared services via hospice care. In 2009, the number of patients using the Palliative care network was 13,400, marking a significant increase in the utilization rate of cancer patient Palliative care services. Analysis of official death records and claims data reveal that the percentage of terminal cancer patients availing themselves of Palliative care (including hospital and palliative care, hospice home care services, and shared palliative care services) increased significantly, from 7% in 2000 to 39% in 2008 (see Figure 5-10).

Figure 5-10 Terminally ill cancer patients who had used palliative cave services in the year before death

To comprehensively improve the quality of palliative care, the Taiwan Association for Palliative Medicine was commissioned to organize staff training, service quality analysis, and counseling programs for medium and small medical centers. This is a mechanism for the training of palliative care providers, and organizes relevant training for palliative care teams involved in cancer prevention and treatment.

Chapter 6

Special Health Topics

Chapter 6 | Special Health Topics |

In the "World Health Report 1998 – Life in the 21st Century: A Vision for All" published by the WHO, special emphasis was placed on "health equality," particularly on placing equal importance on the issues of gender, race and poverty. More and more studies have shown that health risk factors and health disease prevention behavior require different measures and response models for people with different gender, races and income levels, or those with physical and mental disabilities.

Such groups face special health issues that are brought about by special health needs as well as socio-economic status. Women face health problems related to breast cancer, cervical cancer, hormone therapy related to menopause, osteoporosis and incontinence. For minority groups in Taiwan, the problems include the reproductive health of foreign spouses, insufficient attendance rate of children's health examinations, difficulties in obtaining medical information and poor accessibility to treatment, difficulties in obtaining therapeutic drugs for rare disease patients, oral health problems for the physically and mentally disabled, and health care for patients with Yu-cheng disease caused by dioxin poisoning. The most important task in attaining health equality is to utilize the three major concepts of health protection, disease prevention and health promotion in adopting different strategies, plans, methods and intervention measures for eliminating health inequality.

Section 1 Women's health

Current status:

As society becomes an aging society, the average life expectancy of women in Taiwan has reached 82.01 years, while the average natural menopausal age is 49.3±3.8 years. Presently, middle-aged women over 50 years old make up 14.6% of the population. A survey conducted between 2004 and 2008 by the Executive Yuan's Health Department as part of the National Nutrition and Health Survey Program, out of 241 people aged above 50 with osteoporosis, among males lumbar osteoporosis constituted 4.3%, and in the femoral area 10.7%. The incidence among women was more severe, and increased with age. Also, a 2005 National Health Interview Survey found that the prevalence of osteoporosis and urinary increased with age. One out of every four women over 55 years of age suffer from osteoporosis, with nearly one-third of the women over 65 years old (31.2%) suffering from osteoporosis. Approximately 30% of women over 55 suffer from urinary. Women who are at risk are those who are over 45 years old, have a BMI (body mass index) higher than 27, have given birth to four children, or have had hypertension, diabetes or a history of strokes. Thus it is imperative to establish a positive attitude and behavior in middle- aged and elderly women as well as provide correct health-related information.

Policies and results:

1) To provide menopausal women with care and service, a toll-free hotline (0800-00-5107, "Ring Ring! I Want Youth!") was set up to answer menopause-related questions. Nearly 9,740 calls were taken, among which 46.9% were about physiological matters and 33.5% about menopausal

symptoms. BHP also trained 77 counselors to answer the hotline, collected information about menopause from domestic and international sources, and published two issues of the Recharge periodical, of which nearly 6,000 copies were distributed to medical institutions around the nation. Other promotional activities included producing posters and other publicity materials, advocating the services in workplaces and holding a menopausal slogan contest.

2) On important holidays such as Mother's Day and World Osteoporosis Day, this office sent out press releases topics related to menopause, such as osteoporosis and urinary.

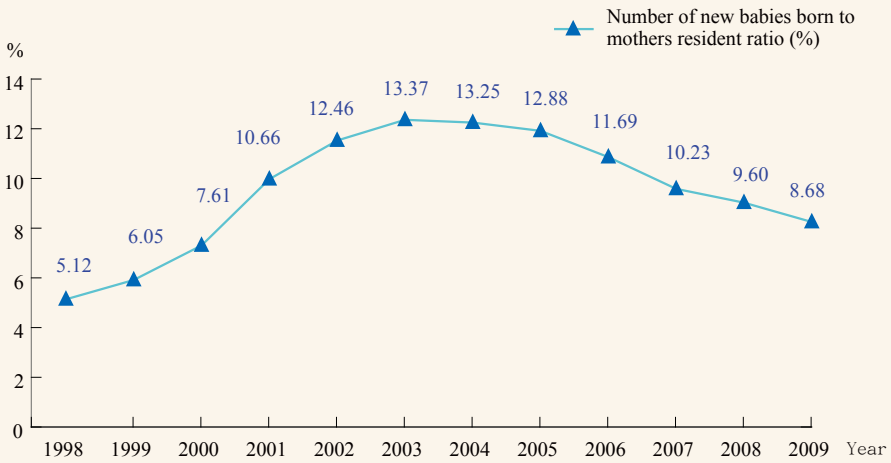
Section 2 Health of disadvantaged social groups

1) Reproductive healthcare for foreign-born spouses

Current status:

In 2009 there were 117,099 newly-registered married couples in Taiwan, of which 95,185 individual spouses were native-born (81.29%); there were 13,294 from Mainland China, Hong Kong, or Macao (11.35%); and 8,620 were foreign-born (7.36%). By the end of 2009, there were around 429,000 foreign and Mainland Chinese spouses in Taiwan, of which foreign spouses accounted for 144,000 or 33.46%, while Mainland Chinese, Hong Kong and Macao spouses accounted for 285,000 or 66.54%. The children of these spouses accounted for 8.68% of total births in 2009 (Figure 6-1). By the end of 2008, Vietnamese spouses accounted for the largest group of foreign spouses holding valid alien registration, at a rate of 57.32%, followed by Indonesian spouses at 18.43% and Thai spouses at 5.68%.

Figure 6-1 Structural analysis of births to foreign-born spouses and those from Mainland China



Policies and results:

Under the impact of globalization and internationalization, cross-national immigration has become a common phenomenon. Issues encountered in international marriages include adaptability, as well as potential reproductive health problems and the education of children, as a result of differences in education levels and age and language barriers between husband and wife. This phenomenon is not just a "family" issue, but also the concern of the whole society and nation, necessitating the intervention of public health sector, which necessitates its inclusion in health management. Since 2003, this office has implemented a "Foreign Spouse Childbirth Health Management Program" with the following objectives:

1) To create a sound reproductive health environment

2) To prevent congenital defects and premature births

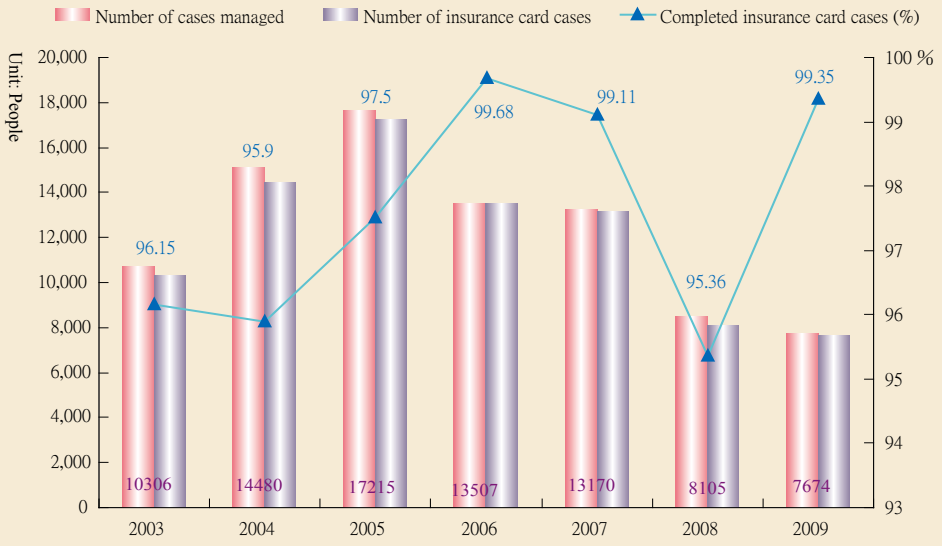
3) Promote and safeguard the health of foreign-born spouses and their children

Aggressive advocacy allowed for these achievements in reproductive healthcare and reproductive health management for foreign-born spouses:

1. Implementation of reproductive health care and health education

In order to strengthen reproductive health care of foreign-born spouses, this office, together with county and city health departments, promoted Health Care cards for children of foreign-born and Mainland Chinese spouses (Figure 6-2). Guidance on family planning was provided, as well as prenatal and postnatal health care, genetic health care and disease prevention measures, as well as

Figure 6-2 Health Care management for the health care of foreign-born and Mainland Chinese spouses, 2003-2009



follow-ups of abnormal cases with referrals for timely treatment. By 2009, 99.57% of foreign spouses, and 99.24% of Mainland Chinese spouses were under the coverage of Health care management.

2. Training of volunteers for interpreting services

To reduce the obstacles in seeking medical services encountered by foreign spouses newly admitted into Taiwan as a result of the language barrier, a "Program to Train Volunteers in the Assistance of Promoting Foreign Spouse Childbirth Health Care Services" was commissioned by this office in 2004 to train interpreters to provide childbirth health care support such as accompanying health bureau personnel on home visits of foreign spouses and assisting in pediatric outpatient services. By the end of 2009, 190 health departments in 21 counties and cities were participating in the program, sponsored by the "Ministry of the Interior Fund to Care for Foreign-Born Spouses of R.O.C. Citizens, which gave subsidies for interpreting services.

3. Providing of subsidies for prenatal care and examinations for those not yet covered by health insurance

To provide comprehensive reproductive medical care to foreign spouses newly admitted to the country or who have not yet enrolled in national health insurance, from 2005 the Fund to Care for Foreign Spouses of R.O.C. Citizens of the Ministry of the Interior has provided subsidies for prenatal examinations services to foreign spouses who have still to completed national health insurance enrollment. In 2009, subsidies were granted in 12,405 instances, with total assistance totaling NT$ 7,180,000.

4. Development and publication of multilingual health education materials

To help foreign spouses overcome language barriers, reproductive health education materials were published in different languages. In 2008, both the "Maternal Health Handbook" and the "Child Health Pamphlet" were published in five languages. Additionally, a film series was produced in the five languages about health care for foreign spouses, and a "Childrearing Handbook" as well, for the use of foreign-born spouses and relevant health care professional.

2) Prevention and control of rare diseases

Current status:

National reporting on the number of cases of rare diseases began in 2000, and by the end of 2009, 3,005 cases had been reported. As these cases are few in number, the market for the drugs is small, presenting little incentive for pharmaceutical companies to produce, import or trading orphan drug, which makes it difficult for patients to obtain the necessary drugs for treatment.

Objectives:

The main objective is to build a comprehensive genetic health and rare disease medical treatment service network that helps patients obtain care and medical treatment subsidies, thus ensuring their right to seek medical treatment.

Table 6-1 International comparison of statutory guarantees for sufferers of rare diseases

Country	United States	Japan	Australia	The European Union	Taiwan
Year enacted	1983	1993	1998	2000	2000
Name of legislation	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	Rare Disease Prevention and Drug Act
Prevalence of rare disease	75/100,000	40/100,000	11/10,000	20/100,000	1/10,000

Policies and results:

To provide for the early diagnosis and treatment of rare diseases, to assist sufferers from rare diseases in obtaining the requisite drugs and foodstuffs necessary to maintain life, the "Rare Disease Prevention and Drug Act" was created, making Taiwan the fifth nation in the world to protect patients with rare diseases through legislation (Table 6-1).

1) Assisting patients with rare diseases in obtaining proper medical services

1. Protection of the rights of patients with rare diseases to seek medical treatment

Since September 2002, rare diseases that have been announced have been included in the major injury and diseases category of the national health insurance program, which waives the co-payment, and thus resolves an obstacle in seeking medical treatment for these patients. Furthermore, where the diagnosis, treatment and drug cost of rare diseases are not covered under the "National Health Insurance Act," Article 33 of the Rare Disease Prevention and Drug Act stipulates that this office must appropriate budgets to subsidize these needs.

2. Establishment of the Committee for the Review of Rare Diseases and Drugs

By December 2009, a total of 175 rare diseases, a list of 74 drugs for rare diseases and their indications, and special nutritional supplements for 40 rare diseases and their indications have been reviewed, established, and announced. In addition, medical cases to be subsidized were reviewed.

2) Establishing a comprehensive genetic and rare disease medical treatment service network

1. The Rare Disease Special Nutritional Supplement and Drug Distribution

Center's reserve for 2009 was established, providing 29 different special nutritional items for

sufferers of rare diseases, service to 16 hospitals, and 324 sufferers of rare diseases. It has subsidies of NT$ 28.53 million, helping those afflicted with the 10 rare disease types listed. In addition, 10 types of emergency drugs for rare diseases were reserved and supplied to hospitals for emergency use. In 2009, the medicines were supplied to 16 patients with rare diseases, and the budget for these subsidies was NT$524,425.

2. Providing international medical laboratory referral services for rare disease cases

International medical laboratory referral services are provided for rare disease cases. The government and the Taiwan Foundation for Rare Disorders each subsidize 40% of the referral test costs. Additionally, rapid review principles for 12 rare diseases were formulated in June 2006 to shorten the review process for international laboratory referrals. Between 2000 and the end of 2009, a total of 354 cases were subsidized, among which 42 cases were referred abroad for testing in 2009.

3. Subsidizing the national health insurance for diagnosis

Treatment, and medications for rare diseases for which the costs have not yet been paid. For those that have been investigated and approved by the Committee for the Investigation of Rare Diseases and Drugs, the subsidy for patient treatment is over 70% in practice, but for patients from low-income households, their coverage is total.

3) Promoting research, education, and public knowledge of rare diseases

Commissioning of academic groups to promote research into prevention and control of rare diseases, and establish relevant policies concerning them. Utilized broadcast media, printing leaflets, and brochures, promoting pubic education about prevention and control of rare diseases, as well as holding campus lecture tours on the subject. Collaborated with public interest groups, such as the Rare Disease Foundation, to hold international symposia.

3) Oral health care for people with disabilities

Current status:

According to a nationwide survey in 2004, the oral health status of the people with disabilities was generally worse than that of the general public. The common oral health problems were lack of medical restoration treatment, poor dental hygiene, insufficient tooth cleaning and lack of preventive health care intervention (Table 6-2). The oral health of children and young adults who are disabled is worse than that of Singapore, and much worse than in Europe, America, Japan, and other developed countries.

Objectives:

This bureau advocates oral preventive health care for people with disabilities, with mid-range objectives from 2009 to 2012 as follows: providing oral preventive health care for 20% of institutionlized people with disabilities annually, with the aim of a coverage rate of 80% by 2012.

Table 6-2 Comparison of the oral health status of disable people with that of the general public over 18 years of age

Subject	DMFT index	Rate of caries in permanent teeth (%)	Filling rate (%)
people with disabities people over age 18	12.1	94.6	30
General public over age 18	7.84	86.61	40.22

Source: Oral Health status Survey of people with disabities in Taiwan (2004)
Oral Health status Survey of Adult and Elderly in Taiwan (2004)

Policies and results:

1) Completion of the "Five Year Oral Health Plan for people with disabilities," which was reported for ratification by the Executive Yuan on May 26th, 2008.
2) Started a preventive oral health care plan for people with disabilities: in 2009, trained 166 preventive oral professional staff; 324 professional oral health care instructors; 1,129 people within the organization who are able to provide professional oral healthcare; and provided 3,600 residents of institutions for people with disabilities, up to 21% of the total number, with preventive oral healthcare services. Organized the 2009 Seminar for Oral Health Care for people with disabilities, in which was screened a documentary about teeth cleaning, and a teeth cleaning demonstration was held.
3) Organized a pilot plan for the development of oral healthcare for Children with Developmental Delays. Subsidized two hospitals to work in concert with the Child Development Associated Evaluation or Treatment Center to train the caregivers of Children with Developmental Delays in teeth-cleaning skills and oral healthcare.

4) Grassroots health care units: health centers

Current status:

Taiwan has a complete grassroots health care system. By the end of 2008, there were 372 health centers in Taiwan's 25 counties and cities, staffed with 4,386 employees, of whom there were 3,652 women (83.3%) and 734 men (16.7%). The centers provide basic medical treatment and primary health care services. In order to encourage these centers to meet local health needs and improve service quality, the BHP office holds the annual service quality competition among the health centers. The Gold Medal competition for health centers also allow these centers to share experiences on quality services and learn from each other.

Policies and results:

1) Enhancing service quality:

1. Developed an on line core public health digital curriculum of 46 hours for primary health care workers which provides diverse and interactive instruction to polish their professional competence and the quality of service.
2. Published a "2008 Introduction to the primary health care centers" in English to acquaint an international audience with the national grassroots health system of Taiwan, and to give an overview of public health promotion. We also published a 2008 Taiwan primary health care center Statistical Yearbook, to survey the national health service's overall manpower, hardware and services, as the reference of county and city government healthcare planning.

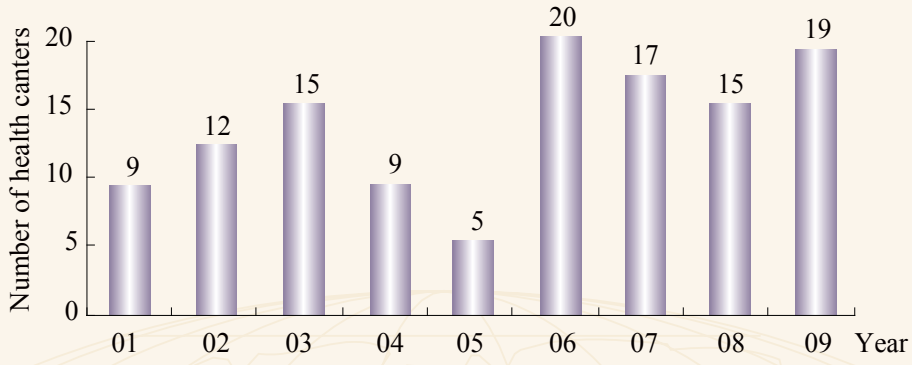
2) Improving the service environment:

1. The 2006 health center reconstruction (expansion) project was incorporated into the Central Government General Subsidy Designated Items List. Between 2001 and 2009, health centers had applied for NT$ 442 million in funding, and oversaw reconstruction/renovation projects in 71 health centers in 15 counties and cities (excluding mountain and outlying island regions). (Figure 6-3).
2. In the reconstruction work following 2009's Typhoon Morakot, the BHP gave grants to health centers for non-mountainous indigenous populations in amounts totaling NT$ 18,710,000. Provided financial assistance for the purchase of equipment for 34 health centers and 9 local health clinics; and for the restoration of 27 health centers and 9 health clinic buildings.

3) Implemented a health center outpatient treatment system

The BHP organized the procurement of a healthcare information system annual update and support, for outpatient treatment-related functions of the health centers in 22 counties and cities. This system supports 315 health centers and three clinics which aim at chronic disease prevention and control.

Figure 6-3 Health center reconstruction and renovation projects in 2001-2009



Section 3 Care for patients suffering from oil disease (Yusho)

Current Status:

In April 1979, some residents of Changhua and Taichung counties began to experiences skin ailments of unknown origin, and investigation discovered that these people had consumed rice bran oil contaminated by polychlorinated biphenyls, or PCB's, hence the disease was known as oil disease or " Yusho". Since 2004,the BHP has continued to provide subsidies for clinical outpatient treatment fees for oil disease patients, and has provided free health examinations and consultation services. Besides, the local public health bureaus and center health care workers provide patient follow-ups, management and health education. Since PCB's can be transmitted via the placenta or through breastfeeding to the second generation, and the children of women could possibly suffer from oil disease. In 2005, these who were born by the mother of oil disease after 1979 are known as the second-generation patients are also eligible for the same health services listed above.

Policies and results:

Every year, the BHP subsidizes the outpatient co-payment fees for oil disease patients and free annual health examinations. By December 2009,1494 oil disease patients were registered and 513(34.3%) of these received free health examinations. From 2004 to 2009, the number of people who had ultilized of this service at least once was 977 (approximately 65.4% of the total).

Moreover, to help oil disease patients in accessing medical consultation, the Department of Health, appointed both DOH affiliated Fong-Yuan Hospital and the Changhua Christian Hospital to set up oil Disease Special Clinics on December 1, 2009 for oil disease patients in Taichung and Changhua counties seperately in order to provide oil disease patients with a better and more friendly environment for medical help. At the same time, with the cooperation of Bureau of National Health Insurance and the informed consent of the oil disease patient, their NHI card was electronically marked in the confidential way so that the patients can leave more privacy when seeking medical help. The IC card, just as the old Yush patient ID card, provides for waiving of co-payments of outpatient visits.

Chapter 7

Health Promotion Infrastructure

Chapter 7 | Health Promotion Infrastructure |

With the rapid advancement of media and Internet technology, the attitude towards access to health information has transformed from passively being informed in the past to proactively collecting resources. For public health services that are oriented toward health promotion, factors like quality, availability, accessibility, immediacy and cost effectiveness become vitally important. Thus the timely collection and dissemination of health information has become a basic aspect of health promotion strategies.

Moreover, in order to share the health promotion achievements of Taiwan with the international community, the development of various media and Internet outlets can facilitate international exchange and cooperation and accelerate the realization of a true global village.

Section 1 Health communication

Current status:

The advancement of contemporary broadcasting media, such as TV, radio, newspapers, magazines, outdoor media and the Internet, gives the public more diversified and rapid communication channels to obtain information on health. On the other hand, the fact that the Internet and media communicate diversified health information without limits of time and space can also have a negative influence on public health if inappropriate or inaccurate health concepts are believed and practiced.

To publicize the concept of "Cherish Life and Promote Health," this office has created the following website to provide health information in an accessible, convenient and accurate manner to help the public manage and promote their health.

Website	Homepage	Description
Bureau of Health Promotion, Department of Health http://www.bhp.doh.gov.tw/BHPnet/Portal/		1. The main goal of the website is to: 1) Provide information about the scope of responsibilities of each unit, as well as public service projects and contact information 2) Provide news about this office, announcements, and events 3) Provide necessary information to the public about various health issues and zones, for example: "Mothers and babies", "Infant hearing", "Oral health", "Adolescent health", "Health of the middle-aged and elderly", "Cancer prevention and control", "Community health", "Smoking prevention and control", "Health education", preventive medicine", "Health research investigations", "Birth notifications", etc. 4) Provide age-appropriate reading material for people to choose from; provide editions in English, for children; PDA versions; RSS feeds 2. Rated an Excellent Health Information Website in 2005 and 2006 3. On the homepage, gives the major issues that this office is concerned with, and an animated banner that lets people see at a glance the key issues that this Bureau deals with 4. For research and academic departments, the website provides specialized areas for raw data, health research investigations, and health education

Website	Homepage	Description
Health 99 website http://www.health99.doh.gov.tw/default.aspx		1. This site offers the general public and health educators advanced search capabilities by keyword, open project, category, type, date added, as well as full text queries. 2. In 2005 and 2006 rated an Excellent Health Information Website. 3. Content-wise, the site includes news updates, promotional materials, health news columns, Q&A's, "Sharing Good Health", and related links to relevant health information resources.
Breastfeeding website http://www.bhp.doh.gov.tw/breastfeeding/		Provides information on breastfeeding, and promotes public awareness of the fact that breast milk is uniquely suited to the healthy development of infants, far more than baby formula.
Web consultation window for genetic diseases http://www.bhp-gc.tw/		1. This website provides integrated professional expertise and resources concerning genetic diseases, as a first resort for medical specialists and public health staff in the medical treatment of many different kinds of genetic diseases as well as rarely-encountered ones. It enhances service quality and response times by enabling rapid collection of pertinent information and resources. 2. In 2006 was recognized as "Best Health Information Website".
Youth web (Sexual Health e-Academy) http://www.young.gov.tw		1. Provides young people with resources for sex education. 2. Also has an online consulting service, with confidential replies, adapted to the needs of most young people.
Healthy workplace information network http://www/health.url.tw/		This is an exclusive website for the promotion of healthy workplaces and the nationwide advocacy of occupational health, making the best use of web resources to actively combat indoor smoking, and provide self-certification activities for indoor workplaces. The website includes a Healthy Workplace Self-Certification Academy; Activities for a Healthy Workplace; Smoke-Free Workplaces Encourage Health; Health Messenger; Resource Downloads; Online Education Links.
Health House http://hpnet.bhp.doh.gov.tw/healthhouse/go.asp		Builds on the concept of "Health 24/7" and encourages the public to improve their health by exercising anytime, anywhere.

Website	Homepage	Description
Tobacco Hazards Prevention and Control website http://tobacco.bhp.doh.gov.tw/		1. Presents the progress and results of tobacco hazards prevention and control efforts, and serves as a one- stop portal for local health bureaus, health education personnel and the public to link to, search, and download information. 2. Contains latest information on international cooperation, smoking hazards, strategies for prevention and control of smoking hazards, smoking cessation services, Smoke-Free Taiwan, yearly events, publications for downloading, investigations of smoking behavior, research reports, media advocacy, and smoking cessation handbooks. 3. Links to Chinese-language quit-smoking websites, outpatient smoking cessation websites, the Health 99 web, and Health Department websites.
Website for the Outpatient Smoking-Cessation Treatment Administration Center http://ttc.bhp.doh.gov.tw/quit/		1. Provides information about the management of smoking-cessation outpatient treatment. 2. Assists smokers to quit smoking by providing effective clinical means and medications to overcome nicotine addiction.
Taiwan Smokers' Helpline http://www.tsh.org.tw/		1. Provides smoking cessation counseling and relevant information. 2. Assists smokers in formulating plans and strategies for quitting smoking.
Website for tobacco product ingredients http://tobacco-information.bhp.doh.gov.tw/		1. This site provides information on ingredients of tobacco products, and related information. 2. Increases public awareness of substances contained in tobacco products, as well as their dangers.
"Health indicator 123" interactive health data querying system http://olap.bhp.doh.gov.tw/		1. Provides health data to the general public through searches of health indicators. 2. The website's database is based on this Bureau's national health surveys and birth reports.

Section 2 Health Surveillance

Current status:

In recent years, Taiwan has faced the challenges of population aging, fertility decline and growing burden of chronic non-communicable diseases. For the formulation of adequate health promotion strategies and to enhance the health of all citizens, the Bureau of Health Promotion (BHP) has gradually developed a surveillance system on non-communicable diseases. This system aims to collect policy relevant information through the well-established birth reporting system as well as the routine and periodic health surveys. A rich set of empirical datasets is thus available for monitoring current status and trends of health status, behavior, knowledge and attitudes of the population in Taiwan, and enables strengthening the evidence basis of policy making, program planning and assessment.

Policies and achievements :

Series of surveys that target on population of different life-course, such as infants and children, adolescents, adults, the middle-aged and the elderly, and the child-bearing aged women, are conducted regularly. Three modes of survey administration, including community-based face to face interview, telephone interview and school-based student self-administered questionnaire, are used for step by step construction of the databases to facilitate evidence-based decision making. Surveillance data on non-communicable disease are collected, analyzed and disseminated.

Surveys that have been conducted or planned between 2001 and 2013 are shown in Table 7-1. Those conducted in 2009 were: National Health Interview Survey, Global Youth Tobacco Survey and Taiwan Youth Health Survey on senior high school students, Behavioral Risk Factor Surveillance System on adults, and Adult Smoking Behavior Survey.

1) National Health Interview Survey

To regularly monitor the health status of the citizens and the changing trends, the BHP collaborates with the National Health Research Institutes on designing and implementation of the National Health Interview Survey. Data were collected by face-to-face interviews and self-administered questionnaires at four-year intervals for a timely investigation and updating on the national health, the transition and the associated factors. Since the first wave of survey in 2001, the second and third waves of the survey were conducted in 2005 and 2009 respectively. The third survey was carried out from June 2009 through February 2010. A total of 25,632 respondents were interviewed with a response rate of 83.9%. The survey report is expected to be completed and published in 2011.

2) Youth Behavior Surveys

Since 2004, the BHP has followed the protocol of the Global Youth Tobacco Survey, which developed by the World Health Organization (WHO) and the United States Centers for Disease Control and Prevention (CDC), to monitor behaviors associated with adolescent tobacco use. In 2006, the Bureau further adopted the survey method of the CDC's Youth Risk Behavior Survey (YRBS), and the WHO's Global Student Health Survey (GSHS) to initiate the Taiwan Youth Health Survey.

Table 7-1 Overview of important health surveys

Survey series	● Ccross-sectional survey → Longitudinal survey												
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Community-based face to face interview survey													
National Health Interview Survey	●	●			●				●				●
Taiwan Longtudinal Study on Aging			→				→				→		
Women health, Family, and Fertility Survey			●	●				●				●	
Taiwan Birth Cohort Study					→	→	→	→		→		→	
Child and Adolescent Behaviors in Long-term Evolution							→	→	→	→	→	→	→
School-based self-administered questionnaire survey													
Taiwan Global Youth Tobacco Survey of Junior High School Students				●		●		●		●	●	●	●
Taiwan Global Youth Tobacco Survey of Senior High School Students					●		●		●		●	●	●
Taiwan Youth Health Survey of Junior High School Students						●		●		●		●	
Taiwan Youth Health Survey of Senior High School Students							●		●		●		●
Telephone interview survey													
Adult Smoking Behavior Survey				●	●	●	●	●	●	●	●	●	●
Behavioral Risk Factor Surveillance System							●	●	●	●	●	●	●
Surveys on Health Issues				●	●	●	●	●	●	●	●	●	●

To address health behaviors that lead to death, disease, disabled, or social problems, these surveys focus on substance use of the adolescent such as smoking, drinking, betel quid chewing, a variety of other lifestyles or health-related behaviors. Surveys are conducted on a rotating year basis among junior as well as senior high students, junior college and vocational students as part of a periodic survey system to monitor current and trends in adolescent smoking and other health behaviors. In 2009, anonymous self-administered questionnaires were completed by a representative sample of senior high, junior college and vocational school students. By the end of 2009, a total of 3,475 students completed the survey questionnaire. The response rate was 90.6%.

3) Monitoring behavioral risk factors

Since 2007, the BHP has conducted telephone surveys on the model of the United States Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS). In order to establish baseline data about prevalence rates of major diseases, behavioral risk factors and utilization of preventive care services, citizens over 18 years old were surveyed about their health risk behaviors. Topics addressed in the surveys include chronic diseases (diabetes, metabolic syndrome, hypertension, kidney disease), tobacco use, betel quid chewing, cancer screening, and other health behaviors and life-style related topics. In 2009, a Computer-Assisted Telephone Interviewing System (CATI) was applied on the survey of the general public age over 18. The interviews were completed at the end of 2009, on a total of 16,260 respondents. Among the eligible participants, the successful responce rate was 63.51%; the rate of answering the phone call was 79.68%.

4) Promotion of the“Online Health Indicator Data Query”

In order to provide user-friendly services and convenient access to health indicators, an interactive online health indicator query system was set up in 2004 by adopting applicable information sciences and internet technology. This data query website (http://olap.bhp.doh.gov.tw/) was constructed with intention to facilitate accessibility of health indicators for the policy maker, program planner and the general public, and to reduce manpower requirement for descriptive analysis and provision of the health data. This website also serves as a platform for dissemination of the survey results and health statistics generated from the birth reporting databases.

The website was first upgraded in 2007 to enhance capabilities of back-end management, allow flexible inclusion of more inquirable databases or health indicators, and enable multi-year and geographic comparison. With expectation on better quality and utilization of the online services, this website was upgraded again in 2009 by adding dual-language interfaces for data query, strengthening user-friendly design, as well as improveing its function of geographic comparison. In addition, a serial of promotion activities was implemented after the upgrading of the website. The number of visitors counted from the first upgrading of the website in June 2007 to the end of 2009 was 30,910.

In 2009, queries on 12 new indicators of health status, health behaviors and utilization of the preventive healthcare and medical services, using data from the 2007 and 2008 Behavioral Risk Factors Surveillance, and 19 indicators from the 2008 Birth Reporting System databases were opened. By the end of 2009, another 55 health indicators from the Taiwan Longitudinal Study on Aging were public accessible. The website provides services for queries into a total of 351 health indicators for the general public.

5) Application of Survey Data

The objective of surveillance system is to understand health status of the citizens and to provide relevant information for policy-making, program evaluation and strategy planning. To increase utilization of the survey data and to enhance the visibility of survey results, research and statistical analysis were conducted using the survey data as material. In 2009, the results of surveys were used for 15 news releases to improve public awareness of a variety of issues on health promotion. In addition, BHP also utilize multiple channels and platforms, such as websites, publications, conferences or journal papers to disseminate the results of surveys to health sectors and academic or professional society.

For wider application of the data and to encourage value-added utilization of the survey data, the bureau makes survey raw data accessible through a well-established data release mechanism. Currently the available datasets for release include the Taiwan Longitudinal Study on Aging, the Women Health, Family, and Fertility Survey, and the Taiwan Youth Health Survey. In 2009, 58 applications were accepted. The research topics or administrative purpose of the accepted applications are posted on the website of the bureau. Moreover, the bureau cooperated with the National Health Research Institutes (NHRI) and the Food and Drug Administration, Department of Health to release data of the 2001 National Health Interview Survey that linked to National Health Insurance databases as well as the 2005 National Health Interview Survey data through the web-based platform managed by the NHRI. It is hoped that domestic and overseas scholars or research institutes can conduct in-depth analysis and publish pertinent academic papers based on their fields of specialization, thus increasing the overall utilization of the database and optimizing the value of the survey resources.

Section 3 International cooperation

Current status:

A healthy citizenry is the foundation of national prosperity, and in the wake of the global recession, promotion of international health is more urgently needed than ever. After years of efforts, this national finally was admitted as an observer in the World Health Assembly in May of 2009. This Bureau works in conjunction with trends in world health, promoting a model of international cooperation in a multitude of health issues, and adheres to international standards and timelines, to advance the work of health promotion.

Policies and results:

This Bureau actively participates in international cooperation and exchanges, and works with the US Centers for Disease Control, Georgetown University, and Princeton University among others, to undertake international planning in important healthcare issues. It arranged for the Vietnam Health Department's Family Planning Office to visit governmental and non-governmental organizations for research and study. This office also collaborated in exchanges on the topics of medical care for families and children in the Vietnamese and Taiwanese population. It also held or participated in major international meetings, to give voice to Taiwan's experiences in promoting health initiatives.

1) 2009 Health Promotion Seminar

In 2008, this office organized a health promotion seminar in which public health officials and health promotion experts from around the world were invited to discuss the topics of community health policy and promotion of senior citizen health. The response from participants was impressive, but the field of health promotion is wide-ranging, so in 2009, a further meeting was organized to address health promotion assessment, setting priorities in health policy, addressing inequalities in healthcare. From July 22 to 23, 2009, invitees included Deputy Director Dr. David V. McQueen of the United States Centers for Disease Control (CDC)/Center for Chronic Disease Prevention and Health Promotion; Dr. Howard I. Goldberg, Deputy Director of the Center for Reproductive Health at the CDC; Oregon State University Associate Professor Chun-hui Chi; and National Taiwan University Public Health Institute President Chiang Tung-liang. There were workshops, seminars, and roundtable discussions, in which experiences were shared and discussions held on the above topics. Officials from the US CDC visited and there were.

Full discussions on the topics of health promotion assessment, and the challenges involved in healthcare for women and children, among visiting officials from the US CDC, academics and experts from Taiwan and abroad, and representatives from this office. The foreign visitors were extremely impressed with Taiwan's activities in health promotion, and a collaborative link was established between this office and the US CDC.

2) Broadened participation in the 2009 Public Health Annual Conference

From November 7 to 11, 2009, participated in the annual Public Health academic conference in the

United States. This office actively participated in the various reports and exhibitions in the conference, and collaborated with the Health Department's special forum on "Breakthrough Strategies for Coping With Tough Health Service Issues". It presented the first report, "New Tobacco Control Strategy: Legislation and Implementation". It also created the poster "Chronic Kidney Disease Monitoring in Taiwan", presenting the progress in health promotion that Taiwan has made.

Other reports were presented in parallel forums. "Dengue Prevention and Control", "Healthcare in Remote Regions, Mountainous Areas and Islands", "Opiate Addiction Cessation and Control", "Cherishing Life: Suicide Prevention", "Medical Wisdom: Utilizing Technology in Medical Care", and others. These presented in full detail the successes of public health in Taiwan in various areas, and fostered international exchanges.

3) Tobacco hazard prevention and control events

In 2009, in addition to collaborating with the United States Centers for Disease Control in surveys about smoking behavior, the Bureau of Health Promotion also actively strove for an international conference that would make possible the sharing of experiences in tobacco hazard prevention and control and foster international cooperation. In addition, the bureau continues to work with non-governmental organizations and developing countries to promote the task of tobacco prevention and control.

Significant achievements include:

1. International exchanges and cooperation

A. Organizing international symposia: Working with National Taiwan University's College of Law, Asia WTO and International Health Law and Policy Research Center from August 28-29, 2009, this bureau held the 2009 "International Conference on WHO FCTC Control of Demand and Supply of Tobacco and International Trade". Well-known scholars from the United States, New Zealand, Japan, Korea and Malaysia were invited to take part and share their thoughts on tobacco supply and demand controls, tobacco advertising and experience in growing alternative crops. More than 10 articles were discussed and Taiwanese experts shared their thoughts on problems with the tobacco growing industry and solutions for switching to viable alternatives.

B. Participated in international tobacco prevention and control: Continued to work with non-governmental organizations, and trained national non-governmental organizations to participate and assist developing nations to promote the ability to prevent and control tobacco consumption, and really participate in international tobacco control activities.

2. Actively participated in global or regional tobacco prevention and control conventions or activities:

Participated in the following international conferences: the "14th World Conference on Tobacco or Health"; "Cross-Straits Conference on Tobacco", and the "13th Annual Committee Meeting of the World Health Organization International Network of Health Promoting Hospitals".

4) "The Social Environment and Biomarkers of Aging Study"

The Social Environment and Biomarkers of Aging Study (SEBAS) is a longitudinal survey

which has been conducted by the Bureau of Health Promotion, Georgetown University and Princeton University since 1990s. The purpose of this study is to investigate the impacts of aging on medical care, families, and society, and to provide policy relevant information for the affiliated government departments to improve health services and social benefits for the elderly.

The study subjects of SEBAS were selected from a nationally representative cohort of the "the Taiwan Longitudinal Study on Aging", which was initiated by the Institute of Family Planning (former institution of BHP) since 1989. Medical and biological data were collected through home visit questionnaire interview, health assessment and physical check-ups, and lab assays on blood and urine samples. The data were used to understand the stress, social environment and health status of the elderly population in Taiwan and for further investigation on associated factors.

The first round of the 5-year collaborative project was conducted from 1999 to 2004, followed by the second round from 2004 to 2009. The fieldwork and data collection were conducted in 2000 and 2006 respectively. The survey results and research findings have been published continually. The research team has been planning for the third round of collaborative project from 2009 through 2014. The third wave of fieldwork is scheduled in 2011 to collect information regarding physical, mental and social health as well as the living status of the older population in Taiwan.

5) International Health Promoting Hospitals – see Chapter 4, section 5, "Healthy Hospitals"

6) 2009 International Cancer Registry Conference

Taiwan's cancer registry initiative has been ongoing for 30 years, and has promoted international exchanges and cooperation. From September 19-20, 2009, this office held a "2009 International Cancer Registry Conference", inviting 13 experts from the Britain, America, Norway, Brazil, Japan, Korea, and Thailand, among others, to give guest lectures. Besides sharing experience in promoting cancer registry initiatives in various countries, it is hoped that opportunities for cooperation in the area of cancer registries can be created, and further promote an Asia-Pacific Cancer Registry Alliance.

7) Taiwanese-Vietnamese cooperation in population and family planning

Vietnam's General Office for Population & Family Planning, Ministry of Health (GOPFP) has been involved in collaborative planning between Taiwan and Vietnam in the areas of population, family, and child healthcare for 12 years. From December 14th to the 24th, 2009, the GOPFP deputed 12 middle and high-level officials to visit Taiwan on an inspection and study tour, and seminars were organized involving governmental and non-governmental organizations in the areas of education and population growth. Such topics were addressed as: how did Taiwan, at a time when its birth rate had reached a level comparable to that of Vietnam, adjust its family planning policy? What areas were addressed, what targets were set, what were major strategies and interventions, and how did Taiwan ensure that population control and reproductive health policies were linked up? Other topics included immigration and urbanization: How are immigrant rights guaranteed, especially in the area of raising children? With regard to the rapid urbanization of villages, what social and economic policies are to be adopted to adapt to this situation, and how are they to be implemented? And with respect to population aging, what

kind of social security strategies or policies should be adopted? These topics were addressed in the seminars.

8) Community and school safety events

In 2009 the Taiwanse Community Safety Promotion Center (TCSPC) became the Affiliate Safe Community Support Center for the World Health Organization's Collaborating Centre on Community Safety Promotion. This Support center is able to train communties to abide by the six international criteria for safe communities. After Korea, the United States and New Zealand, the Memory Space Institution in Taiwan became the fourth international Safe School Promotion Center. The Forum of Taiwan International Safe School was held in Taipei, international academic experts were invited to participate in the roundtable discussions. This forum shared Taiwan's successes in Safe and Healthy schools with participants, and set forth the direction of Taiwan's future developments in this area.

9) Held collaborative exchanges with international partners

1. On April 8, 2009, the chief of Poland's Health Department International Coordination Division D.G. Wojciecj Kutyla made an official visit to the Bureau. Discussions were held on the subject of health promotion and tobacco hazard prevention and control.
2. On August 14, 2009, public officials and academics from the United States made an official visit. These included: former director of the U.S. Centers for Disease Control Dr. Julie L. Gerberding; Deputy Director of the Office of Food Safety Dr. Louis J. Carson; Dr. Paul Halverson, Director of the Arkansas Department of Health; Dr. Georges Benjamin, Executive Director of the American Public Health Association; and Ms. Yvette Benjamin of the Maryland Community Health Resources Commission. Seven other lower-level officials also attended. Health promotion seminars were held by the Peitou Cultural Association, which introduced this Bureau's health promotion initiatives as well as the general situation of community health. The Chairman of the Taiwan Cultural Foundation Hong Te-ren was specially invited to introduce community health initiatives, and led a site tour of the Peitou community.
3. Commissioned National Taipei University of Education to hold a Taiwan-Japan Conference on Preventive Health and Health Promotion on October 30, 2009. Four prominent academics and experts were invited from Japan, including Takashi Etoh from Tokyo University; Prof. Sato Yuzou from Aichi University; Imai Takaya from the Osaka University medical school; and Hidehiro Kawasaki from the Gunma Prefecture Health Department. Lectures and comprehensive discussions were held between Taiwan government officials and academic experts.
4. Anna Halpine, founder of the World Youth Alliance, was invited on December 17, 2009 to visit the Maternal and Pediatric Department of the Taipei Municipal Hospital.
5. On December 10, 2009, Dr. Kelly Lee, Director of the Global Health Research Institute at the Tropical Disease Institute in London visited this office. Discussions were held on the subjects of tobacco hazard prevention and control, and participation in World Health Organization technical meetings.

Chapter 8

Appendix

Chapter 8 | Appendix |

Appendix 1 2009 Publications of the Bureau of Health Promotion

No.	Publications	GPN	Month of publication
1	Staying Young – Handbook for Youth Smoking Cessation (Chinese Version)	1009800104	January
2	2009 Health Book	1009802094	August
3	Happiness of Being Reborn-12 Life stories of Oral cancer patients and their family (Chinese Version)	1009803494	November
4	Happiness of Being Reborn-12 Life Stories of Oral cancer patients and their family (Audio Book)	1009803495	November
5	Touching Love and Life: Stories about the Emotions for Health-Promoting Schools	1009803828	November
6	Stories of hyperglycemia buster	1009803956	December
7	A Special Edition of Outstanding Healthy City Projects, Taiwan Volume 1	1009804398	December

No.	Periodicals	GPN	Month of publication
1	2009 Statistics of Birth Reporting System (Interlinear)	2009502148	June
2	Taiwan Tobacco Control 2009 Annual Report (Chinese Version)	2009601376	July
3	Taiwan Tobacco Control 2009 Annual Report	2009601377	July
4	2008－2009 Bureau of Health Promotion Annual Report (Chinese Version)	2009602807	August
5	2008-2009 Bureau of Health Promotion Annual Report	2009602537	September

No.	Electronic Publications	GPN	Month of publication
1	Taiwan Tobacco Control 2009 Annual Report	4709601379	July
2	Happiness of Being Reborn-12 Life stories of Oral cancer patients and their family (Chinese Version)	4209803496	November
3	Hypertension prevention and control booklet – Blood pressure monitoring skills; Lowering Salt Intake for Better Health	4909803358	November

Note:

. Full text can be downloaded from the Health 99 website (http://health99.doh.gov.tw/EducZone/edukits.aspx)

. Publications conducted by Bureau of Health Promotion are also available in Government Publications Bookstore on Sung Chiang Road (TEL:886-02-25180207) and Wu-Nan Bookstore (TEL:886-04-22260330).

Appendix 2 2009 Chronology of the Bureau of Health Promotion

Date	Event Summary
January 11	On January 11, 2007, 35 amendments to the Tobacco Hazards Prevention and Control Act were announced, and on January 11, 2009 they came into effect. Eight enforceable provisions were included: a health and welfare tax on tobacco products; enactment of smoking cessation legislation; smoking cessation assistance services and incentive programs; nicotine and tar monitoring, and a requirement to label ingredients; indoor smoking regulations; signage regulation at locations that sell tobacco, and signage management; tobacco hazard prevention healthcare funds; and reporting of tobacco product ingredients.
January 12	Revisions to Articles 4 and 35 of the Tobacco Hazards Prevention Act to raise Health Welfare surcharge (the effective date will be veannounced by Executive Yuan)
March 10	Convened a consultative meeting on questions relating to electronic management of tobacco products. Invited legal and toxicology experts, as well as representatives from relevant departments, to discuss the problems involved in the electronic management of tobacco products.
March 12	Announced 17 amendments to the “Important Items for Preventive Health Services by Medical Service Organizations”.
March 13	Convened a press conference concerning 2006 data on national cancer rates. Released data on cancer cases in 2006 and occurrence rates over the previous five years (2002-2006), showing a significant increase in cancer rates. A total of 73,293 new cases occurred in 2006, an increase of 4,386 over the 2005 rate. Apart from a decrease in invasive cervical cancer, the largest increases were in colorectal cancer and oral cancers, by over 600 cases.
March 16	Convened the Fourth Central Cancer Prevention and Control Conference. Announced favorable results of the plan for breast cancer screening for women under 50. Organized a training and certification program for cancer survivors, and coordinated with the Labor Council's medical checkup program for laborers to expand pap smears and cervical cancer screening for workers.
April 13	The Executive Yuan annouced the effective date on June Ist, 2009, to raise the Health and Welfare surcharge.
April 8	D.G. Wojciech Kutyla, chief of the Polish Health Department's National Coordination Division, visited the Taiwan Health Department. Discussions were held concerning tobacco hazard prevention and control.
April 17	Announced the creation of posters about the NT$20 Health and Welfare Surcharge tax on tobacco products, to help consumers recognize package labeling. To protect consumers from hoarding and unfair profiteering by tobacco producers, special labels were used on packaging to distinguish the new packs subject to the new NT$20 health and welfare surcharge. The Bureau announced this through various media channels, to enable consumers to recognize the correct labeling, and to safeguard their rights as consumers.
April 18-19	Participated in the third annual Chronic Kidney Disease – Asian Forum. Held exchanges concerning kidney disease prevention and control with academics from Australia, Japan, and elsewhere.

Date	Event Summary
May 9	To encourage low-income women to obtain pap smears for cervical cancer, and provide subsidies for low-income households whose heads are over 30. Women who have not had a pap smear within the previous three years would receive complete pap smear checkups, and a NT$600 incentive was to be provided to every eligible woman. The benefit period was from May 10, 2009 to September 30, 2009, and a total of 25,000 women received the benefit.
May 18	Adopted the World Health Organization's global children's health curve, and published a new edition of the children's growth curve chart.
June 1	The Articles 4 and 35 of the Tobacco Hazards Prevention Act come into effect and the health and welfare surcharge for both imported from abroad and domestically manufactured tobacco products rose from NT$10 to NT$20 perpack.
June 4	The tobacco manufacturers and importers report the first stage information on tobacco product ingredients.
June 9	Invited Professor Hu Te-wei of University of California, Berkeley, to deliver a lecture, “Research in Tobacco Prevention and Control: Shared Experience of California and Mainland China” . The lecture addressed the results of 20 years of tobacco hazard prevention and control efforts in California, and discussed implementation of this policy.
July 22-23	Held the 2009 Health Promotion Conference. Invited Dr. David V. McQueen, Assistant Director of the Chronic Disease Prevention and Health Promotion Center of the US Centers for Disease Control, and Assistant Director of the Reproductive Health Division, Dr. Howard I. Goldberg, to give lectures. Roundtable discussions were held regarding health promotion assessment, and setting priorities in health policy, as well as ameliorating inequalities in healthcare, and initiatives in women's health. The achievements of Taiwan in health promotion made a deep impression on the foreign visitors, and a foundation was laid for future collaboration between this Bureau and the U.S. Centers for Disease Control.
July 24-30	Invited Professor Zhu Shuhong from the University of California, San Diego, and April G. Roeseler, Director of the California Department of Health, Tobacco Prevention and Control Division, to exchange experiences and provide consultation in Taiwan's tobacco hazard prevention and control initiatives.
July 28-31	Invited Japanese professor Yasuhiko Saito to give a lecture on “Healthy Life Expectancy and Research Applications” . Workshops were also held, and on the basis of these activities, interactive exchanges with the REVES system took place.
August 18	Through the National Library, held a competition for “Good Health Books – Healthy Reading” in 2009. Awards were given in four health-related categories: cancer prevention/ smoking prevention; psychological health promotion; healthy nutrition to protect health; and others (such as rare diseases). There were 595 books entered by 76 publishers, among which 92 were recognized as an “Outstanding Health Book” for that year.
August 28-29	Through the Taipei Howard House, held the 2009 Conference on Tobacco Supply and demand, and International Trade. Notable academics from the United States, Japan, New Zealand, and other countries, as well as Taiwanese experts, shared knowledge concerning tobacco control in various countries.

Date	Event Summary
September 1	As of September 1, the Republic of China ceased using the "Certification Norms for Hospice Care and Home-Based Palliative Care".
September 19-20	The Taiwan Health Department held the 2009 International Cancer Registry Conference, inviting Dr. Maria Paula Curado, Dr. Hai-Rim Shin, Professor Donald Maxwell Parkin from the Wolfson Institute of Preventive Medicine in London, professor of medicine Dr. Michel Coleman of the Tropical Disease Institute in London, and other international experts, to share the experiences of their various countries with the Cancer Registry Institute.
October 1-2	In Chiayi City, the Health Department organized the 2009 National Healthy City Workshop and Award Ceremony. Vice President Hsiao Wan-chang was in attendance, and lauded the winning counties and cities.
October 9-12	The Health Department organized an international conference on the role of government with respect to rare diseases, and invited epidemiologists and patient groups from Taiwan and 15 countries, including the United States, Great Britain, France, Canada, Japan, and Korea, among others.
October 22-23	The Health Department held an academic conference on health promotion in Taiwan in 2009, inviting academics and experts to share their experiences with school health promotion initiatives. In addition, nine city and county government health departments were singled out for praise.
October 23	The Health Department, through Danshui University, held the "2009 Taiwan International Safe Schools Forum". The World Health Organization adopted this school as a "Safe School Promotion Center" in its program for prevention of accidents and injuries on campuses, and it advocates "Safe Schools" on a global level. Only two universities worldwide have received international certification, namely Danshui University and Taiwan Medical University. The WHO Safe School Promotion Center representatives have come to Taiwan to certify Lungshan Middle School and Taipei Medical University.
November 17	An amendment was announced to "Important Items for Preventive Health Service Organizations". Because the incidence of breast cancer among women is highest in the 45-49 age bracket, the Health Department will lower the age range for mammography from 50 to 69, down to 45 to 69.
December 5	The Health Department held the 2009 Safe Communities Conference. There were four WHO International Safe Community award ceremonies, held in Tungshan Village in Yilan County; the Tsoying District in Kaohsiung County; Hsinkang Township in Chiayi County; and indigenous associations in Hoping Township, Taichung County.
December 23	The Health Department published its Certification Norms for Fecal Occult Blood Testing Organizations, to accommodate expansion in 2010 of colorectal cancer screening.
December 30	The Department of Health and the Ministry of Finance drafted change to Articles 4, 5 and 8 of "the Regulation of the Tobacco Health and Welfare Surcharge Distribution and Utilization" and sent draft to the Legislature for deliberation.
December 31	BHP announced the 2009 results of certification for Baby-Friendly Hospital Initiative. A total of 113 medical institutions were certified.

Publication	2010 Bureau of Health Promotion Annual Report
Publishing Organization	Bureau of Health Promotion, Department of Health, Executive Yuan, R.O.C. (Taiwan)
Issuer	Shu-Ti Chiou
	No.2, Changqing St., Xinzhuang Dist., New Taipei City 24250, Taiwan (R.O.C.)
Website	http://www.bhp.doh.gov.tw/
Tel	886-2-2997-8616
Editor	Bureau Of Health Promotion, Department of Health, Executive Yuan, R.O.C. (Taiwan)
Designer	INNO Design Co.
Publication Date	December 2010
Date Founded	October 2007
Frequency	Annual
Other Type	This book is also posted to the National Health Department website, http://www.bhp.doh.gov.tw/
Price	NT$250
Available from the following bookstores	Government Publications Bookstore, 1F., No. 209, Songjiang Rd., District, Taipei city 10485, Taiwan, R.O.C. ;886-2-2518-0207
	http://www.govbooks.com.tw
	Taichung Wu Nan Bookstore, No. 6, jhongshan Rd., Central District, Taichung City 40042, Taiwan, R.O.C. ; 866-4-2226-0330
	http://www.wunanbooks.com.tw
GPN:2009602537	
ISSN:1999-6012	

Cherish Life
Promote Health

Cherish Life  Promote Health

ISSN 1999-601-2
9 771999 601004
GPN:2009602537
Price:NT$250