

Overview of Health Promotion in Taiwan

Bureau of Health Promotion
Department of Health



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- National health is a key gauge of national competitiveness. To increase physical, mental and social health in Taiwan, the BHP has taken its lead from the **Alma-Ata Declaration of 1978** and the five action areas for health promotion identified in the **Ottawa Charter of 1986**.
- BHP has been striving to set **health-friendly public policies**, bring about **healthy communities, hospitals, schools and workplaces**, enhance **public consciousness of health** to usher in a society where health always comes first, and develop citizens' **health skills** and **readjust health services**.
- The ultimate goal is to achieve **“Health For All”** enunciated by the World Health Organization.
- BHP also conducted public health surveillance, related research and development to made **evidence-based policy goals and strategies** that best meet present needs and future development.



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Outline

- Taiwan Health Profiles
- Vision and Strategies of Health Promotion
 - Healthy Birth and Growth
 - Healthy Living
 - Healthy Environment
 - Healthy Ageing
- Special Health Topics
- Health Surveillance



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Taiwan Health Profiles



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Health Status in Taiwan

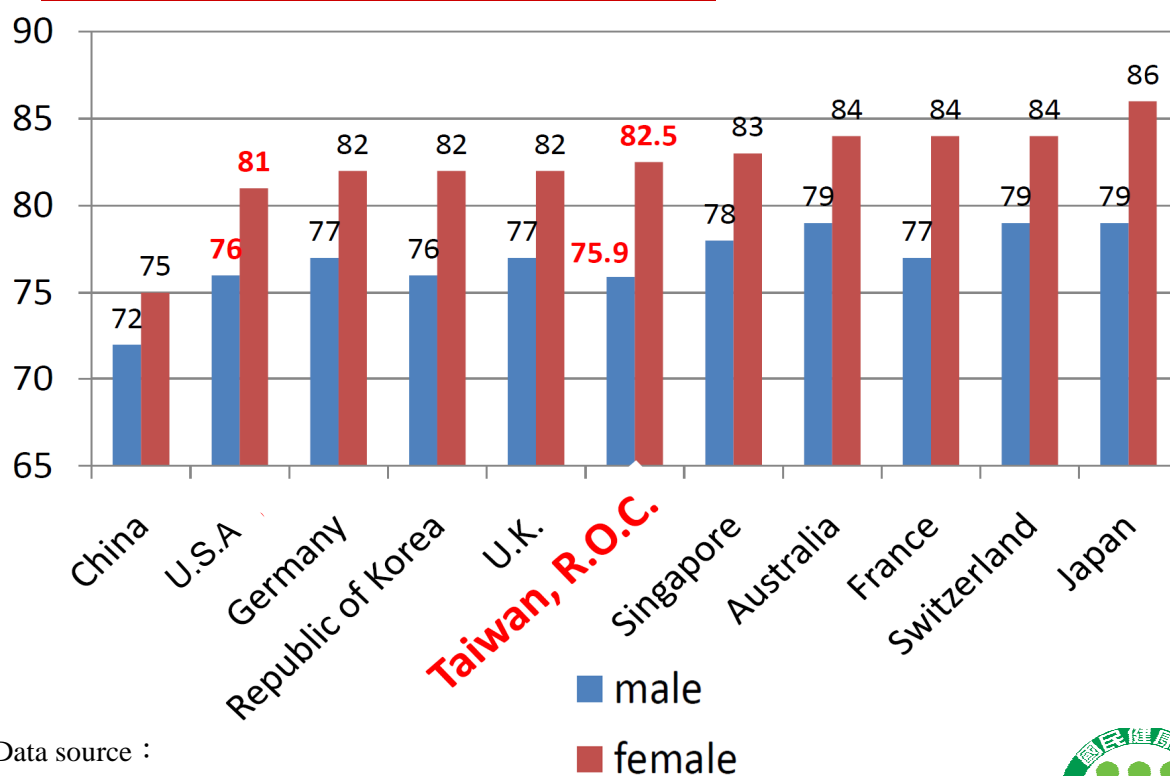
	Taiwan
Total population	23,157,178
Population age 65 and above(%)	10.6
Crude birth rate (‰)	8.3
Crude death rate (per 100,000)	618.7
Total fertility rate (‰)	1.02 (2009)
Maternal mortality rate (per 100,000)	6.5 (2008)
Neonatal mortality rate (‰)	2.7 (2008)
Infant mortality rate (‰)	4.5
Under 5 mortality rate (‰)	6.3
Life Expectancy	78.9
Male	75.9
Female	82.5

Source : 1. Statistical Yearbook of Interior, R.O.C
2. National Vital Statistics Reports, U.S.A.



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Life Expectancy at Birth, 2009



Data source :

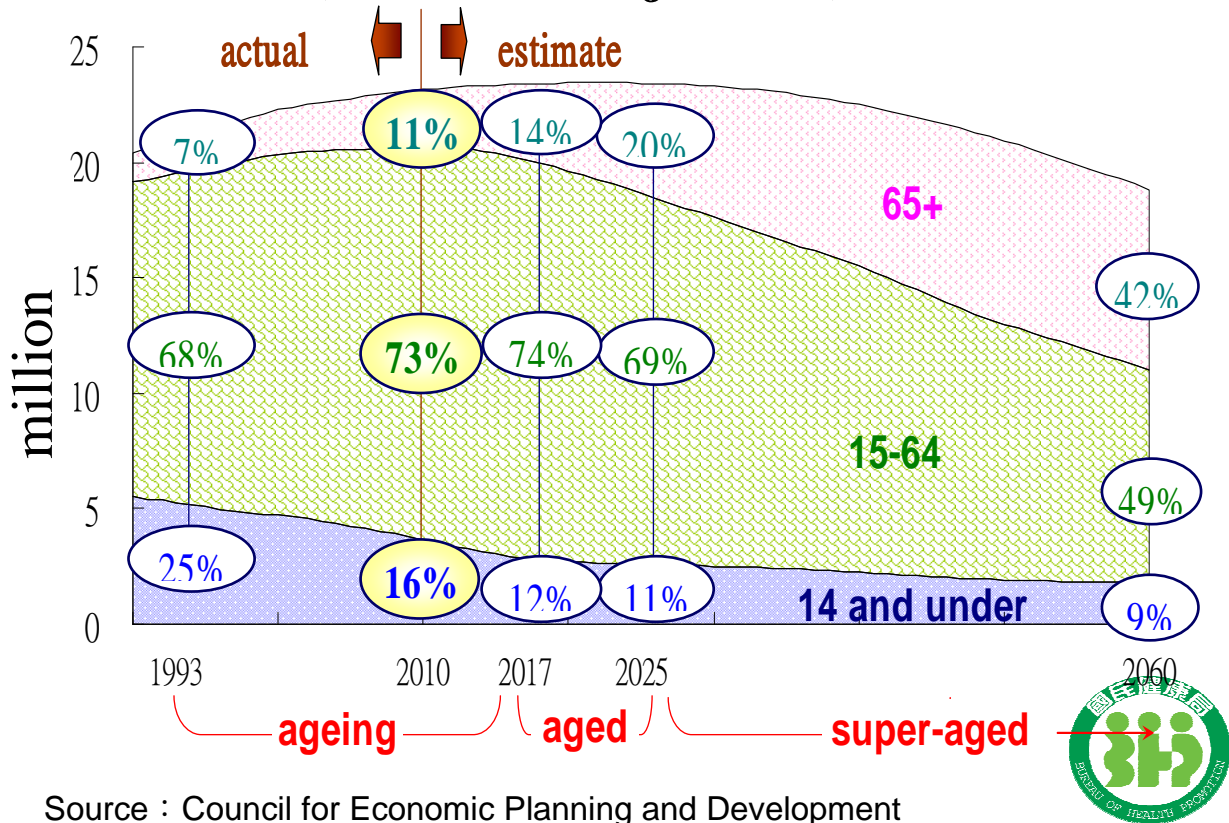
1. World Health Statistics 2009, Table 1

2. Statics of Taiwan is from the website of Department of Health, 2009, Table 1
Population Statistics

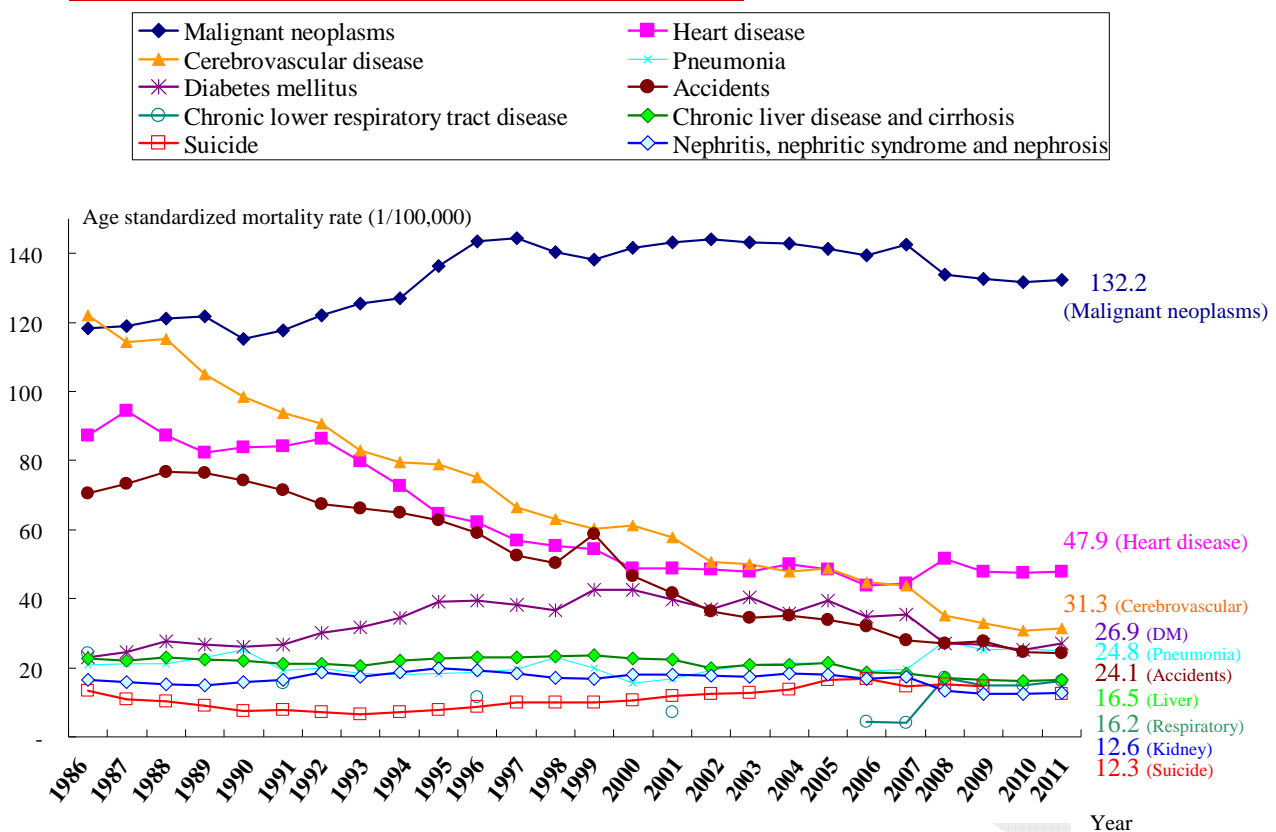


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Future Projected Proportion of Population in Taiwan (Medium Projection)



Top 10 Leading causes of death in Taiwan



Vision and Strategies of Health Promotion

Cherish Life, Promote Health
Increasing healthy life expectancy

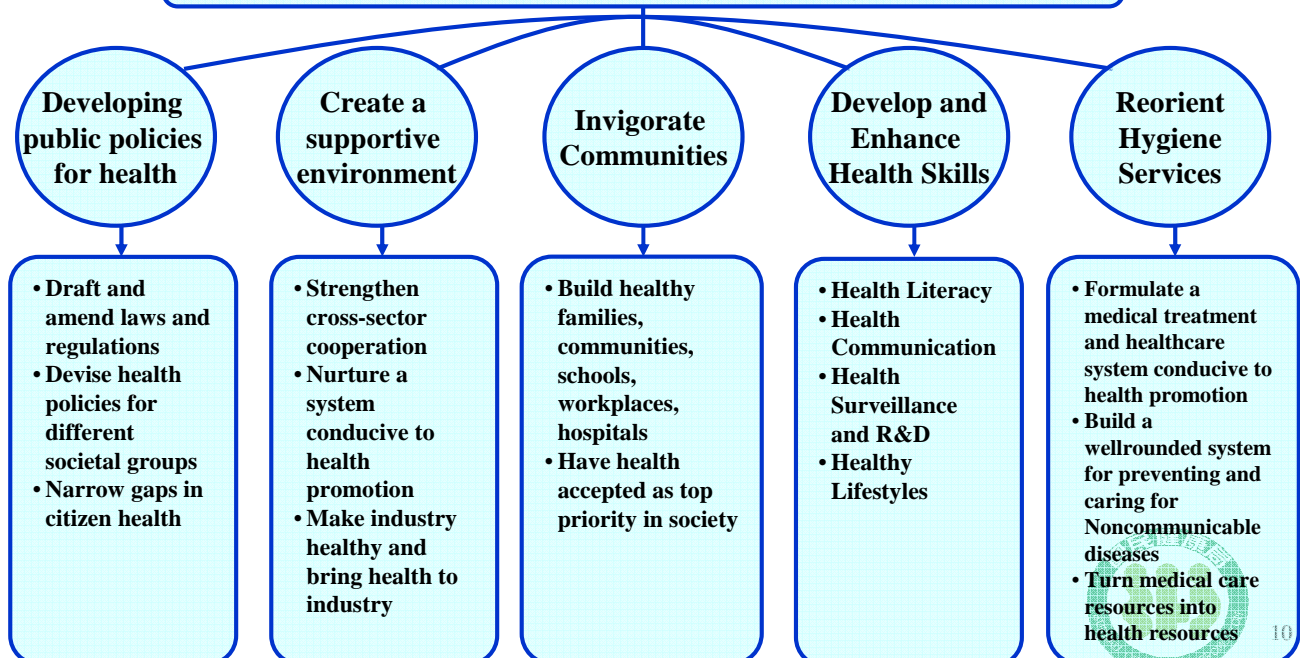


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Vision and Strategies

Cherish Life, Promote Health

Prevention and Control of Noncommunicable Diseases Control of Chronic Diseases Prevention; Safety Protection)
 Health Promotion (3P: Prevention, Protection, Promotion)



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Healthy Birth and Growth

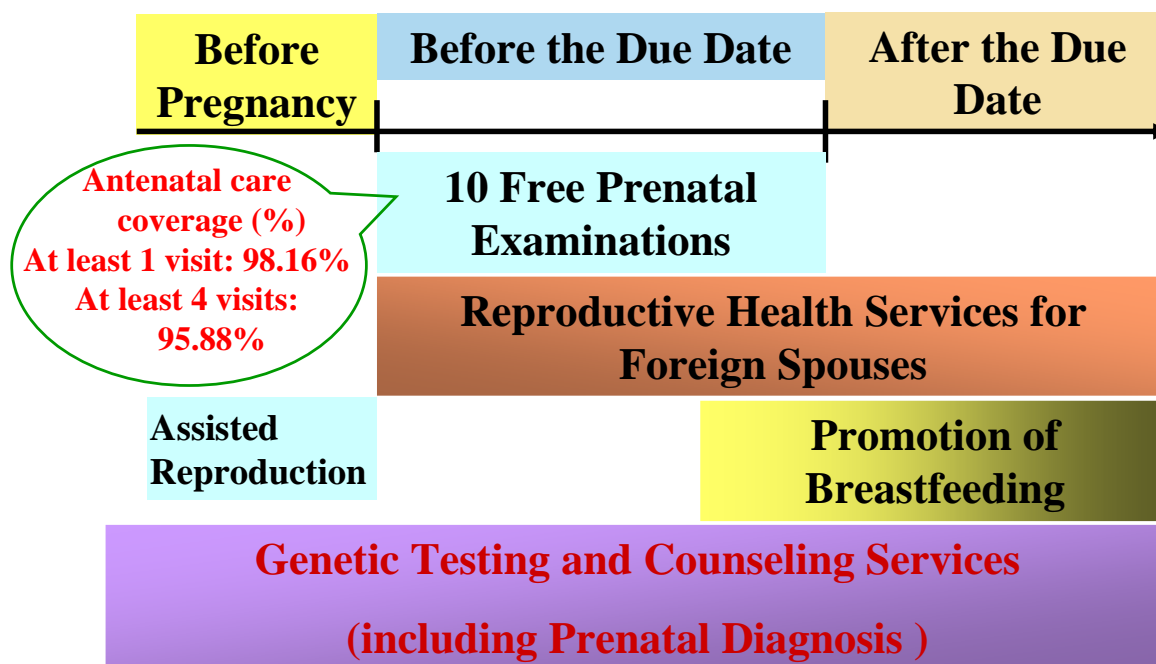
1. Maternal Health

- Systematic Reproductive Health Services
- Comprehensive Reproductive Health Regulations and Systems



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Preventive Services - Maternal Health Promotion



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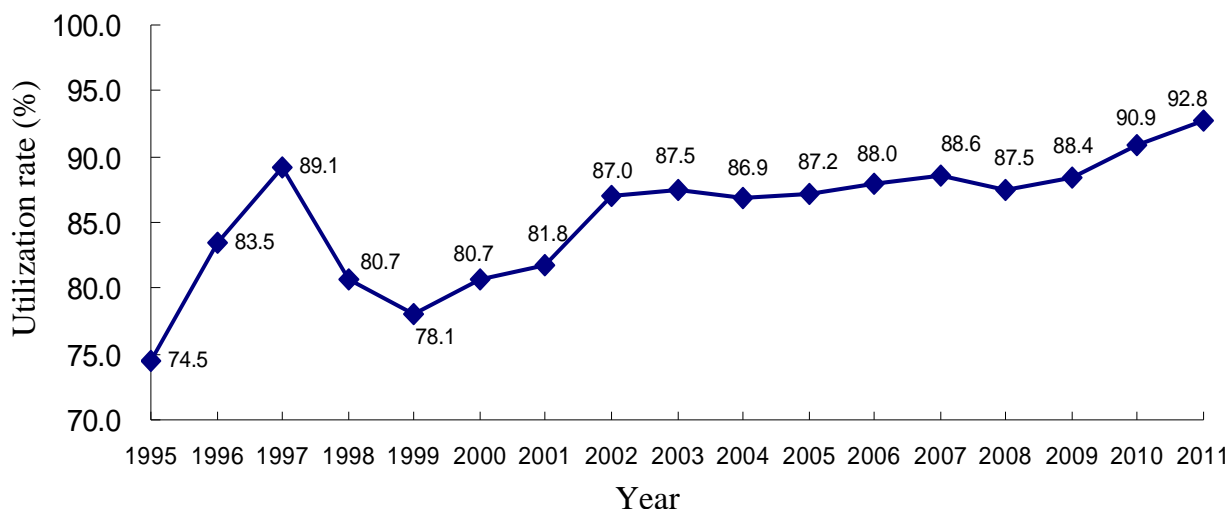
Preventive Services - Maternal Health Promotion

Item	Target	Interval	Content
Prenatal examinations for pregnant women	pregnant women	2 times (<17 weeks)	Physical check-up, Blood and urine tests , Ultrasound examination, Health education
		2 times (17-29 weeks)	
		6 times (>29 weeks)	
Group B streptococcus screening	low income pregnant women	once	Group B streptococcus culturing and screening



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Utilization Rate of Prenatal Examinations

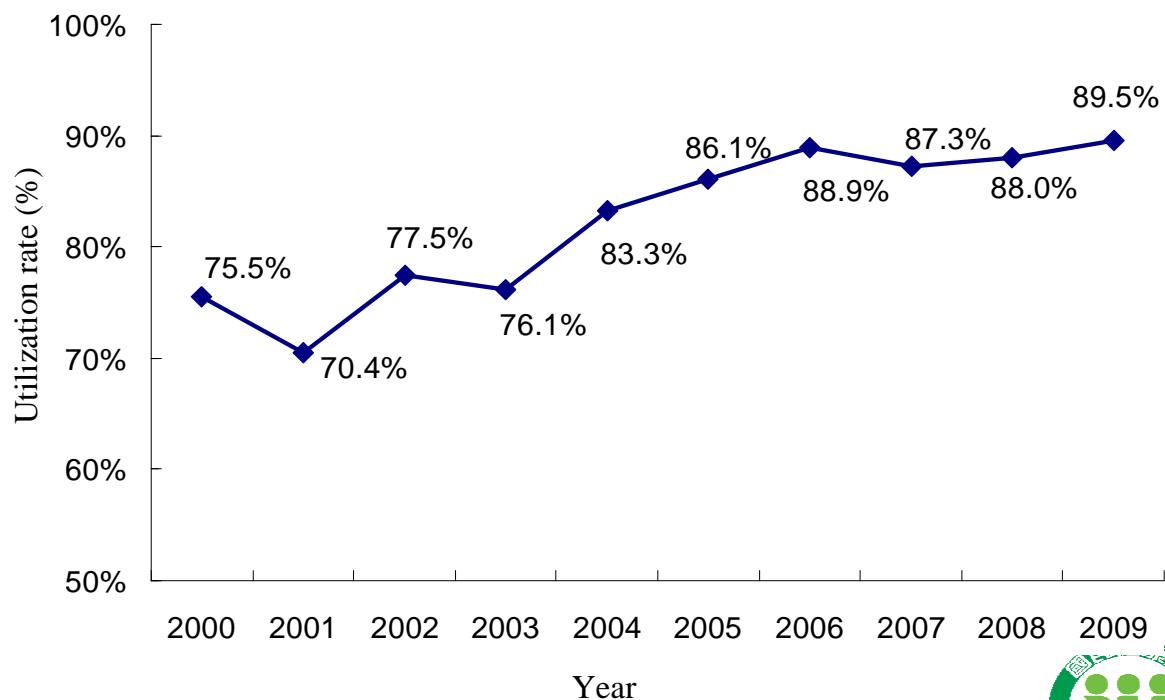


Source : Data for 2002-2005 is taken from the Bureau of National Health Insurance , data for 2006-2010 is based on BHP calculations
Average utilization rate: the number of prenatal examinations/ the number of births multiplied by 10 prenatal tests



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Amniocentesis Rates for Pregnant Women over Age 34, 2000-2009



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Healthy Birth and Growth

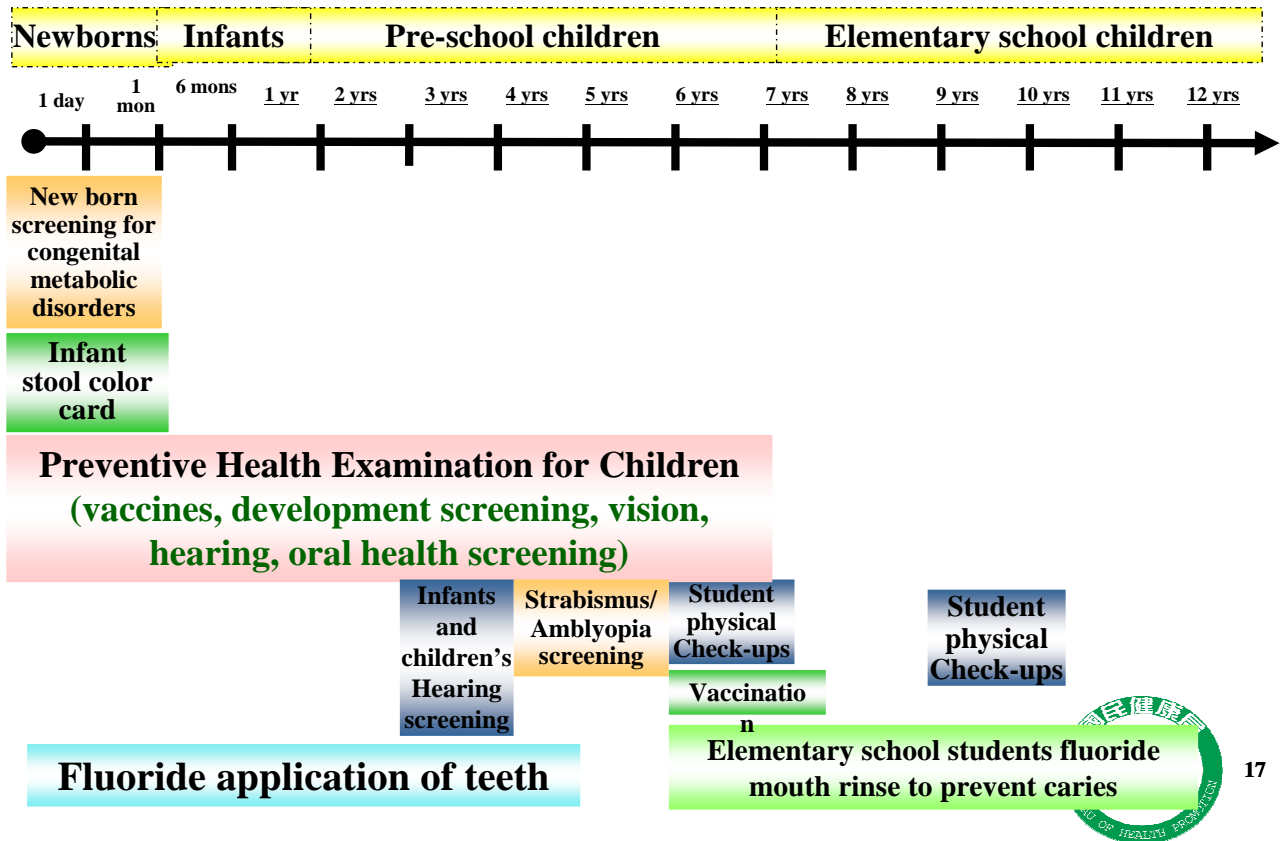
2. Infant and Child Health

- **Provision of Comprehensive Healthcare Services**
 - Preventive Healthcare Services for Children
 - Newborn Screening
 - Upgrading the Competence of Health Professionals
 - Creating a Friendly Environment Conducive to Breastfeeding
 - Promoting Legislation on "Public Breastfeeding Act"
- **Countermeasures to Rectify Sex Ratio at Birth Imbalances**



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Preventive Services - Child Health Promotion



Preventive Services - Newborns and Children

Item	Target	Interval	Content
Newborn screening services	newborns	once	G-6-PD, CHT, CAH, PKU, HCU, Isovaleric acidemia, MSUD, GAL, MMA, GA1, MCAD
Hearing check	newborns in low income families	once	Hearing check
Preventive child health care services	children under 7 years old	7 times	Physical check-up: Medical history of individual and family, height, weight, hearing ability, eyes, mouth and dental, growth and development appraisal
			Examination of development: children hearing, language and Autism screening
			Health counseling: Breast feeding, nutrition, childhood development, oral health care, eye care, injury prevention
Professionally applied fluoride treatment	children under 5 years old	semiannually	Professional fluoride application by dentists, general oral examination, oral health education
Pit-and-Fissure Sealant Program for Children	elementary first and second grade students in mountainous area and first grade elementary school children of low-income families	once	Pit-and-Fissure Sealant of first molar

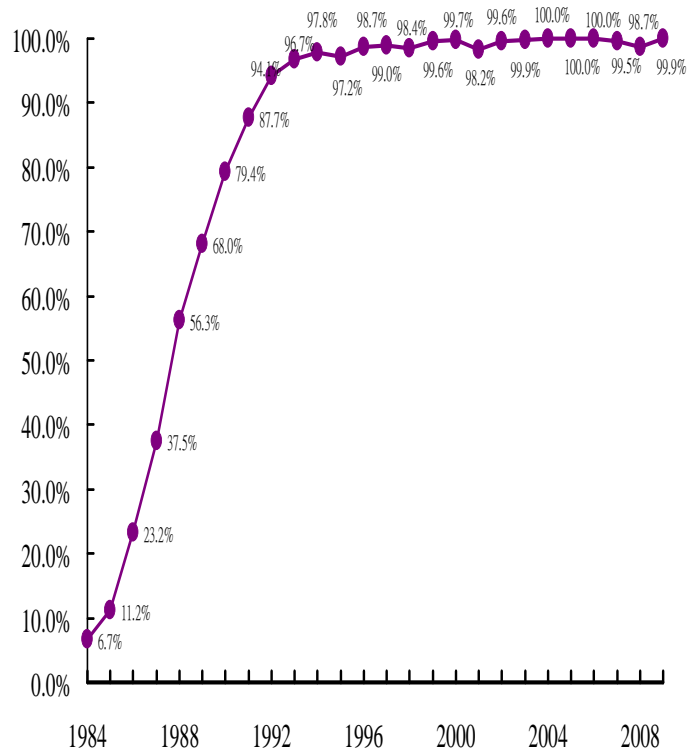
Completion rate of Taiwan newborn screening

452 hospitals/
clinics nationwide
offering sample
taking service

99% of newborn
babies receiving
screening

3 screening
laboratories
31 hospitals
offering
confirmation tests

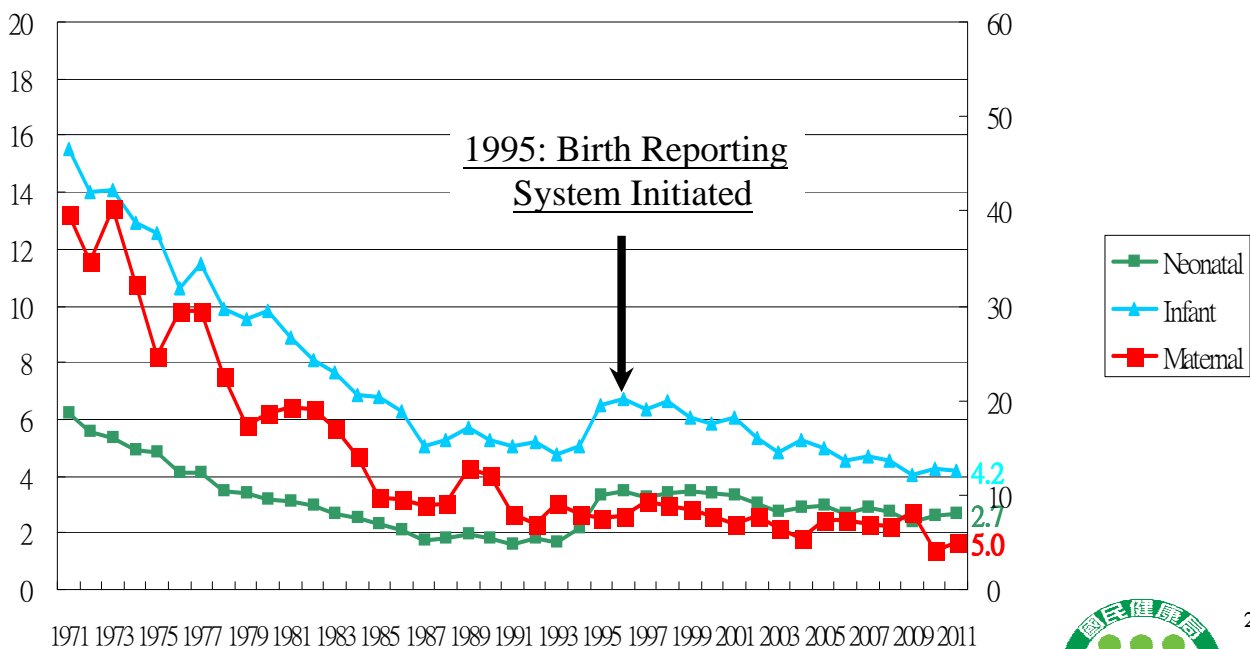
1.88% abnormality rate
(96.76% of abnormality
found are G6PD. The
second highest
abnormality found is
CHT(2.87%)



Maternal, Neonatal and Infant Mortality Rates

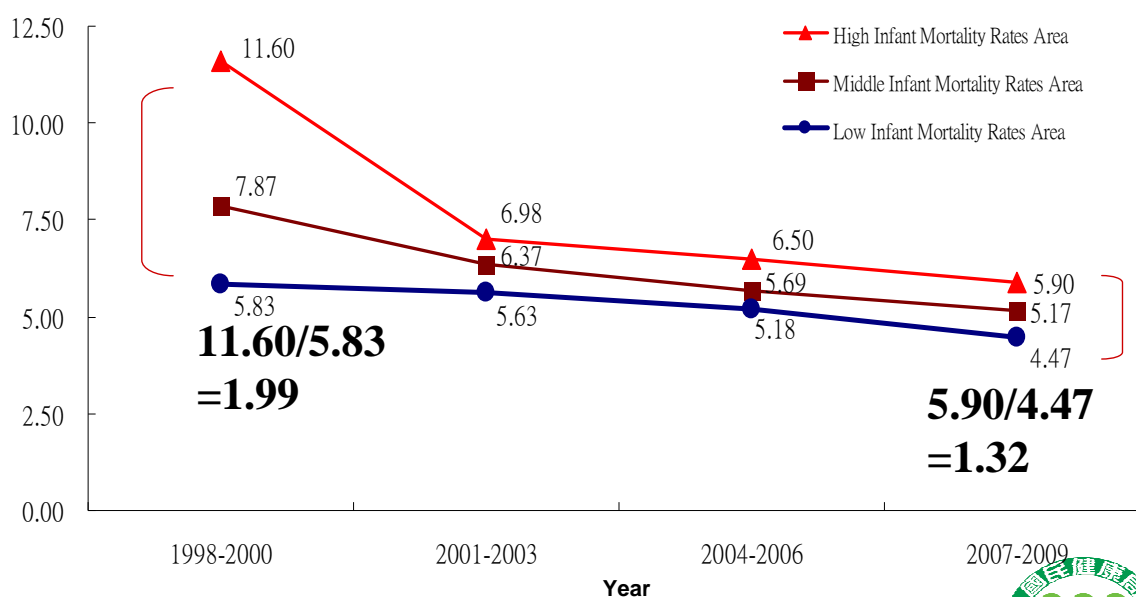
Neonatal and Infant mortality
rate(per 1,000 live births)

Maternal mortality rate
(per 100,000 live births)



Infant Mortality Rates by High/ Middle/ Low Rate Areas

Infant Mortality Rates ‰



Source: Department of Health, Taiwan; Ministry of the Interior, Taiwan



Baby-Friendly Hospital Initiative

Year	Item	No. of hospitals receiving certification	Birth coverage rate of BFHI
2001		38	-
2002		58	-
2003		74	-
2004		77	39.2
2005		81	40.8
2006		82	41.3
2007		94	47.4
2008		94	46.3
2009		113	53.9
2010		144	67.2
2011		158	71.4



Promoting a Breastfeeding-Friendly Society

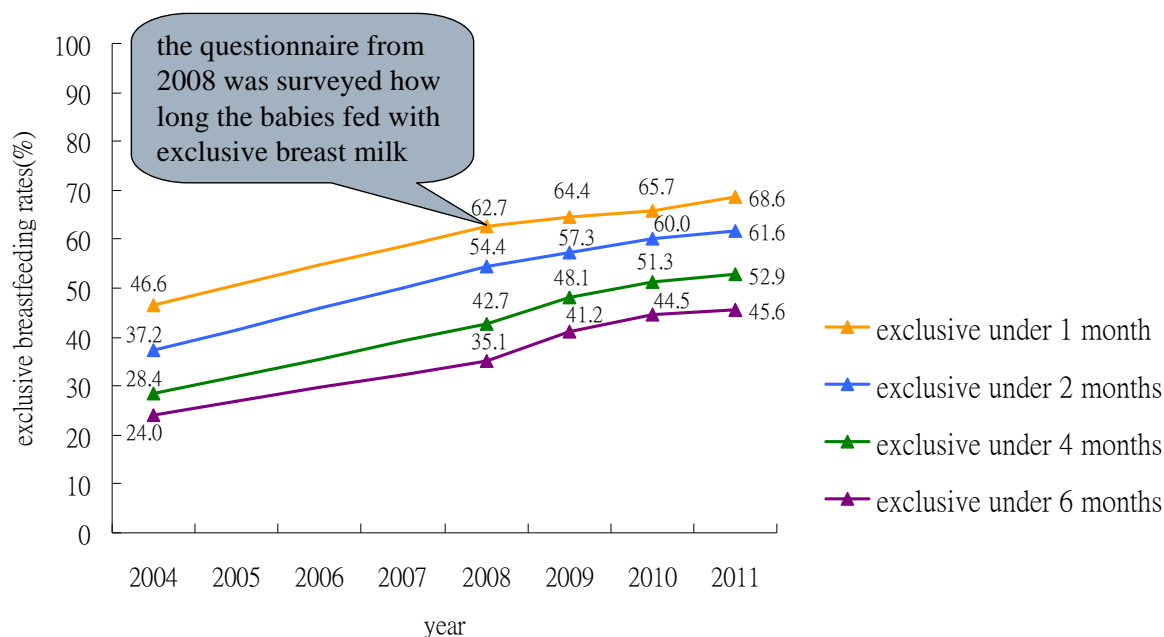
- **Goal: To reduce barriers of and to promote breastfeeding in the communities**

- **Strategies**

- Baby- Friendly Hospital Initiative
- Collaboration with the Council of Labor Affairs to promote breastfeeding-friendly workplaces.
- Breastfeeding support
 - ▲ Hotline : 0800-870870
 - ▲ Website : <http://www.bhp.doh.gov.tw/mammy/>
 - ▲ Workforce training
- Legislation in 2010: “**Public Breastfeeding Act**” to protect the right of breastfeeding in public places and require setup of breastfeeding rooms in certain public places.



Exclusive Breastfeeding Rates, 2004-2011



Data resource: the national survey of exclusive breastfeeding rate, bureau health promotion, 2004, 2008-2011.

Alterant definition: the rate in 2004 was surveyed the breastfeeding situation in different time; the rate form 2008 to 2011 was surveyed how long the babies fed with exclusive breast milk.



Screening for Hearing impairment

- Pre-school (3 y/o) pure tone audimetry hearing screenings in kindergartens carried out by public health nurses since 2001, screening rate from 25%(2002) to 87%(2010) .
- Newborn hearing screening: **free for all newborn since March 15, 2012.**



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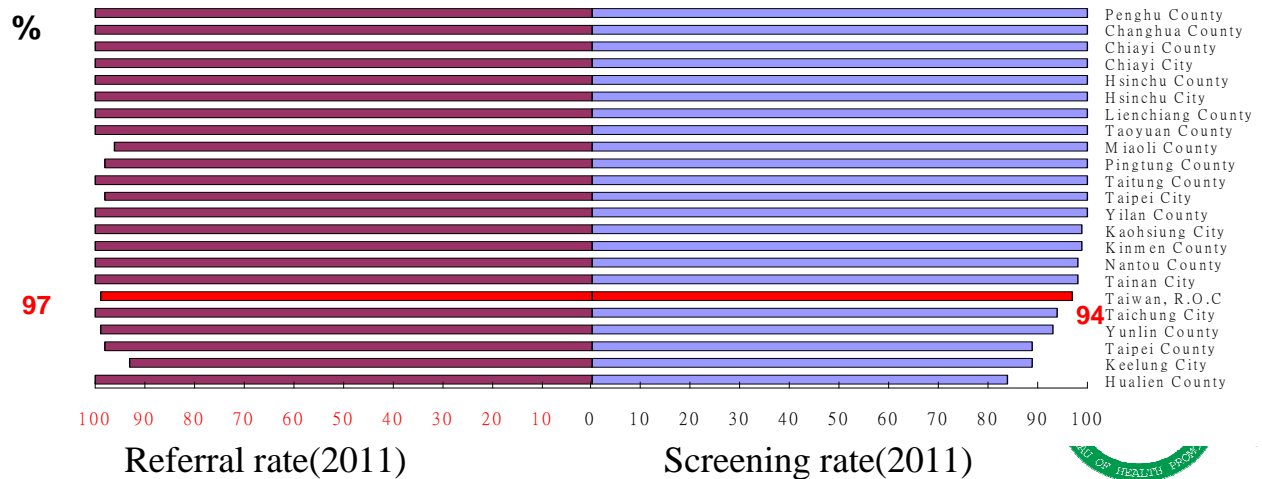
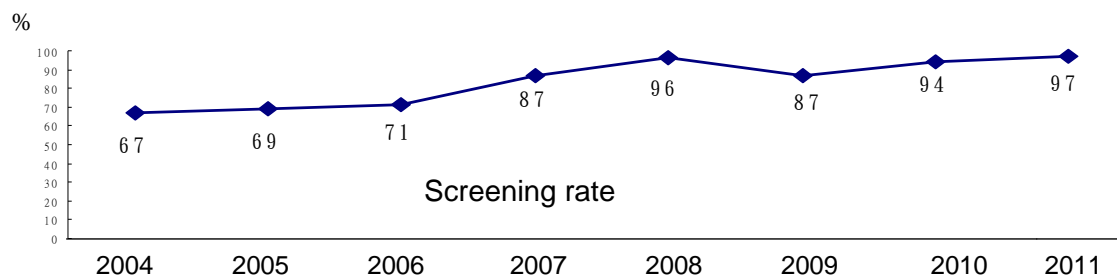
Screening for Vision in pre-school children

- **Vision**
 - Providing strabismus and amblyopia screenings in children of four and five years old in kindergartens in the communities, carried out by trained teachers.



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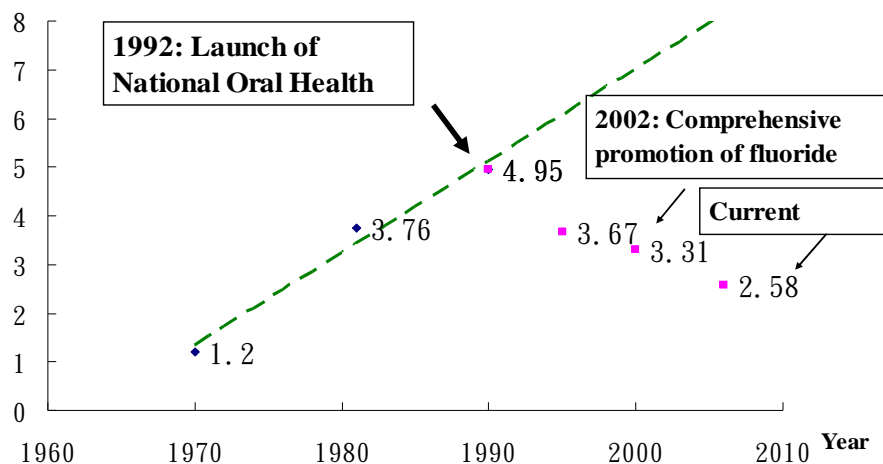
Screenings for Strabismus and Amblyopia in Preschool Children



Oral health of children

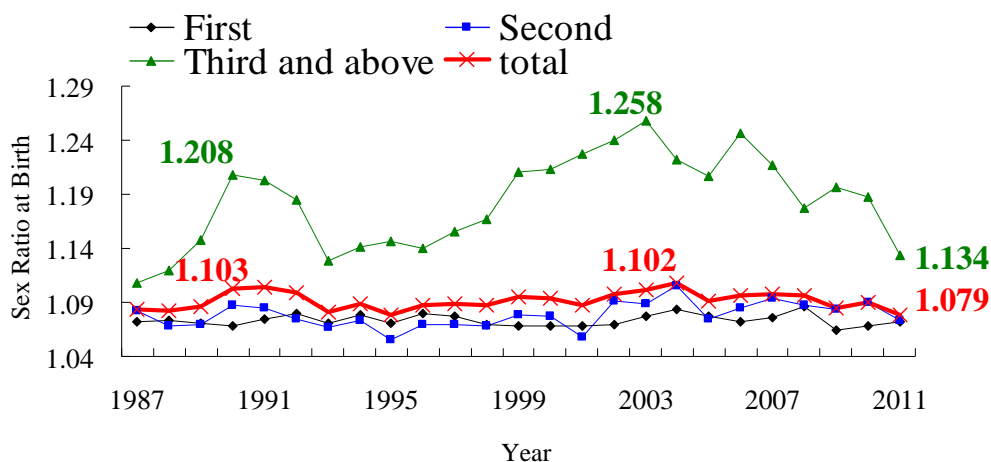
1. Professionally applied fluoride treatment under 5 years old
2. A comprehensive fluoride mouth rinse program for elementary school children
3. Pit-and-Fissure Sealant Program for Underprivileged Children

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



Countermeasures to Rectify Sex Ratio at Birth Imbalances

Sex Ratio at Birth



Sex ratio at birth dropped to 1.1.
It is the lowest in the past 16 years in Taiwan.

Source : 1. Ministry of Interior, 1987-2003

2. Bureau of Health Promotion, Department of Health, Taiwan, 2004-2011



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Healthy Living

1. Tobacco Hazards Prevention and Control

■ MPOWER

- Monitor tobacco use and prevention policies
- Protect people from tobacco smoke via new ban
- Offer help to quit tobacco use
- Warnings on tobacco packages
- Enforce bans on tobacco advertising, promotion and sponsorship
- Raise taxes on tobacco



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MPOWER

WHO Report on the Global Tobacco Epidemic, 2008 - The **MPOWER** Package

Monitor tobacco use and prevention policies

Protect people from tobacco smoke

Offer help to quit tobacco use

Warn about dangers of tobacco

Enforce bans on tobacco advertising, promotion and sponsorship

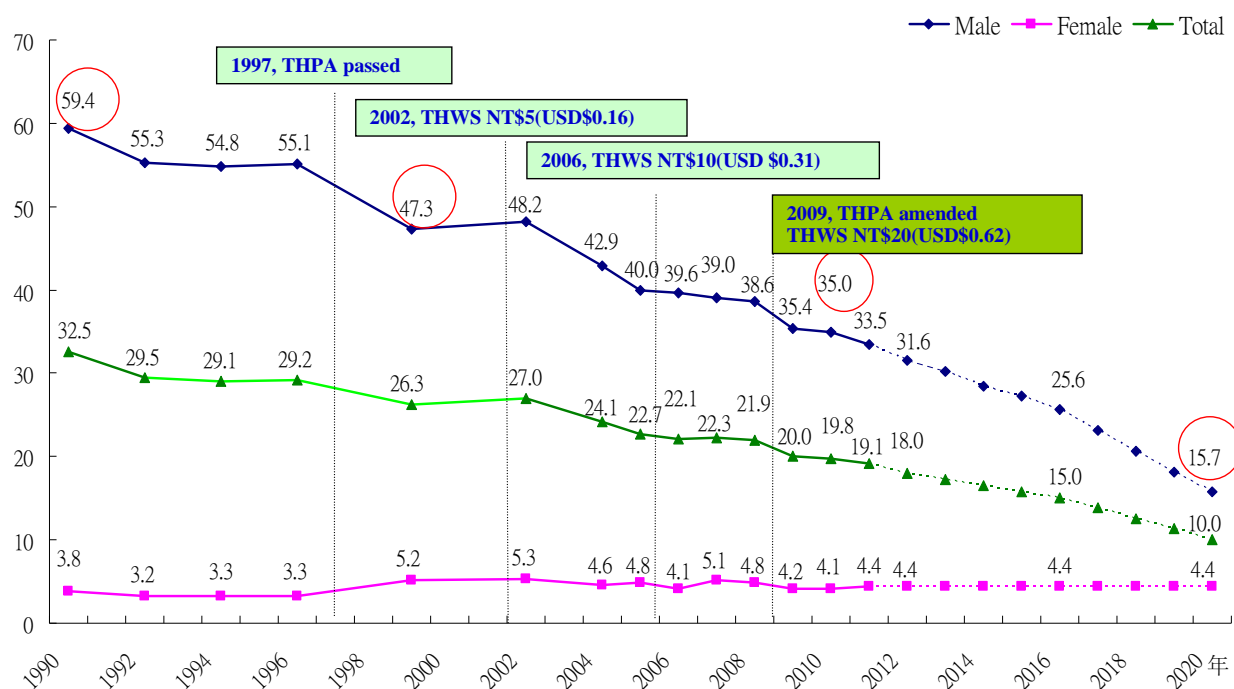
Raise taxes on tobacco



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Monitor :

Taiwan Adults Smoking Prevalence and projection to 2020(Age 18+)



Source:

1. 1973-1996(Taiwan Tobacco company) ; 1999(Lee etc) ; 2002(BRFSS) ; 2004-2011(Taiwan ASBS)

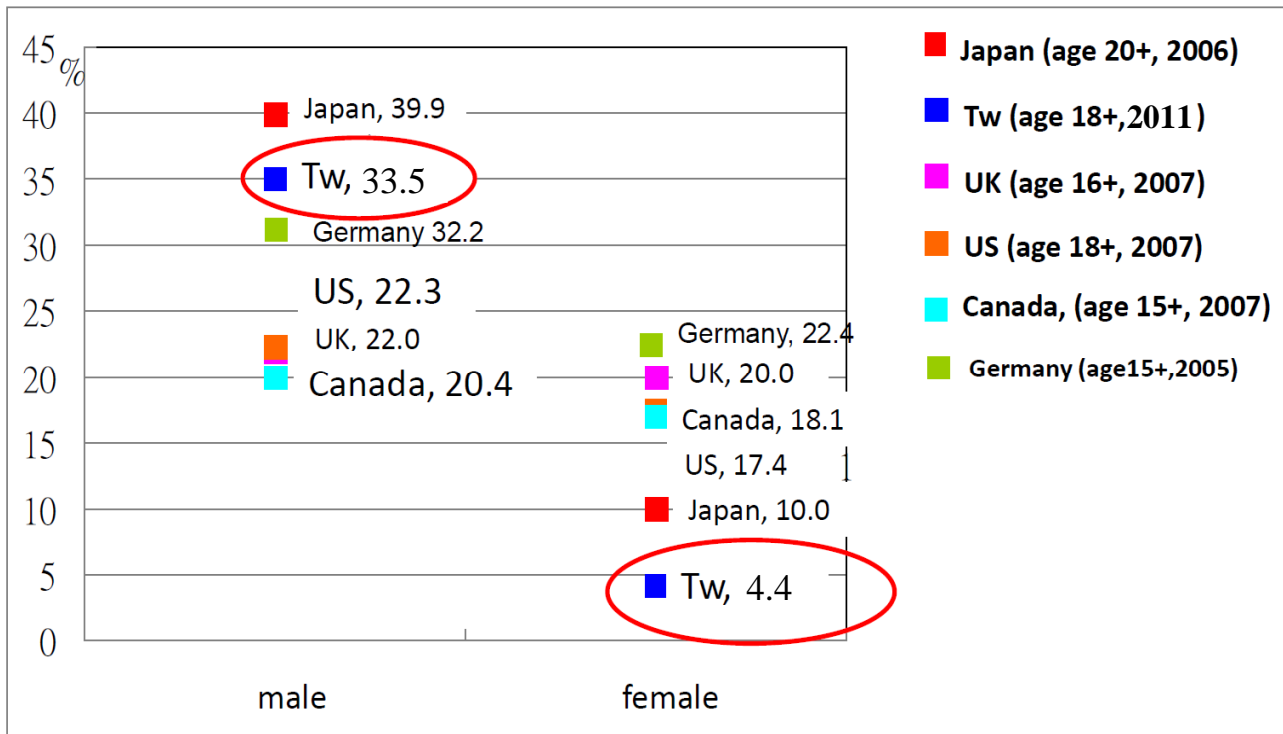
Definition: Current smoker, During survey, smoke more than 100 cigarettes(5 packs) and smoking in past 30 days

Abbreviations: THWS- Tobacco health welfare surcharge, THPA: Tobacco Hazards Prevention Act



Smoking rate

Taiwanese men smoking rate
1.6 times of American's, 1.7 times of Canadian's

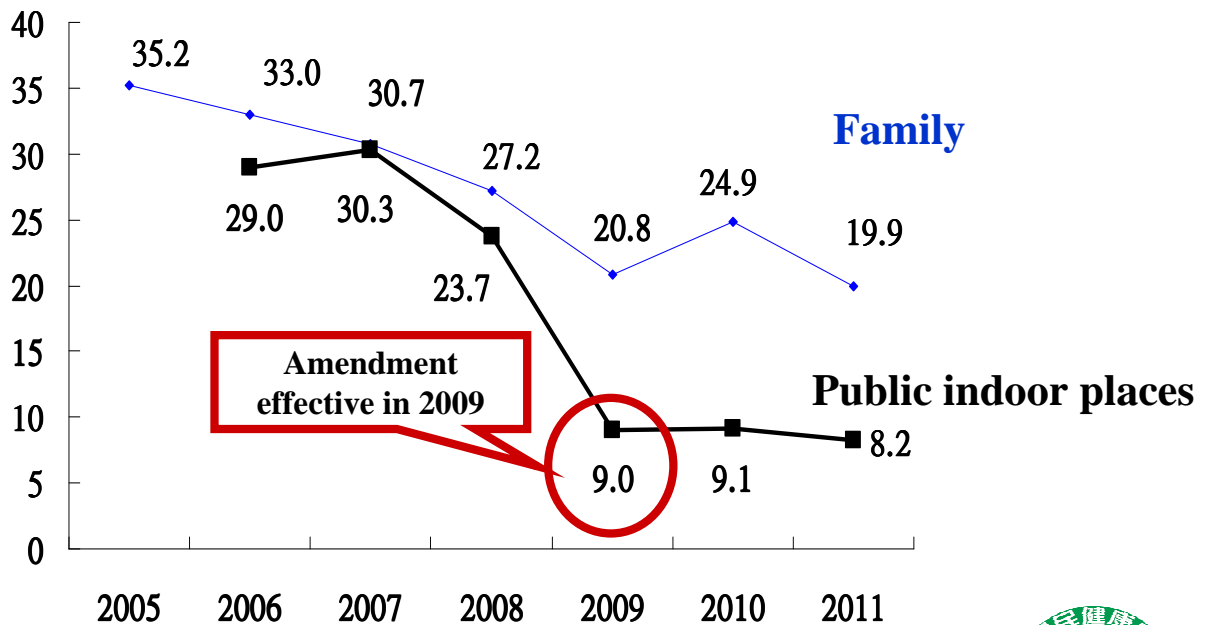


Protect people from tobacco smoke via new ban

Smoking ban on all indoor public and work places plus some outdoor places



Environmental tobacco smoke exposure



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Offer help to quit tobacco use

- Smoking Cessation **Outpatient Services** (Since 2002, 10,000/M)
 - Distributed to **97%** townships
 - Point abstinence rate at 6 month: **23.8%**
- **Second generation smoking cessation payment scheme** (since March, 2012)
- Taiwan Smokers' **Helpline** (Since 2003, 5,000/m)
 - 30% success rate at 6 month
- Cessation **Group-Therapy** in the Community (Since 2002)
- Smoking Cessation Campaign (Quit & Win)



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Extensive training on cessation educators

Background	Ever trainee by 2009	Trainee in 2010	Trainee in 2011	Trainee in 2012 (Jan.-Aug.)	Total (persons)
Physicians	8,475	2,733	2,394	646	14,248
Pharmacists	280	5,554	5,198	2464	13,496
Others (nurses, psychologists, etc.)	900	19,083	11,932	3913	35,828
Total	9,655	27,370	19,524	7,023	63,572



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“Sign-to-quit campaign” with self-help manual



99年戒菸共同願景圖

請填明下列各項資料：

請填明姓名：_____

請填明單位：_____

性 別： 男 女

年 齡：_____

請填明住址及電話(或行動電話)：

是，聯絡電話：_____ 否

註：

- 一、「0」號位，請填明姓名。
- 二、請於申請表中填明是否「曾戒菸或曾戒菸失敗」，如有戒菸，請填明戒菸時間及戒菸方法。
- 三、以上個人資料，僅供電話戒菸服務中心使用，恕不公開。

行政院衛生署國民健康局 關心您

In 2010, 1,458,000 manuals distributed,
50.6% signed to receive follow-up calls,
35.5% found it helpful,
33.2% tried to reduce or quit smoking.



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Smoke-free health care:

Universal access to cessation help in clinical settings



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- **Pictorial Warnings on tobacco packages** (effective in 2009) to cover at least 35% of the tobacco package surface.

- **Enforce bans on tobacco advertising, promotion and sponsorship**

- **Raise taxes on tobacco**

- Tax Amount: Step-by-step increase
- 2002: **NT\$5** (\$0.15) / pack
- 2006: **NT\$10** (\$0.3) / pack
- 2009: **NT\$20** (\$0.6) / pack



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Healthy Living

2. Physical Activity

- Advocating a dynamic lifestyle
- Creating Supportive Environments
- Strengthening personal physical skills



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Advocating a dynamic lifestyle

- To encourage citizens to take up regular exercise, the BHP made use of the media, such as radio, TV and the Internet for promoting the “**10,000 steps a day, makes you healthier**” campaign.
- In collaboration with all the counties and cities, the BHP designated November 11 as **National Day for Walking** to help people integrate it into daily life.
- In collaboration with the Ministry of Education, the BHP strengthened topics concerning physical fitness (including physical activity and diet) to schools. The objective is to make sure children and teenagers learn and cultivate healthy habits both in diet and physical activity.



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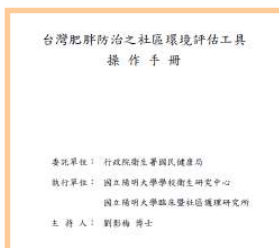
Creating Supportive Environments

- **Identify and improve the obesogenic environment**
 - Community obesogenic environments assessment
- **Building health information**
 - Set up a website to provide information on healthy diets and exercise.
 - Compile a list of frequently asked questions for the “Healthy Centenary, Healthy Taiwan” campaign, and make it available for everyone to view online.
 - Free healthy weight management telephone consultation service (0800-367-100)
 - Provide updated information to the public through social channels such as Facebook.
- **Create a healthy food supply system**
 - Let People see, hear, buy and eat healthy foods.
- **Construct dynamic living environments**
 - Everyone can exercise wherever and whenever they can



Creating Supportive Environments

- **Developing tools to examine obesogenic environments in 22 cities/counties and 368 townships**



- **Obesity prevention website**



- **Toll free helpline and internet telephony 0800-367-100**



- **Facebook**



Supportive environments for healthy eating

Healthy food certification



Aboriginal healthy meal



Healthy lunch box



Three bundles of veggies cost NTD\$ 10



Lotus meal



Healthy lunch box



Calorie labeling in wholesale stores, lunch boxes, vending machines and chain restaurants



Mayors advocate healthy eating

- “Meat Free Monday” in Taichung city and Chuanhua county government and schools



- 500 kilocalories menus with fresh local food ingredients in Hualien county



- “Healthy market” promote local food ingredients in Taoyuan



- Local agriculture products- Broccoli in Chiayi county



Traditional Festival Smart Eats

- Help industries make traditional festival foods that are high in fiber and low in salt, sugar, fat and calories.
- Educate the public on selecting healthy traditional festival foods.
- Rice dumpling press conference



- Osmanthus rice dumpling



- Moon cake by TMH



- Snacks for New Year

認識卡路里—ex. 常見食品與運動			
品名	熱量 (大卡)	60公斤者走路分鐘數	60公斤者爬樓梯階梯數
奶茶 重量杯	350	113	2431
花生糖 一片	221	71	1535
牛軋糖 3顆	180	58	1250
夏威夷火山豆10顆	176	57	1222
鳳梨酥 1個	175	56	1215
汽水1罐	140	45	972
麻糬糖 1個	100	32	694
花生一湯匙(20個)	90	29	625
牛舌餅 2片	80	26	556
巧克力球1球	75	24	521
杏仁果8顆	55	18	382
三合一咖啡隨身包	54	17	375

Supportive environments for dynamic lifestyle

walking trails



pedestrian spaces



Happy farm



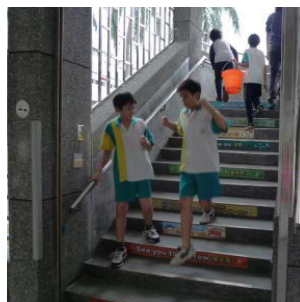
Cycling paths



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Supportive environments for active living

Exercise in elementary schools



Calorie labeling on stairs

Exercise in BHP



Healthy walking in community



Healthy Exercise on fixed time and places led by volunteer in Community of Tainan



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Supportive environments for active living

- Spent calories are marked on walking paths in Chiayi City



Supportive environments for active living

- Meiluen Mountain healthy walk paths, Hualien County
- Path distance and calories spent are marked on the path map.
- Walk paths are planned according to time of exercise and body weights – 6 different routes in total.

花蓮美崙山運動熱量標示

熱量標示軸 使用步驟:

- 選擇您要行走的路線。
- 選擇您最接近的完成時間。
- 將轉軸轉至您的體重，即可查出運動消耗熱量。

歡迎您使用 美崙山運動熱量標示表

若您走路或跑步以「數碼錶完一句話（約10個字）」或「心跳130~140下/分」的強度完成所選擇的路線，即可根據花費時間使用本表估算您運動時的總熱量消耗。

消耗卡路里

※成人體重約60公斤
 ※請以1小時時間計算
 ※時間以分鐘計算

路線/難度	路線1 簡單	路線2 簡單	路線3 簡單	路線4 簡單	路線5 簡單	路線6 簡單
體重/公斤	時間/分鐘	消耗熱量 (大卡)	時間/分鐘	消耗熱量 (大卡)	時間/分鐘	消耗熱量 (大卡)
60	56	84	36	85	55	82
50	37	56	24	57	37	55
40	28	42	18	42	27	41
30	21	31	14	32	21	31
20	17	25	11	25	16	25

備註:
 1. 花蓮縣政府農業發展處
 2. 花蓮縣衛生局
 3. 國立華南大學體育與運動科學系
 4. 梅崙山登山會



Supportive environments for active living

- Calories spent after running are clearly labeled by the Meiluen Track Ground in Hualien County, based on user's weight and time spent exercising.

花蓮縣立美崙田徑場 400m運動熱量標示

歡迎您使用運動熱量估算法，當您走路或跑步以「跑完跑完一句話（約10分鐘）」或「心跳130~140下/分」的強度完成400m的運動時，即可使用本表估算您運動時的總熱量消耗。

走路時間 (分鐘)	8.0	5.3	4.0
體重 (公斤)			
50	16.7	14.4	13.3
60	20.1	17.3	16.0
70	23.4	20.2	18.6
80	26.8	23.1	21.3
90	30.1	26.0	23.9

單位：大卡

跑步時間 (分鐘)	3.0	2.4	1.6	0.8
體重 (公斤)				
50	12.4	11.9	11.2	10.5
60	14.9	14.3	13.5	12.6
70	17.4	16.7	15.7	14.8
80	19.9	19.1	18.0	16.9
90	22.4	21.4	20.2	19.0

單位：大卡

運動健康吃：時常+吃綠蔬菜、時常+吃水果、時常+吃豆類！

■ 場地管理：花蓮縣立體育場 ■ 熱量測量：國立東華大學 體育與運動科學系
 ■ 設置單位：花蓮縣衛生局 林耀志副教授



Supportive environments for active living

- Calories spent after cycling for 1km is labeled on bike paths in Chia Yi county, based on the weights of the cyclists.



恭喜你已經騎了1公里 加油囉!

鐵馬騎動囉! 樂活逍遙遊!

單車運動消耗的熱量

項目 公斤	男生	食物代換 (可消耗)	女生	食物代換 (可消耗)
	每公里消耗大卡		每公里消耗大卡	
50公斤	85.5~129	牛舌餅半個 (30g)	70.5~112.5	黑糖發糕一塊 (40g)
60公斤	102.6~154.8	烤地瓜半個 (93g)	84.6~135	酸辣湯一碗 (392g)
70公斤	119.7~180.6	花生糖一塊 (40g)	98.7~157.5	綠豆糕一塊 (34g)
80公斤	136.8~206.4	魚丸湯一碗 (594g)	112.8~180	烤玉米一根 (168g)
90公斤	153.9~232.2	綠豆椪一塊 (78g)	126.9~202.5	銅鑼燒一塊 (82g)

起點至本點累計公里數：1公里 嘉義縣政府·嘉義縣衛生局邀您-健康齊步走-

Develop Personal Skills

■ Designing Health Exercise



Health Exercise Disk



Downloadable Health Exercise video



Health Exercise Press conference

- Media promotion planning and national sweepstakes
- Conduct 1st and 2nd wave survey to know the change of KAP
- Set up obesity prevention website <http://obesity.bhp.gov.tw>
- Free healthy weight management telephone consultation service (0800-367-100)
- Video whiteboard on the topic of Healthy Weight Loss
- Compile a list of frequently asked questions for the “Healthy Centenary, Healthy Taiwan” campaign, and make it available for everyone to view online.



Guidebook, brochures, billboards, and Instruction Manuals

- Instruction Manuals for hospital, workplace, local health bureau and school to assist all sectors in implementing healthy weight loss management
- Distribute guidebooks and brochures of “Healthy Centenary, Healthy Taiwan” to help people learning “Healthy eating, Happily exercise, Weigh everyone”



Instruction Manuals



billboard



brochure



Healthy living guidebook for people



Develop Personal Skills



1. Healthy rice dumping



2. Obesity Prevention section on the BHP official website



3. Education materials

認識卡路里—ex. 常見食品與運動

品名	數量	60公斤者走 四分階數	60公斤者爬 樓梯階數
奶茶 重量杯	350	113	2431
花生糖 一片	221	71	1535
牛軋糖 3顆	180	58	1250
夏威夷火山豆 10顆	176	57	1222
鳳梨酥 1個	175	56	1215
汽水 1罐	140	45	972
麻糬捲 1個	100	32	694
花生一湯匙(20個)	90	29	625
牛舌餅 2片	80	26	556
巧克力球 1球	75	24	521
杏仁果 8顆	55	18	382
三合一咖啡隨身包	54	17	375

4. Calorie comparison chart by BHP – to burn the calories of a single cup of Bubble tea, one has to climb the entire floors of Taipei 101!



5. Aboriginal healthy exercises



6. Healthy weight management weaved into local tourism – aboriginal harvest dances



7. Healthy martial arts for all age groups



Healthy Environment

- Healthy Settings
- Healthy Hospitals



Partners of Health Promotion

- Public health team: central and local
- Healthcare team: public and private
- Community participation through places where people live, work, study, seek care, etc.
- Academic field
- NGOs
- Media
- Political power: political leaders, central and local governments
- Industry



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Health Promoting Settings (Nov. 2012)

SETTINGS		TOTAL
Communities ever subsidized from 1999 to 2012		531
Communities with ongoing activities in HP		397
Promoting Betel-quid Free Communities		233
Promoting Smoke-Free Communities		217
Promoting Safe Communities		82
Promoting Healthy-Ageing Communities		193
Promoting Healthy Workplace		7,411
Health Promoting Schools		3,699
Certified by BHP	Healthy Communities	84
	Baby-Friendly hospitals	144
	HP Workplaces	303
	Age-Friendly Hospitals	32
Certified by WHO Collaborating Centers	Healthy City	21
	Health Promoting Hospitals	91
	Safe Community	19
	Safe School	46

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International Certification (Nov. 2012)

- Healthy Cities: a total of 10 cities/counties and 11 districts joined in the Alliance of Healthy Cities in the WPRO.



WHO Collaborating Centre
for Healthy Cities and Urban Policy Research



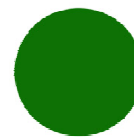
- Safe Communities and Safe Schools : a total of 19 communities and 46 schools were approved by the WHO International Community Safety Promotion Center.



WHO Collaborating Centre on
Community Safety Promotion



- Health Promoting Hospitals: 91 Hospitals have joined the WHO International Network of Health Promoting Hospitals.



International Network of
Health
Promoting
Hospitals & Health Services



WHO Collaborating Centre

for Evidence-Based Health Promotion in Hospitals

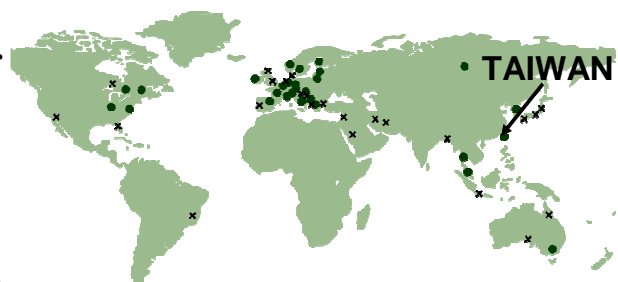


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Health Promoting Hospitals

- Establishment of Taiwan HPH Network (1st Network in Asia), Dec. 2006
- **Taskforce on HPH and Environment** was approved to set up with 4-year periods by General Assembly of International HPH Network in 2010.
--Dr. Chiou is the leader
--**164** Taiwan hospitals and **10** foreign institutions have joined this task force.
- Dr. Chiou was elected as **the Chair** of International HPH Network in Apr. 2012
- The 20th International HPH Conference was successfully hosted by **Taiwan in April of 2012** – the first time it's outside of Europe.

- International HPH Network established in 1990
- Up to **Nov. 2012** (data from: www.hphnet.org)
-- over 900 member hospitals from 40 countries
-- 40 National/Regional HPH Network



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Healthy Ageing

1. Four Key Components of Proactive Approaches to Healthy Ageing

- ❑ Preventive services and Disease management
- ❑ Age-friendly health services
- ❑ Community health promotion for elderly
- ❑ Towards an age-friendly society



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Preventive Services for Adult and Elderly

Item	Target	Interval	Content
Adult preventive health services	People aged 40-64	3 years	Physical examination , Health education, Blood test, urine routine test
	People over 65 years old	1 year	
	People who suffering from polio over 35 years old	1 year	
	Indigenous people over 55 years old	1 year	



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Universal coverage of health services

- Provided jointly by National Health Insurance and Bureau of Health Promotion
- Scope:
 - **evidence-based screenings**, such as screening for: hypertension, hyperlipidemia, diabetes, obesity, GFR, health consultation, cervical cancers, CRC, breast cancer, oral cancer.
 - **immunization** (elderly flu shot),
 - **smoking cessation**,
 - **acute and chronic illness care**,
 - **medications**,
 - **surgeries**,
 - **basic dental services**, etc.



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Disease management for chronic conditions

Ex.

- Diabetes
- Hypertension
- Chronic kidney disease
- Depression
- Asthma
- etc.



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Components of disease management -1

- Evidence-based **guidelines** for diagnosis, management and follow-up
- **Training** and certification for healthcare providers based on the guidelines
- **Team-based care** by doctors + nurses, dieticians, **care managers**, etc.
- **Cooperation** between providers
- **Quality indicators and monitoring** of performance
- **Extra pay** for good performance



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Components of disease management -2

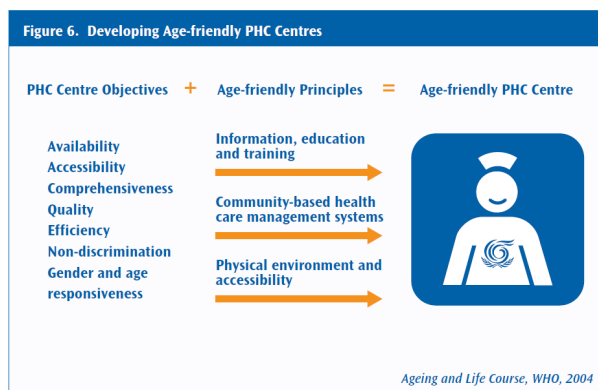
- **Planned care** according to the guidelines, with:
 - Patient registry
 - Computerized decision support and reminding for providers
 - Regular review of complications
 - Reminding for patients to return for treatment and follow-up
 - Personal health record for patients to carry
- **Patient empowerment:**
 - Health education and shared decision making
 - List of resources (ex. for group physical activity, healthy foods, etc.)
 - Patient groups



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Taiwan's Framework of Age-Friendly Hospitals and Health Services

- Based on:
 - WHO age-friendly principles
 - WHO Standards of Health Promoting Hospitals
- 32 Hospitals in Taiwan are Age-Friendly certified (November 2012)
- Working Group on HPH and Age-Friendly Health Care was approved by General Assembly of International HPH Network in Apr. 2012 -- Dr. Chiou is the leader



Community Health Promotion for Elderly National Program on Healthy Ageing

2009-2012

Priority topics in community

1. Physical activity	5. Smoking cessation
2. Falls prevention	6. Mental health promotion
3. Nutrition	7. Social participation
4. Oral health	8. Screening



Health promotion station



← Fall prevention exercise show

Grandpa-grandma fun contest; Will have 1000+ teams in 2011



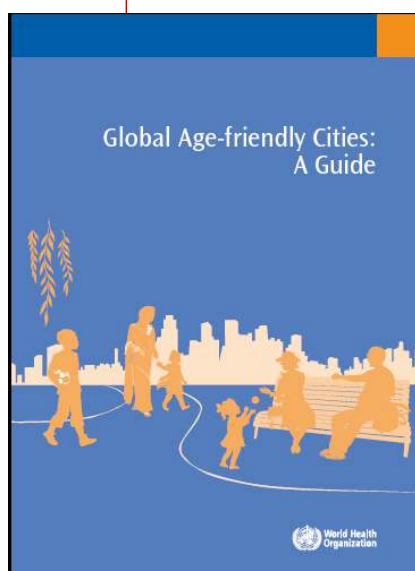
Community screening



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WHO Age-Friendly Cities - A Guide

Figure 6. Age-friendly city topic areas



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Age-Friendly Cities Project

- in 2010 : 1 pilot city
 - Commitment of the mayor and inter-department cooperation of the city government
 - Collecting the views regarding the problems, needs and priorities from the elderly;
 - Developing locally-tailored age-friendly city indices
 - Review of age-friendliness in major policies and services
- in 2011 :
 - Develop a three-year action plan based on the results of needs assessment and self-assessment
 - Apply to the WHO Global Network of Age-friendly Cities.
 - Extend to 8 counties/cities.
- in 2012 :
 - 20 cities/counties participate

Vision

- in 2013 : all counties/cities in Taiwan



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President Ma visited seniors in Chia-Yi City (the first pilot age-friendly city in Taiwan)



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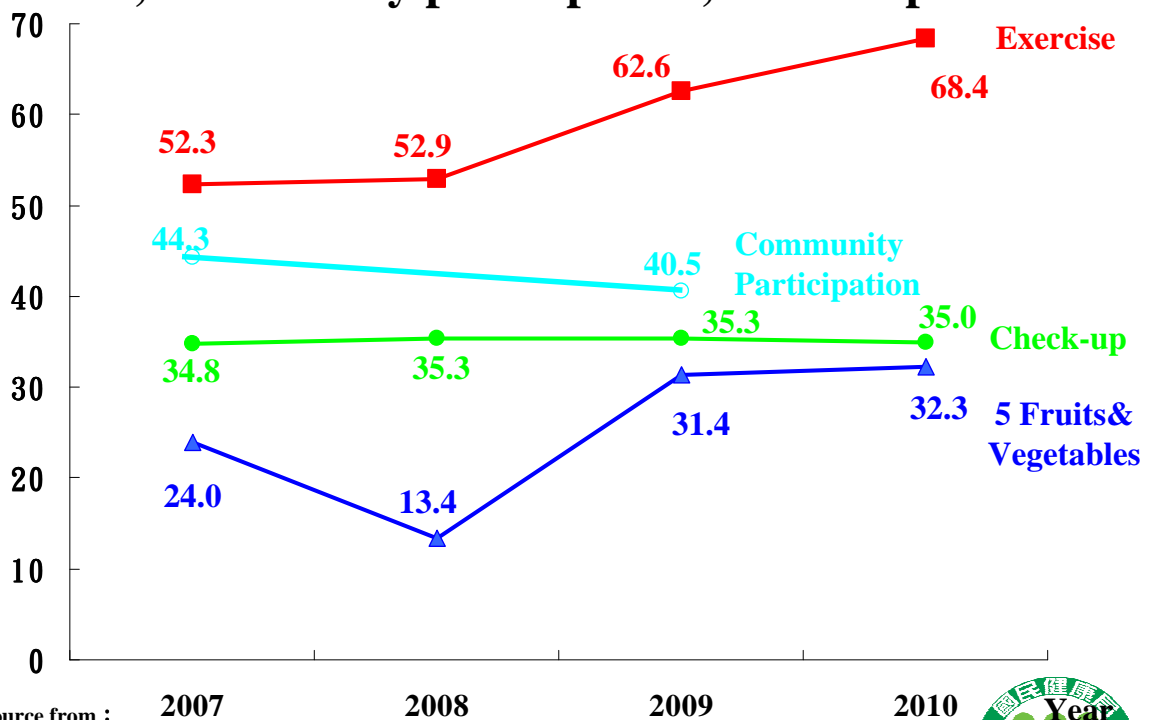
President Ma led all to pledge toward an age-friendly society



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Elderly health promotion indicators : -1

Exercise, Community participation, Check-up & Fruit

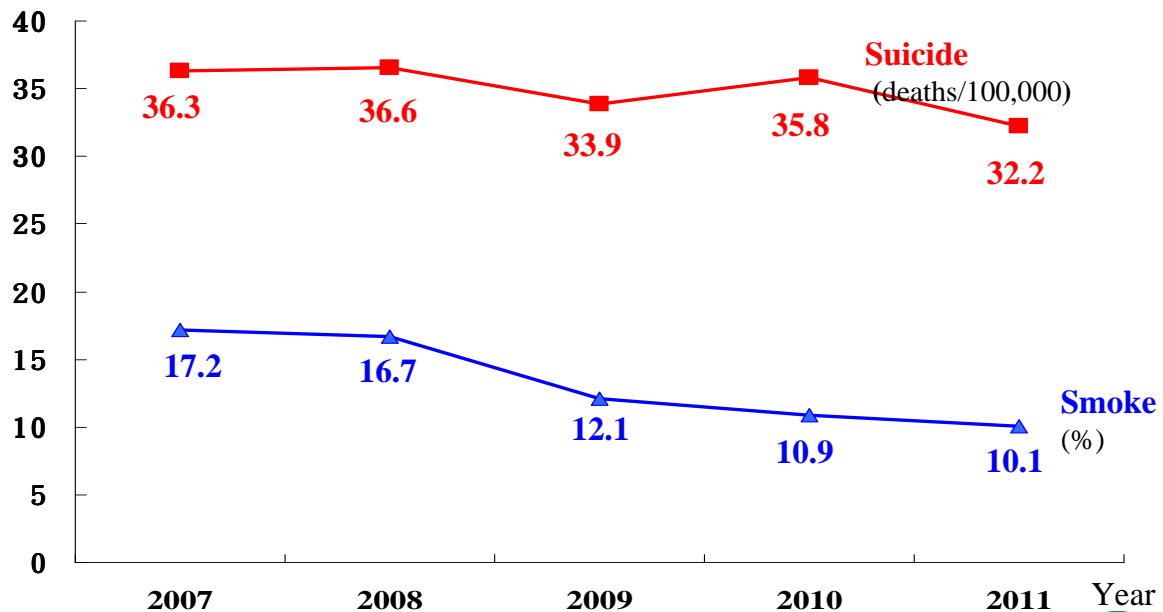


Source from : 2007 2008 2009 2010
Exercise, 5 Fruits & Vegetables: Behavioral Risk Factor Surveillance System (BRFSS)
Community participation: National Health Interview Survey (NHIS)
Check-up: Use of Prevention Healthcare Services for Adults



Elderly health promotion indicators : -2

Smoke, Suicide



Source from :

Suicide : Death report system

Smoke : Adult Smoking Behavior Surveillance System (ASBS)



Healthy Ageing

2. Prevention and Control of Major Chronic Diseases - Cancer as an example

- ❑ Screening for Major Types of Cancer
- ❑ Quality of Cancer Care

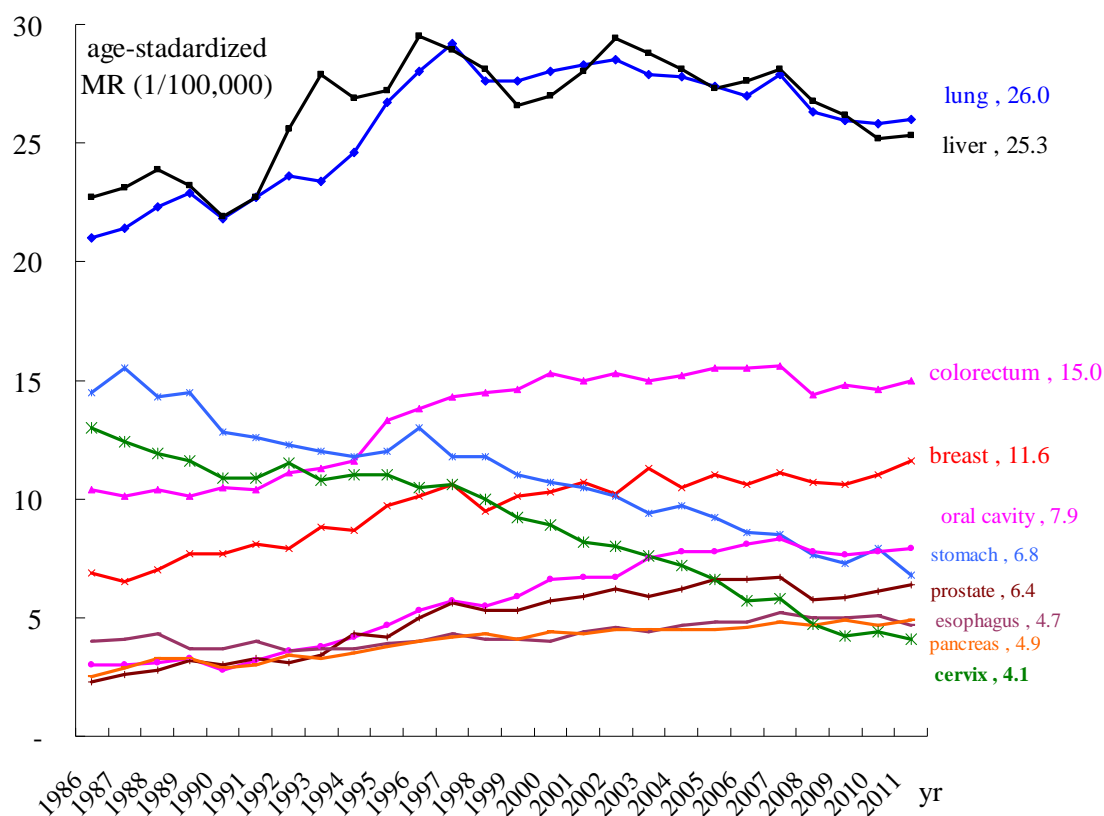


Burden of Cancers in Taiwan

- Cancer has been the number 1 killer in Taiwan since 1982.
- The cancer death tolls continued to rise until 2007 and accounted for 28% of total deaths and 10.1% of National Health Insurance expenditure in 2011

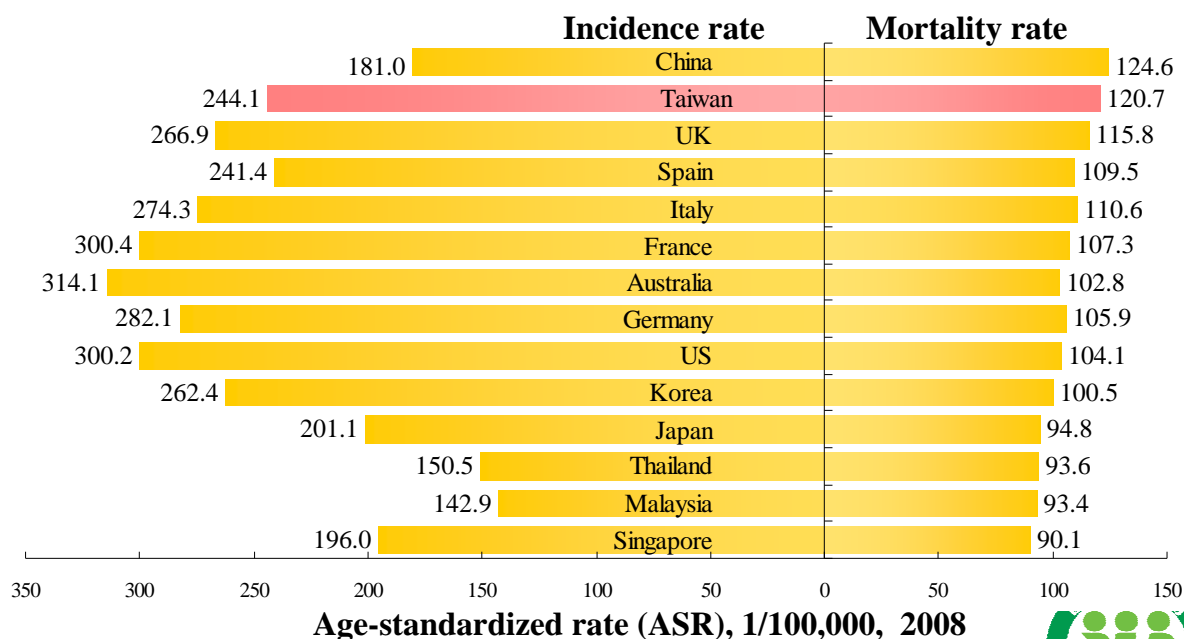


The trend of mortality of 10 leading cancers



Cancer -- Incidence & Mortality Rate

Cancer is the top leading cause of death in Taiwan. The incidence and mortality rates are both higher than many other countries



Source: 1. GLOBOCAN 2008, IARC

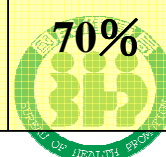
2. Chinese Taipei data from 2008 Taiwan Cancer Registry and 2008 Statistics of Major Causes of Death



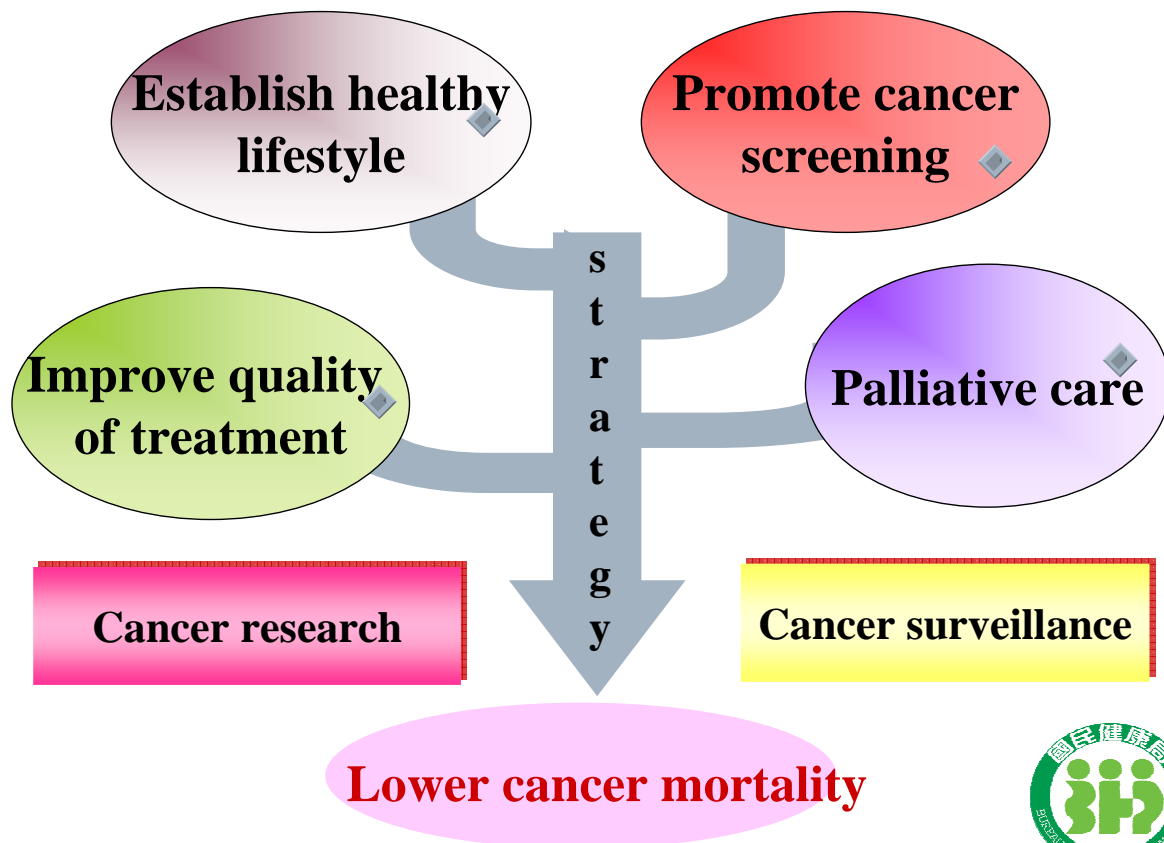
Objectives of National Cancer Control Program

■ Long term: reducing standardized mortality rate by 10%

Cancer	Target	2009	2013	
		Regular Screening rate	Regular screening rate	Lifetime screening rate
Cervical Ca.	3-yr pap smear (or HPV) for female aged 30-69	58%	70%	-
Breast Ca.	2-yr mammogram for female aged 45-69	11%	30%	55%
Colorectal Ca.	2-yr i-FOBT for people aged 50-69	10%	50%	70%
Oral Ca.	2-yr visual inspection of oral cavity for smokers and betel-quid chewers aged 30+	28%	50%	70%

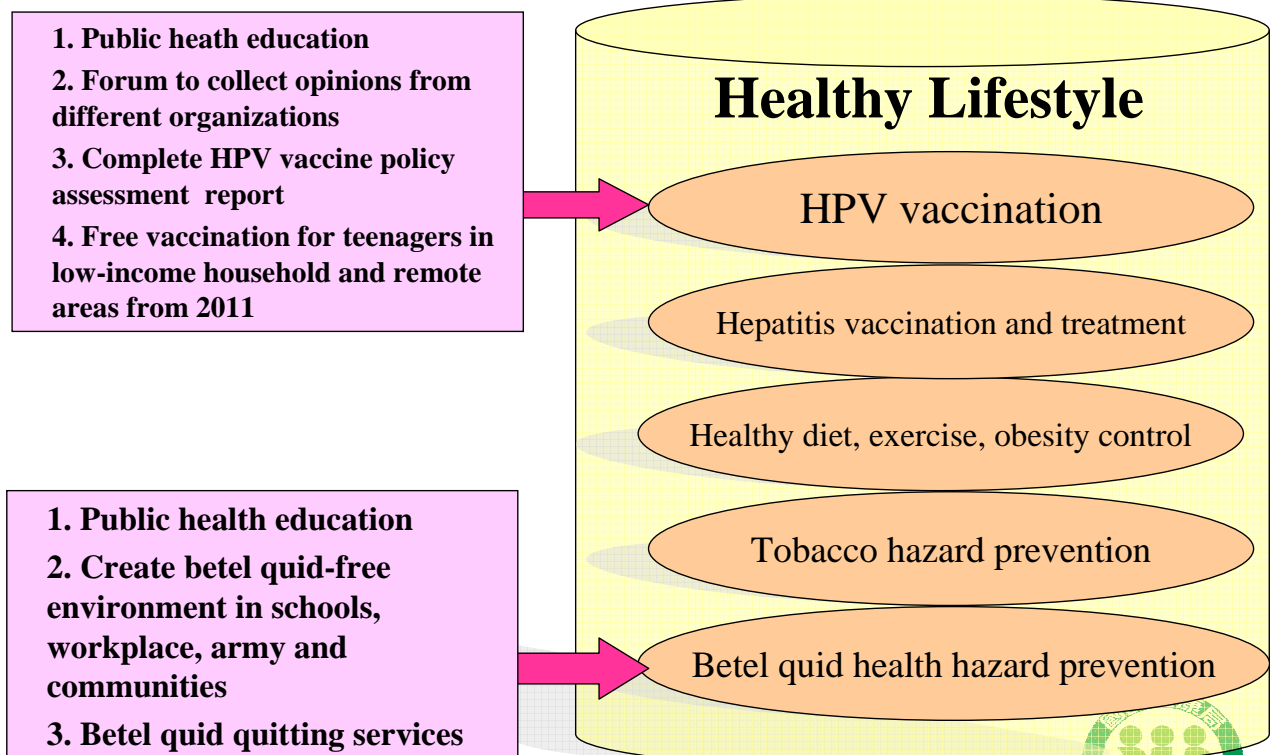


Strategy of Cancer Control



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Strategy - Establish Healthy Lifestyle



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Strategy - Promote Cancer Screening

Cancer	Target	Tool	Interval
Cervical Ca.	Women aged ≥ 30	Pap smear	3 years
	Women refused Pap Smear	HPV test	5 years
Breast Ca.	1. Women aged 45-69 2. Women aged 40-44 with family history	Mammography	2 years
Colorectal Ca.	People aged 50-69	i-FOBT	2 years
Oral Ca.	Betel-quid chewers and smokers aged ≥ 30	Oral mucosa exam	2 years



Evidences of Cancer Screening

Screening tool	Effectiveness/Mortality (screening interval)	ICER (screening interval)
Pap smear	↓ 60-90% (3-5 years)	12.3 thousand USDs (3 years)
Mammography	↓ 21-34% (1-3 years)	40.3 thousand USDs (2 years)
Oral mucosa exam	↓ 43% (3 years)	11 thousand USDs (2 years)
i-FOBT	↓ 18-33% (1-2 years)	Dominated



Strategy - Promote Cancer Screening

- Promote screening through mass media and working with NGOs and enterprises
- Provide accessible services (mobile clinics)
- Subsidize hospitals to integrate cancer screening into daily practice
 - reminding system in the outpatient service
 - patient-friendly screening services
- Establish an effective referral and follow-up system for screened positive cases
- Conduct QC program to ensure screening quality
 - personnel training and certification
 - medical institution accredited and regular quality evaluation
 - data analysis, feedback and monitoring



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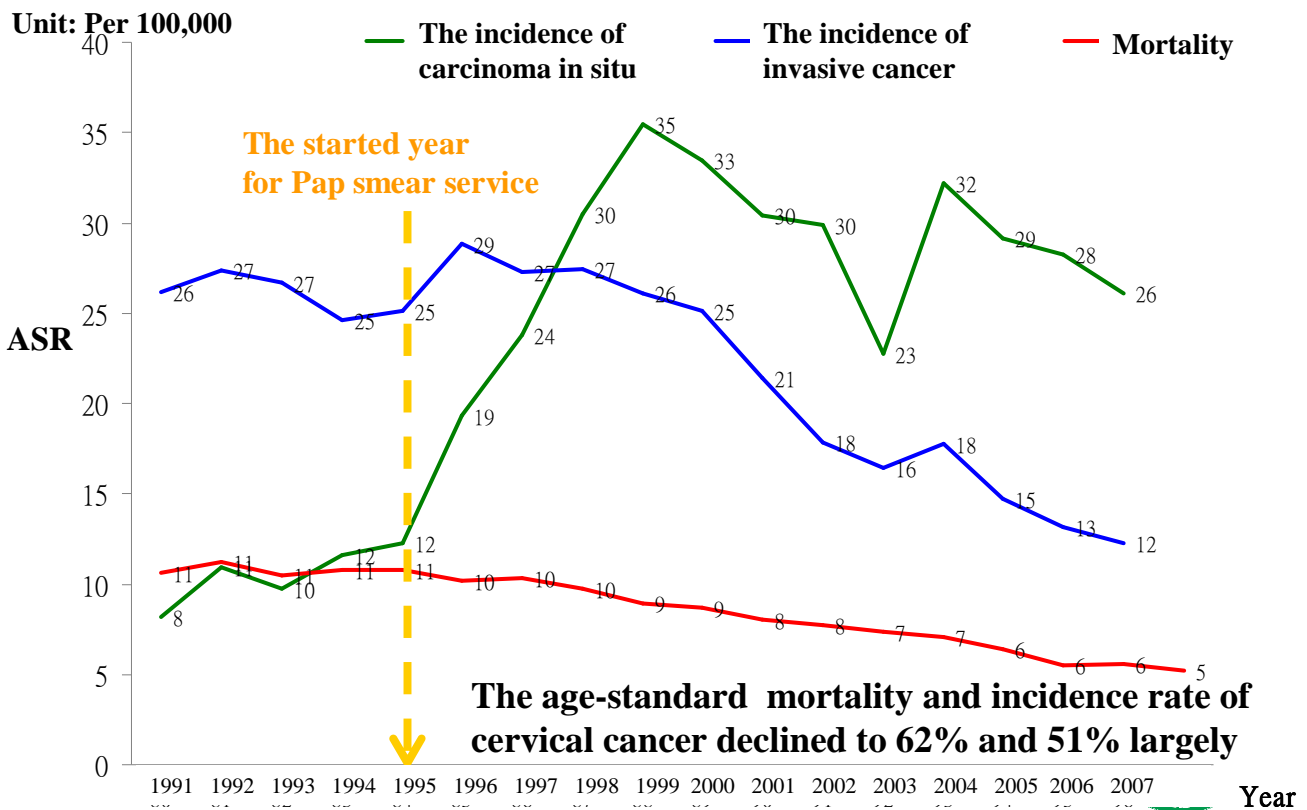
Positive Predictive Value & Case Yield of Screening Program, 2011

Cancer	PPV			Case Yield		
	Pre-cancer	Cancer	Total	Pre-cancer	Cancer	Total
Cervical	1/2	1/5	1/2	1/92	1/293	1/70
Breast		1/17	1/17		1/172	1/172
Colorectal	1/2	1/19	1/2	1/26	1/257	1/24
Oral	1/22	1/36	1/13	1/326	1/394	1/178



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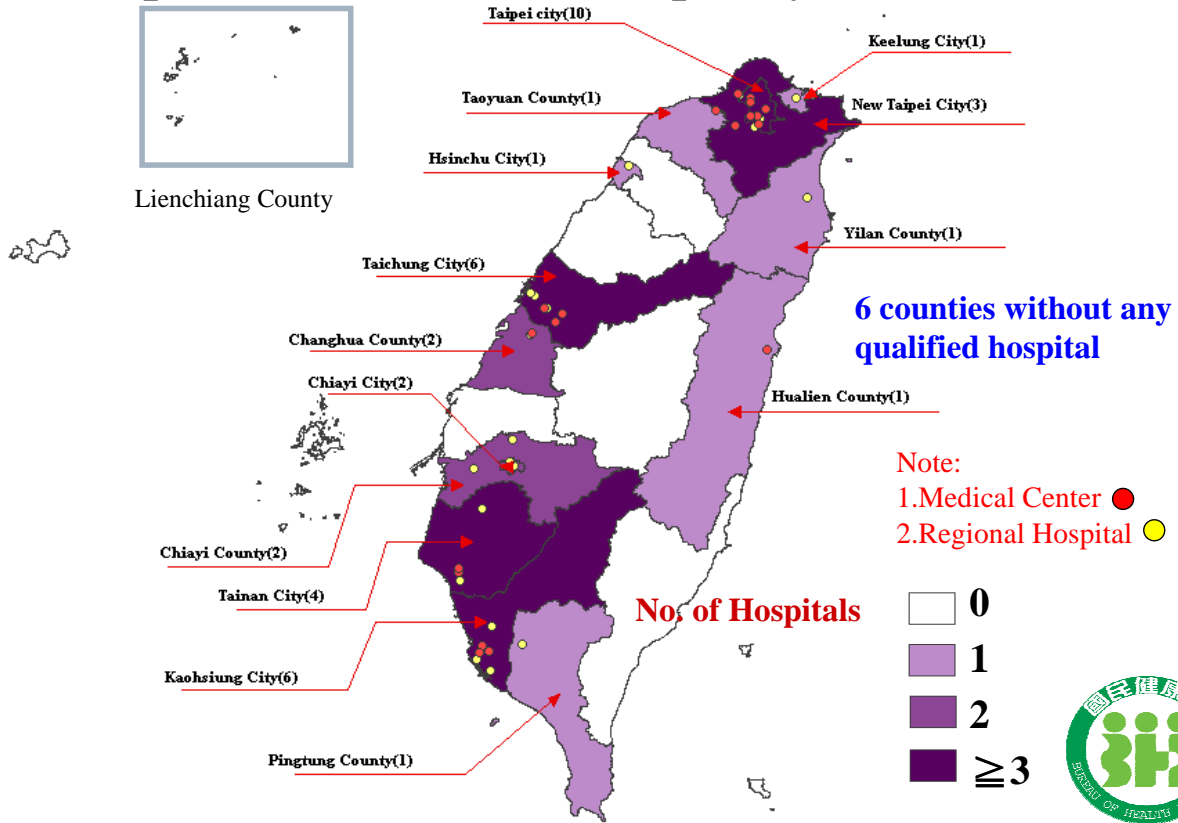
The Trend of Incidence & Mortality of Cervical Cancer in Taiwan



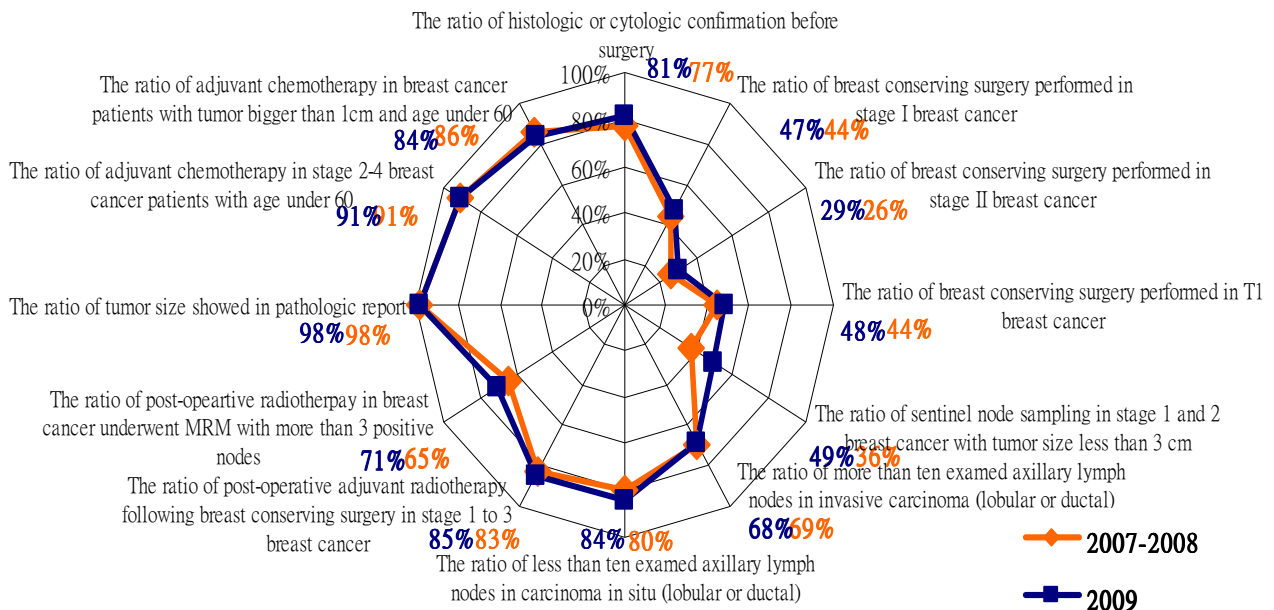
Strategy - Improve Quality of Cancer Care

- Subsidize hospitals to enforce “Regulations for Cancer Care Quality Assurance Measures”
- Conduct the accreditation program of cancer care
 - hospitals with more than 500 new diagnosed cancer cases every year are qualified for application
 - among 43 qualified hospitals, 41 hospitals received certification.
- Develop quality indicators of cancer care to evaluate the performance of hospitals
 - data analysis, feedback and monitoring

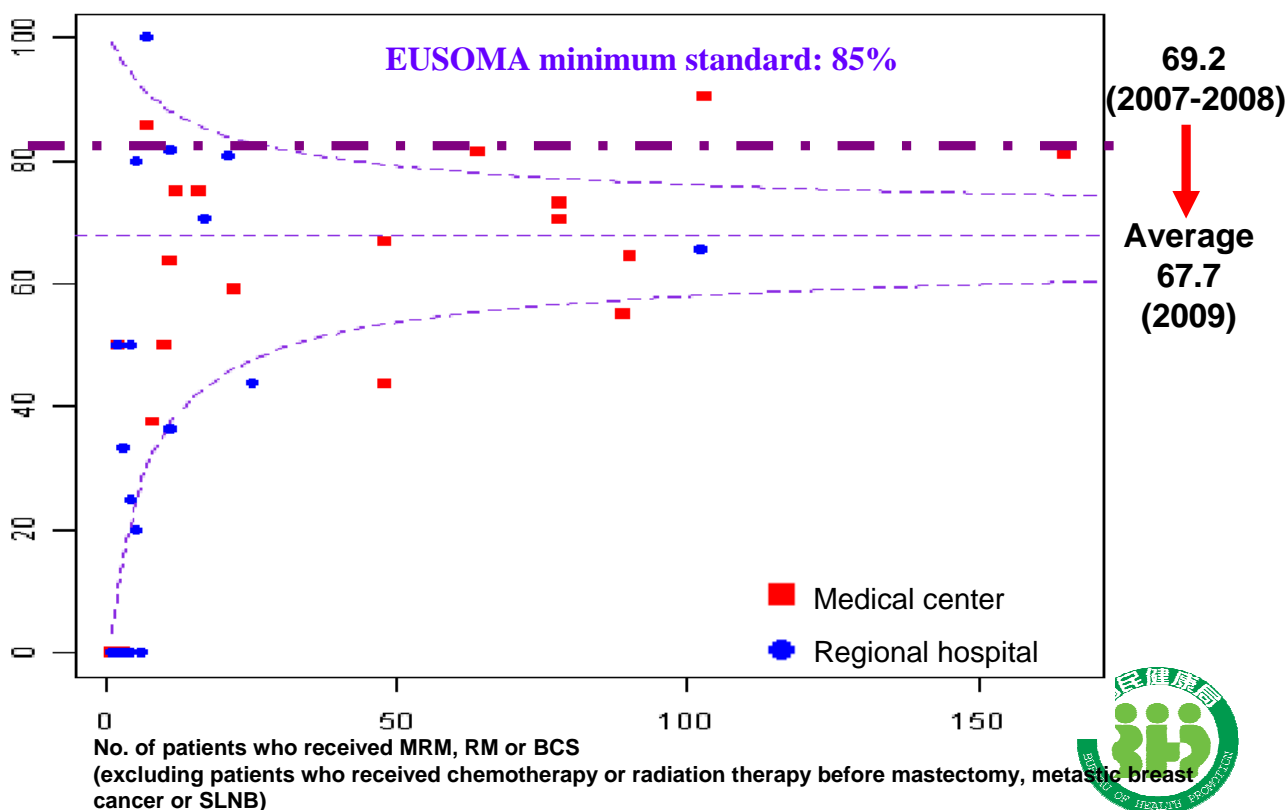
Distribution of hospitals with accreditation of the comprehensive cancer care quality



Performance on the core measures of breast cancer treatment



The ratio of more than ten axillary lymph nodes examined in invasive carcinoma (lobular or ductal)



Strategy- Surveillance and evaluation

- ❑ **Mortality:**
 - Death certificate and registry
- ❑ **Morbidity and healthcare utilization:**
 - **Cancer registry:** launched in 1979, hospitals ≥ 50 beds
 - Household registry + **Cancer screening registry**
 - Claim Data of National Health Insurance
- ❑ **Surveillance on risk factors :**
 - Behavioral risk factors surveillance system (every year)
 - National Health Interview (every 4 years)
 - Measurement on obesogenic environments
- ❑ **Evaluation of public awareness and practice, etc.**



Special Health Topics

- Preventive healthcare services for aboriginal adults
- Oral care for people with disabilities
- Services for new immigrants



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Preventive healthcare services for aboriginal adults

- (A) Provided once every year for aboriginals aged 55 years and older since July, 2010.
- (B) An aboriginal version handbook of adult preventive health services was compiled and distributed to the eligible groups to improve their compliance with preventive healthcare and self-management of health.
- (C) 28,000 aboriginal adults availed themselves of the services in 2011, and the number of users is expected to be 29,000 in 2012.



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Oral care for people with disabilities

Oral health of people with disabilities was inferior to that of the general public, and the Five-Year Oral Health Program for people with disabilities was conducted in 2008.

- (A) 12 home service teams were established during 2010-2011 and provided oral care services to 4,000 people with disabilities
- (B) Provided oral care services to 25,000 people with disabilities at homes and 154 specialized institutions during 2008-2012



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Services for new immigrants

- (A) Enroll in the National Health Insurance
- (B) Reproductive health promotion and management: 99%



- (C) Enhance mandarin ability
- (D) Life skill education & guidance



Home visit

Health education

Health education

Family support groups

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Health Promotion Research and NCD Surveillance



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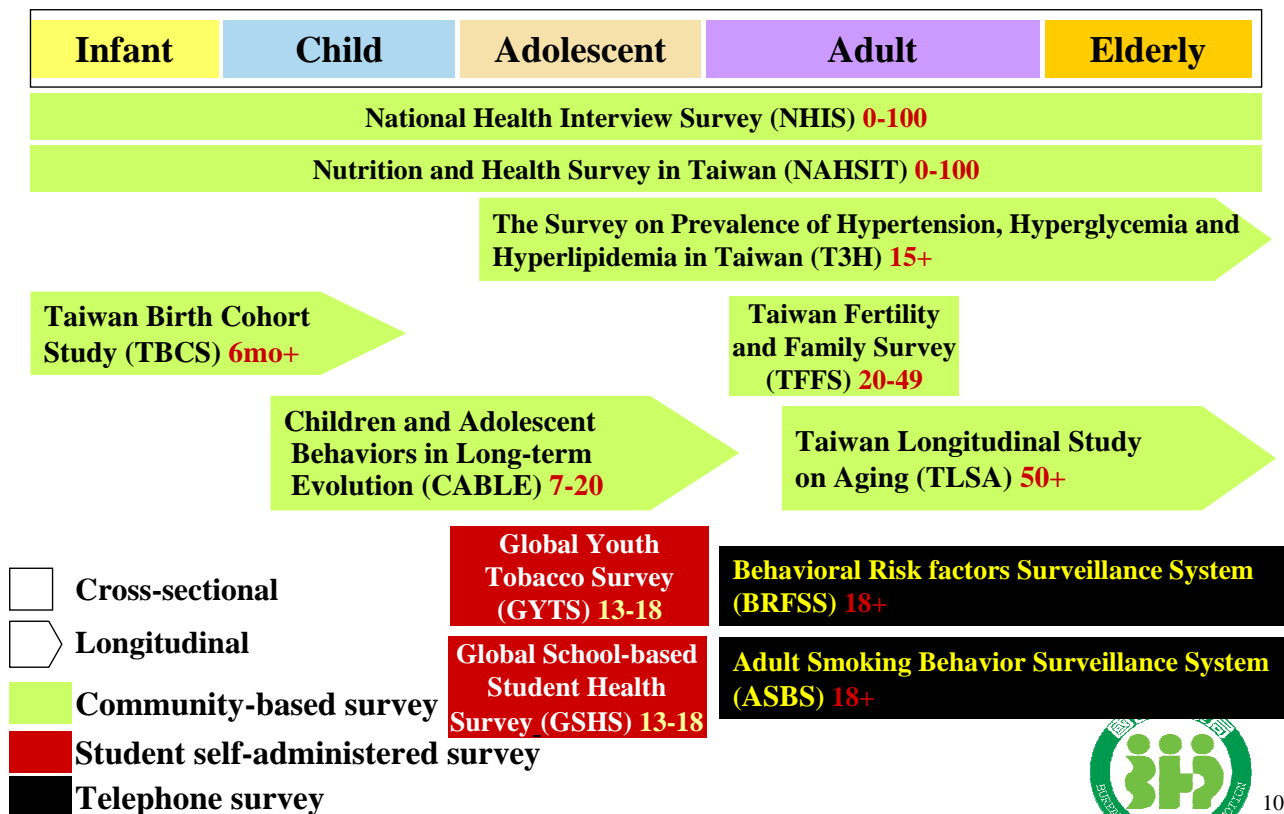
Sources of NCD Surveillance Data

- **Registration system**
 - Household registration system (MOI)
 - Birth reporting system (BHP)
 - Death reporting system (DOH)
 - Cancer registration (BHP)
- **Administration system**
 - The National Health Insurance data (BNHI)
 - MCH service data base (BHP)
 - etc.....
- **Survey**



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NCD Surveys on population across lifespan



Application of Internationally Comparable Tool

WHO protocol
■ Global Youth Tobacco Survey (GYTS, 2004 ~)
■ Global School Personnel Survey (GSPS, 2004 ~)
■ Global Health Professions Student Survey (GHPSS, 2009 ~)
■ Global School-based Student Health Survey (GSHS, 2012 ~)
Others
■ Washington Group Questions on Disability (NHIS, 2013)
■ The European Health Literacy Survey (NHIS, 2013)



Thank You

If you have any questions or suggestions, please contact Vivian Liu at chliu@bhp.doh.gov.tw

**Cherishing Life,
Promoting Health**

