

A world map with various countries color-coded. Most landmasses are orange. Some countries in Europe, Africa, and Southeast Asia are purple. Some countries in Central Asia and the Pacific are pink. Iceland is light blue. The title is overlaid on the map.

# 台灣 菸害防制年報

TAIWAN TOBACCO CONTROL  
Annual Report **2011**

Parties to the who FCTC : **1 7 4**



2011

TAIWAN TOBACCO  
CONTROL ANNUAL  
REPORT



TAIWAN TOBACCO CONTROL Annual Report 2011

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From  
the Director  
General

Saving Health and Lives.

Let's Do It !

The anti-tobacco movement in Taiwan first emerged during the seventies and sought to promote national awareness on the Hazards of smoking. The movement also pushed for society to ban second-hand smoking. After restrictions on tobacco imports and advertising were lifted in 1987, the smoking population began to grow. In response, the Department of Health launched the "3-Year No-Smoking Plan" and the "5-Year Plan for Tobacco Hazards Prevention in Taiwan". Non-governmental organizations also joined together to protest against Section 301 of the U.S. Trade Act. The tobacco wars had begun in Taiwan.

The first "Tobacco Hazards Prevention Act" (THPA) was passed and implemented in 1997 to prevent Tobacco Hazards and protect public health. The law regulated the promotion, advertising and sale of tobacco as well as the target customers, smoking age, smoking areas, health warnings and tar/nicotine content labeling. In preparation for joining the World Trade Organization in 2001, the "Tobacco and Alcohol Tax Act" and "Tobacco and Alcohol Administration Act" were passed in 2000, followed by the ending of the tobacco and alcohol monopoly in 2002. A health and welfare surcharge of NT\$5 per pack was also imposed in the same year. By earmarking 10% of the collected revenues for tobacco prevention and control this enabled the launching of related activities. In 2006, the health and welfare surcharge was increased to NT\$10 per pack as a way of using financial pressure to control smoking, with 3% of revenues earmarked for tobacco control activities. Amendments to the THPA were passed ten years later on July 10, 2007, to be implemented after January 11, 2009. Key changes included the expanding of no-smoking areas and penalties, on-the-spot fines for smoking in no-smoking areas, the addition of six graphic health warnings and quit smoking information, the banning of text and labels such as "low-tar", "light" and "mild" that may deceive people into thinking that smoking was not Hazardous to health or only slightly harmful, prohibiting smoking by pregnant women, prohibiting the supply of tobacco products to non-adults, requiring non-adult smokers to undergo quit smoking education, the banning of tobacco product advertising and sponsorships with steep fines, and requiring tobacco manufacturers and importers to register their products' content, additives, emissions and toxicology data. The health and welfare surcharge on tobacco products was also increased from NT\$10 per pack to NT\$20 in the same year. All of the above developments show that Taiwan is actively working to build a no-smoking framework in line with global trends. The new regulations also aim to raise public awareness on personal health, protect non-smokers' right to health, reduce harm from second-hand smoking, lower the smoking rate and create a healthy, smoke-free living environment.

After many years of campaigning against smoking, the adult smoking rate has dropped from 29.8% in 1996 (Male: 55.11%; Female: 3.8%) to 19.8% in 2010 (Male: 35.0%; Female: 4.1%). Exposure to second-hand smoke in no-smoking areas has also declined from 23.7% in 2008 to 9.1% in 2010. Smoking in virtually all indoor public spaces is now banned. Satisfaction among the general public on improvements in smoke-free environments has now reached 90% and it's now the social norm to reject tobacco.

However, the adult smoking rate for men in Taiwan is 1.6 times compared with developed countries such as the US, UK and Canada. Over 50% of smokers in the US, Canada, UK and Australia have quit smoking compared to just 30% in Taiwan. Smoking is also the No.1 killer in Taiwan. All of the top 10 causes of death including malignant tumors, heart disease, stroke, pneumonia, accident injury, chronic respiratory illness and high blood pressure are linked to smoking. Statistics showed that while the average life expectancy for men and women



have now reached 76.2 and 82.7 years respectively, the difference in average life expectancy has also widened from 4.1 to 6.5 years. The discrepancy can be attributed to the far higher smoking rate among men. For smoking-related causes of death including cancer, heart disease, stroke, pneumonia and chronic respiratory disease, the mortality rate among men is also far higher than women. Lowering the high rate of smoking among men is therefore essential to achieving equality in men's and women's health. Assistance must be given to smokers to quit smoking in order to prevent more people from being harmed by first- and second-hand smoking.

For individuals, families and society, quitting produces immediate health benefits and also saves money compared to treatment for hypertension, diabetes and high blood lipids. There is no need for lifelong medication or expensive examinations. As quitting offers a simple way to eliminate a major cause of heart disease, strokes, cancer and chronic respiratory illness, it should really be promoted more actively. To help smokers quit smoking and reduce the obstacles to quitting right away, the "Joint Care and Treatment Network for Quitting Smoking" was launched in 2010 to mobilize all community and government resources. With "Appeal to the Heart" and "Get Professional Help for Quitting" as the key themes, a public awareness campaign was launched through community groups, the religious community and corporate sector. Celebrity spokespersons such as Jolin Tsai and Jay Chou were also invited to promote tobacco control. Cardinal Kuo-hsi Shan was also invited to deliver the message "Love, professional help and commitment can help you quit smoking successfully!" The "Quit & Win 2010" event attracted a total of 25,405 teams and included 2,079 inmates from correctional facilities for the first time. 1.45 million "Quit Smoking Handbooks" were also printed to encourage smokers to quit smoking. A total of 737,391 signatures were received expressing willingness to accept counseling on how to quit smoking.

More than 1,900 hospitals now provide cessation clinic services in 95% of local districts. Between 2002 and 2010 quit smoking treatment was provided to more than 440,000 people. The Quit Smoking helpline also took 513,923 calls between 2003 and 2010. In 2010, up to 27,450 smoking cessation educators were trained in community pharmacies, schools, workplaces and medical facilities. The Department of Health is now developing a second generation smoking cessation service that will be "Full-course, Full-Spectrum, All Population" to try and help more smokers quit. The new service will take Tobacco Hazards Prevention and control in Taiwan into a new era.

The tobacco war will continue as long as tobacco products exist. There is still much we can do in this long war. For the 2011 Tobacco Control Annual Report, we used the WHO Framework Convention on Tobacco Control to focus on "Developing and implementing Tobacco Hazards Prevention and control strategies", "Measures for reducing demand for tobacco products", "Measures for reducing the supply of tobacco products" as well as "Monitoring, research and technical cooperation" to present an overview of Taiwan's efforts in promoting tobacco control. Through this yearbook, we hope to share our accomplishments with our local and overseas partners in Tobacco Hazards Prevention and control.



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December 2011

# Development and Implementation of a Tobacco Hazards Prevention and Control Policy in Taiwan

## Changing the Smoking Culture through the THPA

During the seventies, "smoking" and "offering a cigarette" were a part of social life, and the adult male smoking rate in Taiwan reached 60%. In 1984, community groups began campaigning against smoking due to the increasing severity of Tobacco Hazards. Various anti-smoking activities were held to raise awareness of smoking's dangers and popularize the concept of "reject second-hand smoke". In 1987, the US used Section 301 of the Trade Act of 1974 and forced Taiwan to permit tobacco imports and advertising. The Department of Health also launched the "3-Year No-Smoking Plan". This was followed by the "5-Year Plan for Tobacco Hazards Prevention and Control in Taiwan" in 1990 that coordinated the efforts of government agencies and non-government organizations to carry out various tobacco control activities. The "Tobacco Hazards Prevention Act" (THPA) was passed and implemented in 1997 to prevent Tobacco Hazards and protect public health. The new law regulated the promotion, advertising and sale of tobacco as well as the target customers, smoking age, smoking areas, health warnings and tar/nicotine content labeling. The "Tobacco and Alcohol Tax Act" and "Tobacco and Alcohol Administration Act" were passed in 2000. A health and welfare surcharge of NT\$5 per pack was also imposed in 2002 in accordance with Article 22 of the "Tobacco and Alcohol Tax Act". The law earmarked 10% of surcharge revenues for Tobacco Hazards Prevention Act. Experts and academics were also commissioned to propose the "Recommendations on Tobacco Hazards Prevention Act" to provide guidance on related activities. The "Tobacco and Alcohol Tax Act" was amended in 2006 to increase the surcharge to NT\$10 per pack with 3% of revenues dedicated to tobacco control.

## Bringing Tobacco Legislation in Line with the World

In 2005, the WHO passed the Framework Convention on Tobacco Control. Taiwan also passed amendments to the THPA after 10 years on July 10, 2007, with the changes taking effect on January 11, 2009. On January 23, 2009, further amendments to the THPA were made increasing the health and welfare surcharge on tobacco products from NT\$10 to NT\$20 per pack. These developments show that Taiwan is actively working to build a no-smoking framework in line with global trends. The new regulations also aim to raise public awareness on personal health, protect





non-smokers' right to health, reduce harm from second-hand smoke, lower the smoking rate and create a health, smoke-free living environment.

Apart from increasing the health & welfare surcharge from NT\$10 to NT\$20 per pack, other key changes were made to the THPA in 2009. Prohibition on smoking was expanded to include public indoor spaces, indoor workplaces with 3 people or more and public transportation. Owners of these spaces are now required to display no-smoking signs at the entrance and in suitable places. All smoking-related items were also to be removed. Penalties for non-compliance included fines between NT\$10,000 to NT\$50,000. Smokers can also be issued on-the-spot fines of between NT\$2000 to NT\$10,000. For health warnings, six graphic health warnings were added to the warning messages along with quit smoking information. The use of text and labels such as "low-tar", "light", "mild" that may mislead people into thinking that smoking was not Hazardous to health or only slightly harmful was banned. To strengthen protection for babies, children and youth, smoking during pregnancy was prohibited and the supply of tobacco products to underage youths banned. Penalties for non-compliance included fines of between NT\$10,000 to NT\$50,000 as well as compulsory smoking cessation education for smoking youths. Strengthened controls on tobacco promotions and advertising in tobacco retailers included banning the sale of tobacco products from open displays directly accessible to consumers. Penalties were also greatly increased with the penalties for violating the ban on tobacco advertising, promotions and sponsorships increased from between NT\$100,000 ~ NT\$300,000 to NT\$5 million ~ NT\$25 million. Tobacco importers and manufacturers were also required to register and make publicly available the ingredients, additives, emissions and toxicology data of their tobacco products.

2009 was an important year for the tobacco control campaign as well. In addition to the routine tobacco control activities, additional supporting measures were put into place for the expansion of no-smoking areas and new rules on tobacco products on January 11, 2009. A push was also made to increase the health and welfare surcharge on tobacco products. Vertical and horizontal coordination between government agencies, the Legislative Yuan, local governments, industry, general public and non-government organizations used various resources to educate the public on obeying the new regulations as well as increase tobacco prices and health surcharge within a short amount of time. The total mobilization proved successful on both fronts and represented a new milestone in Taiwan's tobacco control efforts.



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Taiwan Goes Smokefree starts 2009

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## Fighting First- and Second-hand Smoke on Multiple Fronts

The "Joint Care and Treatment Network for Quitting Smoking" was launched in 2010 to expand smoking cessation services. Non-government organizations, the religious community and business community were all mobilized in a yearlong campaign with "Appeal to the Heart" and "Get Professional Help for Quitting" as the key theme. Celebrity spokespersons such as Jolin Tsai and Jay Chou were invited to promote tobacco control. Cardinal Kuo-hsi Shan was also invited to deliver the message "Love, professional help and commitment can help you quit smoking successfully!" The "Quit & Win 2010" event attracted 25,405 teams while 1.45 million "Quit Smoking Handbook" were distributed to encourage smokers to quit smoking. A total of 737,391 signatures were received expressing willingness to accept counseling on how to quit smoking.

Professional help for smoking cessation has been found to increase the success rate by at least 20%. More than 1800 hospitals now provide smoking cessation clinics in 95% of local districts in Taiwan. Between 2002 and 2010, quit smoking treatment was provided to more than 440,000 people. The Quit Smoking helpline also took 513,923 calls between 2003 and 2010. In 2010, up to 27,450 smoking cessation educators were trained in community pharmacies, schools, workplaces and medical facilities.

The adult male smoking rate is still far higher in Taiwan compared to many developed countries. The quit smoking rate is also just 29% for men. At the moment, a lack of subsidies for smoking cessation treatment drugs means that the medication costs the same as a pack of cigarettes per day. The high cost is not only a major obstacle to quitting, but also a heavy burden for economically disadvantaged laborers who have the highest rates of smoking and addiction. The Department of Health adjusted its services in 2011 in response to the inadequate smoking cessation subsidies, difficulties in accessing medical treatment and lack of subsidies during hospitalization. The emphasis is now on subsidies for health education and reasonable use of drugs for smoking cessation, "total" support for smoking cessation services, better health education monitoring and management, outpatient/inpatient treatment and "full" community smoking cessation treatment. The second-generation smoking cessation service is scheduled to be introduced at the end of 2011. Its introduction will help more smokers to quit and take Taiwan's tobacco control efforts into a new era.





The health & welfare surcharge has made it possible to fund a full tobacco control campaign aimed at preventing any further increase in the smoking population, increasing the number of former smokers and reducing exposure to second-hand smoke. Key strategies include implementing tobacco control measures through local governments, all-spectrum tobacco control education and promotion, accessible smoking cessation inquiry service, promoting international exchanges and a research & monitoring system. Proper enforcement, education, awareness, smoking cessation services and basic infrastructure will all hopefully support the total campaign on smoking.

Realizing a smoke-free environment is no short-term task. While improvements have been made in the general public's awareness of Tobacco Hazards as well as Tobacco Hazards in the environment, the adult male smoking rate is still relatively high. Some people still smoke in no-smoking areas; the price of tobacco products is still relatively low; the quit rate among smokers is low as well; and only a low percentage of medical workers actively counsel the public to quit smoking. All of these signs show that there is still much to be done on tobacco control. In the future, we will continue to work with all stakeholders to launch yearlong awareness programs, create smoke-free environments, provide a variety of smoking cessation services and promote Tobacco Hazards education. Through health policies, supportive environments, appropriate services, community support and the implementation by the general public, industry, government, academic and private sector resources will be channeled into tobacco control activities and work together to realize a smoke-free Taiwan.

# Reducing Tobacco Demand





# Non-Pricing Measures

## ◎ Supporting Tobacco-free Environments

As smoking and secondhand smoke represents a serious health hazards that can even have an impact on socio-economics, tobacco control is now a priority all around the world. Tobacco control efforts not only seek to reduce the rate of smoking among the general public but also to protect people against secondhand smoke in public places. To this end, the Bureau of Health Promotion, Department of Health is enforcing a ban on secondhand smoke in public spaces. A grassroots campaign is also being waged to change the public perception on smoking as well as create smoke-free environments in schools, the military, the community and the workplace for a healthier future.

### Smoke-free Campuses

#### Training of campus quit-smoking education cadre for junior, senior and vocational high schools

The School Health Act and Tobacco Hazards Prevention Act require all schools at the senior secondary level and below to implement a campus-wide ban on smoking. The Tobacco Hazards Prevention Act also prohibits smoking by people under the age of 18 and no person shall provide tobacco products to person under the age of 18. According to the Tobacco Hazards Prevention Act regulations Governing quit-Smoking Education, schools must organize quit-smoking education for students under the age of 18. quit-smoking education must have a minimum duration of 3 hours and may be extended if the student was caught smoking again within one year.

According to the "Senior and Vocational High School Student Smoking Survey", smoking prevalence among high school students in 2009 was 14.8% (19.6% for Males and 9.1% for Females). Compared to that



▼ Advanced course for campus quit-smoking education cadre training  
Smoke-free



▲ Beginner's course for campus quit-smoking education cadre training in northern, central and southern Taiwan

of 2007, which was 14.8 (19.3% for Males and 9.1% for Females), the rate of increase in high school smoking has slowed, with over 60% of student smokers expressing a desire to quit smoking. The "Junior High School Student Smoking Survey" found that smoking prevalence among junior high school students in 2010 was 8.0% (11.2% for Males and 4.2% for Females). When compared to the 2008 smoking prevalence of 7.8% (10.3% for Males and 4.9% for Females), smoking prevalence among male junior high school students increased slightly while remaining flat for female students. Over 50% of smokers also expressed a desire to quit smoking. Quit-smoking education for students is therefore required by law and actual demand.

The Bureau of Health Promotion is promoting the "Campus Quit-smoking Education Cadre Training Program" to train more Quit-smoking education cadre for junior, senior and vocational high schools. The Quit-smoking education cadre's monitoring efforts, feedback and experiences will encourage students to quit smoking, support the promotion of different cessation services on campus and help create a smoke-free campus.

In 2010, the Campus Quit-smoking Education Cadre Training Program trained a total of 205 teachers including 151 in the beginner course and 54 in the advanced course. The trainees were also tested before and after the course on their Quit-smoking knowledge, attitude and self-efficacy. The results were analyzed and statistically significant differences found (Table 1-1, 1-2, 1-3). Over 90% of participants agreed that the "Quit-smoking Education Cadre Training" helped with organizing Quit-smoking education for students (Table 1-4). The provision of Quit-smoking education cadre training can therefore improve the professional knowledge, attitude and self-efficacy of teaching cadre for Quit-smoking education.

In the future, the Bureau will work closely with the Ministry of Education to strengthen campus tobacco control activities by defining quantifiable targets, counseling and examination techniques, organizing campus tobacco control audits, continuing to train campus anti-smoking education cadre in local schools, expanding the campus tobacco control awareness program, setting up smoke-free campus environments and implementing anti-smoking education.

**Table 1-1 Analysis of quit-smoking education knowledge**

(n=80)

Item	Pre-Test		Post-Test		Pair-t
	Mean	SD	Mean	SD	
1. I know about the Hazards of smoking	2.95	.50	3.31	.47	-5.82*
2. I know various techniques for helping students to quit- smoking	2.63	.62	3.23	.48	-7.82*
3. I know the behavior change theories for quit-smoking (E.g. Basic concepts for the trans-theoretical model)	2.34	.67	3.18	.50	-10.17*
4. I know how to give students individual counseling on smoking cessation	2.36	.60	3.16	.51	-10.78*
5. I can evaluate students' smoking and cessation behavior	2.65	.55	3.14	.57	-6.29*
6. I know how to motivate students to quit-smoking	2.55	.69	3.16	.51	-8.01*
7. I have the ability to help students quit-smoking	2.36	.66	3.11	.57	-9.55*
8. I know the contents of each "Quit-smoking Group Activity" teaching module	2.24	.64	3.28	.53	-14.38*
9. I know the contents of the "Quit-smoking Group Trainee Handbook"	2.20	.64	3.30	.49	-13.97*
10. I know the contents of the "Individual Quit-smoking Counseling Handbook".	2.23	.66	3.26	.50	-13.97*
11. I know the contents of the "Practical Quit-smoking Education and Resources Handbook"	2.25	.65	3.26	.50	-13.44*
Total	2.45	.50	3.22	.42	-13.84*

Note: The survey covered the 80 people that answered both the pre- and post-test surveys. Those that answered only one survey were excluded.

\* :  $p < .05$

**Table 1-2 Analysis of attitude to organizing quit-smoking education for students** (n=80)

Item	Pre-Test		Post-Test		Pair-t
	Mean	SD	Mean	SD	
1. I think the government should ban all tobacco advertising	3.43	.61	3.60	.54	-3.15*
2. I think the government should ban all forms of tobacco promotions	3.49	.55	3.65	.51	-2.59*
3. I think quit-smoking group activities help students to quit -smoking	3.14	.47	3.36	.53	-3.07*
4. I think that individual counseling can help students to quit -smoking	3.19	.48	3.43	.52	-3.54*
5. I think that parental support will improve the effectiveness of individual quit-smoking counseling	3.43	.50	3.69	.47	-4.13*
6. I can help students to quit-smoking	2.87	.59	3.44	.50	-8.25*
7. It is my job to educate students about the Hazards of smoking	3.21	.47	3.43	.50	-3.65*
8. I am willing to organizer quit-smoking education for students	3.15	.55	3.29	.51	-2.17*
9. I am willing to serve as an quit-smoking teacher	3.05	.57	3.24	.58	-2.81*
10. I am willing to evaluate the effectiveness of student quit-smoking efforts	3.09	.51	3.28	.48	-3.32*
Total	3.12	.35	3.44	.38	-8.48*

Note: The survey covered the 80 people that answered both the pre- and post-test surveys. Those that answered only one survey were excluded.

\* :  $p < .05$

Table 1-3 Analysis of quit-smoking education self-efficacy

(n=80)

Item	Pre-Test		Post-Test		Pair-t
	Mean	SD	Mean	SD	
1. I can evaluate demand for student quit-smoking education	2.29	.72	3.01	.44	-9.12*
2. I can manage student quit-smoking education	2.33	.81	3.03	.50	-7.97*
3. I can plan student quit-smoking education	2.34	.78	3.03	.48	-8.52*
4. I can set teaching goals for student quit-smoking education	2.26	.74	3.04	.49	-9.51*
5. I can evaluate the results of student quit-smoking education	2.24	.72	3.08	.41	-10.41*
6. I can discuss different cessation methods with students	2.38	.79	3.13	.43	-8.52*
7. I can refer students to external cessation services	2.43	.82	3.20	.40	-8.24*
8. I can discuss with parents how to help student quit smoking	2.28	.76	3.04	.51	-9.30*
9. I can organize smoking cessation group activities (quit smoking classes)	2.23	.78	2.94	.54	-8.50*
10. I can provide individual counseling on smoking cessation	2.26	.81	3.00	.48	-8.02*
Total	2.30	.70	3.05	.38	-10.42*

Note: The survey covered the 80 people that answered both the pre- and post-test surveys. Those that answered only one survey were excluded.

\*p < .05

Table 1-4 Effect of participating in quit-smoking education cadre training on student quit-smoking education

Effect of participating in quit-smoking education cadre training on student quit-smoking education (%)					
Item	Strongly Agree	Agree	Disagree	Strongly Disagree	Unanswered
1. Cadre training will help me organize student quit-smoking education in the future	35.3	60.3	0	0	4.4
2. Cadre training satisfies my personal thirst for knowledge	30.9	61.8	2.9	0	4.4
3. Cadre training improves my professionalism in quit-smoking education	35.3	58.8	0	0	5.9
4. Cadre training helps me with my teaching	27.9	66.2	1.5	0	4.4
5. Student anti-smoking education is a meaningful task	35.3	60.3	0	0	4.4
6. Professional knowledge and skills in quit-smoking education is very important to me	30.9	63.2	1.5	0	4.4



## Colleges

The Tobacco Hazards Prevention Act bans all indoor smoking at colleges and universities. Outdoor smoking is also restricted to designated smoking areas. If there are no designated smoking areas then no smoking is allowed at all. According to the 2010 "College Student and Faculty and Staff Smoking Survey", 7.6% of colleges students smoke and 10.1% of the staff have smoked within the last 7 days. Students' exposure to secondhand smoke on campus was 57.6% and showed that more work remains to be done in realizing smoke-free campuses. The "Smoke-free Colleges Project" was therefore commissioned by the Bureau to provide tobacco control education on campus and improve students' understanding of tobacco control knowledge and skills. Concrete targets and direction were also proposed based on each university's progress in tobacco control to help realize universities create smoke-free campuses.

In 2010, a total of 73 universities/colleges and 280 people took part in the "School Campus Tobacco Hazards Control Camp". Assistance was also given to 31 universities/colleges on setting concrete targets and directions based on their current progress in tobacco control. The "School Campus Tobacco Hazards Control Implementation Plan" was also launched to define public strategies on tobacco control on campus, creating a supportive environment, strengthening community action, development of personal health skills, re-defining health services and creative marketing.

On-site inspections were carried out in spring and fall by experts and local health departments at 31 universities and colleges.

The inspections covered the following key areas:

1. Public strategies for tobacco control on campus: The school management sets up and supports the inter-department "Smoke-free Campus Task Force" to develop tobacco control initiatives on campus.
2. Creating a supportive environment: Display no-smoking signs in prominent places and remove tobacco products from campus stores. Smoking areas on campus are regularly maintained and progressively eliminated each year.
3. Creative marketing: Organize student-oriented creative marketing efforts (including No Smoking posters and No-Smoking Angels). Creative short videos on the theme of tobacco control on campus were produced to generate exposure in the mass media and highlight the schools' efforts and innovations in tobacco control.
4. Strengthening community action: Schools were encouraged to pool the tobacco control resources from all departments, clubs as well as community health, healthcare and groups to promote tobacco control, implement tobacco control policy and integrate tobacco control resources.
5. Development of personal health skills: Improve students' self-health management skills and understand the messages conveyed by tobacco advertising through classes, lectures and workshops. By equipping students with the ability to correctly judge and identify the negative effects of tobacco advertising, they can say no to smoking.
6. Re-defining health services: Carbon monoxide testing and questionnaire surveys are used to identify student smokers for additional education, smoking cessation clinic and referral services.

Under the "School Campus Tobacco Hazards Control Implementation Plan", intervention efforts by participating efforts have led to major improvements in the effectiveness of tobacco control initiatives (Fig. 1-1). Outstanding schools were also selected for an award ceremony and presentation of results hosted on November 1, 2010.

### Outstanding Schools in the "School Campus Tobacco Hazards Control Implementation Plan" Award

Award	School	Features
Gold Award	Ta Hwa Institute of Technology	Comprehensive reporting of relevant statistics including smoking prevalence among new students. The school invited oral health doctors to conduct oral inspections on all new students and identify smokers. Smokers then underwent CO testing, leading to significant savings in CO test consumables. The comprehensive promotion program incorporated many summer activities organized in conjunction with the local community.
Silver Award	National Formosa University	Various anti-smoking activities were held on and off campus. The news media was used to emphasize the school's commitment to realizing a smoke-free campus and landlords were encouraged to provide smoke-free rental accommodation. The successful use of the media helped to enhance the school's image.
Bronze Award	Tamkang University	Implementation is not easy in a large university with a big student population. The school organized the "No Smoking with 5 Meters of the University: Smoke-free Travel on the Go" campaign in conjunction with local shops and health authorities. More than a thousand staff and students enthusiastically took part. Distinction
Distinction	Chang Jung Christian University	The size of the campus meant the implementation of a smoke-free campus was a test of the school's determination and resolve. Beautiful acrylic signs were produced and posters regularly changed. Smoke detectors were installed in student dormitories. The innovative measure used inconvenience to smokers as an incentive to quit smoking. Distinction
Distinction	Southern Taiwan University	Military education instructors personally visited all local medical institutions in Yongkang, Tainan, and arranged for registration fees to be waived when referring smoking students for medical assistance. A quit smoking class was also set up to counsel and track students that want to quit smoking. A total of 268 students agreed to sign up for smoking cessation therapy, an important accomplishment.
Distinction	National University of Tainan	The high caliber of students meant the smoking population was lower to begin with. Tobacco control was incorporated into the teacher training and clever teaching equipment designed. The school also set up a quit smoking ambassador to promote Tobacco Hazards Prevention and control in the community.
Distinction	National Kaohsiung University of Applied Sciences	Various tobacco control initiatives were launched in cooperation with landlords and community resources. Close collaboration with the Department of health and the community achieved excellent results. The school's efforts were recognized and promoted by the Department of Health, Kaohsiung Government.
Distinction	Tungnan University	Being an engineering & industrial college the school has a relatively high number of smoking students. Nevertheless, the president remained committed to the smoke-free concept in order to provide students with the best learning environment. Additional quitting and withdrawal assistance was provided for smoking students in collaboration with the department of health. Distinction
Distinction	Feng Chia University	A creative and variety of Tobacco Hazards control activities helped attract student interest and participation. Local and external resources were also integrated through an alliance with the Fengchia business district to promote Tobacco Hazards control.



**Figure 1-3 Accomplishments at 31 universities and colleges after intervention through "School Campus Tobacco Hazards Control Implementation Plan"**

Accomplishments of the "School Campus Tobacco Hazards Control Implementation Plan" included:

- Compassionate angel and patrols were established through 27 Sunshine Clubs and at 21 schools to encourage people to not smoke.
- 20 schools with smoking areas reduced their total number of smoking areas by 18.
- 31 schools incorporated tobacco control into their military education and general education courses.
- Students created a total of 101 promotional videos for TV walls and online marketing.
- Carbon monoxide testing and cessation therapy were provided in partnership with 30 medical institutions and 28 departments of health (including centers and health centers).
- 24 schools added carbon monoxide testing to their new student physical examinations for follow-up and support. A total of 24 various quit smoking classes were set up to apply peer pressure and establish a supportive environment for 110 formers and help 432 people reducing their tobacco use.
- Co-organized 43 anti-smoking awareness activities including the World No Tobacco Day and Quit & Win.



▲ Presentation of results for "Implementation of Tobacco Hazards Control on Campus by Universities and Colleges"



## Smoke-free Military

The 2010 Adult Smoking Behavior Survey showed that the smoking rate among men was 35.0 percent. It also revealed that the rate among 18 to 20 year olds was 15.4 percent and that there was a dramatic jump for 21 to 25 year olds to 33.9 percent. This is the age at which men in Taiwan typically begin military service. To try to stop men from picking up smoking at this critical time, starting from 2004, the Bureau of Health Promotion worked with the Ministry of National Defense to launch the Comprehensive Plan for Controlling Tobacco and Betel Nut Use in the Military. The agencies focused on recruits in the training center for new active soldiers and students in military academies. Through policy and environment, education and announcements, and programs and services for quitting smoking, efforts were made to prevent officers and soldiers from starting smoking while in the military and to keep them away from secondhand smoke. The agencies worked to enhance programs aimed at increasing the quitting rate among people who already were smokers and used monitoring and research to analyze the effectiveness of prevention work at each different branch and area of the military. Below is an analysis of key work that was carried out:

### 1. Policy and environment:

A total of 82 measures under the Comprehensive Plan for Controlling Tobacco and Betel Nut Use in the Military took effect in 2010. In addition, an amendment to the Tobacco Hazards Prevention Act came into effect. The amendment banned indoor smoking areas, called for strict enforcement of the indoor smoking ban, and strengthened measures for planning and managing smoking areas. The government increased unannounced inspections and launched suitable management, explanation and recommendation measures.

### 2. Health education and promotion:

In 2010, a total of 2,822 tobacco & betel nut control billboards were set up and 2,223 tobacco & betel nut control cadre trained. 1,414 training sessions were held attended by a total of 192,753 officers and soldiers.



▲ Quiz poster "Quit & Win" promotion



▲ Quiz poster



▲ Report on "Quit & Win" campaign in Youth Daily

Promotional activities such as quiz sessions, basketball games, slogan competitions, 4-panel comic competitions and The Bureau of Health Promotion and Ministry of National Defense offered training to 1,414 instructors focused on preventing Hazards caused by tobacco and betel nuts. The instructors went on to hold 1,136 large-scale training sessions that reached people on 192,753 occasions. They conducted quiz sessions with prizes, basketball games, slogan-choosing activities, four-box comic strip contests and educational image design competitions. The ministry also has done promotional work through its Youth Daily News and the Chukuang Garden Area educational videos and websites.

### 3.Care and services to quit smoking:

In 2010, a total of 435 doctors were trained to set up quit smoking clinics at the unit level. Smoking cessation services were provided 23,217 times by October of the same year with a success rate of 11.99%. Quit smoking classes were also held using local health center and hospital resources to provide a range of cessation services.

### 4.Monitoring and research:

Between September and November in 2004, the agencies helped conduct monitoring and research work on both voluntary and non-voluntary soldiers in Taiwan, using group administered questionnaires to complete a general census aimed at assessing the smoking situation among soldiers. In addition, Between August and December in 2005 the proportional sampling technique using different characteristics of the armed services was used to pick out 43 units, with soldiers and officers serving as research subjects and all members of the units tested (Table 1-5).

An investigation platform was set up in 2007 for smoking among military academy cadets and new recruits to conduct routine surveys on smoking and betel nut chewing among cadets and reservists. The platform provided a continuous mechanism for the investment of resources and evaluating the results. In



▲ Carbon monoxide test



▲ Non-smoking army counseling and guidance

2010, a survey of 43,806 new recruits produced an average smoking prevalence of 40.1%. A follow-up survey on 11,087 new recruits from 2009 showed that by the end of their military service in 2010, smoking prevalence had dropped from 42.2% to 39.5%. The armed forces' efforts in tobacco prevention are therefore beginning to produce results (Table 1-6).

For week 4 of August 2010, CTS Chukuang Garden Area produced a special report on report on tobacco control. General Chi-hong Chu, the Deputy Director of the MND Medical Affairs Bureau, and Director-General Shu-ti Chiu from the Bureau of Health Promotion were invited to encourage service personnel to quit smoking. Major General Meng-huei Weng, the head of the Army Communication Electronics Information School, Major General Tzu-feng Chen, the Chief of Staff at the Marine Corps Headquarters, and Lieutenant General Hsiang-tai Hsiung, the head of the Air Defense Artillery Command, were invited to serve as spokespersons and share their experiences on successfully quitting. The high-ranking officers would hopefully serve as an example and encourage more servicemen to quit smoking.

**Table 1-5 Smoking prevalence in the armed forces in 2004 and 2005**

Smoking Prevalence in each Branch	Army	Navy	Air Force	Marines	Joint Logistics	Reserves	Military Police	Survey Sample	Recovery Rate
2004	45.6	51.0	48.1	49.2	—	—	—	49,000	50.4%
2005	42.0	44.0	47.9	—	45.6	35.9	30.3	18,800	45.0%

**Table 1-6 Smoking prevalence among recruits at recruit training centers, 2006 ~ 2010**

Unit		Total	No. of Smokers	Prevalence (%)
Recruit Training Center	2006	78,010	31,613	40.5
	2007	65,949	28,180	42.7
	2008	66,997	30,858	44.1
	2009	62,638	25,584	43.4
	2010	43,806	26,279	40.1
Entry/Exit Comparison	2006 Intake	17,186	8,349	48.6
	2007 Departure		8,274	48.1
	2007 Intake	15,577	6,730	43.2
	2008 Departure		6,770	43.5
	2009 Intake	11,087	4,749	42.2
	2010 Departure		4,244	39.5



## Smoke-free Communities

The five key action areas identified in the Ottawa Charter for Health Promotion were used by the Bureau of Health Promotion as a framework for promoting a unique and innovative smoke-free community strategy. By establishing community conventions, building a localized support environment, training community volunteers, implementing health promoting strategies and methods, and adjusting the service direction and methods, community awareness and motivation was achieved at the grassroots level. In 2010, "25 Smoke-free Community Projects" successfully partnered with 223 community organizations to promote smoke-free environments. A total of 1,523 smoke-free households, 348 smoke-free stores, 26 smoke-free restaurants, 137 smoke-free schools and 54 smoke-free workplaces were set up throughout northern, central and southern Taiwan. Three communities have been chosen after expert reviews to share their unique features and innovations:

- (1) The Guanyin Township Health Center of Taoyuan County was able to accurately track its community resources and health of local residents. The promotion strategy based on the integration of resources and establishment of a promotional organization conformed to the five key action areas in health promotion. The mayor, councilors and volunteers mobilized the community to promote the smoke-free community convention. The "Guanyin Children's Park", "Central Community Park" and "Guangfu Paper Bark Tree Fitness Trail" were declared smoke-free areas. Monitoring over a 4-month period collected 2,731 cigarette butts and issued 390 infringement notices. Smoking cessation services were provided in collaboration with community medical institutions and the success rate tracked. As part of the Lotus Festival, 1000 families joined in promoting the smoke-free neighborhood campaign.





▲ Signing of the Miaoli Smoke-free Community Convention and No Underage Tobacco Sales Agreement



▲ English Drama Contest

(2) The Miaoli Health Center of Miaoli County adopted a promotion strategy that conformed to the five key actions areas of health promotion. With the support of the mayor, councilors and borough wardens, the smoke-free Tung Blossom Trail was set up as part of the Tung Blossom Festival. Wenchang Temple was also declared a smoke-free historic building. To ensure that stores do not sell tobacco products to minors, incentives, counseling and audits were carried out simultaneously. Tobacco Hazards control was incorporated into the school curriculum and quiz sessions to promote smoke-free households through students. The accessibility of smoking cessation resources was also improved. The local media was leveraged to boost the effectiveness of the promotion and the electronic signs on community footbridges were used to play anti-smoking messages. The program also took sustainable development into account by encouraging community groups to adopt and maintain smoke-free environments.

(3) The Department of Health's Potz Hospital established an organization for promoting smoke-free communities and to track basic community statistics and resources. The Mayor of Puzih, law enforcement, health authorities, schools and community schools were recruited to promote Tobacco Hazards control in accordance with the five key action areas of health promotion. For example, school surveys were conducted on smoking among students, parents and parents asking their children to buy cigarettes. An education campaign was run for students to teach them how to influence their parents and the local media was also used to promote the message. The head of the local police department's involvement helped boost deterrence through inspections and targeting of students under the age of 18 smoking outside of schools. A particular emphasis was placed on the selling of tobacco products to minors in partnership with local health inspectors. The effort proved to be more effective.



▲ Community activities of Potz Hospital, Department of Health



## Smoke-free Workplace

A majority of people spend close to one-third of their time or even more at work, making the workplace a key area for carrying out Tobacco Hazards Prevention and health promotion work. If a systematic approach is taken to guarding against Tobacco Hazards and boosting health in the workplace, better results are achieved and the benefits can even be expanded to the home and community.

Workplace Health Promotion and Tobacco Control Centers have been present in the northern, central and southern regions of Taiwan since 2003. The centers are able to answer inquiries and provide assistance and training related to workplace health issues while establishing a network for guarding against Hazards caused by tobacco in the workplace and boosting hygiene and health services. Since 2007, the centers have been working to promote an autonomous national system for certifying healthy workplaces, and starting in 2008,

Healthy workplaces are also publicly recognized to promote smoke-free workplaces and health promoting activities. Since 2006, the health workplace self-certification program has provided counseling and training for tobacco control and health promotion in the workplace with the help of professional teams. The building of a tobacco control and occupational health support network helps to promote a healthy work environment and enhance employee health. The new Tobacco Hazards Prevention Act regulations that took effect in 2009 banned smoking in indoor workplaces with three or more people. Most businesses actively sought to comply with the new law to provide a safe and comfortable smoke-free workplace through activities such as quit smoking classes, quit smoking workshops, carbon monoxide testing, anti-smoking posters, adding smoking cessation services to the company health clinic, declaring smoke-free offices and sharing of experiences by employees that successfully quit smoking.



- ▲ For information related to the autonomous national system for certifying healthy workplaces, please refer to the healthy workplaces information website at <http://www.health.url.tw/index.nosmoke.php>



- ▲ Health promoting activities at Chimei

Between 2007 and 2010 a total of 5,523 workplaces were self-certified as healthy workplaces. In 2010, a professional consulting team provided on-site counseling to 155 workplaces and 16 professional unions and industries. The proactive approach to health promotion and tobacco control helped push the number of certified workplace past 1,969 (Fig. 1-2). The healthy workplace website was also kept up to date with the latest information and free downloads of various no smoking or quit smoking advertising. Cumulative reviews now total more than 380,000. The Bureau also produced the National Outstanding Healthy Workplace Journal. The publication featured 30 workplaces that were chosen by experts for outstanding performance in tobacco control or health promotion. The eight award categories were "Achievements in Quitting Smoking", "Health Benchmark", "Health Leadership", "Health Management", "Sustainable Health", "Nutrition & Health", "Vitality & Movement" and "Annual Special Industry Award".



Figure 1-2 No. of businesses certified as healthy workplaces in past years



◀ The results of health checkups are reviewed and employees encouraged to improve their health



▲ The home economics class of Xingda Harbor Fisherman's Association in Kaohsiung County emphasizes cessation and fitness

To establish the progress made on smoke-free workplaces after the new Tobacco Hazards Prevention Act took effect, a national healthy workplace survey on all full-time employees in Taiwan aged 15 and above was carried out in 2010. The survey found that smoking prevalence in the workplace was 17.3% (0.9% lower than 2009) with 31.1% being male and 3.0% being female. Up to 84.1% of workplaces had a complete smoking ban (3.6% higher than 2009). The results showed that the implementation of the new Tobacco Hazards Prevention Act in 2010 is having an impact on tobacco control in the workplace. Most employees are now protected against secondhand smoke and enjoy a healthier environment. The results of past workplace smoking surveys are shown in Fig. 1-3 and Fig. 1-4.

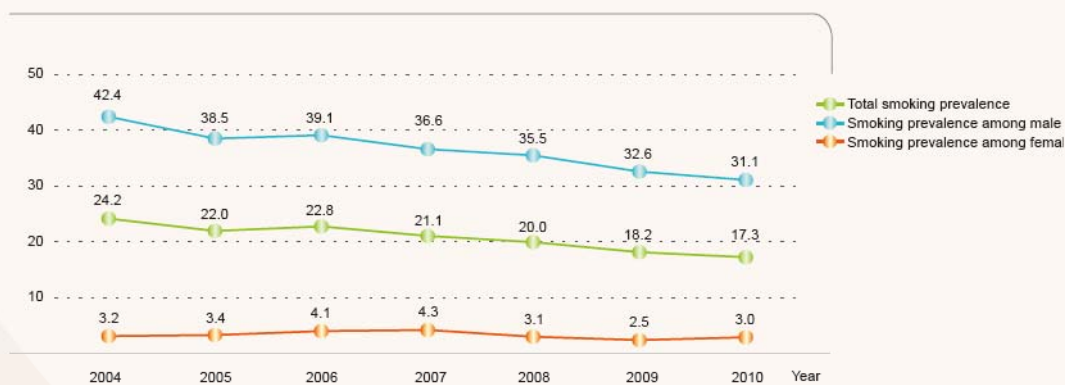


Figure 1-3 Trends in smoking prevalence 2004 ~ 2010

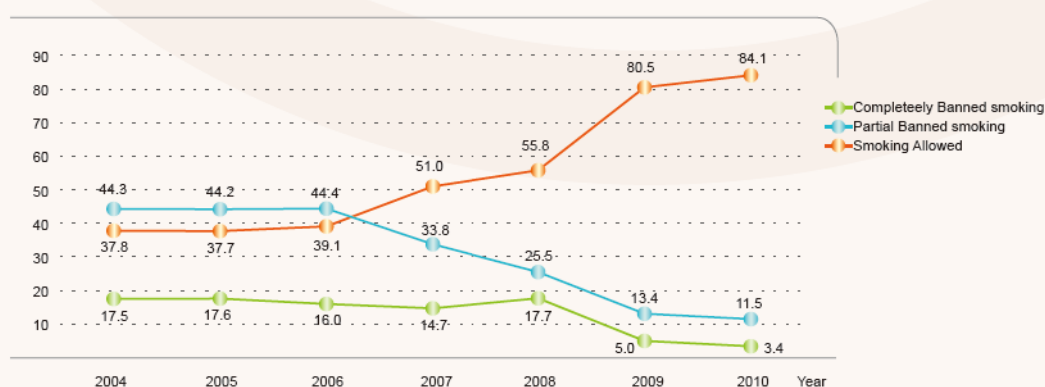


Figure 1-4 Trends in workplace no smoking policy over past years



## ◎ Graphic Warning

The design of cigarette packaging is one way that cigarette manufacturers advertise their product. Article 11 of the WHO FCTC calls on signatory parties to mandate a health warning on all tobacco products ( it recommends that the warning take up at least 50 percent of the principle display area on packaging, and that 30 percent be considered the minimum ). When the Tobacco Hazards Prevention Act was passed in 1997, it only required that tobacco product packaging carry a written warning, which was ineffective at sending smokers a warning. The Department of Health, however, succeeded in getting an amendment to the Tobacco Hazards Prevention Act passed. Article 6 requires that the front side of tobacco products carry a warning that takes up at least 35 percent of the principle display area. The warning needs to include not only a written message about smoking Hazards but also a picture and information to help smokers quit. Of the 174 parties that signed the WHO convention, only about 40 require that such a message and picture be printed on tobacco packaging. Taiwan was the 22nd country to implement warning labels and pictures but is ranked 35th in the world in terms of warning size.

While it was working to get the amendment passed, the Department of Health recruited groups with strong background and experience to evaluate the effectiveness of warning messages on tobacco products that were already in place. It gathered methods used by key countries to place health warnings and pictures on their products and created a design suited to Taiwan. The design concept included addressing the damage that smoking can cause to organs (including lung cancer, heart disease, oral illnesses, impotence), the Hazards it poses to fetuses, changes in appearance (including the teeth), and the negative effects that secondhand smoke can have on families. The department also invited language experts from the Academia Sinica, medical practitioners and advertising designers to offer professional opinions. In the end, these experts designed six different warning messages and pictures.

In response to the success generated by pictorial tobacco warnings, Taiwanese health officials acquired the rights to do a remake of the “Sponge” commercial from Australia's

smoking helpline. “Sponge” uses concrete evidence to show the impact smoking has on the body, namely by using a person squeezing a tar-soaked sponge that represents the lungs after smoking. Health officials advertised Taiwan's quit smoking helpline using the ad, which offers the perfect dose of terror to convince people to heed the health Hazards of smoking. This ad received a great deal of exposure through traditional television broadcasts and on a number of multimedia outlets, including TV walls outside of business plazas and on TVs in the elevators of commercial buildings and buses. The ad turned out to be an effective tool for adding urgency to smokers' motivations to quit. A telephone survey conducted on people who called the helpline to quit smoking showed that 55.8 percent had seen this ad. In addition, management of the helpline says it received calls from 53,737 people in 2009, a 1.25 times increase from the previous year.

The Department of Health also commissioned experts and scholars to carry out a phone survey on 500 smokers to better understand the impact of the warning photos and messages. Ninety percent of the



▲ Graphic warning



respondents said they had paid attention to the warnings on the packaging, with those about lung cancer and emphysema having the greatest effect. The warnings had an overall positive effect, with 57.9 percent of people saying that they smoked less in places with other people and 73.7 percent saying the warnings had led them to avoid smoking in front of children.

The "2009 Investigation into conditions before and after media coverage of new Tobacco Hazards Prevention Act regulations" survey also found that people became more uncomfortable the longer they were exposed to the warning pictures and labels (comfort level decreased from 29.9% to 14.2%). The warnings pictures also had a positive effect in convincing individuals to quit smoking (from 37.8 to 41.4 percent) and encouraging family or friends to quit (58.4 to 60.8 percent). Plus, investigation showed that when one is exposed to the pictures and warnings over a longer period of time, there are changes in both the thirdperson effect and individual attitudes. From these results, one can see that the tobacco warning labels and pictures are in line with international trends and have a positive impact on getting people to quit smoking (see Table 1-7).

**Table 1-7 Impact of tobacco packaging warning labels and pictures**

Item	Comfort Level		One Personally Wants to Quit Smoking		One Wants to Encourage Family/ Friends to Quit	
	Study I(2009.03) (N=491)	Study II(2009.12) (N=506)	Study I(2009.03) (N=491)	Study II(2009.12) (N=506)	Study I(2009.03) (N=491)	Study II(2009.12) (N=506)
Definitely can/can	29.9	14.2	37.8	41.4	58.4	60.8
Cannot/definitely cannot	45.6	54.5	30.9	32.6	33.0	31.5
Undecided	24.5	31.2	31.1	26.1	8.6	7.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Survey periods: March and December, 2009

To renew the six tobacco warning labels that were already in use, between 2009 and 2010 the Department of Health carried out the Tobacco Pictorial Health Warnings Development Plan. The scope of the plan focused on collecting information related to warnings and pictures that were being used in both Taiwan and abroad and designing at least 12 sets of warnings that included images related to the following concepts: functional disabilities, secondhand smoke Hazards, skin or appearance changes and health Hazards. Experts then used surveys to assess the effectiveness of the warning messages and pictures.

For the enforcement of the new Tobacco Hazards Prevention Act regulations on tobacco warning labels and pictures, the 2010 Joint Inspection Program for Tobacco Hazards Prevention Act inspected a total of 206 no-smoking sites (91.6% compliance) and 52 tobacco sellers (100% compliance). Except for cases where the no-smoking sign was not displayed that were rectified on the spot, all infringements were recorded by the Department of Health for further action. Local departments of health also conducted 226,488 joint inspections targeted at tobacco packaging in 2010 with 3 infringements recorded. Local health authorities also carried out 123,391 audits on the labeling and displays of tobacco retailers with 26 infringements recorded.

## ◎ Promotion and Training

Once the new and expanded Tobacco Hazards Prevention Act regulations came into force on January 11, 2009, smoking was banned in all indoor public areas, restaurants, shops, workplaces and public transport systems. Survey results from the last two years showed that over 90% the general public is now aware of no-smoking areas and smoke-free environments. The anti-smoking policy has clearly become a part of everyday life and society is gradually embracing the concept of a smoke-free environment.

A variety of media channels are used to deliver the anti-smoking message to the general public. By reinforcing Tobacco Hazards education, encouraging smokers to quit and make use of smoking cessation services, the multi-pronged approach is continuing to help the smoke-free environment movement grow.

### Tobacco Control Promotion and Accomplishments

In 2010, a variety of media channels were used to focus on getting the message of smoking cessation services and Tobacco Hazards education out to the general public.

The media strategies and channels were tailored to the target audience. Channels used for the integrated marketing effort included TV, radio, the Internet, newspapers, magazines, billboards, vehicle stencils, MRT, High Speed Rail and Taiwan Railway light boxes.

The first TV advertisement used the "Quitline: Sponge" to confront the general public with the dangers of smoking (one pack a day means 150cc of tar is sucked into the lungs after one year). The second "Get Professional Help to Quit" advertisement introduced a variety of smoking cessation services and encouraged smokers to improve their changes of successfully quitting by seeking professional help. Exposure on the Internet, digital signage in office buildings, commercial district advertising and on transportation were also used to strengthen the general public's

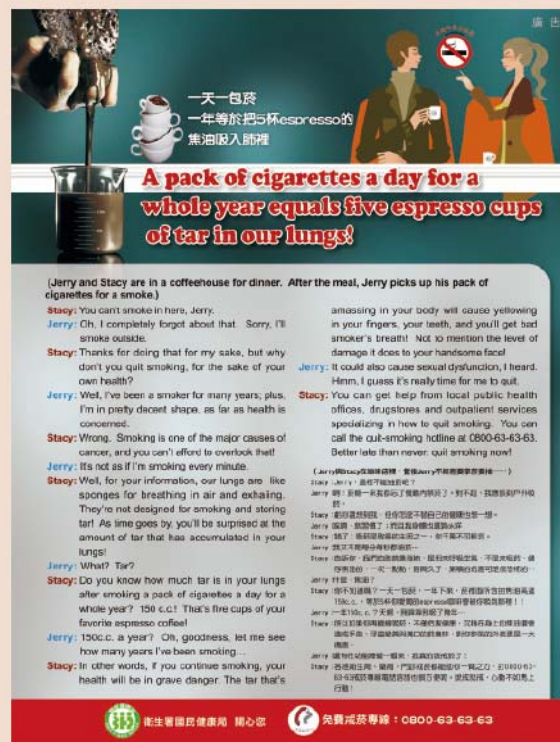


- ▲ Attracted Internet users' attention by collaborating with popular blogger Milu Egg to offer humorous smoking cessation tips



- ▲ "Get Professional Help to Quit" posters were produced as a follow-up to the TV advertisement and distributed to local governments and pharmacies. The poster encouraged smokers to seek professional help to improve their chance of success.





▲ Anti-smoking advertisements were produced tailored to the type of newspaper and magazine. Shown here are the Studio Classroom and Super Taste versions.

awareness of tobacco control issues.

For radio advertising, the "Quitline: Tung" radio advertisement was recorded to introduce the quit helpline 0800-63-63-63 in a humorous manner, point out no-smoking public spaces and encourage people to quit smoking. For family, friends and non-smokers, the "Quitline: Numbers" advertisement used research statistics to specify the dangers of smoking and encourage people to remind smokers to quit for their health. The radio advertisements were aired through national and local radio stations. On-air broadcasts and interviews were also used to reinforce the Tobacco Hazards and smoking cessation message.

Other promotional efforts included partnering with well-known bloggers, advertisements at portal and social networking websites, newspaper and magazine reports as well as TV features and related promotions to bring Tobacco Hazards and smoking cessation message to different parts of the population. The "Get Professional Help to Quit" poster was produced and distributed to local pharmacies, departments of health, schools, hospitals, workplaces and public spaces to instill the tobacco control message into everyday life at fixed locations.

To get the message out to young people, Jay Chou was invited to become the volunteer spokesperson and use the media. By promoting an atmosphere of "Don't smoke, be yourself" in society, this sought to make not smoking a matter of pride and self-confidence for 4.6 million youths and students.



The "Public Attitude to Health Promoting Issues Survey (Before and After Promotion)" was conducted in August and November, 2010. According to the telephone survey, the rate of smoking in no-smoking areas improved in indoor workplaces (8.3% → 3.5%), internet cafes (5.8% → 2.4%) and KTV (4.5% → 1.9%) (Table 1-8). The survey also found that an intensive anti-smoking campaign in the media created a social atmosphere that increased smoker willingness to quit and individual reminders to quit. The number of smokers that want to quit after being exposed to the campaign also increased by 8% (36.9% → 45%) (Table 1-9). The proportion of the general public that has heard of the 0800-636363 quit helpline increased as well (46.8% → 56.1%) and calls to the helpline increased significantly (during the promotion period the average number of calls per month increased by nearly 3000). The statistics showed that using a range of channels for the tobacco control campaign improved communication with the general public.



▲ Minister of Health Yang and BHP Director-General Chiu invited Jay Chou and his 87-year old grandmother to tell young students to "Don't smoke, be yourself, I'm with you!"

**Table 1-8 Public spaces where you most often encounter people smoking, 2010**

Type of Public Space	Survey 1	Survey 2
	Before Promotion (August)	After Promotion (November)
	Proportion (N=552)	Proportion (N=951)
Restaurant	10.30	6.90
School	2.90	4.50
Supermarket, indoor public market	6.50	4.30
Internet cafe	5.80	2.40
Hospital	1.80	2.20
KTV	4.50	1.90
Bus	3.10	1.70
Train		
Indoor workplace with more than 3 people	8.30	3.50
Roadside	53.60	51.20
Park	20.30	14.50
Traditional market	16.10	11.90
Outside office building	10.10	11.40
Bus stop	10.70	8.60
Night market	12.90	6.90
Temple	8.20	4.10
Stairwell	7.60	2.20

Source: Public Attitude to Health Promoting Issues Survey (Before and After Promotion), Bureau of Health Promotion, Department of Health, R.O.C.

**Table 1-9 Change in smoker attitude towards quitting due to smoke-free environment policy**

Item	Before Promotion (August)	After Promotion (November)
	Proportion (N=141)	Proportion (N=129)
Yes	36.9	45.0
No	59.6	51.9
Unsure	3.5	3.1
Total	100.0	100.0

Source: Public Attitude to Health Promoting Issues Survey (Before and After Promotion), Bureau of Health Promotion, Department of Health, R.O.C.

## Tobacco Hazards Prevention Act Complaint Phone Line

Due to increasing awareness among the general public of secondhand smoke's dangers and their rights, the Tobacco Hazards Complaint Services was set up in 2003 to provide the general public with an avenue of filing complaints. With the new Tobacco Hazards Prevention Act taking effect on January 11, 2009, the 0800-531-531 Tobacco Hazards helpline and complaints services was expanded to cope with the expected surge in questions about the new laws and complaints about secondhand smoke. Complaints judged to be valid are forwarded to local Health Department for inspection and action. In 2010, the 0800-531-531 helpline took 20,509 calls from the general public including 3,233 complaints (Table 1-10).

Better understanding of the Tobacco Hazards Prevention Act means that in 2010, a total of 3,559 inquiries and complaints were received, with 947 cases forwarded to the notification system. Statistics showed that most calls were questions about the purpose of the helpline, the content of the Tobacco Hazards Prevention Act regulations, home Tobacco Hazards issues and other suggestions about Tobacco Hazards control. Showing that people had high hopes and cared about the new regulations under the Tobacco Hazards Prevention Act and the rise in the health and welfare surcharge on tobacco products.

**Table 1-10 Inquiries regarding Tobacco Hazards Prevention and complaints forwarded to Health Department**

Item	Period	Calls	Complaints	Forwarded to Health Dept	Closed	Dismissed
Old Regulations	2008	–	465	465	339	72
New Regulations	2009	20,509	3,233	3,233	2,757	347
	2010	3,559	947	947	848	81

Source: Tobacco Hazards Prevention Act Services and Law Enforcement Personnel Training Program, Bureau Of Health Promotion



## Enforcement Personnel Training Program

The 2008 amendments to the Tobacco Hazards Prevention Act represented a major step forward in protecting the population against the hazards of smoking. The enforcement of the new laws should be in the spirit of the law, avoid differing interpretations that lead to conflicting regulations and also be performed by personnel thoroughly familiar with the laws so improper administrative sanctions are not issued. Great care must therefore be taken with the legal system, interpretations of individual cases, overseas case law and enforcement personnel training to ensure that the Tobacco Hazards Prevention Act is implemented properly.

"Basic Enforcement Personnel Training" and "Advanced Enforcement Personnel Training" training was therefore organized for personnel charged with Tobacco Hazards Prevention Act enforcement from local health authorities to improve their understanding of the amended legislation and strengthen their enforcement capabilities. In the "Basic Enforcement Personnel Training" program, the focus was on the Tobacco Hazards Prevention Act, subsidiary regulations and practical law enforcement. The program ensured that local law enforcement personnel understood and could enforce the Tobacco Hazards Prevention Act correctly, could issue legal administrative sanctions based on the administrative evidence-gathering require by law and can communicate the results to local regulators. In the "Advanced Enforcement Personnel Training" program, increased emphasis was given to Tobacco Hazards Prevention Act and related regulations, Administrative Procedure Act, Administrative Penalty Act, the writing of administrative sanctions and appeals, practical law-enforcement and techniques. The program was aimed at equipping local regulators with a legal research and analysis capability in support of Tobacco Hazards Prevention Act implementation.

A total of four "Basic Enforcement Personnel Training" sessions with 164 trainees and one "Advanced Enforcement Personnel Training" session with 72 trainees were completed in 2010. To determine if the content was being properly applied by trainees during Tobacco Hazards Prevention Act enforcement, trainees were asked to evaluate their understanding of the law, differences between the old and amended legislation, professionalism in tobacco control activities, confidence during law enforcement and course content. Most trainees reported that they were very satisfied with the classes on Tobacco Hazards Prevention Act law.

The results of the training showed that proper planning provided enforcement personnel with a more thorough understanding of Tobacco Hazards Prevention Act regulations and practical techniques. The training also improved their grasp of the amended Tobacco Hazards Prevention Act and associated regulations. The enhanced understanding and skills produced substantial and tangible benefits to the performance of their law enforcement activities.



▲ "Basic Enforcement Personnel Training" and "Advanced Enforcement Personnel Training" classes

## Local Government and Municipal Tobacco Control Exchange Workshops

The Bureau of Health Promotion held the 2009 City and County Tobacco Hazards Prevention Practical Exchange and Training Workshops. The purpose of the workshops was to better achieve a consensus related to policies local governments have in place to carry out Tobacco Hazards Prevention work. The rise in health and welfare surcharge on tobacco products, put into effect in 2010. The goal of the workshops was to raise the effectiveness of tobacco control efforts by providing Taiwan's 25 cities and counties with an exchange and study platform for related issues and coordinating Tobacco Hazards Prevention work carried out by central and local governments.

The workshops accomplished a number of valuable objectives. 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. Three workshops were held in all, with one each in northern, central and southern Taiwan, and a total of 206 people took part. Apart from presentations of local tobacco control accomplishments and awards, the northern session focused on "Analysis of International Secondhand Smoke Prevention Policies" and "Gender & Smoking – Tobacco Advertising Targeted at Women". Local governments' "2010 Quit & Win", "Quit Smoking Handbook" distribution/recovery and "Community Pharmacy Smoking Cessation Consultations" were also discussed. The central session emphasized "Key Areas in Tobacco Control", as well as local governments' experiences with tobacco control inspections and local tobacco control programs.



Each of the workshops featured lively discussion and achieved the goals of getting people to share their experiences and carry out other exchanges. Organizers had people who took part in the workshops fill out questionnaires, and the results showed that most enforcement personnel from departments of health felt that what they learned would assist them in their work and would like to take part in more workshops in the future.



▲ "Local Government Tobacco Control Exchange Workshop" trainees in class



## ◎ Enforce ban on Tobacco Advertising, Promotions and Sponsorships

International experience shows that the general public is often unwittingly exposed to messages from tobacco companies and products under the guise of public welfare. Many countries have now enacted bans on tobacco advertising and promotions.

### Inspecting and Clamping Down on Illegal Tobacco Product Advertising

The Article 9 of the Tobacco Hazards Prevention Act enhances the variety of methods that can be used to suppress promotion or advertising of tobacco products. For example, it bans promotions using any of the following channels: radio broadcasts, television, movies, recorded material, electronic signals, computers/ the Internet, newspapers, magazines, billboards, posters, pamphlets, notices, announcements, instructional manuals, samples, stickers, exhibitions, or other written, ictorial, material, or electronic records. Also banned are interviews or reports that introduce tobacco products, make use of the tobacco brands' name for promotions, or use a name or logo similar to those used by tobacco companies for such purposes. Vendors cannot sell tobacco products at a discounted price and they cannot offer cigarettes as a gift or prize in return for customers who buy a certain product or take part in a certain activity. It is also illegal for vendors to package tobacco products together with other products to sell or to sell/distribute cigarettes individually or as loose goods. In addition, tobacco dealers are prohibited from any kind of promotional activity at tea, dinner, or explanatory meetings, tasting functions, concerts, speeches, or sporting or charitable events.



▲ Source: Apple Daily, 2010/07/01

Tobacco companies still occasionally use advertisements and promotions to try expand their market. To protect public health, local health authorities actively pursue tobacco advertising and promotions. Between 2004 and 2010, a total of 792,160 inspections were carried out with 73 sanctions handed down. The top three types of sanctions were in order: violation of the central government-imposed ban on promotions (20.8%), use of promotional text, graphics or objects (13.9%) and use of discounts or other such methods (11.1%). In-depth analysis of sanctions issued by local health authorities on tobacco advertising or promotions between 2004 ~ 2010, Taipei issued the most sanctions with 44 cases (60.2%), followed by Taoyuan County, Kaohsiung then Taichung County (Table 1-11).



Article 9 of the Tobacco Hazards Prevention Act tobacco advertising, promotions and sponsorships. Evidence collected by the Department of Health and sanctions issued included a 5.2 Million NT fine for including illustrated cards with tobacco products, a 8 Million NT for selling tobacco products online, a 6.7 Million NT on advertising on tobacco packaging, and fines totaling 10.1 Million NT on Taipei night clubs for tobacco promotions and advertising on packaging. There was also the case of smokeless tobacco lozenges that used pamphlets to introduce the new product. As the lozenges are still classed as a tobacco product, the Keelung Health Bureau imposed a 5 Million NT fine for violating Article 9 of the Tobacco Hazards Prevention Act.



▲ Source: The Liberty Times ,2010/07/01

Table 1-11 Illegal tobacco advertising or promotions in Taiwan, 2004 ~ 2010 (NTD)

Region	Sanctions	Fines
Taipei City	44	10505000
Keelung City	3	5100000
New Taipei City	3	100000
Hsinchu City	1	100000
Taoyuan County	5	150000
Miaoli County	1	6700000
Taichung City	2	200000
Taichung County	3	100000
Tainan City *	1	8000000
Kaohsiung City	5	5500000
Kaohsiung County	1	50000
Pingtung County	3	300000
Hualien County	1	50000
Total	73	36955000

\* Successfully appealed

## Tobacco Hazards Prevention Act Inspections and Information System

In January 2004 the Bureau of Health Promotion established the Tobacco Hazards Prevention Act Inspections and Punishments Reporting and Case Management Information System. The bureau also decided to upgrade the system in accordance with the new government regulations, with the upgrade completed on May 16, 2009.

In 2010, a total of 3,635,695 inspections were carried out at 381,630 locations and 9,240 sanctions issued. A comparison of the inspection categories showed that the top 3 types of sanctions were: 4,584 cases of smoking in a no-smoking area (49.6%), 3,896 of under-18 smoking (42.2%) and 468 cases where smoking-related materials were present in an area marked as no-smoking (5.1%) (Table 1-12). Keelung City issued the most fines followed by Taipei City. New Taipei City had the most sanctions for underage smoking followed by Taipei City. Taichung County had the most cases of smoking in a no-smoking area, followed by Kaohsiung City. As for smoking-related materials were present in an area marked as no-smoking, New Taipei City was in first place followed by Taipei City, Taichung City, Yunlin County then Taichung County. Further analysis showed that for smoker sanctions in 2010, the top 3 venues where underage smoking was found were no-smoking areas, Internet cafes then schools. Underage smokers were generally in junior, senior or vocational high school (Table 1-13). For smokers over the age of 18, sanctions for smoking in a no-smoking area were in order Internet cafes, game arcades and schools.

Despite local health authorities' efforts to implement the new Tobacco Hazards Prevention Act regulations through active promotion and enforcement, there are still a small number of people or public figures that challenge the law by smoking in train carriages and Internet cafes. There was even a video published online of cigarettes being forced on young children. These behaviors not only violate the Tobacco Hazards Prevention Act ban on smoking in no-smoking areas as well as the "Children and Youth Welfare Act" prohibition against supply of tobacco products to children under age 18. The act of child abuse has been referred to the relevant authorities for prosecution and strong criticism leveled against the guardians flouting the law. The community is also asked to take action on the problem of tobacco use by children.

Table 1-12 Tobacco Hazards Prevention Act enforcement by city/county health authorities, 2008 ~ 2010

Item	Smoker under the age of 18						Smoking in no-smoking area						Supply of smoking-related materials in a marked no-smoking area					
	Sanctions			Inspections			Sanctions			Inspections			Sanctions			Inspections		
Year	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010
Taipei City	397	597	408	13067	11941	23388	1	88	308	13677	33450	45511	37	37	98	16819	42829	45138
Keelung City	108	256	89	13978	78256	14796	38	90	163	11680	80228	15052	31	4	2	12238	79271	14811
New Taipei City	5030	4724	1539	5632	8929	7905	1	341	371	16890	13290	18225	88	146	104	20624	17895	17838
Yilan County	47	94	27	7846	21807	14064	0	45	47	7541	24036	14471	2	1	7	12334	22486	14423
Hsinchu City	21	64	226	2435	7385	4932	0	244	327	2759	8727	5369	11	0	7	3003	8386	5034
Hsinchu County	0	195	174	2135	4172	10278	0	141	177	5207	10825	10888	0	18	7	6468	10112	10723
Taoyuan County	521	507	116	5969	15328	13610	1	635	292	6730	27442	20846	16	13	10	9571	26308	20508
Miaoli County	26	143	12	5820	25338	5137	0	85	50	5364	35853	6559	0	7	40	5922	33855	6302
Taichung City	75	332	176	6577	12438	29387	1	238	283	6694	35243	52033	15	40	0	11810	28790	51791
Taichung County	167	502	263	5227	21660	47892	2	290	650	7932	35709	86235	25	4	5	11468	33526	86107
Changhua County	38	270	72	5774	11861	18285	0	35	78	6005	23183	19885	0	0	44	6954	26682	19828
Nantou County	312	396	292	1319	4580	1807	0	32	27	2518	20738	5622	3	3	0	8711	27655	5484
Chiayi City	0	1	9	651	30746	21101	0	21	49	1181	34541	22358	0	0	18	3085	32715	22322
Chiayi County	15	86	66	2652	5180	4568	0	38	71	2913	9346	6060	0	3	9	5745	9249	5823
Yunlin County	20	64	12	4057	8559	8644	0	88	156	4357	9855	9770	8	30	15	5563	8514	8755
Tainan City	1	16	46	1940	31757	11068	18	196	153	2099	46196	14427	0	2	0	3504	46019	15355
Tainan County	158	248	29	5011	18487	17124	1	210	355	5609	22453	18789	19	4	1	9480	20472	18434
Kaohsiung City	711	134	82	6620	31344	17668	0	442	485	6152	78524	22186	0	5	0	20408	109959	21982
Kaohsiung County	18	108	29	8099	25842	12212	0	191	227	8903	46151	13831	1	7	15	14954	45328	13416
Pingtung County	19	81	87	4652	7729	5092	0	113	191	11418	25039	15610	7	12	0	19650	26456	15302
Taitung County	11	35	32	3217	3619	3035	0	14	19	3086	7728	4400	0	1	78	3677	7184	4250
Halien County	72	51	45	6856	5100	5393	0	58	94	8947	13124	8473	1	20	7	8428	13171	8453
Penghu County	5	52	64	47	578	812	0	1	2	415	2274	2637	0	0	0	2025	2043	2579
Kinmen County	0	2	1	115	1592	772	0	1	8	372	1748	941	0	0	1	443	1575	938
Lienjiang County	0	0	0	121	394	392	0	11	1	155	2798	399	0	0	0	176	2803	397
Total	7772	8958	3896	119817	394622	299362	63	3648	4584	148604	648501	440577	264	357	468	223060	683283	435993



**Table 1-13 Disciplinary Action Taken for People Under the Age of 18 Smoking or for Students Smoking at School, from 2004-2010, Based on School Level and Gender**

Item	Elementary School		Junior High School		Senior (Vocational) High School		College		Youths Not Taking Classes		Those not enrolled		Total
	Times Action Taken	%	Times Action Taken	%	Times Action Taken	%	Times Action Taken	%	Times Action Taken	%	Times Action Taken	%	Times Action Taken
Males	265	0.7	13103	33.5	13498	34.6	502	1.3	8386	21.5	3309	8.5	39063
Females	40	0.6	2712	38.8	2133	30.5	56	0.8	1554	22.2	502	7.2	6997
Total	305	0.7	15815	34.3	15631	33.9	558	1.2	9940	21.6	3811	8.3	46060



▲ Source: Apple Daily, 2010/01/23



▲ Source: China Times, 2010/10/02



▲ Source: China Times, 2010/08/18

## ◎ Smoking Cessation Assistance: 2010 is the Quit Smoking Action Year

Tobacco Hazards Prevention has become an accepted social norm since smoking was banned in indoor public spaces and workplaces in 2009. To help smokers quit early, 2010 was declared the "Quit Smoking Action Year" and the "Joint Care and Treatment Network for Quitting Smoking" was set up. In addition to existing professional smoking cessation services through clinics and the quit helpline, the community, schools, workplace, military and medical professionals were all mobilized to join in the "Battle to Save Life" campaign. By training specialists on tobacco control, providing a variety of quit services and promoting various Quit & Win creative competitions, assistance was provided to help smokers quit early.

### Joint Care and Treatment Network for Quit Smoking

Since the new Tobacco Hazards Prevention Act regulations took effect in 2009, the types of no smoking areas have been expanded and the health & welfare surcharge increased. The Joint Care and Treatment Network for Quitting Smoking was launched in 2010 to organize quit clinics, quit helplines, local government quit classes, smoking cessation assistance from community pharmacies, Quit & Win activities and the Quit Smoking Handbook. The goal was to continue providing a variety of accessible and convenient quit smoking services to the general public so they can choose the most suitable quit resource for their needs. People that really wish to quit smoking can then receive the necessary treatment and support.

According to the "Adult Smoking Behavior Telephone Survey", in 2009 smoking prevalence among men and women over the age of 18 were 35.4% and 4.2% respectively. In 2010 smoking prevalence were 35.0% and 4.1%. Despite the decrease in the number of smokers, there remained nearly 3.6 million smokers in the overall population. The new Tobacco Hazards Prevention Act regulations that took effect expanded the number of smoking areas, increased the health & welfare surcharge, required "warning pictures and messages" to be printed on tobacco packaging along with the toll-free quit helpline 0800-636363. The number of calls from the general public grew by 125% in 2009 compared to the previous year. Over 2,100 hospitals now provide quit clinics and service volume grew by nearly 20% over the same period last year as well. By taking a three-pronged approach with health warnings, expanded no-smoking areas and higher tobacco prices, progress has

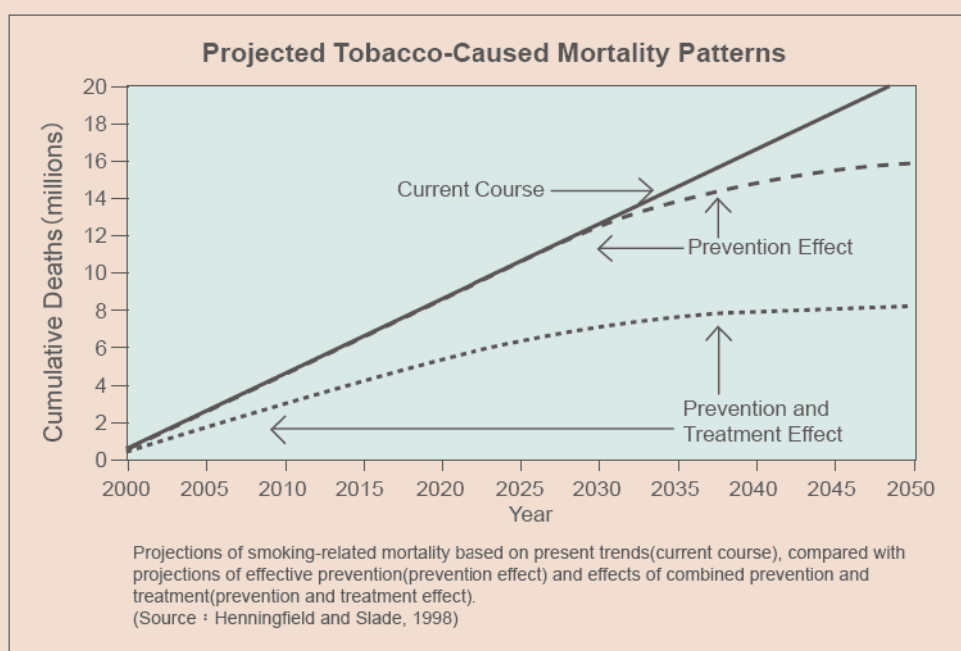


▲ "Joint Care and Treatment Network for Quitting Smoking" – The "Quit Smoking Handbook" was made available for download on the Internet

been made towards encouraging smokers to quit smoking.

To reduce the number of smokers and protect citizen health, the Bureau declared 2010 to be the "Quit Smoking Action Year" and set up the "Joint Care and Treatment Network for Quitting Smoking". In addition to the existing quit clinics and helplines, the Bureau partnered with community groups, the religious community and business community to launch a round-the-year campaign. Local health and other authorities also invited the general public to quit smoking. The initiatives transformed workplaces, schools, hospitals and families into a supportive environment. They also provided a variety of smoking cessation services and Quit & Win creative competitions. The general public was invited to take part and give their support in

order to persuade smokers to quit smoking together. A total of 561 quit classes attended by 10,999 people were held in collaboration with local health center and hospital resources. Using telephone conferences with local department of health directors and section chiefs, tobacco control education personnel were trained for community pharmacies, schools, workplaces and hospitals. In the 2010 survey on adult smoking behavior, 48.3% of smokers had received medical advice against smoking (51.1% for male and 29.5% for female). A total of 27,450 specialists were trained in 2010. The 64-fold increase on 2009 was also 2.8 times the cumulative total from past years and provided the cornerstone for community smoking cessation services. Over 1450,000 "Quit Smoking Handbooks" (with the 2010 Quit Support Card inside) were also printed and

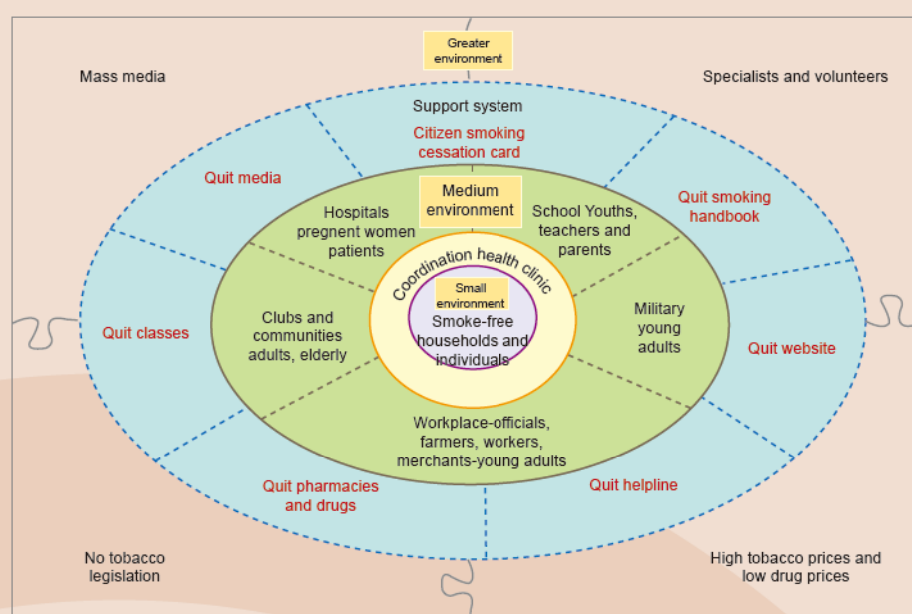




distributed. By delivering quit smoking information to the general public, smokers were actively encouraged to quit smoking and to seek professional help. The 2010 Quit Support Card signing campaign led to 737,691 people signing the quit card and agreeing to telephone "comfort calls". A lottery draw was also held to pick 400 winners each month of prizes such as electronic blood pressure monitors, USB disks, toolkits and pedometers. Smokers also received support for their quit smoking efforts over the phone. A sample survey of 1,222 people found that 36.25% felt the quit handbook was useful, 33.96% reduced or quit smoking, and 32.98% reported that they have now quit smoking.

In the marketing of tobacco control issues, the "2010 Quit & Win" competition successfully attracted 25,405 entries. Cardinal Kuo-hsi Shan was also invited to call for people to quit smoking through love, film the "Professional Quit Smoking Service" TV advertisements and convey the message that professional help and willpower will help people quit. To prevent smoking by young people, Jay Chou was invited to become the anti-tobacco campaign spokesperson. He also was featured in the "Don't smoke, be yourself" anti-smoking advertisement to tell students: "Don't smoke, be yourself, I'm with you!" The advertisements, posters and other promotional materials were also distributed to schools and colleges throughout Taiwan. The Taiwan Medical Alliance for the Control of Tobacco also organized the "Walk for Cessation" event to show their support for smoking cessation services. The fitness walk was used to publicly express their support for tobacco control and to promote the importance of quitting. A total of 568 people took part in the event.

Quitting smoking can help to prevent cardiovascular disease, respiratory disease and cancer. Quitting reduces the risk of coronary heart disease by 50% after one year; after five years the risk of experiencing a stroke is reduced to the same level as non-smokers; after 10 years, the risk of dying from lung cancer is halved; after 15 years, the risk of heart disease drops to the same level as non-smokers. For individuals, families and society, quitting produces immediate benefits and also saves money compared to treatment for hypertension, diabetes and high blood fats. There is no need for lifelong medication or expensive examinations. As quitting offers a simple way to eliminate a major cause of heart disease, strokes, cancer and chronic respiratory illness it should really be promoted more actively.



▲ "Joint Care and Treatment Network for Quitting Smoking": Source: Joint Care and Treatment Network for Quitting Smoking notes provided by Director-General Shu-ti Chiu on 2010/01/12.

## Smoking Cessation Treatment Personnel Training

For the 2010 "Quit Smoking Action Year" everyone was mobilized for the "Battle to Save Life" campaign and to promote the "Joint Care and Treatment Network for Quitting Smoking". Training for medical personnel including quit clinic physicians, teachers and pharmacists helped establish a network for professional medical quit smoking resources. Health promoting hospitals, schools workplaces and community pharmacies were also used to encourage smokers to participate in smoking cessation activities.

### Quit Smoking Clinics and Physician Training

Empirical medical research showed that there is a direct relationship between doctors' efforts and their effectiveness in encouraging patients to quit smoking. As part of the "Outpatient Smoking Cessation Treatment Plan", the Taiwan Association of Family Medicine (TAFM) was commissioned to organize the "Outpatient Smoking Cessation Treatment and Physician Training Course". The course was intended to assess the needs, circumstances and effectiveness of smoking clinics run by doctors.

In 2010, the number of training courses was increased from 2 sessions a year to 4 sessions divided among each region. In response to the demand from hospitals, clinic frequency was increased from 2 times to 4 times a year so it is now held in January, April, July and October. The first training session was also moved to March to expand the number of quit smoking service providers and expand the reach of hospitals and doctors that offer quit clinics. A total of 4 training sessions were held in northern, central, southern and eastern Taiwan with 579 certified (must complete pre- and post-training testing and achieve a score of at least 70 points in post training test). Between June 2002 and the end of December, 2010, the total number of qualified doctors stood at 9,174. To provide doctors that are already providing smoking cessation services with the opportunity to further and refresh their education, an online e-learning course (multimedia) and online correspondence course (XMS e-learning platform at [HYPERLINK "http://www.tafm.org.tw" http://www.tafm.org.tw](http://www.tafm.org.tw)) was provided. These, along with the "Outpatient Smoking Cessation Service Bulletin" published by the Outpatient Smoking Cessation Management Center, allowed doctors to continue their education and renew their training certificates by correspondence or over the Internet. A total of 2,178 people renewed their certificates this year.

To provide doctor training and improve the quality of quit smoking services, this year's training course included an explanation of the "Joint Care and Treatment Network for Quitting Smoking" strategy. The "Educational Curriculum and Basic Teaching Materials for the Outpatient Smoking Cessation Treatment and Physician Training Course" was also compiled covering the following key areas: (1) History, addiction and withdrawal symptoms of tobacco products; (2) the dangers of smoking and the benefits of quitting; (3) behavioral changes caused by quitting; (4) clinical techniques for treating smoking and tobacco dependence; (5) latest quit smoking drugs; (6) relapse prevention; (7) case studies; and (8) tobacco control strategies and practice (global trends and the status in Taiwan). The "Outpatient Smoking Cessation Physicians' Consulting Technique Handbook" and "Outpatient Smoking Cessation Supplementary Handbook" were also produced

to improve the use and effectiveness of handbooks and teaching materials. The teaching materials can be publicly downloaded from the TAFM website ( HYPERLINK "<http://www.tafrm.org.tw/>" <http://www.tafrm.org.tw/>). Medical associations' board and general meetings were also used to encourage heart, chest and metabolic specialists to participate. Notices were also sent out to related sub-specialties to encourage them to take part in the outpatient smoking cessation training and to provide quit smoking services.

Evaluations of quit clinic services provided by doctors and the training effectiveness showed that the quit smoking class improved trainee confidence ( $p < 0.05$ ) in carrying out quit smoking activities. After the training, students exhibited widespread improvements in their attitude to quitting ( $p < 0.05$ ). Smoking classes can therefore improve trainees' understanding reasons for quitting. Pre- and post-testing analysis showed that both sessions improved their understanding tobacco control and helped boost their knowledge rating (Table 1-4).

**Table 1-14 Evaluation of differences in the training and basic quitting for trainees, 2010**

Location	Course	Average Score	P
Local training	Before training	70.59 ± 18.47	<0.05
	After training	93.84 ± 7.85	
TV learning	Before training	79.17 ± 16.66	
	After training	95.00 ± 7.22	

Source: Taiwan Association of Family Medicine

## Smoking Cessation Education Personnel Training

As nurses, social workers and psychologists have much exposure to smokers and are well placed to help with quit smoking efforts, they make suitable personnel for quit smoking & health education. If they can be equipped with the knowledge and skills for tobacco control and smoking cessation, they can help popularize smoking cessation in hospitals, communities, schools and workplaces. The object of this training program is to train personnel as well as promote tobacco control and smoking cessation education.

The Taiwan Tobacco Hazards Control Education Guide was compiled in 2010 to provide teaching materials for smoking cessation education (previously known as the Taiwan Tobacco Hazards Control Guide for Nursing Personnel between 2003 ~ 2006) and extensively applied in this training program. The goal of the introductory training is to train smoking cessation educators and equip them to carry out smoking cessation education tasks. The course covered domestic and overseas developments in tobacco control, Tobacco Hazards, the link between tobacco and disease, nicotine, tobacco addiction and smoking cessation drugs, smoking cessation behavioral changes, healthy habits and smoking cessation, individual smoking cessation strategy and resources, and group smoking cessation and techniques. Six smoking cessation education



personnel training courses have been held to date. A total of 759 trainees took part with 681 completing the course (90.56% pass rate). Nearly 90% of the trainees expressed their satisfaction with the overall course. A 2-day "Advanced Smoking Cessation Education Personnel Training" course was also held in northern Taiwan to focus on the development of smoking cessation educators' roles and functions. Key themes included resource integration and planning, setting up of personal smoking cessation classes, consultation and health education techniques, promotion of tobacco control activities and management. The course content covered self-image and stress management, smoking cessation consultation, communication techniques and case studies, smoking cessation class planning and application, problems during execution and problem solving, telephone smoking cessation techniques, creating a supportive smoking cessation environment, prevention of relapse, and the role and functions of smoking cessation managers. All the 66 trainees that took part all passed the course (100% pass rate). Pre-training and post-training testing showed significant improvements in the tobacco control knowledge of students in both the introductory and advanced courses.

A database has also been set up for healthcare personnel on tobacco control knowledge, attitudes and difficulties. The "Taiwan Tobacco Control Educator Alliance" website ( HYPERLINK "http://www.tcea.org" http://www.tcea.org) has been created as well to provide a networking platform for smoking cessation educators. A database of trainees from this year, links to domestic and overseas tobacco control resources, downloadable course materials, analysis of smoking cessation problems, experiences and insights have all been uploaded to the website.

## Smoking Cessation Education Training for Pharmaceutical Personnel



Community pharmacies offer the advantages of convenience, accessibility and professionalism as well as more contact with local smokers. To expand the breadth and scope of smoking cessation assistance, smoking cessation education training for pharmaceutical personnel was organized to enhance the smoking cessation knowledge and skills of community pharmacists. The training also equipped them to provide timely smoking cessation service.

The introductory training course covered Tobacco Hazards education, healthy living habits, introduction to smoking cessation drugs, the role and function of pharmacists in smoking cessation and prevention, how to help with individual smoking cessation efforts, the handling of withdrawal symptoms, smoking cessation consultation and communication techniques as well as discussion of real-client examples. The advanced training covered the smoker's perspective, empirical basis for smoking cessation intervention, smoking

cessation guidance, group discussions as well as discussion of real-client on smoking cessation in specific groups.

A total of 699 people completed and passed the 8 introductory training courses held in 2010, while a total of 105 passed the 2 advanced training courses. Generally speaking, all students' post-training test results were equal or higher than their pre-training results. Over 90% were satisfied with their course. Additional developments included a smoking cessation case management system, a handbook on smoking cessation consultation techniques for pharmaceutical personnel (teaching materials for smoking cessation self-care) and a smoking cessation service guide. The current status and obstacles facing trained pharmacists providing smoking cessation services were also evaluated. The study provided a reference for future improvements to smoking cessation educators' consultation ability and the effectiveness of smoking cessation management services.

The provision of smoking cessation consultation services is an innovative service for community pharmacies. Pharmacists that pass the introductory and advanced courses will be certified as qualified smoking cessation educators. In the future, community pharmacies will set up smoking cessation consultation stations and become an important outpost for community smoking cessation education. The general public will then have access to more personal, convenient and comprehensive disease prevention and health promoting care.

The "2010 Community Pharmacy Smoking Cessation Service Trial" was also held in Chiayi City, Tainan City and Changhua County. Between October and December 30, 2010, the trial set up 132 community pharmacy smoking cessation consultation stations. Smoking cessation consulting services were provided to 511 people, an average of 4.77 sessions per educator (Table 1-15 ).

**Table 1-15 Service volume from the 2010 Community Pharmacy Smoking Cessation Consultation Service Trial**

Location	Target No.of Cases	No. of Cases	No. of Consultations	Average No. of Consultations	No. of Smoking Cessation Consultants
Chiayi City	250	225	1,320	5.8	21
Tainan City	150	177	443	2.5	79
Changhua County	100	109	652	6	32
Total	500	511	2,415	4.77	132

## Services at Smoking Cessation Outpatient Clinics

Taiwan began to provide clinical service complete with drugs aimed at helping people to quit smoking from 2002. The clinics provide two courses of treatment per year for people 18 years of age and older who are addicted to nicotine (Addicts are classified as people scoring four or more points on the Fagerstrom nicotine dependence scale or who smoke an average of 10 or more cigarettes per day.) Pharmacological treatment for one course lasts for a maximum of eight weeks and includes a short consultation session, with subsidies provided for both the visitation and medicine (see Table 1-16).

**Table 1-16 2010 Outpatient Smoking Cessation Treatment Subsidy Plan**

Subsidized Item	Subsidy funding	Notes
Treatment Fee	NT\$250/time (self-prepared prescription) NT\$270/time (prescription pre-prepared)	Prescription for meds to quit smoking needs to be prepared at the same time, then give this fee
Prescription Fee	NT\$250/week	When setting the subsidy amount, weeks are used as the unit (at most two weeks), with a maximum of two therapy courses subsidized each year. Each course has a limit of 8 weeks medicine and the entire course needs to be treated at the center within 90 days.
	NT\$500/week	Subsidy for low-income households
Fee for preparing medicine	<b>Preparing 1 week's medicine:</b> <ul style="list-style-type: none"> <li>● Doctor (with pharmaceutical certification) – NT\$11/time Pharmacist - NT\$21/time</li> <li>● Pharmacy that cooperates with the national health insurance system and local hospitals – NT\$32/time</li> <li>● Regional hospitals and medical centers – NT\$42/time</li> </ul> <b>Preparing medicine for 2 weeks in a row:</b> <ul style="list-style-type: none"> <li>● Doctor (with pharmaceutical certification) – NT\$21/time Pharmacist - NT\$32/time</li> <li>● Pharmacy that cooperates with the national health insurance system and local hospitals – NT\$42/time</li> <li>● Regional hospitals and medical centers – NT\$53/time</li> </ul>	In light of the current national health insurance system, fees are based on the level of the medical unit, the number of weeks of medicine, and other details of the prescription.
Pregnant smokers' referral service fee	NT\$100/pregnancy	The pregnant woman fills out her referral information and an agreement paper, and there is a subsidy of NT\$100 for referring her to the smoking cessation helpline

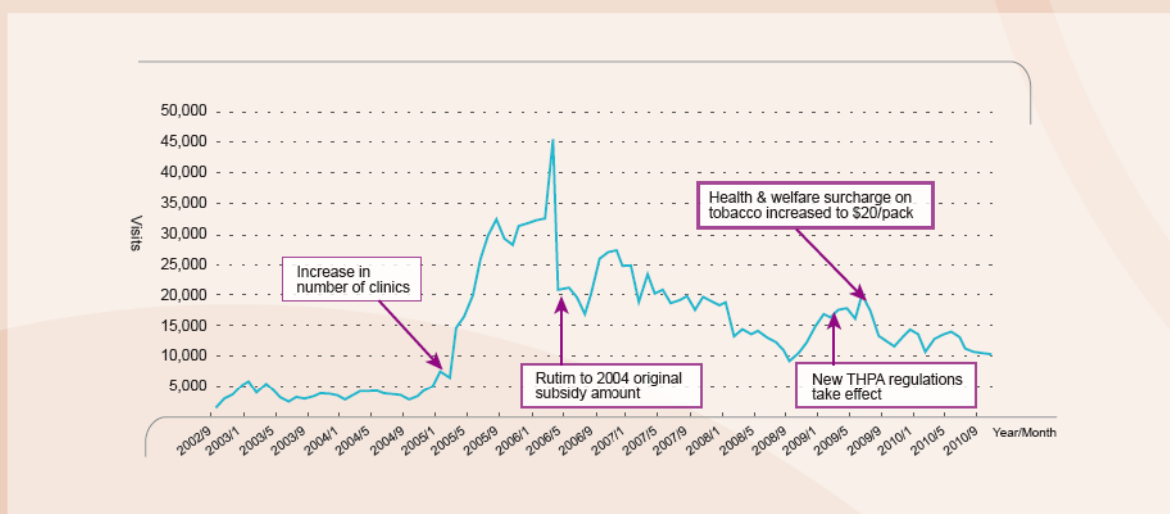
Doctors who provide the service need to first take courses related to assisting people in quitting smoking and receive certification. After finishing these steps, the doctors are able to establish contracted clinics for providing drug-assisted therapy for quitting smoking, with patient fees channeled through Taiwan's national health insurance system. Clinics that provide such service need to agree to quality check inspections, which include service satisfaction surveys, tracking the success rate for patients in quitting smoking and a cost-benefit analysis.



As 2010 was declared the Quit Smoking Action Year, hospitals were encouraged to provide the smoking cessation service to provide the smoking public with convenient accessible smoking cessation services. To increase the number of smoking cessation clinics and doctors, applications for the Outpatient Smoking Cessation Treatment Plan are now accepted four times a year (January, April, July and October) instead of the previous two.

There were already 1,886 medical institutions in 2010 contracted to provide Outpatient Smoking Cessation Services. The medical institutions were spread out over 355 townships, villages and cities (for a coverage rate of 96 percent). Though December 2010, there were 441,104 patients who had visited the Outpatient Smoking Cessation Services (with repeat visitors subtracted from the tally). Subsidies were adjusted based on supply, demand and budget constraints. Efforts to expand the program began in January 2005, with the number of clinics offering such services increasing by the month. Owing to a reduction in annual fees, funding cuts reduced subsidies on physician treatment services and prescriptions starting in April 2006, and there was also a decrease in the number of Outpatient Smoking Cessation Services visits (see Figure 1-6). But later there was a major increase in demand for people who wanted to quit smoking due to the implementation on Jan. 11, 2009, of a new amendment to the Tobacco Hazards Prevention Act that increased the number of indoor public places where smoking is banned and that made it illegal to smoke at indoor worksites with three or more people.

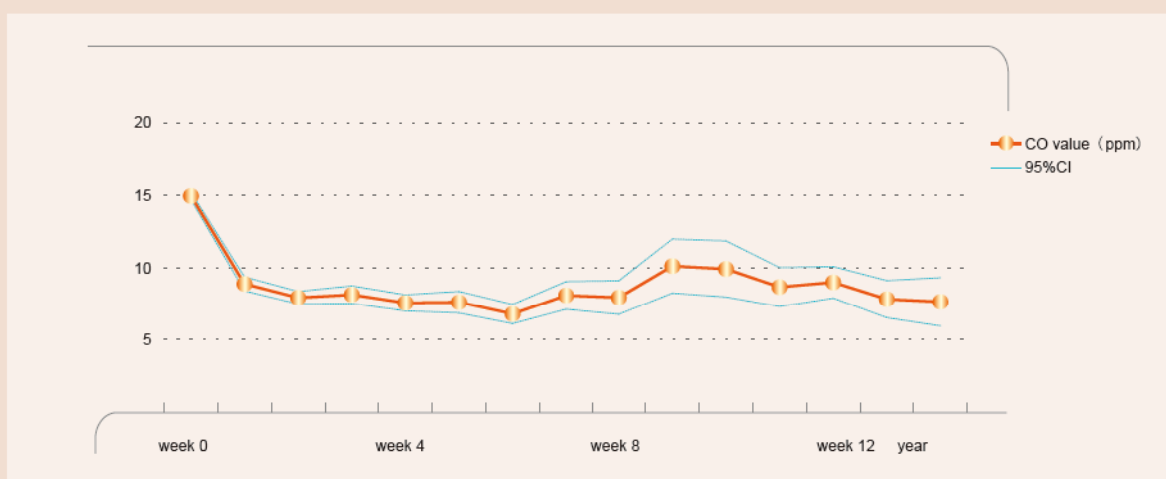
To set up a more comprehensive quality improvement system, the Bureau is not only continuing to improve management quality but also recommending the use of follow-up consultations to improve the success rate of smoking cessation treatments in accordance with international smoking cessation trends. In March 2010, a quality improvement plan was implemented requiring the 410 medical institutions contracted with the program to make follow-up telephone calls and short consultations. A carbon monoxide testing pilot trial was also carried out in the hopes to improving both quantity and quality. The "Outpatient Smoking Cessation Service Quality Improvement Plan" was announced on December 15, 2009. Contracted hospitals must now apply the 5A (Ask, Advise, Assess, Assist and Arrange) procedure when providing smoking cessation



**Figure 1-6 Trend in Outpatient Smoking Cessation Treatment Volume**

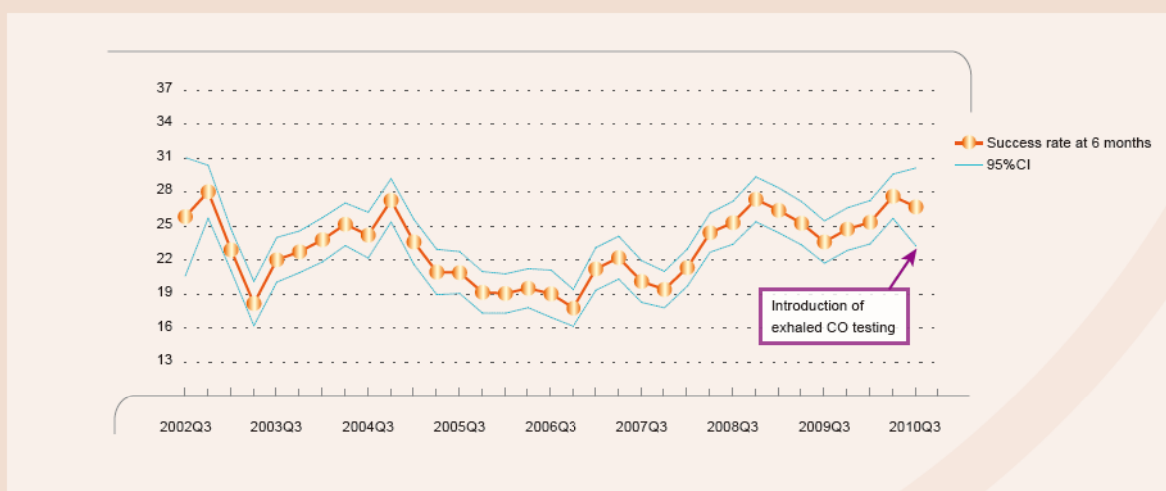
Source: Office for Smoking Cessation Services, Bureau of Health Promotion

services based on each patient's needs. Case management was also strengthened with medical personnel contacting the case between 80 to 100 days after the first visit (during the follow-up period) by phone or in person to check on their progress. The follow-up by specialists are aimed at improving smokers' willingness to quit and smoking cessation success rate. The goal was to achieve a reporting rate of over 66% or quitting success rate of over 33% after 3 months during the year. In addition, the "Carbon Monoxide Testing Trial" used instruments to measure carbon monoxide concentrations during exhalation. The result provides a scientific measurement of smokers' health and improves their willingness to quit smoking. In 2010, 25 medical institutions with 5 at each level were selected to take part in the trial. A total of 22 medical institutions took part and tested 797 people a total of 1436 times. If institutions that volunteered to perform carbon monoxide tests outside of the program were included, then a total of 214 institutions performed 9,068 tests. Most were public hospitals and health centers. The data showed that the carbon monoxide readings dropped significantly in the first week (Fig. 1-7).



**Figure 1-7 Changes in carbon monoxide readings over time after initial consultation (2010)**

Source: Office for Smoking Cessation Services, Bureau of Health Promotion



**Figure 1-8 Success Rate of People Who Receive Outpatient Smoking Cessation Services**

Source: Office for Smoking Cessation Services, Bureau of Health Promotion

To understand the benefits of drug-based clinical treatments to help people quit smoking, the Bureau of Health Promotion conducted a telephone survey to find out the six-month success rate among people who had received such treatment (to determine the success rate, the bureau looked at if people did not smoke for the one-week time period leading up to the six-month point after they began receiving treatment). Investigators carrying out the survey asked a total of 60,329 people between September 2002 and July 2010 and found that there was a success rate of 22.9 percent, showing improvement over previous years (see Figure 1-8). An average of 31.1 percent of patients at medical centers managed to give up smoking, the highest rate among all levels of health units offering clinical service to quit. Data showed that the cost per person who managed to quit smoking was highest at basic clinics, but that the basic clinics were most spread out and most convenient for patients; therefore, they served the highest number of patients (see Table 1-17).

**Table 1-17 Effectiveness of Clinical Therapy to Quit Smoking for Different Medical Unit Levels**

Level	Courses Carried Out	Success Rate at 6 Months	Average Subsidies for Each Course (NT\$)	Average Cost Per Person Who Successfully Quit (NT\$)
Medical Center	20,564	31.09	1,442.37	4,638.86
Regional Hospital	41,255	28.20	1,389.89	4,928.83
Community Hospital	54,855	24.32	1,472.02	6,051.52
Clinic	409,914	20.26	1,558.20	7,690.20
Public Health Centers	71,555	26.79	1,339.22	4,999.40
Total	598,143	22.95	1,508.51	6,573.75

Source: Office for Smoking Cessation Services, Bureau of Health Promotion

The Bureau of Health Promotion carried out a benefits analysis of clinical, pharmacological service to quit smoking in 2007 and 2008, looking at both direct benefits (can be connected to a reduction in medical treatment costs for smoking-related illnesses) and indirect benefits (an increase in quality-adjusted life years). The analysis showed that for every NT\$1 invested in the program, benefits of NT\$27 were obtained, showing that it is a plan with clear cost benefits. The United Kingdom, Japan and Taiwan all provide this type of service and other countries are gradually starting to adopt the same idea. Keys for its success in Taiwan include increasing smokers' willingness to take advantage of the service, encouraging more medical institutions to offer services, effectively controlling service quality and adequate promotion.

The first step the Bureau of Health Promotion takes to control the quality of clinical subsidized services to quit smoking is investigating centers that seek to sign a contract. After signing, the centers are required by their contract to know and take into consideration the Clinical Practice Guidelines for Treating Smokers in Taiwan. The bureau regularly provides new information related to the program to contracted medical institutions, works to enhance communication of items that medical institutions should be aware of holds classes aimed at raising service quality. In addition, it carries out computer administrative, professional and on-site inspections. In order to provide the public with effective, professional and high quality smoking cessation services.



## Smoking Cessation Helpline

Taking California's helpline as a model, Taiwan commissioned a private organization in 2003 to set up Asia's first Smoking Cessation Helpline, the Taiwan Smokers' Helpline (TSH). The service gives smokers a convenient, accessible outlet that is confidential. It offers professional psychological consulting with toll-free smoke cessation counseling services (0800-636363).

Service to help people quit smoking on the helpline is offered from 9 a.m. to 9 p.m. and is provided in Mandarin, Taiwanese, Hakka and English. Referral service, consultation and information services are all provided, depending on user needs. A preliminary conversation takes place when a call comes in and, if necessary, consultation is provided through text messages. The counselor and the smoker will develop a cessation plan. After the two convey all necessary information, they arrange weekly consultations lasting from between 30 and 50 minutes, with the course generally lasting 5 to 8 weeks. After consultation service ends, the service reps seek to keep track of the person trying to quit, including checking with the person at 1, 3, 6 and 12 months to see if he or she has succeeded in quitting.



The service received 513,923 calls to the service between 2003 and 2010, consisting of 115,082 individual cases. Overall service satisfaction has stayed consistently over 80% in previous years, and the over 30% of those that received multiple consultations successfully quit smoking.

As time progresses so does technology, with the traditional landline telephone no longer serving as the primary communication device. In light of these changes, in June 2006 the helpline began making it easier for people to call using mobile phones and started offering text messaging service. A large volume of calls that come in are from people using mobile phones, so the service added two more lines devoted to people using mobile phones in April 2010. The new lines have made it even more convenient for people to call the helpline and have added new channels to the social support system, making it easier for people to quit smoking and raising the service usage rate.

Taiwan acquired the rights to reuse the advertising developed by Australia's Quitline this year and the "New Regulations on the Way, Quit Now" advertising was produced to support the implementation of the new Tobacco Hazards Prevention Act regulations on January 11, 2009. An advertising campaign was launched using government, medical, workplace, school and community resources.

99.82% of callers to Taiwan's Quitline service immediately asked for a consultation, exceeding the service quality indicators proposed by the US Centers for Disease Control and Prevention (CDC) (Table 1-18).



**Figure 1-9 Quit helpline service volume in past years**

Source: Taiwan Smokers' Helpline (TSH)

Looking at the number of people who called the smoking cessation helpline in 2009 and their success rate in quitting, analysts estimate that direct benefits from the helpline will be about NT\$16.42 million, based on a reduction in medical costs incurred by smoking-related diseases between 11 and 15 years after callers quit. The analysts calculated indirect benefits to be NT\$310.54 million based on savings in quality-adjusted life years through 15 years after the smokers quit, bringing the total amount of direct and indirect benefits to NT\$326.96 million. Comparing these numbers to the annual budget the government appropriates for the helpline, for every NT\$1 invested in the program, benefits of NT\$12.3 were obtained. If the usage rate of the helpline among smokers increases, the benefits will become even more obvious.

To provide a supportive environment for smokers wanting to quit smoking, civic, medical and health professionals were all mobilized for the "Battle to Save a Life" campaign as part of the "Quit Smoking Action Year". The "Professional Help for Smoking Cessation" advertisement was aired between October and November 2010 to promote the importance of professional help in smoking cessation. Calls to the TSH increased by 150% during this period. According to telephone service representatives, callers were generally positive about the advertisement's introduction of smoking cessation resources as it helped them access professional help. The helpline also set up a bilateral partnership with local departments of health to provide the general public with even more accessible smoking cessation resources. For example, local departments of health may organize promotions and ask the helpline to provide free posters and promotional materials featuring the toll-free helpline number. Members of the general public may also be referred to the quit helpline and contacted to offer comprehensive assistance with smoking cessation.

The helpline also made "comfort calls" to smokers that signed the quit support card in the "Quit Smoking Handbook" and agreed to receive follow-up phone calls. Over 30% felt that the handbook was helpful with 33% reducing their smoking or quitting altogether.

The Bureau will continue to use a variety of marketing channels in the future to increase smokers' use of the helpline. The quality of service will be maintained and feedback generated using quality indicators in order to continue providing smokers with a high-quality and effective quit smoking helpline service.

**Table 1-18 Comparison between the Taiwan Smokers' Helpline and U.S. Centers for Disease Control and Prevention's Recommended Guidelines**

Service Standard	CDC Recommended Guidelines	Taiwan Smokers' Helpline Performance in 2010
Call Completion Rate	90%—95%	93.68%
Call Completion Rate Within 30 Seconds	100%	97.73% (Calls Connected within 20 Seconds)
Returning Calls Within 24 Hours	100%	100%
Sending Pamphlets and Relevant Info Within 48 Hours	Within 48 Hours	Within 48 Hours
Immediate Counseling Services Provided to Callers Who Request It	50%	99.82%

Source: Taiwan Smokers' Helpline (TSH)



## 2010 QUIT &amp; WIN

"Quit & Win" is an international smoking cessation competition supported by the WHO. First launched in 1994 by the National Public Health Institute in Finland, the campaign has since attracted more than 80 countries.

In support of the biennial "Quit & Win" competition, the Bureau partnered with the Tung's Foundation in 2010 to invite well-known entertainer Jolin Tsai as the spokesperson. Drumming was used to demonstrate the commitment to "Battle to Save a Life". After former Minister of Health Ching-chuan Yeh and Vice Minister Shan-chwen Chang announced the start of the campaign, a variety of marketing channels were brought to bear including intensive marketing, media exposure, mass distribution of promotional materials and strong public welfare advertising in the media. President Ma also gave his full support through his "Weekly Talk", with Yue Sun, the lifelong anti-smoking volunteer joining him to call upon all citizens to join the "Quit & Win" campaign. These efforts were successful in turning "Quit & Win" into a national movement.

The campaign also adopted a proactive approach through referring smokers to smoking cessation resources and services. Using the national "Quit & Win" platform, the 39 quit clinic doctors from Taipei Hospital's 8 campuses banded together to provide one thousand people wanting to quit smoking with "4 weeks of free smoking cessation drug therapy". The move not only triggered intense public interest and inquiries but also greatly increased the use of outpatient smoking cessation services. In partnership with the Taiwan Pharmacist Association, pharmacists also provided smoking cessation consultations directly through more than one thousand pharmacies throughout Taiwan. Smokers were encouraged to enter the competition and given one week's worth of nicotine gum for free to help them overcome the initial discomfort from quitting smoking.



▲ "Quit & Win" competition results were published on the GLOBAL link webpage

Interpersonal communication formed an important part of the campaign's promotional strategy. A partnership with the Taipei Health Department encouraged 160,000 elementary school students in Taipei to become the vanguard in helping parents to quit smoking. Promotional channels were also expanded so that Taiwan Taxi's fleet of 6,000 taxis provided free anti-smoking advertising inside the car during the promotional and competition period. The ads helped to promote the campaign and remind competitors to keep quitting.

In total, more than 10,000 physical and virtual channels in Taiwan including 395 departments of health (centers), around 500 medical institutions, 1,000 large enterprises, 1,000 chain and community pharmacies, 2,000 elementary schools, 365 local government offices, all universities and colleges, all industrial and science parks, all freeway rest areas, police, defense and civic organizations joined in promoting the campaign.

The campaign also saw the Ministry of Justice agree to allow the inmates of correctional facilities to participate in a social welfare competition concurrently with the outside the world for the first time. Yung-fu Tseng, the Minister of Justice, gave his full support as well and expressed his concern in the health of inmates and staff at his first press conference after being sworn-in. The healthy and positive "2010 Quit & Win" competition was therefore able to reach over 90% of the prison population.



▲ Jolin Tsai taking part in press conference for the 2010 Quit & Win public welfare advertisement

# "Quit & Win" campaign reporting



▲ Source: China Daily News ,2010/04/25



▲ Source: The Liberty Times ,2010/04/16

The publicity campaign, the involvement of the smoking cessation service system as well as the support of schools, hospitals, government agencies and private enterprise saw 25,405 teams of competitors over the age of 18 as well as 2,079 inmates of correctional facilities enter the 2010 competition.

The first prize winner of 2010 used the competition as the opportunity to quit 60 years of smoking, betel nut chewing and drinking all at the same time. Over the years, more than 110,000 people have entered the Quit & Win competition. The success rate after 1 year from the past 4 competitions have exceeded 35%, far higher than the international average of 15~25%.

The results from this years' competition was published on the GLOBALink webpage (<http://www.globalink.org/>) set up by the International Union Against Cancer. The accomplishments from the Taiwan Quit & Win campaign were also presented at the 9<sup>th</sup> "2010 Asia-Pacific Conference on Tobacco or Health" and "4<sup>th</sup> Cross-strait Conference on Tobacco Control", highlighting Taiwan's efforts and achievements in promoting tobacco control.



## Correctional Facility Smoking Cessation Services

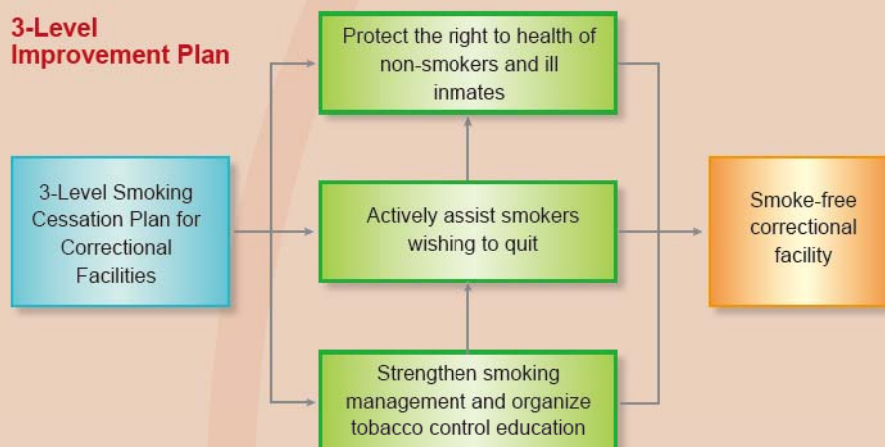
Tobacco products had previously been banned in correctional facilities. To get their fix, inmates used all kinds of ways such as family meetings, packages and dead-drops to acquire tobacco products. Some inmates even bribed corrections officers to help smuggle in cigarettes. Tobacco products became the de facto currency for the underground economy among inmates, leading to many problems and disciplinary issues in corrections management. In a bid to stamp out these problems, the Ministry of Justice amended Article 47 of the Prison Act in July, 1993, to permit inmates over the age of 18 to smoke at designated times and locations. The "Regulations Governing Smoke Cessation and Cessation Encouragement" was passed on August 16, 1993, along with the "Guidelines for Inmate Smoking Management" on August 20, 1993, to provide official oversight of tobacco products and smoking behavior. In view of tobacco products' danger to health, the spirit of the laws sought to encourage smoke cessation. As a result, tobacco products became a controlled rather than prohibited goods.

To protect the health of non-smokers and check on the progress made in promoting tobacco control, correctional facilities were required to report on their tobacco control efforts. A survey was also conducted among inmates on June 30, 2009, and found that smoking prevalence among the nearly 65,000 inmates in Taiwan reached 91.6% before they entered the correctional facility. Up to 83.9% of inmates also continued to smoke during their prison term. Around 40% had tried to quit smoking but only some of the inmates participated in smoking cessation classes. Around 25% of inmates were strongly motivated to quit smoking, around 38% were willing to participate in free smoking cessation groups and clinics while 47% were willing to purchase smoking cessation drugs. The survey also found that some inmates were willing to try quit smoking and agreed that tobacco was harmful to health. How to actively encourage and help inmates to quit smoking is an important issue. To this end, the Ministry of Justice announced the "Tobacco Control Implementation Plan for Correctional Facilities" on April 8, 2010. The plan provided for smoking cessation services in correctional facilities for the first time and hoped to actively promote tobacco control by helping and encouraging inmates to quit smoking.

To encourage inmates to quit smoking and protect the health of non-smoking inmates, in 2010 the "Quit & Win" campaign entered the correctional facilities for the first time. Smoking cessation incentives tailored to inmates were added to the competition to motivate inmates to quit smoking. A total of 2,079 inmates began quitting as part of the campaign. These developments showed that a diversified promotional strategy with inter-disciplinary cooperation is necessary for promoting and assisting inmates with smoking cessation. The goal is to realize a smoke-free environment and progressively reduce the number of smokers over the years.

To prevent an increase in the smoking population, increase the number of people that quit smoking and reduce the danger from second-hand smoking, correctional facilities should be developed into environments that support smoking cessation. A range of smoking cessation assistance should be provided to improve the success rate of quitting by increasing the motivation and willingness of inmates to quit smoking. The three key implementation strategies include protecting the health of non-smokers or ill inmates, actively helping inmates that want to quit and strengthening smoking management as well as organizing regular tobacco control and smoking cessation education seminars.

First, correctional facilities arrange for smoking cessation seminars to be held. People that wish to quit



smoking are then selected and may begin quitting when ready. Those that wish to quit through willpower are first housed together before starting. Those that require nicotine patches may wait for nicotine patches to be distributed to the facility before starting. Upon the arrival of new inmates, a variety of incentives are also used to encourage them to use their correctional time to quit smoking. Finally, active promotion is carried out by corrections officers at all levels. They may even lead by example and quit smoking in order to inspire inmates to follow their lead as well.

As of December 22, 2010, 265 smoking cessation seminars have been held at 10 correctional facilities including the Taipei Prison and a total of 38,442 inmates took part. To help inmates to quit smoking, those that wish to quit smoking are recorded then assigned to smoking cessation classes, workshops and housing for centralized management. Once an inmate agrees to quit smoking, they no longer receive a tobacco ration as well. Since September 2010, professional assistance or smoking cessation drugs were progressively provided to inmates on record. At 10 correctional facilities including the Taipei Prison, as of December 22 a total of 1,970 people have quit for 1 month with a success rate of 94.97% (1,871 people successfully quit smoking), 1,411 people have quit for 2 months with a success rate of 92.98% (1,312 people successfully quit smoking). After the plan was put into practice, it was found that the support and active promotion of corrections officers at all levels helped to improve the quit rate. Examples of this included the Yilan Prison, the Penghu Prison and Yanwan Skill Training Institute. When corrections supervisors set an example in smoking cessation they also inspire inmates to quit smoking as well. The chief of security at the Yanwan Training Institute for example quit smoking to set an example. The above developments provide other facilities with a reference for their own implementation in the future.

# Pricing and Taxation Measures

## ● Proposed Assessment on Increase to Tobacco health and welfare surcharge

Smoking and secondhand smoke are the leading cause of death and many diseases. According to the WHO, more than 5 million people die of tobacco-related illnesses, or an average of one death every six seconds. Taiwan passed the "Tobacco Hazards Prevention Act" in 1997 to combat the dangers of tobacco products. Ten years later, revisions to the Tobacco Hazards Prevention Act was passed through the combined efforts of community groups, government agencies and the Legislative Yuan on June 15, 2007. The revised law was signed into law by the President on July 11, 2007, and took effect on January 11, 2009, after an 18-month buffer period. An increase to the health and welfare surcharge on tobacco was approved on January 12 of the same year, increasing the levy from NT\$10 to NT\$20 per pack from June 1 onwards. The two major policy initiatives in 2009 ushered in a new era in tobacco control and the new regulations heightened the general public's health awareness. The extra layer of protection for more than 80% of the population that didn't smoke helped to build a healthy smoke-free living environment.

Article 6 of the WHO FCTC specifically states that policies directed at the price and tax on tobacco products are an effective for reducing tobacco consumption, especially among youths. At the 4th Conference of the Parties for the "WHO Framework Convention on Tobacco Control" held in Uruguay in November 2010, the WHO Tobacco Free Initiative presented a technical report showing that higher tobacco taxes increased the price of tobacco and reduce tobacco consumption, particularly among the young and the poor. Raising tobacco taxes is strongly recommended as an effective means of tobacco control for FCTC parties. Higher tobacco taxes and prices not only help to reduce tobacco use, but also produce benefits in health and healthcare.

Since the revised Tobacco Hazards Prevention Act took effect on January 11, 2009, and the welfare & health surcharge on tobacco was increased on June 1 of the same year, a variety of tobacco control methods have been used including education on the Hazards of tobacco products, cessation services and strengthening the enforcement efforts local regulatory agencies. Due to public opinion considerations however, any further increases to the health & welfare surcharge should be evaluated carefully in accordance with Article 4 of the Tobacco Hazards Prevention Act. Factors such as smoking-related illnesses, incidence, death rate, National Health Insurance costs, tobacco consumption & smoking prevalence, the ratio of tobacco taxes to retail price, national income, consumer price index as well as other factors that influence tobacco prices and control should all be given careful consideration to arrive at a well-thought out proposal.



# 2

## Reducing Tobacco Supply



## ◎ Evaluating the Effectiveness of Tobacco Hazards Prevention Act Enforcement

The general public has become more aware of no-smoking environments since the new regulations came into force and most people obey the relevant regulations. A small number of managers at no-smoking venues and tobacco sellers however, still attempt to challenge the gray areas of the law, impacting on the ideal of smoke-free public spaces.

The Consumers' Foundation, a third-party civic organization, has been commissioned to invite experts in public health, medical education and law to set up a working group for evaluating pricing and execution methods based on actual local government enforcement efforts since 2004. To gain a more complete picture on the results of regulatory enforcement, local townships that serve as the seat of government were excluded from the 2010 evaluation and priority given to sampling townships with larger populations. The greater diversity in the venues of these areas helped to provide a more complete picture. A total of 590 households in 45 townships were surveyed and 410 tobacco sellers tested on their knowledge of regulations prohibiting underage smoking. The purpose of the survey was to determine how well Articles 5, 6, 7, 9, 10, 11, 13, 15 and 16 of the Tobacco Hazards Prevention Act was being enforced.

### Onsite Surveys in 25 Cities and Counties

Due to the geographic distribution of onsite surveys, manpower and budgetary constraints meant that a non-probability sampling method was used. Samples were selected using the three-stage stratified sampling framework to establish the relative levels of policy enforcement. In 2010, the evaluation found that the overall compliance rate among the 25 cities and counties on method of tobacco sale (Article 5), health warnings (Article 6), nicotine and tar content labeling (Article 7), tobacco product advertising and promotion (Article 9), restrictions on tobacco displays (Article 10), prohibition on the supply of free tobacco products (Article 11), prohibition on sale of tobacco products to minors (Article 13), no smoking areas (Article 15) and no smoking outside of designated smoking areas (Article 16) was 87.7%. For tobacco sellers, the compliance rate with Article 5 on sale of tobacco products where the buyer's age could not be determined was 100%; for tobacco labeling, compliance with Article 6 was 99%; for tar and nicotine content labeling, compliance with Article 7 was 100%; for tobacco advertising, compliance with Article 9 was 96.4%; for tobacco product display, compliance with Article 10 was 85.7%; for ban on supply of free tobacco products, compliance with Article 11 was 100%; for no underage smoking, compliance with Article 13 was 45.9%. For no smoking areas, compliance with Article 15 was 97.6% and compliance with Article 16 was 91.4%. Generally speaking, no smoking signs were displayed at almost all non-smoking areas. Chinese warning pictures and messages were also displayed by tobacco sellers. Violations were more common for tobacco product displays with the problem of additions to tobacco display cabinets being particularly severe (Fig. 2-1).

### Prohibition on Underage Tobacco Sales and Selling

According to the "Global Youth Tobacco Survey" (GYTS) conducted by the Bureau among junior high school students (2010) and senior/vocational high school students (2009), 32.3% of junior high school smokers and 20.7% of senior/vocational high school students began smoking before the age of 10. Based on on-site Tobacco Hazards enforcement surveys using minors wearing senior high school uniforms, 54.1% of stores were willing to defy the law on tobacco sales. The purchase of tobacco products by young people under the age of 18 has become an important issue in tobacco control.

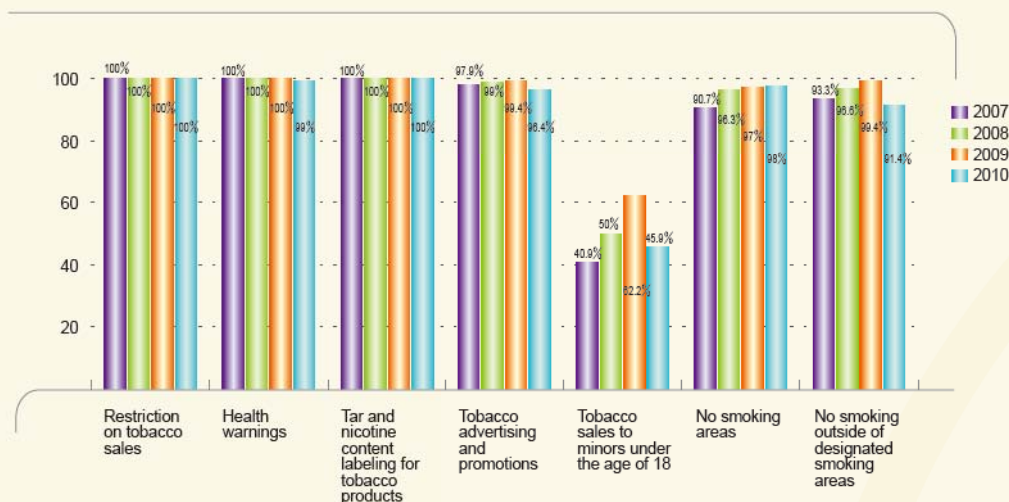


Figure 2-1 Comparison of compliance with the regulations of the Tobacco Hazards Prevent Action between 2007 ~ 2010

Source: Final report on the "Evaluation of Effectiveness in Enforcing the Tobacco Hazards Prevention Act Project" commissioned from the Consumers' Foundation by the Bureau of Health Promotion



Figure 2-2 Tobacco vendor compliance with ban on underage tobacco sales, 2005 ~ 2010

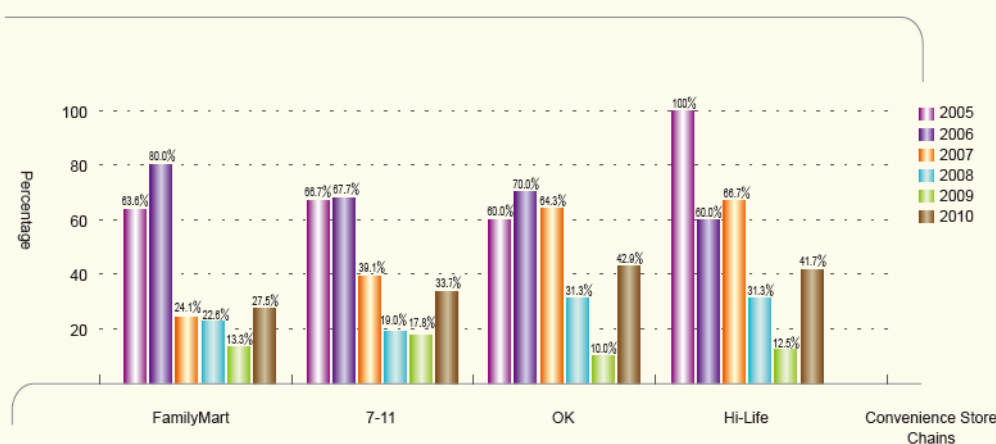
Source: Final report on the "Evaluation of Effectiveness in Enforcing the Tobacco Hazards Prevention Act Project" commissioned from the Consumers' Foundation by the Bureau of Health Promotion



To determine if convenience stores were illegally selling tobacco products to youths, 410 tobacco sellers in 25 cities/counties were tested by disguised buyers between May and October, 2010. The test found that 54.1% of the four major convenience store chains, supermarket chains, hypermarts, betel nut kiosks and general stores sold tobacco products to people under the age of 18. The violation rate was 33.5% among the four major convenience store chains but also up to 75.7% and 83.7% among betel nut kiosks and general stores. The results showed violations were common among tobacco sellers. The survey results from 2005 to 2010 produced compliance rates of 19%, 25.2%, 40.1%, 52.3%, 62.6% and 45.9% respectively. (Figure 2-2)

When compared to the results from 2009, tobacco sales to minors increased from 37.4% to 54.1%; among the four major convenience store chains, 33.5% of the stores sold tobacco to minors in 2010, more than double the rate of 15.5% in 2009. Out of the four major convenience store chains, OK had the highest violation rate at 42.9% in 2010 followed by Hi-Life at 41.7%, President Chain Store at 33.7% and FamilyMart at 27.5% (Fig. 2-3); the violation rate among betel nut kiosks in 2009 and 2010 were 78% and 75.7% respectively, a reduction of 2.3%. Among general stores, violations remained high with an increase of 27.2% from 56.5% in 2009 to 83.7% in 2010. In 2010 supermarkets and hypermarts were also tested with over 50% (55.8%) illegally selling tobacco products to minors. Generally speaking, with the exception of a slight reduction in betel nut kiosks, all other retailers saw an increase in violations compared to 2009. There is therefore still great room for improvement.

Recently, complaints were received from the general public on more than 20 videos showing smoking by children under the age of 18. The videos included adults teaching children to smoke and forcing cigarettes on a 1-year old child. These were public instances of child abuse. As these acts violate the ban on supply of tobacco products to minors imposed through the Tobacco Hazards Prevention Act and "Children Welfare



**Figure 2-3 Proportion of illegal tobacco sales by convenience store chains, 2005 ~ 2010**

Source: Final report on the "Evaluation of Effectiveness in Enforcing the Tobacco Hazards Prevention Act Project" commissioned from the Consumers' Foundation by the Bureau of Health Promotion

Act", the people involved in publishing the videos will be investigated and issued with the maximum penalty of \$50,000. Adults forcing cigarettes on helpless babies or young children also violated Article 30 Paragraph 15 of the Children Welfare Act prohibiting any improper acts against children.

Due to factors such as youths being a high-risk group for smoking and the enforcement rate on tobacco sales to minors, it will be necessary to step up enforcement and awareness efforts to strengthen the network for no underage tobacco sales among the local cities/counties. The 2009-2010 No Underage Tobacco Sales Counseling and Marketing Plan included the development of a practical handbook, the organizing of "Tobacco Seller" and "Health Volunteer" training courses in partnership with local departments of health, strengthening counseling for tobacco sellers and launching the "Support Me by Not Selling Tobacco Products to Children Under 18" movement. Apart from producing associated promotional materials and developing practical techniques for requiring young people to show personal ID, one-day store manager events and media publicity were also used to promote an atmosphere of not selling tobacco products to children under 18 and no smoking among youths.

An awareness campaign was also run in area around Nanyang Street with its high concentration of tutoring classes. Tobacco sellers along the street were visited, promotional materials placed at stores that sell tobacco, and merchants taught how to handle youths in school uniforms or that look under 18, and perform the 3-steps to refusing a tobacco sale. These efforts called up on merchants to not sell tobacco products to youths.

For local governments that achieve excellent results in enforcing the ban on underage tobacco sales, marketing and resource usage is strengthened to promote their success as a role model for other local governments. Media reports are also used to promote the techniques for requiring young people to show personal ID when purchasing tobacco products in order to boost public awareness of the ban on underage tobacco sales.



## ● Curbing Illicit Trade in Tobacco Products

The Ministry of Finance has acted in accordance with The Tobacco and Alcohol Administration Act to put forth a complete oversight system. The ministry has also cooperated with other government agencies at both the central and local levels along with investigation units to enhance investigation efforts in line with the law and to strengthen public knowledge of regulations. In addition to its own work, the government has called on members of the tobacco industry to set up self-oversight policies. It provides needed assistance to the private enterprises while sharing relevant information to ensure that inspections for uncovering contraband cigarettes are successful and the legal tobacco products industry is protected. The government helps provide training related to distinguishing between legal and contraband cigarettes to raise the practical knowledge of investigators, and it has a monitoring mechanism in place to ensure the quality and increase the effectiveness of these investigations.

According to the Regulation of the Tobacco Health and Welfare Surcharge Distribution and Utilization, 1 percent of the tobacco health and welfare surcharge should be provided to the central government for conducting investigations into contraband cigarettes and for preventing evasion of taxes on tobacco products. Also, based on the regulations contained in the Guidelines for the Usage of Funds Derived from the Tobacco Product Health and Welfare Surcharge to carry out Seizures on Illicit Tobacco Products and to Prevent Tax Evasion, nine-tenths of the 1 percent mentioned above should be used for investigating contraband tobacco products, with the remaining tenth used for preventing evasion of taxes on tobacco products.

To gather and coordinate major investigation cases related to contraband tobacco products, the inter-agency "Central Supervisory Unit for the Handling of Seizures of Tobacco and Alcohol-Related Products" and task forces drawn from the Ministry of Finance, Ministry of the Interior, Department of Health, Ministry of Justice, Coast Guard Administration and Consumers' Foundation have been set up. Local finance, environmental protection, health, industry, news and police units form united inspection task forces for carrying out inspection and suppression efforts. Together they use their authority to investigate and rectify all types of illegal commerce related to tobacco products. Central and local enforcement agencies have worked together to optimize the use of existing manpower for investigation and enforcement efforts. Enforcement techniques are also continuously being refined to improve their effectiveness.

Local governments and customs officials at the city and county levels managed to detect and seize 10,278,683 packages of contraband cigarettes in 2010, an increase of 49.91% on 2009. The money invested into contraband investigations is therefore beginning to produce results. Shown below are data on the total number of smuggled cigarettes seized from 2002 to 2010 (Table. 2-1).

**Table 2-1 Contraband seizures, 2002 ~ 2010**

Year	Local Government		Directorate- General of Customs		Total
	10,000 Packs	Proportion	10,000 Packs	Proportion	10,000 Packs
2002	351.29	13.26	2,298.88	86.74	2,650.17
2003	201.11	7.66	2,424.50	92.34	2,625.61
2004	763.60	34.67	1,439.01	65.33	2,202.61
2005	403.88	32.36	844.23	67.64	1,248.11
2006	366.03	55.37	295.01	44.63	661.04
2007	676.52	62.07	413.34	37.93	1,089.86
2008	322.51	72.31	123.47	27.69	445.98
2009	579.2	56.35	448.61	43.65	1,027.81
2010	763.94	49.58	776.87	50.42	1,540.82
Total	3,664.14	30.66	8,287.05	69.34	11,951.19

Source: Ministry of Finance



# 3

## Research, Monitoring and International Exchange



## ◎ Research and Monitoring

### Adult Smoking Behavior Survey

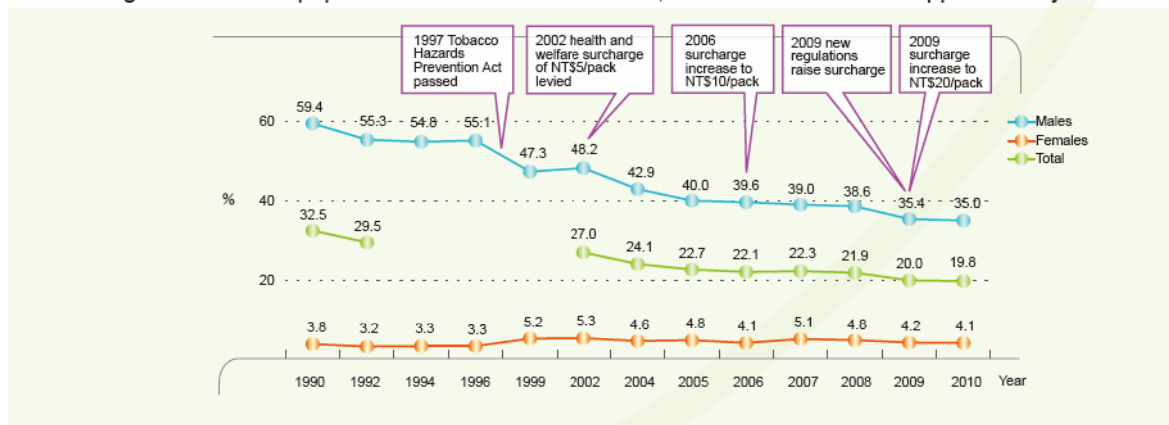
Telephone surveys on smoking behavior by people over the age of 18 has been conducted since 2004 to monitor the status and trends in smoking behavior in Taiwan to provide a reference for policy-making by central and local health authorities. The survey uses Chunghwa Telecom's residential telephone listing as the parent sample. Probability Proportional to Size (PPS) sampling is used to pick the exchange combinations then the last two digits are randomly generated to produce the survey sample. Once a call is answered, within-household sampling is used to select the person to be interviewed. Over 16,000 interviews are on average conducted each year.

### Smoking Prevalence

A look at the prevalence of smoking among adults over 18 in past years showed that smoking prevalence among males and females were 59.4% and 3.8% respectively in 1990. In 2002, smoking prevalence among males dropped to 48.2% and increased to 5.3% for females.

In 2008, smoking prevalence declined even further to 38.6% for males and 4.8% for females. On January 11, 2009, the amended Tobacco Hazards Prevention Act came into effect, expanding the number of no-smoking areas, banning tobacco advertising, promotions and sponsorship, requiring warning pictures, pictures and smoking cessation information to be displayed, regulating tobacco sellers and increased the health & welfare surcharge. As a result, smoking prevalence dropped to 35.4% for male. Females dropped to 4.2% though this did not represent a significant change. Two years after the introduction of the new Tobacco Hazards Prevention Act regulations, statistics for 2010 showed that the growth of smoking among adults over 18 had slowed, with smoking prevalence among males and females being 35.0% and 4.1% respectively (Fig. 3-1). In terms of regional smoking prevalence, New Taipei was the highest (23.7%) followed by Hualien County (23.4%) and Taoyuan County (22.8%). Smoking prevalence among males was highest in New Taipei (44.0%) followed by Nantou County (41.0%) and Miaoli County (38.9%). Smoking prevalence among females was highest in Hualien County (12.1%) followed by Keelung (8.0%) and Kaohsiung (7.7%).

Using the total adult population in 2010 as a reference, this meant there were approximately 3.6 million



**Figure 3-1 Historical smoking prevalence among adults over 18 in Taiwan**

1. Survey data for 1990 ~ 1996 were compiled by the Taiwan Tobacco and Wine Monopoly Bureau.
2. Data for 1999 was from survey conducted by Professor Lan Lee.
3. 2002 data came from the Bureau of Health Promotion's "2002 Survey of Knowledge, Attitude and Behavior toward Health in Taiwan".
4. 2004 and 2010 data came from the Bureau of Health Promotion's "Adult Smoking Behavior Survey".
5. The definition of a smoker between 1999 ~ 2010 referred to those that had smoked more than 100 cigarettes (5 packs) and had smoked in the past 30 days.

adult smokers, or 3.22 million males and 380,000 females. This represented a decrease of over 10,000 from 2009 and more than 340,000 from 2008. The 2010 data showed that smoking prevalence grows dramatically among young men in Taiwan aged between 18 ~ 25. Prevalence of smoking climbs every year after 18 and peaks between 31 ~ 35 of age until 1 in every 2 young males smoke. For females, smoking grows every year after 18 and peaks among those aged between 36 ~ 40 until approximately 1 in every 13 females smoke (Fig. 3-2). Smoking is therefore an important issue among young men and women.

When smoking behavior statistics for males from around the world are compiled, 50.7% of Taiwanese males had never smoked, a ratio similar to the US (53.1%), UK (48.6%), Australia (50.9%) and Canada (46.9%). Only 14.3% of Taiwanese males had quit smoking compared to the statistics from the US (25.4%), UK (29.8%), Australia (27.9%) and Canada (33.0%). In Taiwan, the number of males that still smoke is 2.5 times that of those that had quit smoking (Fig. 3-3).

### International Smoking Cessation Experience

The 2010 survey results showed that 39.3% of smokers had attempted to quit smoking in the past 12 months, with 38.5% of males and 47.0% of females making the attempt. Statistics from other countries such as Vietnam (55.3%), Mexico (49.9%), Thailand (49.8%) and the Philippines (47.8%) showed that approximately half of smokers tried to quit in the past year (Fig. 3-4).

### Exposure to Second-hand Smoke

The 2010 survey results showed that 24.9% of families were exposed to secondhand smoke in the past week. 15.7% of respondents reported people smoking in their indoor workplace or office in the past week. 9.1% reported exposure to secondhand smoke in no-smoking areas mandated by law in the past week. Due to the expansion of no smoking areas in 2009, the rate of exposure to secondhand smoke at home and in no smoking areas declined. The exposure rate is showing signs of increasing again for 2010, so more work needs to be done in promoting tobacco control (Fig. 3-5).

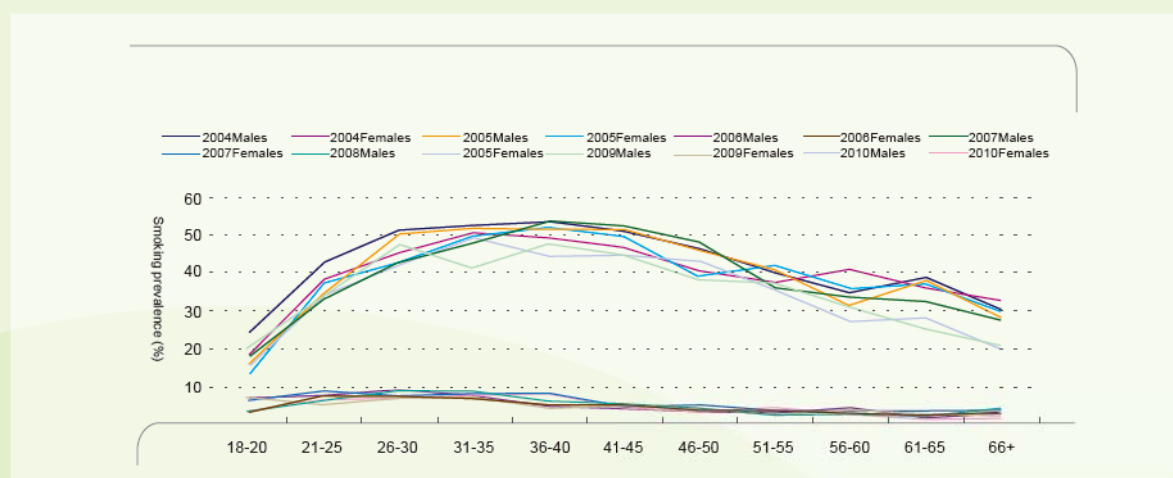
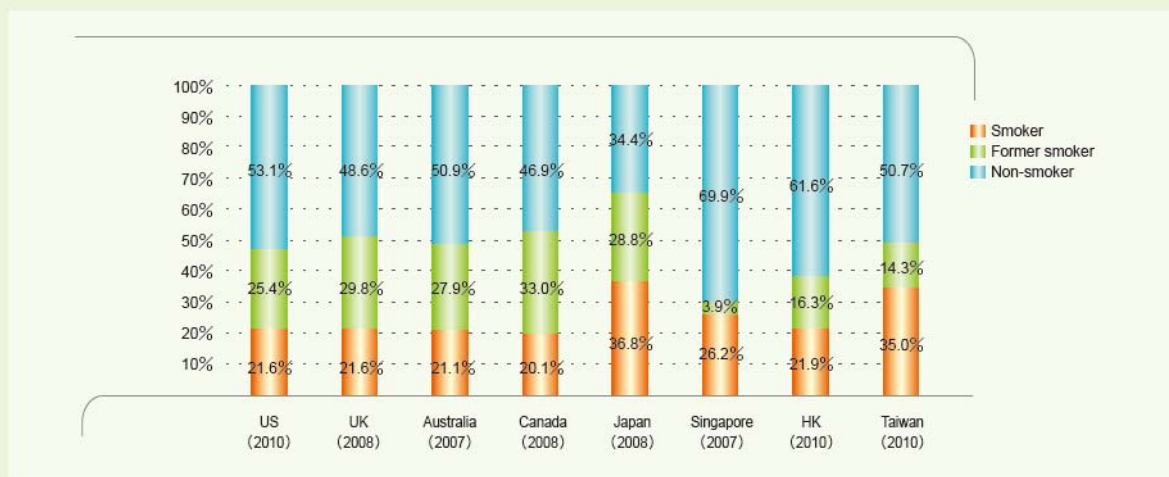


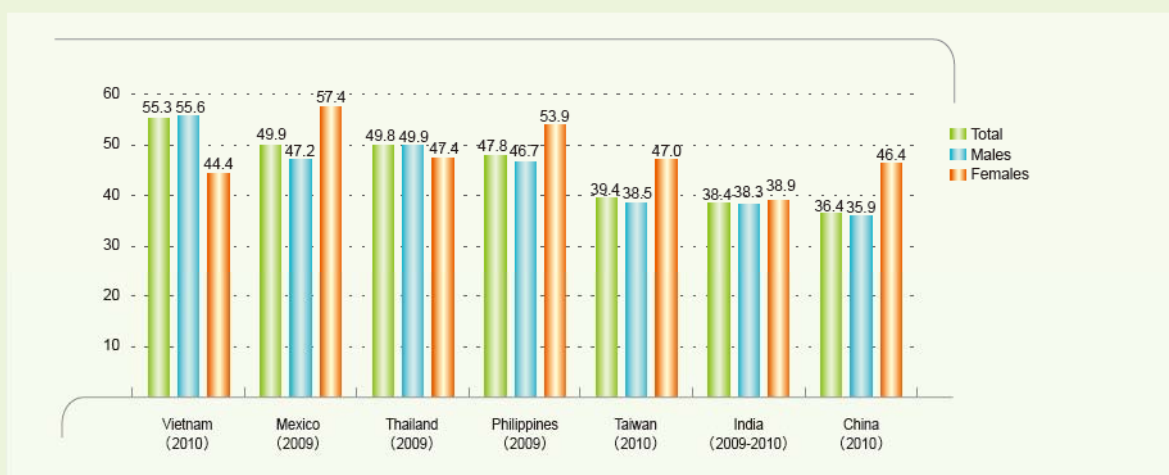
Figure 3-2 Distribution of smoking prevalence for each age group over 18





**Figure 3-3 Distribution of smoking prevalence among men in each country**

1. Early Release of Selected Estimates Based on Data From the 2010 National Health Interview Survey: Current smoking. National Center for Health Statistics, CDC., June 2011. Available at: <http://www.cdc.gov/nchs/nhis/released201106.htm>
2. WHO Framework Convention on Tobacco Control— Parties'reports of reporting on the implementation of the convention. Available at: [http://www.who.int/fctc/reporting/party\\_reports/en/index.html](http://www.who.int/fctc/reporting/party_reports/en/index.html)
3. Statistics on Behavioral Risk Factors, Center for Health Protection, Department of Health, Hong Kong Special Administrative Region. Available at: <http://www.chp.gov.hk/tc/data/4/10/280/442.html>



**Figure 3-4 Percentage of smokers in each country that attempted to quit smoking**

Source: 2010 "Adult Smoking Behavior Survey" by the Bureau of Health Promotion and the Global Adult Tobacco Survey



**Figure 3-5 Historical adult exposure to secondhand smoke**

1. Exposure to secondhand smoke at home was defined as seeing someone smoke at home within the past week. Source: Bureau of Health Promotion's "Adult Smoking Behavior Telephone Survey".
2. Exposure to secondhand smoke in the indoor workplace was defined as the percentage of workers that smelled tobacco smoke in their indoor workplace. Source: Bureau of Health Promotion's "National Healthy Workplace Environment Survey". The survey sampled full-time workers over the age of 15.
3. Exposure to secondhand smoke in no smoking public spaces was defined as seeing someone smoke in a public space that has been declared a no smoking area by the Tobacco Hazards Prevention Act. Source: Source: Bureau of Health Promotion's "Adult Smoking Behavior Telephone Survey". The survey sampled adults over 18.

## Global Youth Tobacco Survey

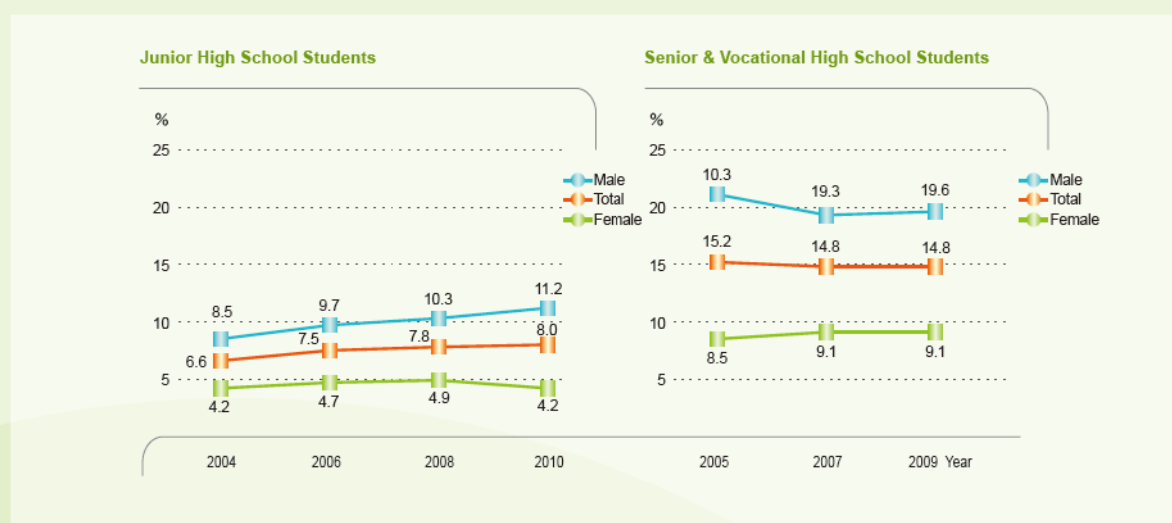
To establish a basis for international comparison, the Bureau has collaborated with USA's Center for Disease Control since 2004 to use the "Global Youth Tobacco Survey" (GYTS) questionnaire designed by the WHO to survey junior high school and senior and vocational high school students each year on an alternating basis. The survey investigated the trends in smoking prevalence among all public junior, senior and vocational high school and 5-year junior college students throughout Taiwan as well as their Tobacco Hazards knowledge, attitude and secondhand smoke exposure. The data was provided to health authorities for planning and evaluating tobacco control strategies on campus.

The student sample selected for the survey is representative of all junior, senior and vocational high school students as well as first to third year students in 5-year junior colleges in Taiwan. The sample schools are selected using systematic random sampling followed by the selection of "sample classes". All students in the same classes are then surveyed. Around 25,000 people are surveyed each year.

## Smoking Prevalence

According to the GYTS, smoking prevalence among senior and vocational high school students was 15.2% in 2005 (21.1% for male and 8.5% for female), 14.8% in 2007 (19.3% for male and 9.1% for female) and 14.8% in 2009 (19.6% for male and 9.1% for female). Generally speaking, the growth in smoking among senior and vocational high school students has slowed for both male and female.

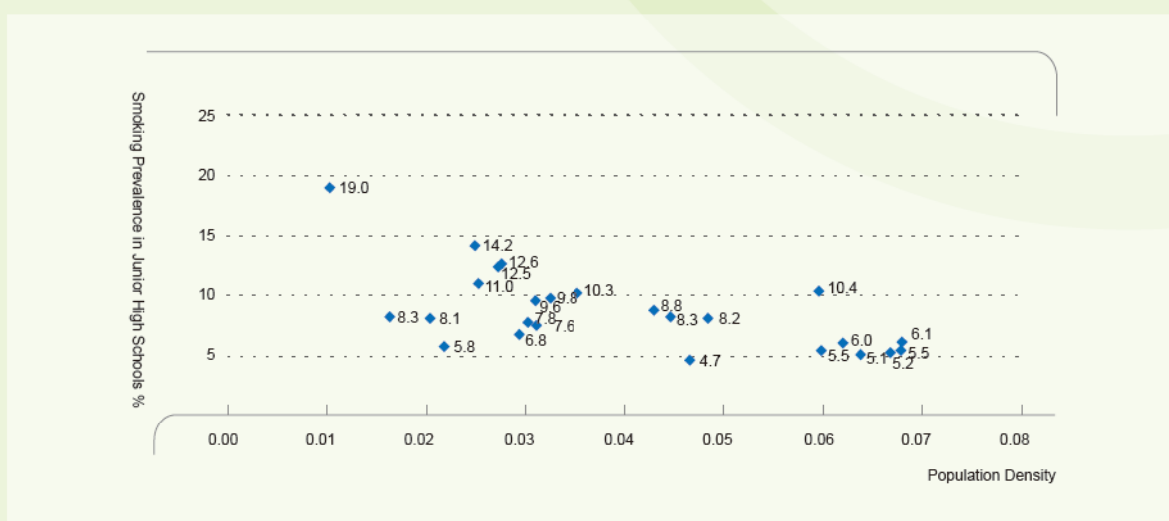
According to the GYTS, smoking prevalence among junior high school students was 7.5% in 2006 (9.7% for male and 4.7% for female), 7.8% in 2008 (10.3% for male and 4.9% for female) and 8.0% in 2010 (11.2% for male and 4.2% for female). Generally, smoking among junior high school male shows signs of increasing while it is slowing among junior high school female (Fig. 3-6).



**Figure 3-6 Trends in smoking prevalence among junior, senior and vocational high school students**

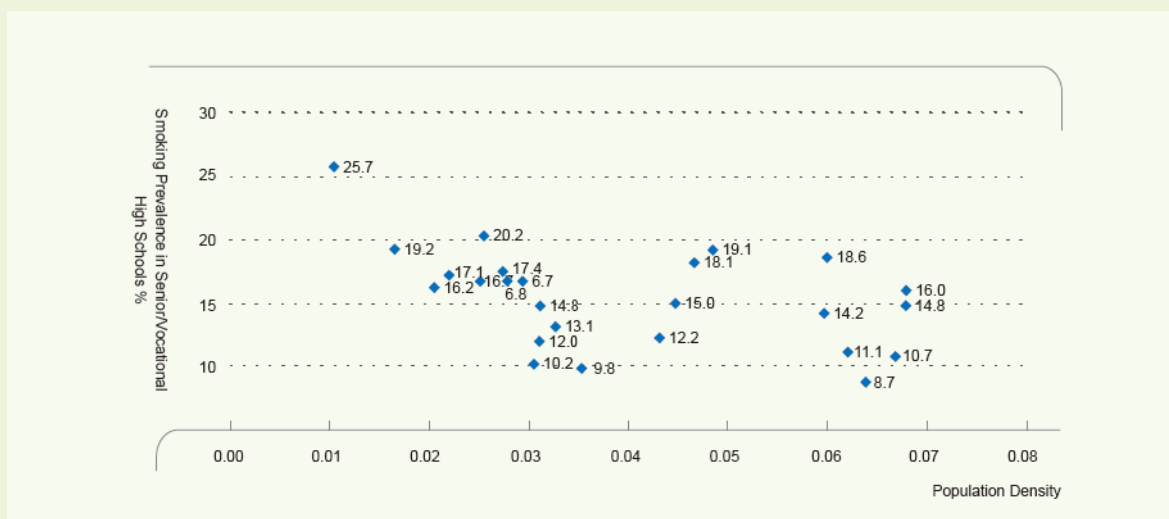
1. Source: "Global Youth Tobacco Survey", Bureau of Health Promotion
2. Smoking is currently defined as having experimented with cigarettes in the past 30 days even if it was just one or two puffs.

When the correlation between urbanization and youth smoking prevalence was examined, negative correlation was identified between the smoking prevalence and population density. For junior high school students, there was a high level of negative correlation (correlation coefficient  $r$  was between plus and minus 0.6 ~ 0.9) and for senior/vocational high school students there are medium level of negative correlation ( $r$  was between plus or minus 0.3 ~ 0.6). In other words, there was significant correlation between higher population density and lower smoking prevalence among youths (Fig. 3-7, Fig. 3-8).



**Figure 3-7 Correlation between smoking prevalence among junior high school students in 2010 and population density at the end of 2008**

$r = -0.624$   $p = 0.001$



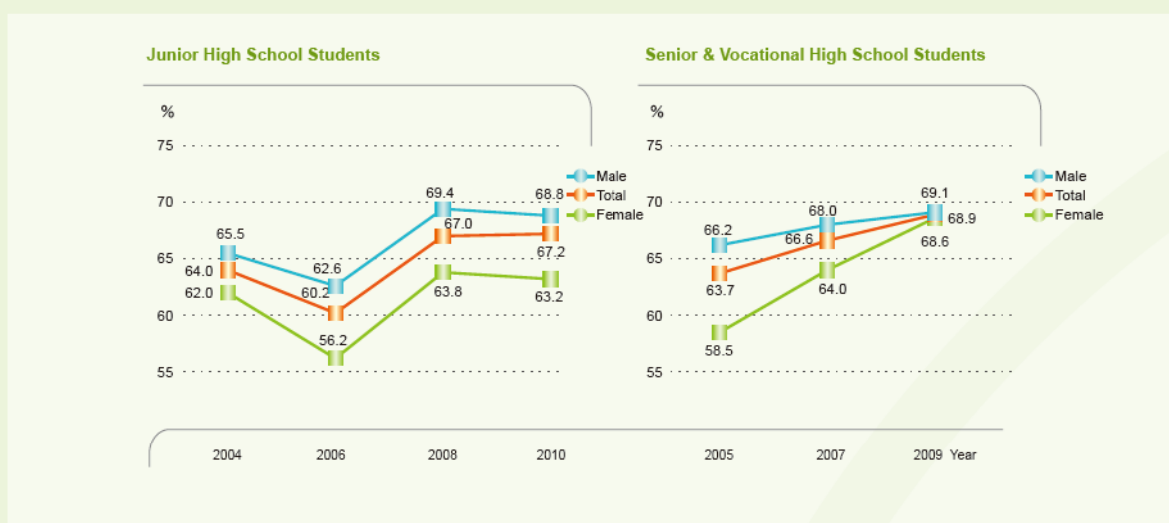
**Figure 3-8 Correlation between smoking prevalence among senior/vocational high school students in 2009 and population density at the end of 2008**

$r = -0.456$   $p = 0.022$



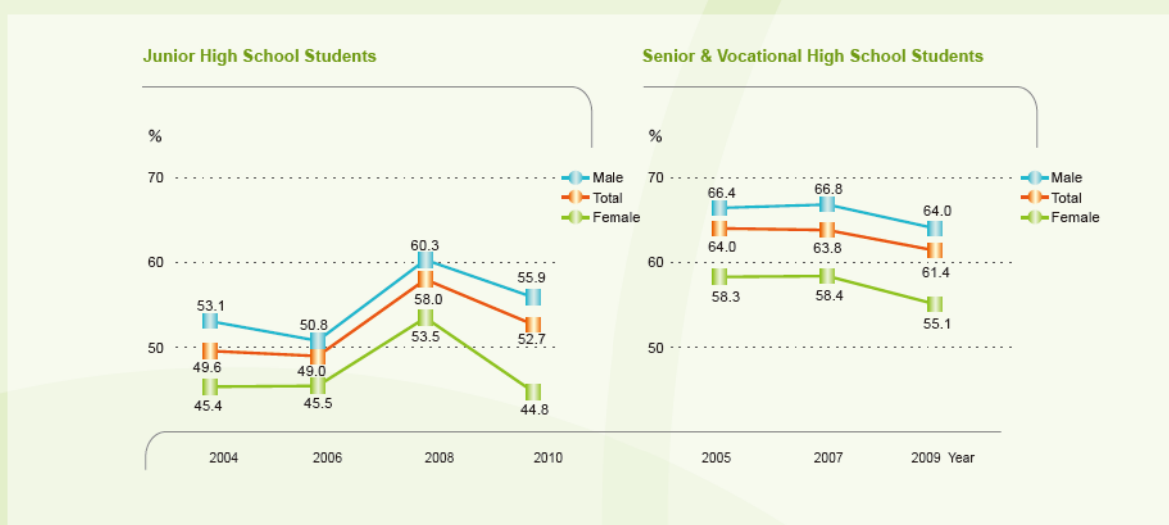
## Smoking Cessation Experience and Willingness

Though smoking prevalence remained unchanged, current smokers showed a greater willingness to quit smoking. Over 60% of junior, senior and vocational high school students have tried to quit smoking in the past year (Fig. 3-9). As for cessation intent, around 50% of smokers in junior high schools reported wanting to quit while over 60% of smokers in senior/vocational high schools reported wanting to quit (Fig. 3-10).



**Figure 3-9 Trends in experience with smoking cessation among junior, senior and vocational high school students**

1. Source: "Global Youth Tobacco Survey", Bureau of Health Promotion
2. Experience with smoking cessation was defined as having attempted to quit smoking within the past year



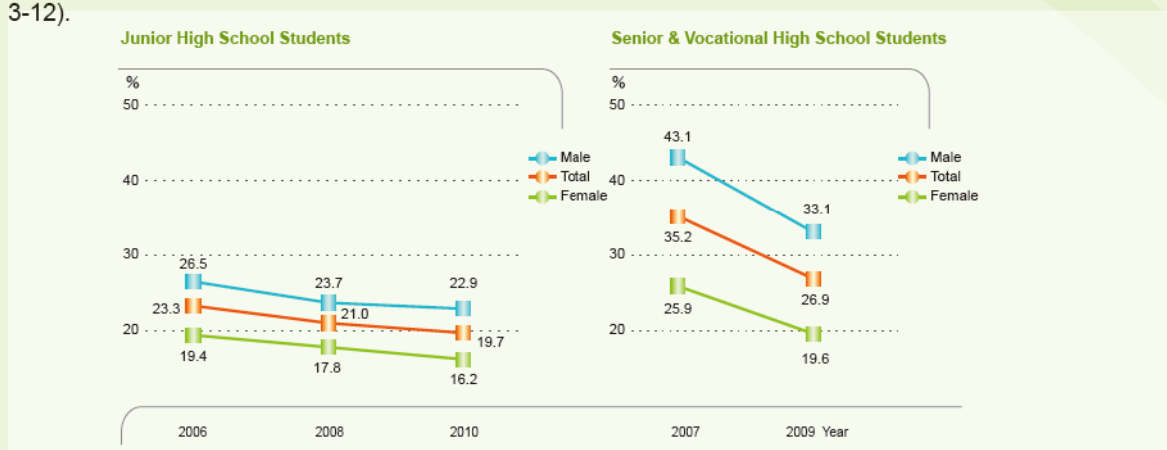
**Figure 3-10 Trends in willingness to quit smoking among junior, senior and vocational high school students**

1. Source: "Global Youth Tobacco Survey", Bureau of Health Promotion
2. Willingness to quit smoking was defined as the smoker wanting to quit smoking now

## Exposure to Second-hand Smoke

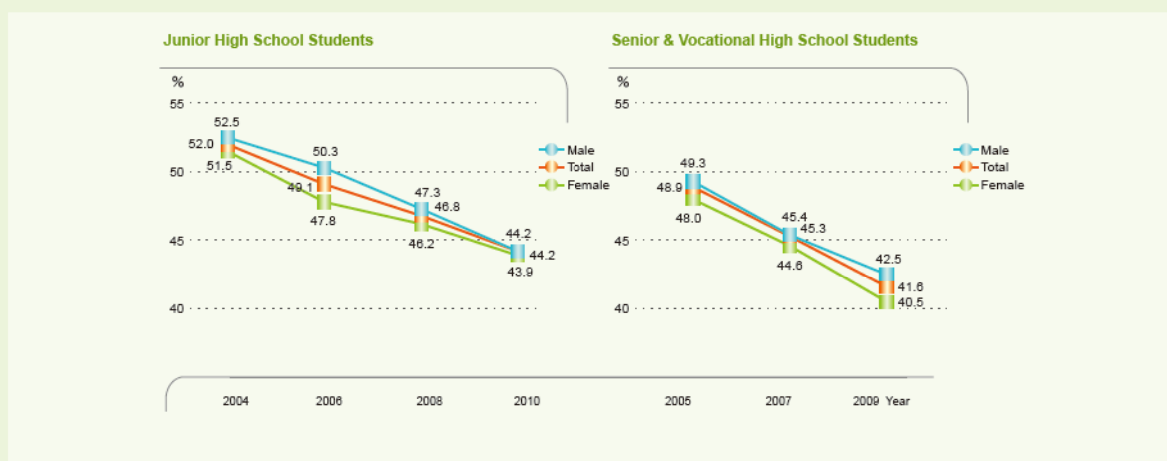
The School Health Act and the Tobacco Hazards Prevention Act bans smoking at all schools below the level of senior and vocational high schools. The 2007 survey of senior/vocational high school students and 2008 survey of junior high school students found however, that 35.2% of senior/vocational high students (43.1% of male and 25.9% of female) and 21.0% of junior high school students (23.7% of male and 17.8% of female) reported being exposed to secondhand smoke at school. Since the new Tobacco Hazards Prevention Act took effect in 2009 however, secondhand smoke exposure in senior/vocational high school campuses has dropped significantly to 26.9% (33.1% for male, 19.6% for female). Exposure in junior high schools has also dropped slightly to 19.7% (22.9% for male and 16.2% for female) (Fig. 3-11).

For secondhand smoke exposure at home, for senior/vocational high school students exposure at home was 41.6% in 2009 (40.5% for male and 42.5% for female). When compared to the 45.3% in 2007 (44.6% for male and 45.4% for female) significant improvement has been made. Among junior high school students, exposure at home was 44.2% in 2010 (43.9% for male and 44.2% for female). When compared to the 46.8% in 2008 (46.2% for male and 47.3% for female) significant improvement has also been made as well (Fig. 3-12).



**Figure 3-11 Historical second-hand smoke exposure at school among junior and senior/vocational high school students**

1. Source: "Global Youth Tobacco Survey", Bureau of Health Promotion
2. Exposure to second-hand smoke in school was defined as seeing someone smoke on campus within the past week
3. No data for secondhand smoke exposure in schools available from 2004 and 2005



**Figure 3-12 Historical second-hand smoke exposure at home among junior and senior/vocational high school students**

1. Source: "Global Youth Tobacco Survey", Bureau of Health Promotion
2. Exposure to secondhand smoke at home was defined as seeing someone smoke at home within the past week

## University Student, Faculty and Staff Smoking Behavior Survey

To learn more about smoking behavior of local university/college students and school personnel to provide a reference for policy-making by central and local health authorities, the University Student, Faculty and Staff Smoking Behavior Survey was conducted in 2010. The survey looked at 1st and 3rd year full-time undergraduate students at universities and colleges in Taiwan (excluding military and police academies, in-service classes and departments established less than three years ago) as well as currently-serving school personnel. Universities/colleges in Taiwan were divided into four categories: public, private, general and technical/vocational. PPS sampling was used to select 10 schools for the survey. A total of 5,403 students and 1,200 school personnel were surveyed.

### Smoking Prevalence among Students

The survey results found that 7.6% (6.5 ~ 8.6%) college students currently smoked. The smoking prevalence among males (12.7%) was significantly higher than for females (1.9%). If broken down into universities and technical/vocational colleges, smoking prevalence was 5.5% among undergraduates and 10.3% among college students. When classified by gender and university/college, female undergraduate students had the lowest smoking prevalence at around 1.4% followed by female college students at 2.6%. Among male undergraduate students smoking prevalence was 9.9% and among male college students it was 15.9% (Fig. 3-13).

### Student Exposure to Second-hand Smoke

Location of secondhand smoke exposure was divided into three categories: school (excluding dormitories), accommodation (including dormitories) and other. The results showed that greatest likelihood of secondhand smoke exposure was at "Other" with 67.7% students reporting exposure. This was higher than at school (57.6%) and in their accommodation (33.3%). Men's secondhand smoke exposure was also higher than women's. College students also had a higher chance of exposure to secondhand smoke (Fig. 3-14).

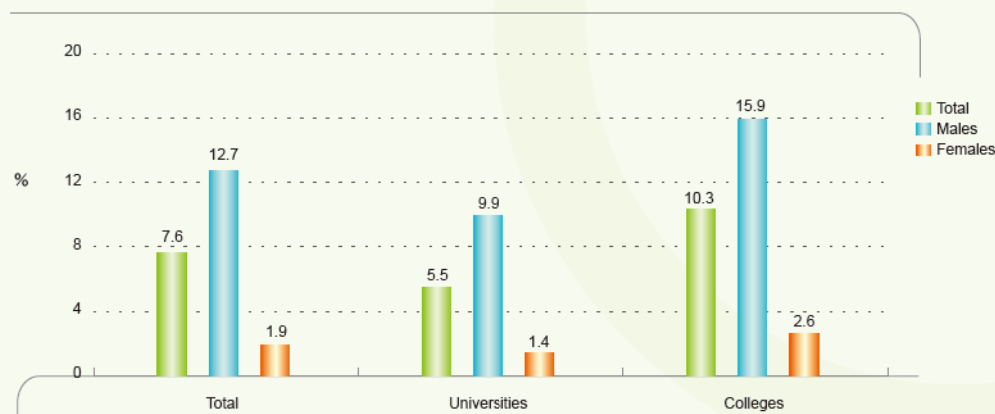
### Student Smoking Cessation Experience

The survey found that up to 70.6% of smokers had attempted to quit smoking within the past year. The ratio was approximately the same for both males and females.

### Smoking Prevalence among Faculty and Staff

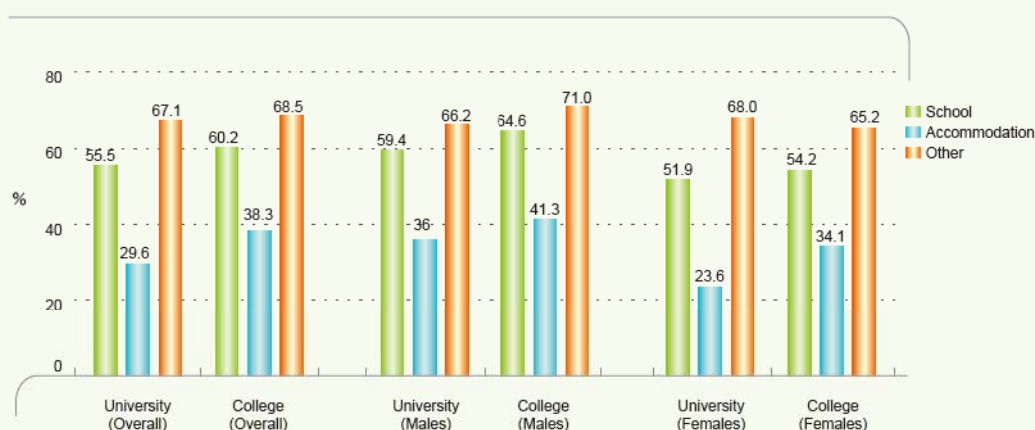
The survey results showed that 10.1% of faculty and staff members currently smoked. Males (16.8%) were significantly more likely than females (1.5%) to smoke. There was no difference in smoking prevalence between faculty and staff (1.5% and 1.6% respectively) but among males, prevalence among staff (24.3%) was significantly higher than the faculty (12.4%). A comparison of universities and technical colleges showed that male university faculty & staff had a higher smoking prevalence (19.9%) than college faculty & staff (13.0%) (Fig. 3-16).





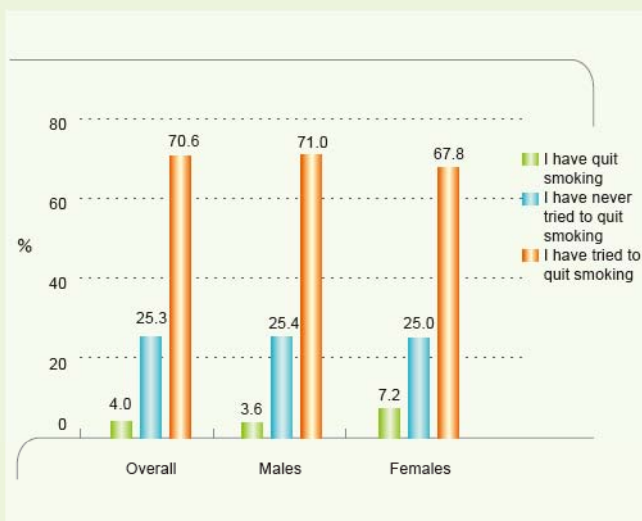
**Figure 3-13 Smoking prevalence among university/college students**

- Source: 2010 "University Student, Faculty and Staff Smoking Behavior Survey", Bureau of Health Promotion
- A smoker was defined as those that had smoked more than 100 cigarettes (5 packs) and had smoked in the past 30 days



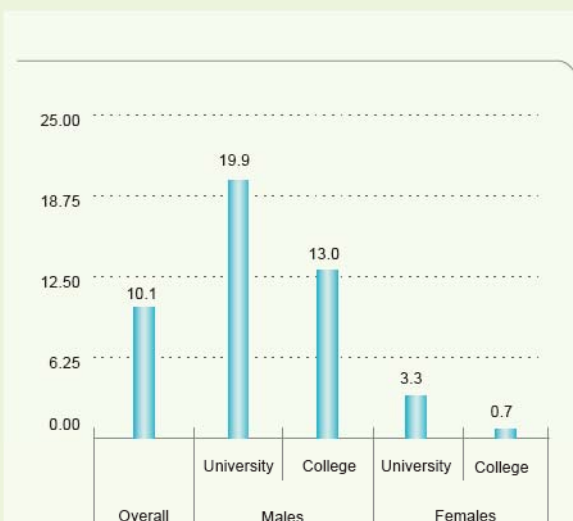
**Figure 3-14 Second-hand smoke exposure among university/college students**

- Source: 2010 "University Student, Faculty and Staff Smoking Behavior Survey", Bureau of Health Promotion
- Second-hand smoke exposure was defined as having being exposed to secondhand smoke within the past 7 days



**Figure 3-15 Smoking cessation attempts among university/college students**

- Source: 2010 "University Student, Faculty and Staff Smoking Behavior Survey", Bureau of Health Promotion
- Smoking cessation was defined as having attempted to quit smoking within the past year

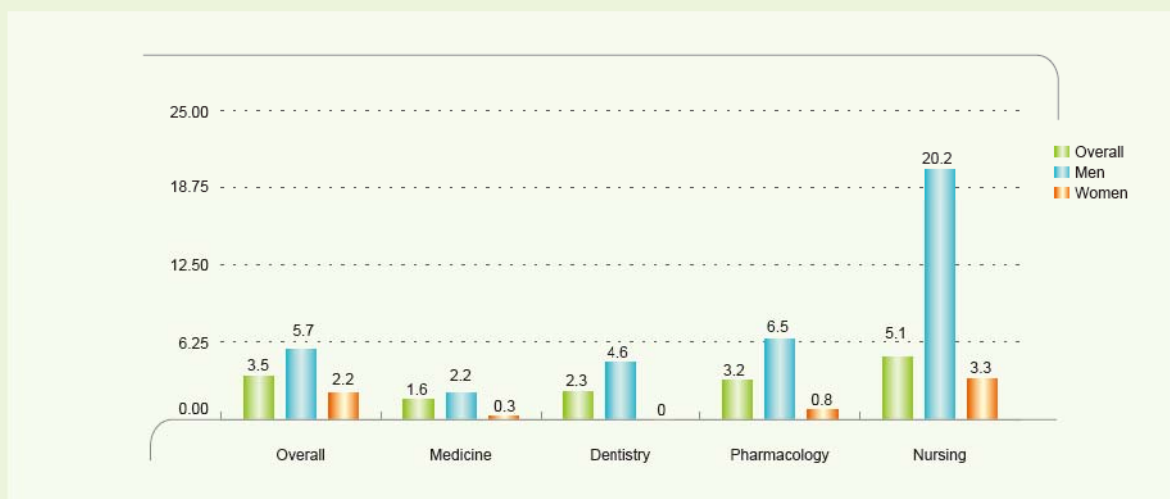


**Figure 3-16 Smoking prevalence among university/college faculty and staff**

- Source: 2010 "University Student, Faculty and Staff Smoking Behavior Survey", Bureau of Health Promotion
- Current smoker was defined as those that smoked within the past 7 days

### National Medical Student Smoking Behavior Survey

In 2009 the Bureau of Health Promotion surveyed 3rd year students from 10 public/private medical schools, 6 dentistry schools, 10 nursing schools and 6 pharmaceutical schools. The total effective sample was 90% (3170 out of 3544 people) on their smoking-related knowledge, attitudes and behavior. The survey results found that smoking prevalence among medical students was 3.5% (5.7% for Males, 2.2% for Females; a ratio of 3 to 1) (Fig. 3-17), a relatively low figure compared to medical students in neighboring countries. Over 30% of medical students were not shown about the Hazards of secondhand smoking, with nursing students being particularly lax in this area. Only 10% of future doctors (medical students) had undergone smoking cessation training and less than 50% said they would actively advise patients to quit smoking. There is room for improvement to students' knowledge and attitude towards smoking cessation. Generally speaking, while the smoking prevalence was relatively low among medical students, medical schools should still reinforce their students' professional knowledge and training in Tobacco Hazards and smoking cessation so they can contribute more to tobacco control efforts.



**Figure 3-17 Comparison of smoking prevalence among medical students**

1. Source: "National Medical Student Smoking Behavior Survey", Bureau of Health Promotion
2. A smoker was defined as those that had smoked more than 100 cigarettes (5 packs) and had smoked in the past 30 days

## Tobacco Information Monitoring

The new Tobacco Hazards Prevention Act regulations in 2009 imposed strict bans on tobacco promotions and advertising. Research found that while PR sponsorship activities were suspended during the year, smoking still appeared in cartoons. Tobacco product placement had also changed from direct, overt advertising to indirect, covert marketing messages. Long-term media monitoring of tobacco information as well as promotion of media literacy are needed to help support the promotion of tobacco control.

In 2010, experts and scholars were commissioned to monitor tobacco information conveyed in TV programs and film. During the 5-month project (from May to October 2010), the monitoring effort covered a total of 102 films (including Chinese and foreign language films shown in theaters, DVDs and TV), 92 TV programs (including the top five AGB Nielsen-rated drama, cartoon, variety, recreation/music and sports programs from the first week of each month) and 327 hours of TV news content (including 9 cable and non-cable TV evening news programs between 19:00 ~ 21:00).

Investigation results indicated that about 30 percent of films showed images of tobacco products or people smoking. Chinese-language films also had a higher frequency of tobacco exposure compared to foreign language films over the past 3 years (2008 ~ 2010). In 2010, for example, 17 Chinese language films were analyzed, 7 of which had at least one reference to tobacco products, with an average of 32.00 references per film. In contrast, the average number of references among foreign language films was 29.54. Generally speaking, tobacco references in foreign-language films have increased over the years (from 15.34 references in 2008 and 23.48 references in 2009 to 29.54 references in 2010) (Table 3-1). It is also worth nothing that the Golden Horse-winning movie *Monga* had the highest frequency of tobacco references of any film this year (120 references). There was on average a tobacco reference every minute.



▲ 2010 press conference on the results of tobacco information monitoring for TV and film

**Table 3-1 Comparison of tobacco references in Chinese and foreign-language films, 2008 ~ 2010**

Item	2008				2009				2010			
	Sample Size	Film with Tobacco	No. of Tobacco	Average No. of Tobacco	Sample Size	Film with Tobacco	No. of Tobacco	Average No. of Tobacco	Sample Size	Film with Tobacco	No. of Tobacco	Average No. of Tobacco
Chinese-language film	17	15	512	34.13	14	13	511	39.31	17	7	224	32.00
Foreign-language film	63	32	491	15.34	90	50	1,174	23.48	85	24	709	29.54

Source: 2010 results of tobacco information monitoring for TV and film



















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▲ Smoke-free sticker and smoking cessation pamphlet

year plan.

Mongolia Cooperation Project. The Cambodia Project  
ng a smoke-free work environment, hosting the Quit  
es. In Mongolia, the emphasis is on working with the  
tor on promoting a smoke-free work environment and

Tobacco Hazards awareness. A summary of key accomplishments is provided below:

### 1.Assisting Cambodia with promoting tobacco control

- (1)Promoting tobacco control policy and legislation: Worked with regional organizations and local civic organizations to provide technical support and promote tobacco control legislation; activities include the hosting of meetings, lobbying as well as the development of policy-related lobbying documents and proposals.



▲ Provincial seminar

(2)Creation of smoke-free environments: Began promoting a smoke-free policy in 10 provinces in collaboration with the Cambodian Ministry of Interior. Examples include the design and distribution of anti-smoking teaching and promotional materials, organizing provincial seminars, helping smokers with quitting, as well as carrying out monitoring after seminars and generating recommendations based on the monitoring results for the reference of provincial officials. An evaluation on the requirements for a smoke-free environment in the Kampong Chhnang Province was carried out and a partnership formed with the provincial health department to promote a smoke-free environment in the health department offices, public hospitals and one provincial high school. Training for smoking cessation counseling was also provided.

(3)Smoking cessation counselor training and services: Organized the Quit & Win campaign; hosted 25 quit smoking classes; hosted smoking cessation counseling workshop.

## **2.Assisting Mongolia with promoting tobacco control**

Assisted with printing promotional materials for a smoke-free environment including the design of smoke-free stickers suitable for different environments. No-smoking pamphlets were printed using the Six Z's in the Mongolian language for smoking cessation tips.





















