
Cycling, Active Society and Health Promotion: Experiences in Taiwan

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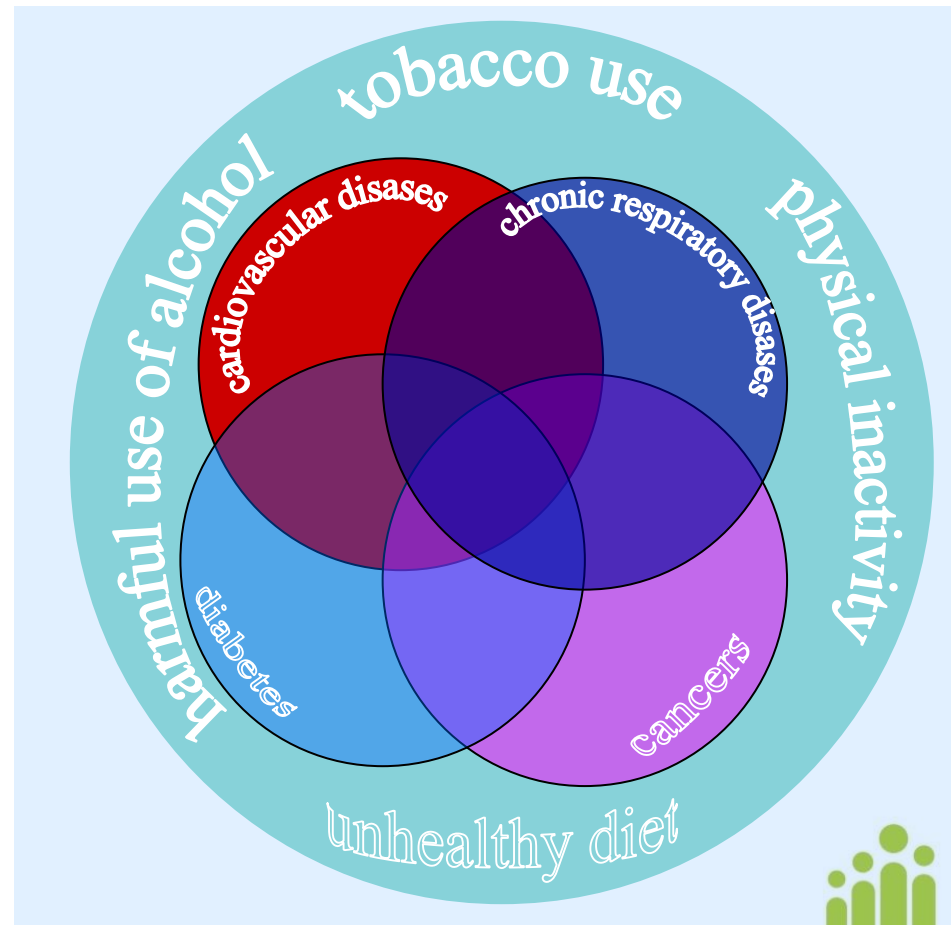
Outline

- Background
- Methods- the whole-of-society and health-in-all-policies approach in Taiwan
- Results
- Comments

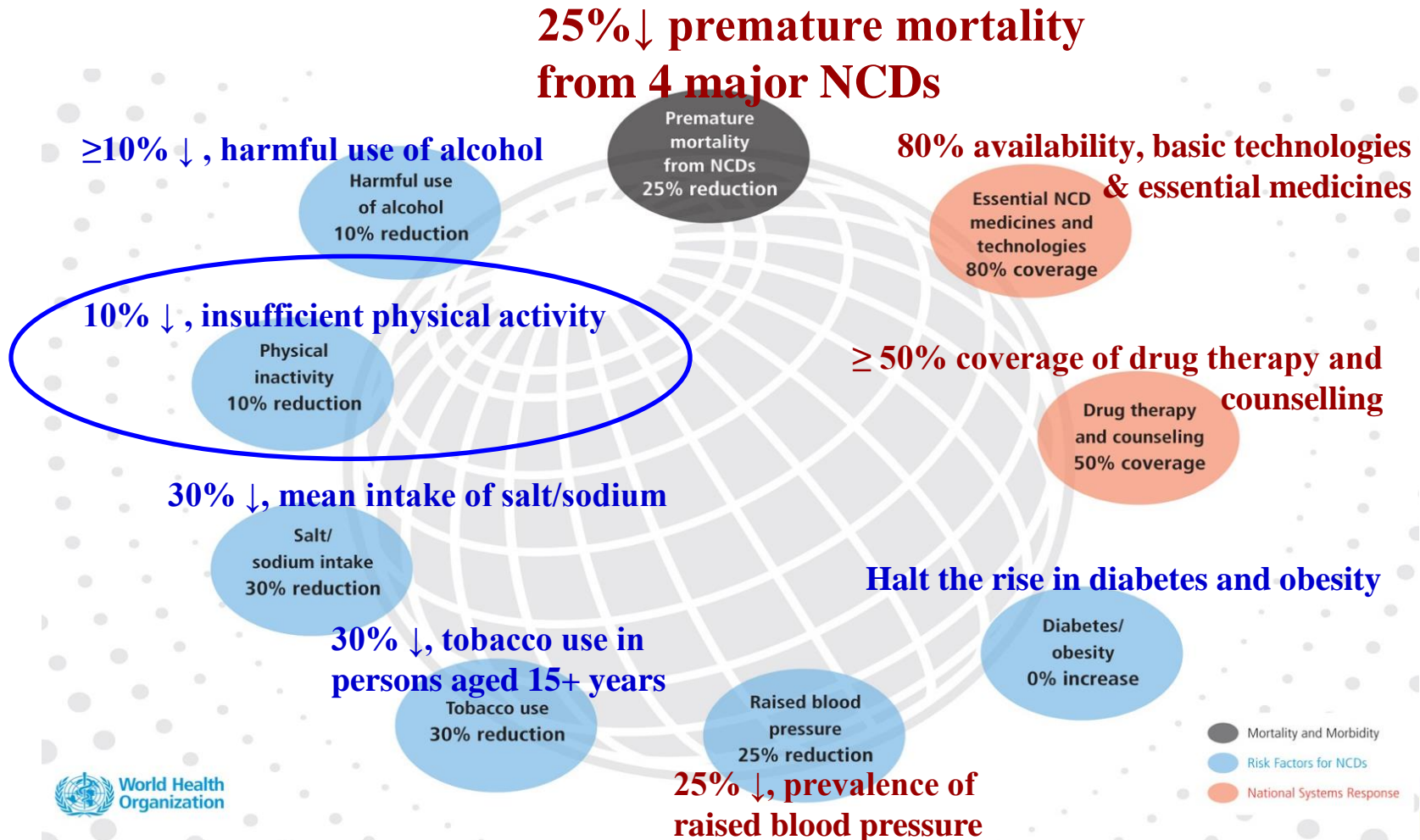
Background

2011 UN High Level Meeting on the Prevention and Control of Non-communicable Diseases

- NCDs caused **36 million** deaths (2/3 of total deaths) in 2008. **1/4** of these happened before the age of 60.
- **The 4 major risk factors-** **tobacco** use, harmful use of **alcohol**, unhealthy **diet** and **physical inactivity**.



Set of 9 voluntary global NCD targets for 2025 (WHA, 2013)



UN, Transforming our World- the 2030 Agenda for Sustainable Development

- On 25 September 2015, the 193 countries of the 70th Session of the UN General Assembly adopted **the 2030 Development Agenda** titled "Transforming our World"
- **17 goals, 169 targets.**



3 GOOD HEALTH & WELL-BEING

Ensure healthy lives and promote well-being for all at all ages



- 3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100000 livebirths
- 3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1000 livebirths and under-5 mortality to at least as low as 25 per 1000 livebirths
- 3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
- 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being**
- 3.5 Strengthen the prevention and treatment of **substance abuse**, including narcotic drug abuse and harmful use of **alcohol**
- 3.6 By 2020, halve the number of global deaths and injuries from **road traffic accidents**
- 3.7 By 2030, ensure universal access to **sexual and reproductive health-care services**, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
- 3.8 Achieve **universal health coverage**, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
- 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil **pollution** and contamination
- 3a Strengthen the implementation of the World Health Organization Framework Convention on **Tobacco Control** in all countries, as appropriate
- 3b Support the research and **development of vaccines and medicines** for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
- 3c Substantially increase **health financing** and the recruitment, development, training and retention of the health **workforce** in developing countries, especially in least developed countries and small island developing States
- 3d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

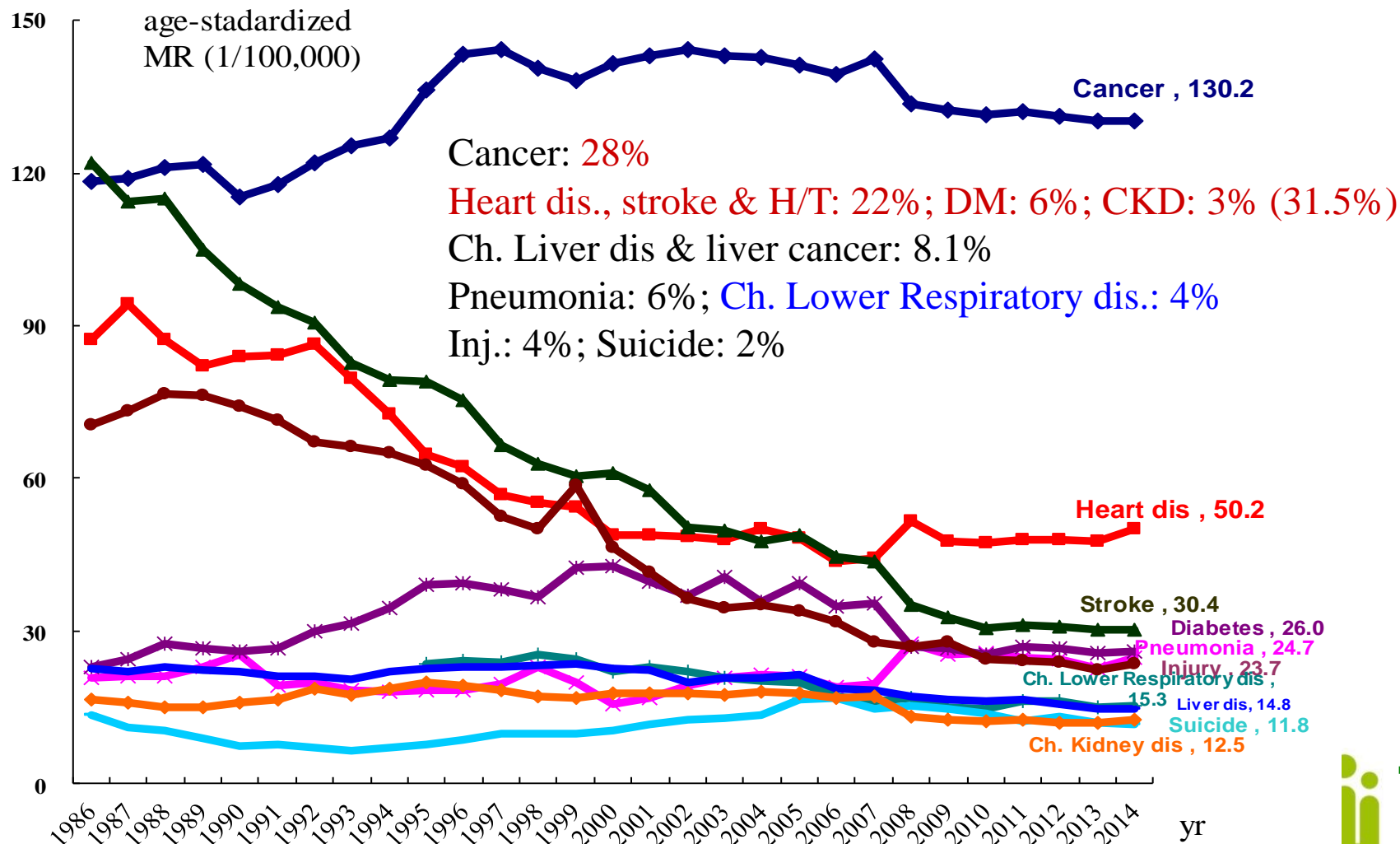
The effects of insufficient physical activity

- WHO has pointed out that insufficient physical activity or inactive lifestyle is one of the ten major causes of global deaths and disability. Over **200 million deaths** are attributed by inactive lifestyles.
- Around **60-85%** adults live an inactive lifestyle, and **2/3** children have insufficient physical activity globally.
- **About 21-25% of breast cancers and colorectal cancers, 27% of diabetes and 30% of ischemic heart diseases are caused by a lack of physical activity.**
- Inactive lifestyle also increases the risks of obesity, high blood pressure, osteoporosis, lipid disorders, depression, anxiety, etc.

Physical activity

- Holistic health promotion with
bio-
psycho-
social benefits

Trend of Top 10 Leading Causes of Death in Taiwan: 4 major NCDs account for 57.3% of deaths.



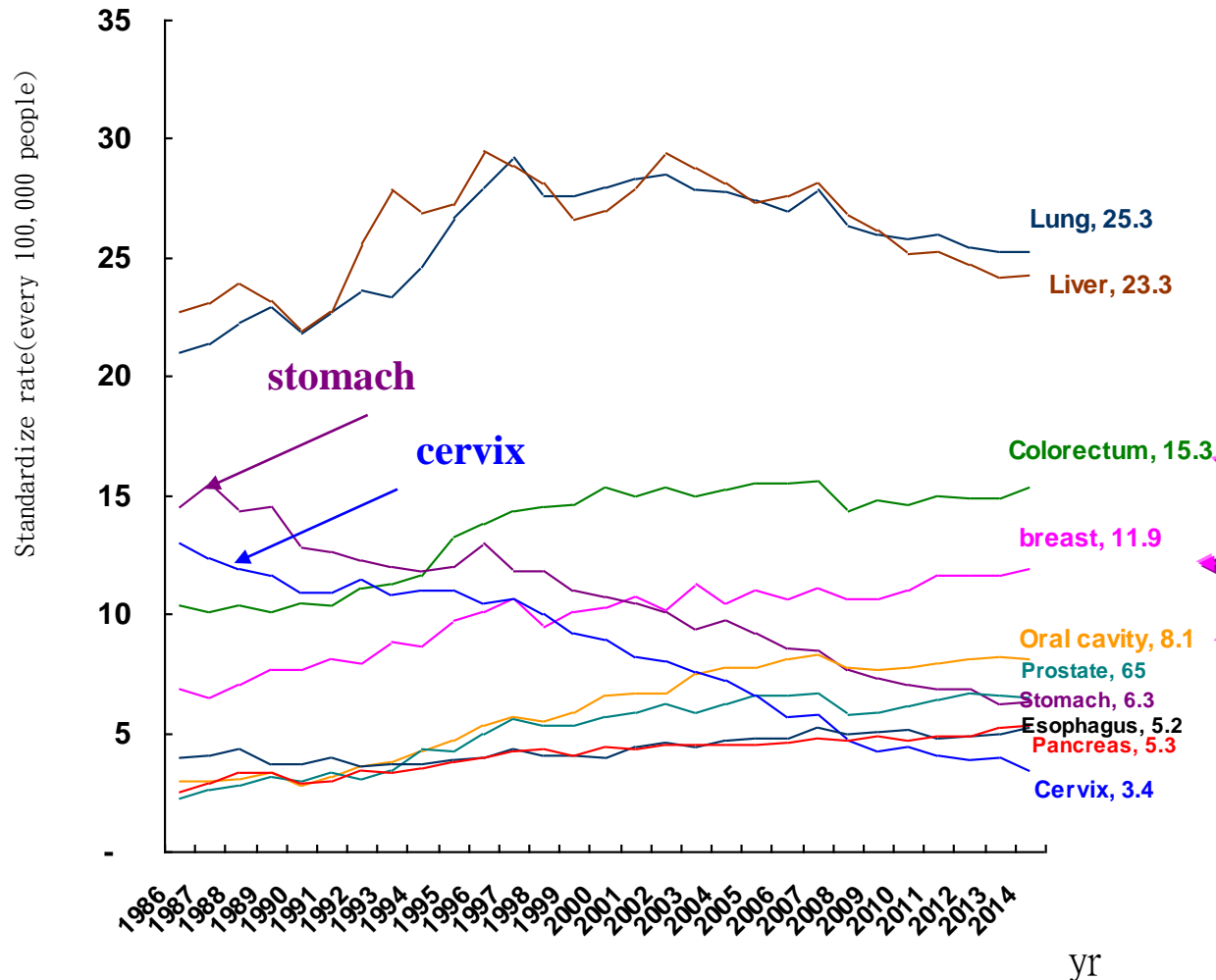
Source: 2014 Mortality Annual Report. Department of Statistics, Ministry of Health and Welfare

Note : 1. Based on W.H.O. 2000 World Standard Population.

2.Chronic lower respiratory disease mortality rates are available from 1995.



Major fatal cancers and their trends



Among the leading cancers,

• mortalities from **liver, stomach and cervix** are declining,

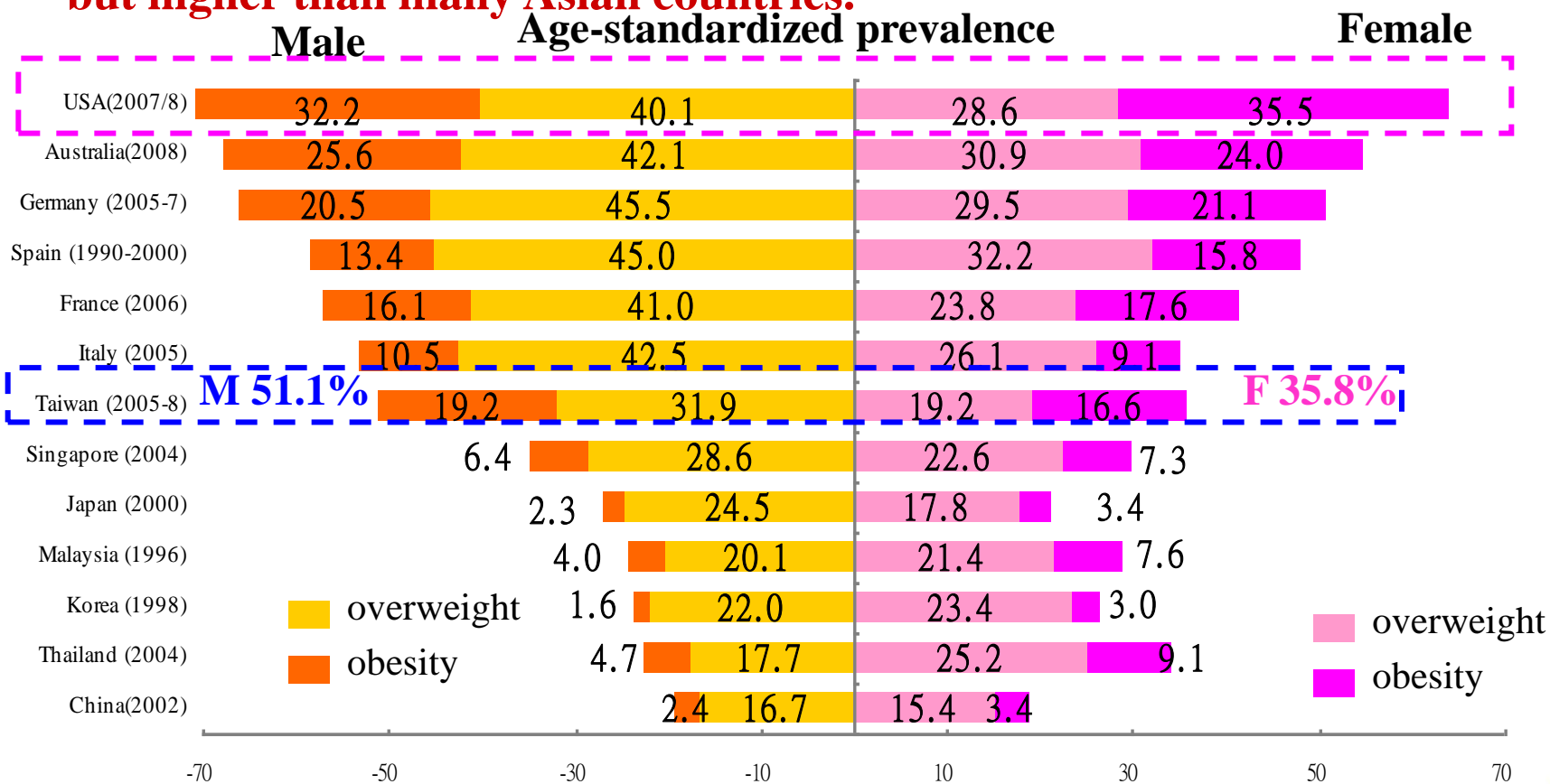
• MR from **colorectum, breast, oral cavity, and esophagus** are rising.

• The importance of **obesity, unhealthy diets and physical inactivity** has emerged.

source: 2014 Statistics of Major Causes of Death

Overweight and obesity in adults

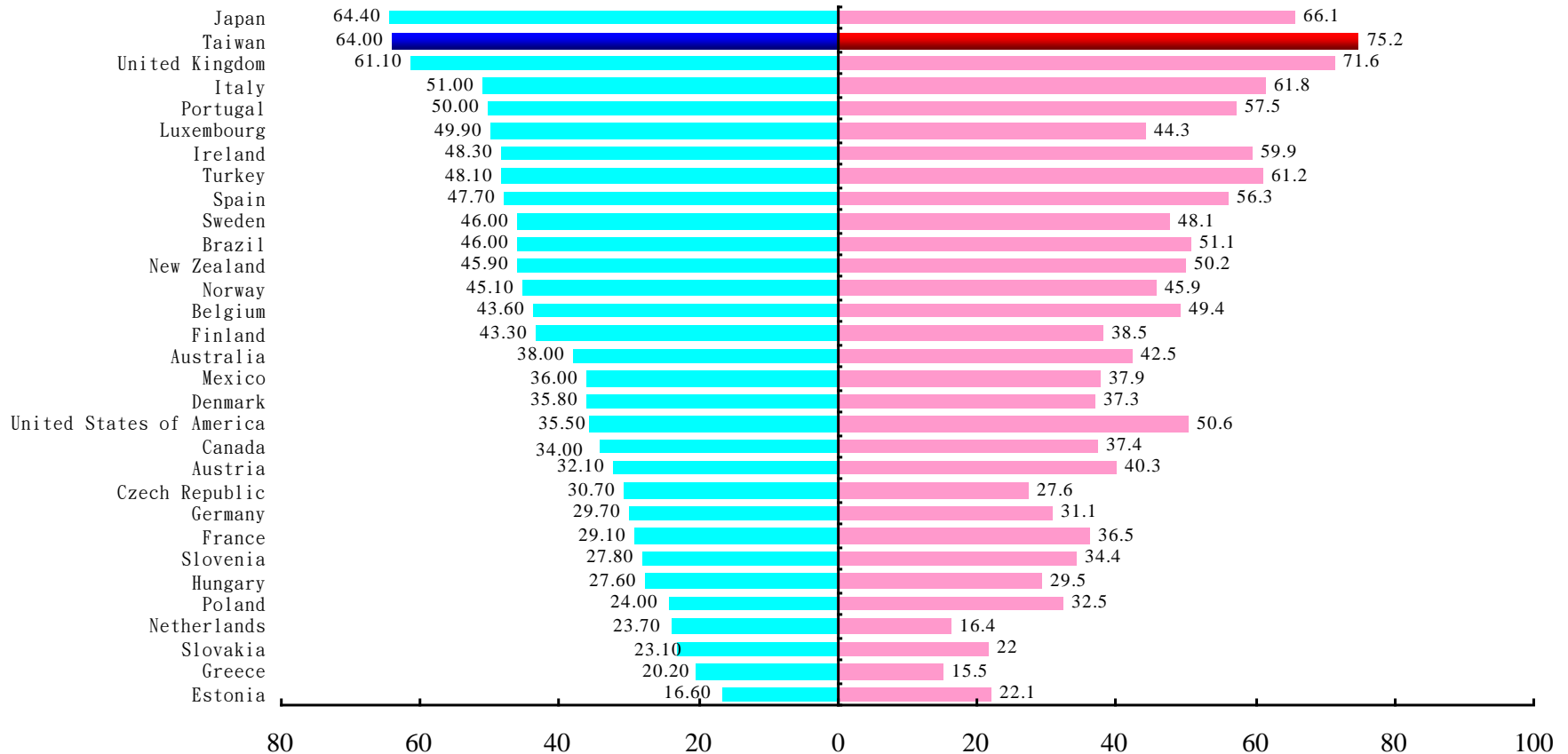
Our prevalence of overweight and obesity is lower than Western countries, but higher than many Asian countries.



Data sources: International Obesity Taskforce (IOTF)
 Europe: overweight: $25 \leq \text{BMI} < 30$; obesity: $\text{BMI} \geq 30$ (2008, 20+ years old)
 Asia: depends on each countries' standard
 Chinese Taipei: Nutrition and Health Survey in Taiwan (NAHSIT).
 overweight: $24 \leq \text{BMI} < 27$; obesity: $\text{BMI} \geq 27$ (2005-2008, 18+ years old)



Insufficient Physical Activity Rates, by Gender, Taiwan and the OECD Countries



Note :

- 1.Source: WHO 2011 country profile. Insufficient physical activity: defined as people aged 15 or above who are engaged in less than three times per week in less than 30 minutes of moderate activities, or less than 20 minutes of vigorous activities in the past week.
- 2.Source of Taiwan: 2012 Sports City Survey. Definition of percentage with insufficient physical activity: 100% - Regular physical activity rate (333 Regular physical activity is defined as people aged 13 or above performing activities at least 3 times per week, 30 minutes each time, the intensity of the activity resulting in heart rate reaching 130 bpm or above, sweating or shortness of breaths).
3. Countries without data: Chile, Iceland, Israel, South Korea, Switzerland.



Health-Related National Targets of Taiwan's Golden-Decade Mega-plan (2011-2020)

Indicators	Base, 2010	Target, 2020
Cancer mortality rate (1/100,000)	131.6	119.3 by 2016 (10%↓) 106.0 by 2020 (20%↓)
Adult smoking rate (%)	Adults: 19.8	Adults: 10 (50%↓)
Adult betel quid chewing rate (%)	Men 12%	Men: 6% (50%↓)
Adult physical activity (%)	Adults: 26%	Adults: 52% (2 folds ↑)
↓ of insufficient PA: from 74% to 48% (35%↓ by 2020 vs. 10%↓ by 2025 as global target)		
Healthy BMI (%)	Men: 46.4	Men : 48.7 (5% ↑)
	Women: 56.8	Women : 59.3 (5%↑)
	Boys: 59.5	Boys : 65.5 (10% ↑)
	Girls: 66.71	Girls : 73.4 (10% ↑)
Age-friendly City Initiative	1 among 22 cities and counties	All 22 by 2016 (100%) 22 cities/counties ¹⁴ participated in 2013

Golden-Decade Mega-plan

- Doubling the prevalence of adults doing regular exercise within ten years, from 26% in 2010 to **52% in 2020**.



Note :

- 1.Data Source: “2014 Sports City Survey” of Sports Administration, Ministry of Education, 2014.
- 2.Regular physical activity rule is defined by people aged 13 or above perform activities at least 3 times/week, 30 minutes each time, reaching 130 heart beats/min.



Personal benefits of cycling

- Health benefits, compared to other exercises,
 - Higher **energy** consumption than walking
 - More suitable than jogging to people with degenerative arthritis
- **Convenient** to build into daily lives as a transportation.
- Might be easier to control time
- More **affordable** (lower cost than cars, doesn't need fuel)

Societal benefits of promoting cycling

- Green **economy**: industry & tourism benefits
- **Environmental protection** benefits
 - Lower **energy consumption** (fossil fuel cost, cars- 2.885 NTD/km, motorcycles- 0.776 NTD/km)
 - Reduces **greenhouse gas emission** (eg. NO_x, SO_x , CO₂ etc.) **& carbon footprint**
 - Reduces costs of **road maintenances**

Cycling can also contribute to other UN Sustainable Development Goals

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



9. Build **resilient infrastructure**, promote inclusive and **sustainable industrialization** and foster **innovation**

11 SUSTAINABLE CITIES AND COMMUNITIES



11. Make **cities and human settlements** inclusive, safe, resilient and **sustainable**

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



12. Ensure **sustainable consumption** and production **patterns**

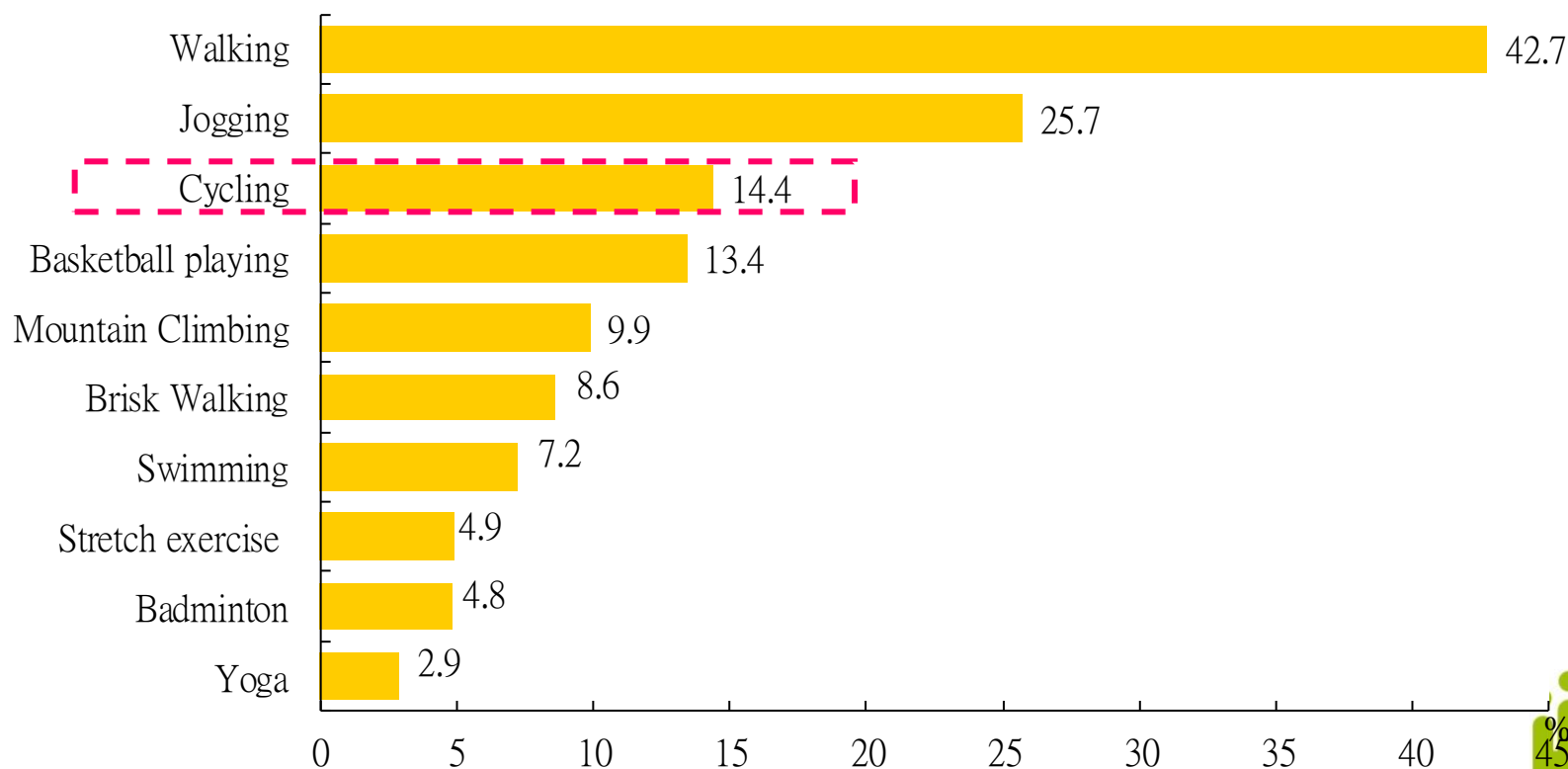
13 CLIMATE ACTION



13. Take urgent action **to combat climate change** and its impacts

Popular exercises among Taiwanese

- Cycling is the 3rd most popular exercise in Taiwan.



註：

資料來源為103年教育部體育署「運動城市調查」。

Barriers to promotion of cycling

- Popular use of motorcycles;
- Low gasoline price
- Low taxi price
- Inadequate awareness
- Inadequate infrastructure

Methods-
the whole-of-society and health-in-all-
policies approach in Taiwan

The whole-of-society and health-in-all-policies approach

- Not just a matter of transportation;
- We worked in collaboration with local governments, academia, media, civil society and industries to develop
 1. healthy **policies**,
 2. supportive **environments** and
 3. social **mobilization**at different levels and types of settings where people **live, work** and **learn**.

1. Healthy policies

- The President declared the importance of developing **environments** conducive to the promotion of cycling and related industries
 - Cycling path connection project
 - Legislation on road safety
 - Legislation to support sport and sport-related industries



Taiwan-wide Cycling Path Network

- Construction:
- By:
the Sports Administration,
Ministry of Transportation and
Communication,
CPAMI (營建署), and
local governments
- The cycling path connection
project was initiated in
2012, and completed in
2015.



全台自行車環島路網將於年底建置完成，將配合台鐵、高鐵轉運站規畫86處補給站，建立友善自行車環境。(photo by 交通部運輸研究所)

Ministry of Transportation and Communication

- Regulation for Cycling Transportation and Road Safety
- Website that provides information on cycling routes and sightseeing spots

環騎圓夢9+2日行

Day1 → Day2 → Day3 → Day4 → Day5 → Day6 → Day7 → Day8 → Day9

景點 餐廳 住宿 活動 加油站
自行車租借 便利商店 醫療院所
台鐵轉運站

認證補給站 沿線影片

Day1 路線

利用臺北市區道路及河濱自行車道→大漢溪河濱→台3線→台4→台3乙→高原路、南坑道路→新龍路→縣道115→縣道118→台1線(新竹市)

騎乘距離約 95 公里

環騎圓夢9+2日行



請選擇出發地

請選擇



資料來源:環騎圓夢網站

<http://itaiwanbike.iot.gov.tw/>

Website information



教育部體育署-臺灣i運動資訊平台
台各縣市運動地圖網



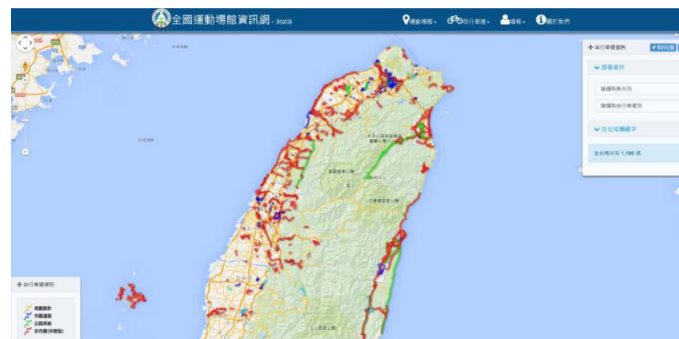
教育部體育署-自行車道網站



交通部觀光局-臺灣騎跡



縣市運動地圖-新北市運動達人



教育部體育署
-全國運動場館資訊網-自行車道地圖

註：

資料來源

1. 教育部體育署 臺灣i運動資訊平台 <http://isports.sa.gov.tw/Home.php>
2. 教育部體育署 自行車道地圖 <http://www.sa.gov.tw/wSite/lp?ctNode=468&mp=11>
3. 交通部觀光局臺灣騎跡 <http://taiwanbike.tw/>
4. 新北市運動達人 <http://www.sportmaps.ntpc.edu.tw/>
5. 教育部體育署全國運動場館資訊網 <http://iplay.sa.gov.tw/>

Environmental Protection Administration

- Part of President Ma's environment policies – **green and low carbon transportation**
- Green transportation include walking, cycling, bus, rapid transit, train and high speed rail
- **National Cycling route GIS system** integrated information over 4,300km of cycling routes in Taiwan



National Police Agency

- Anti-theft tags for bicycles
- Bike Service Station provided by police stations – services such as water replenishment, resting and emergency repair



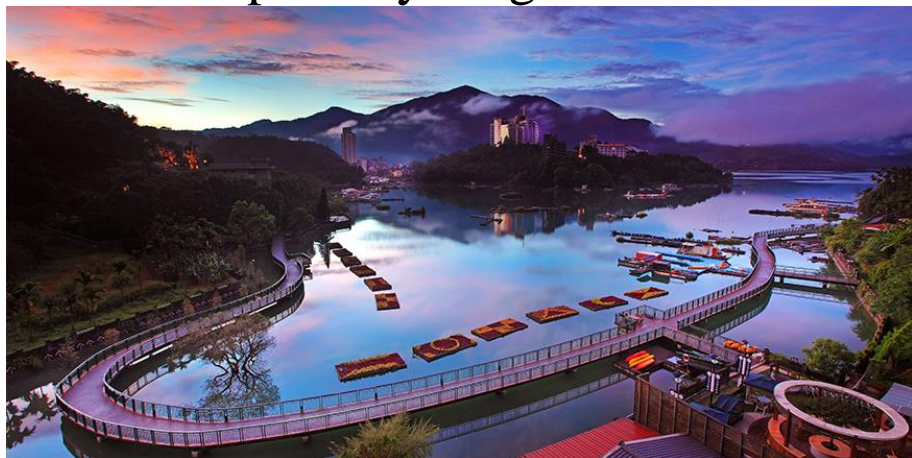
~ 旅人 TRAVELING ~
<http://umechen.poxnet.net>

Sports related legislations

- Ministry of Education,
- Sports related legislations
 - National Sports Act
 - Sports Lottery Issuance Act
 - Sports Industry Development Regulation
 - School Health Act
- Top 10 Cycling Routes in



Taitung County



Sun Moon Lake



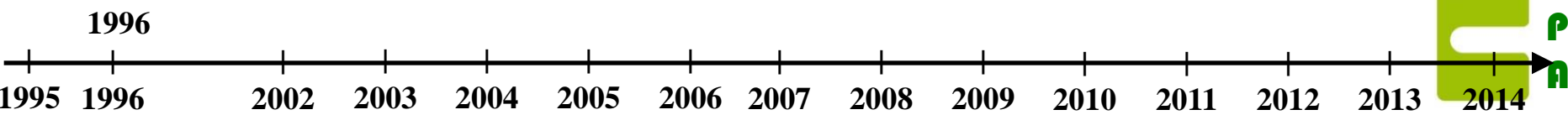
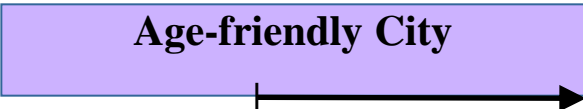
Taipei City Riverside

2. Supportive environments

- “5A’s” strategies to make healthier choices easier
 - Available: vehicles & paths,
 - Accessible: built into the bigger transportation and tourism system,
 - Affordable: at low price,
 - Adorable: a preferred choice, and
 - Adoptable: make it a daily activity.



Setting-Based Health Promotion



Cycling paths & signals in Cities and Counties



Walk path and cycling path in Taipei



Taipei City Cycling Path



Ride bike with MRT in Taipei



Cycling signal

Cycling all the way to scenery spots



Keelung City



Pingtung County



Taitung County



Penghu County

Cycling app, map, & information



Cycling map and street view in Kaohsiung City



Bicycle App, Kaohsiung City



Cycling information in Yilan County



Cycling map in Yilan County

Make it simple and accessible



Simplified U-bike member application



Unified bike renting service **between Taipei and New Taipei City**



Bike renting in Kaohsiung



Pbike renting in Pingtung County

3. Social mobilization

- Politicians led by example
- Nationwide promotion of weight-management campaign
- National promotion of physical activity as a health-promoting symbol for people and for patients



Politicians led by example



Taipei City



Taichung City



Coming-of-Age Bike Event in Hsinchu



Taichung City

Cycling in national promotion of physical activity



健康生活動起來-身體活動小冊



健康生活動起來手冊

中等費力身體活動

- 快走
- 普通速度騎自行車
- 舞蹈 (不含慢舞)
- 健康操
- 洗車
- 整理庭院
- 登山健行
- 網球雙打
- 拖地

費力身體活動

- 跑步
- 上樓梯
- 有氧舞蹈
- 快速持續游泳
- 網球單打
- 球類運動 (不含保齡球)
- 鏟土
- 搬 10 公斤以上重物
- 登山爬坡
- 快速騎自行車

(註: 此身體活動程度的建議項目僅供參考, 實際身體活動程度應視自身是否能正常說話為判斷標準。)

衛生福利部國民健康署 15

身體活動建議

運動項目	體重	消耗熱量 (大卡/公斤體重/小時)	運動30分鐘所消耗的熱量 單位: 大卡			
			40公斤	50公斤	60公斤	70公斤
騎腳踏車						
騎腳踏車(一般速度, 10公里/小時)		4	80	100	120	140
騎腳踏車(快, 20公里/小時)		8.4	168	210	252	294
騎腳踏車(很快, 30公里/小時)		12.6	252	315	378	441

自行車熱量消耗

600 Tons weight loss campaign- It's happening everywhere! Have you joined?



■ The CEO of TSMC in annual company sporting events



Community folk-dance groups



community post-partum mothers support groups



HP workplaces



Basket ball groups of a company



Healthcare system as role models

- St. Martin de Porres Hospital in Chia Yi outreach to community



- Weight loss program in DOH Keelung hospital



- Pins with “On diet, don’t feed me!” texts and BMI calculator in Kaohsiung Municipal United Hospital



Active transportation- BBMW

Decoration of stairway and reminding
in front of elevators



■ pedestrian spaces



BBMW:
New Brand of transportation:
B-bus
B-bike
M-metro
W-walk



Hospitals Promote Green Transportations

In order to reduce greenhouse gas emission from vehicles, and to increase staff and citizens' physical activity, the strategies hospitals taken to promote cycling are:

- Plan outdoor cycling paths and offer free bike rental services
- Set up MRT bike stops within hospital area
- Organize staff cycling events



Dalin Tzu Chi Hospital offers free bikes for staff

Kaohsiung Municipal Hsiaokang Hospital sets up MRT bike stops within hospital area for the conveniences of hospital comers.

Fangliao General Hospitals organize cycling events for staff.

Cycling & weight loss



Calorie labeling on Taichung City's cycling path



Calorie labeling on Taitung County's cycling path



Cycling information in Yilan County



Calorie labeling on Taitung County's cycling path

And the winner is...

“Honor” as the reward

- “1 kg rice in exchange of 1 kg weight loss”



Lottery for participants with “health” as the reward



Bicycles are widely used as a healthy gift or reward in lottery and contests

健康臺北動起來 享瘦幸福跟著來

腰圍不超過女31吋(80公分)男35吋(90公分) 遠離代謝症候群

報名資格

- ▶ 年滿6歲~64歲以下
- ▶ 體位：18~64歲成人BMI $\geq 20\text{Kg}/\text{m}^2$ 者及6~17歲兒童及青少年依照行政院衛生署兒童及青少年體位標準屬於過重或肥胖者

獎勵內容

個人參加獎：

自即日起至102年6月30日前報名，可分別參加4月、7月抽獎活動（共計50位幸運得主）

獎品	名額
商品提貨券 10,000元	1
商品提貨券 3,000元	5
商品提貨券 2,000元	6
商品提貨券 1,000元	8
16吋摺疊自行車	5




臺北市府衛生局
Department of Health, Taipei City Government

100000000 臺北市政府衛生局
（聯絡電話：02-27208888）

105年 嘉市大減噸 摸彩活動

早報名快減重，送百禮

為鼓勵民衆自主健康體重管理，強化健康飲食及健康運動等減重動機，藉由越早報名或越早成功瘦身者，中獎機率越大之方式辦理本活動。

摸彩辦法

摸彩及兌獎時間
105年4月1日、7月1日、10月3日於嘉義市政府衛生局辦理公開摸彩（現場錄影），中獎名單公布於本局網站(<http://www.cicbh.gov.tw/>)，並寄送公文通知中獎人，請於105年10月31日前完成兌獎，逾期不受理。

摸彩品 每季摸彩獎品如下

105/4/1 剔除摸彩券 留至7月續抽

報名早鳥獎

- 腳踏車 1名
- 運動禮券3,000元 3名
- 耐熱餐盤 10名
- 玻璃保鮮盒(含保冷袋) 20名
- 跳繩 60名
- 多功能開瓶器 70名
- 潔牙旅行組 100名

105/7/1 剔除摸彩券 留至10月續抽

健康管理獎

- 腳踏車 2名
- 運動禮券3,000元 4名
- 溫熱揉捏按摩器 1名
- 手腕式電子血壓計 1名
- 耐熱餐盤 3名
- 玻璃冷水壺 40名
- 玻璃保鮮盒(含保冷袋) 40名

105/10/3 剔除摸彩券 留至10月續抽

成功打肪獎

- 腳踏車 2名
- 運動禮券3,000元 2名
- 玻璃保鮮盒(含保冷袋) 40名
- 加碼獎



摸彩券發放規則

- 1.符合報名資格者，於活動期內參加即獲1張摸彩券；若BMI ≥ 27 者，加獲1張摸彩券。
- 2.於活動期內減重1公斤，即獲1張摸彩券（初次體重及最終體重測量需間隔至少1個月以上）。

指導單位：衛生福利部國民健康署、嘉義市政府
主辦單位：嘉義市政府衛生局
協辦單位：嘉義市東區衛生所、嘉義市西區衛生所、天主教聖馬爾定醫院、國立嘉義醫院、嘉義基督教醫院、臺中崇德醫院分院、陽明醫院、遠東醫院、安心醫院、陳仁濟醫院、陽明護理之家、聖馬爾定附設護理之家、蘭潭家福護理之家、仁德護理之家、延松護理之家、保康長期照顧中心、忠孝護理之家、私立嘉義仁愛之家、嘉樂附設護理之家、瑞孝長期照顧中心

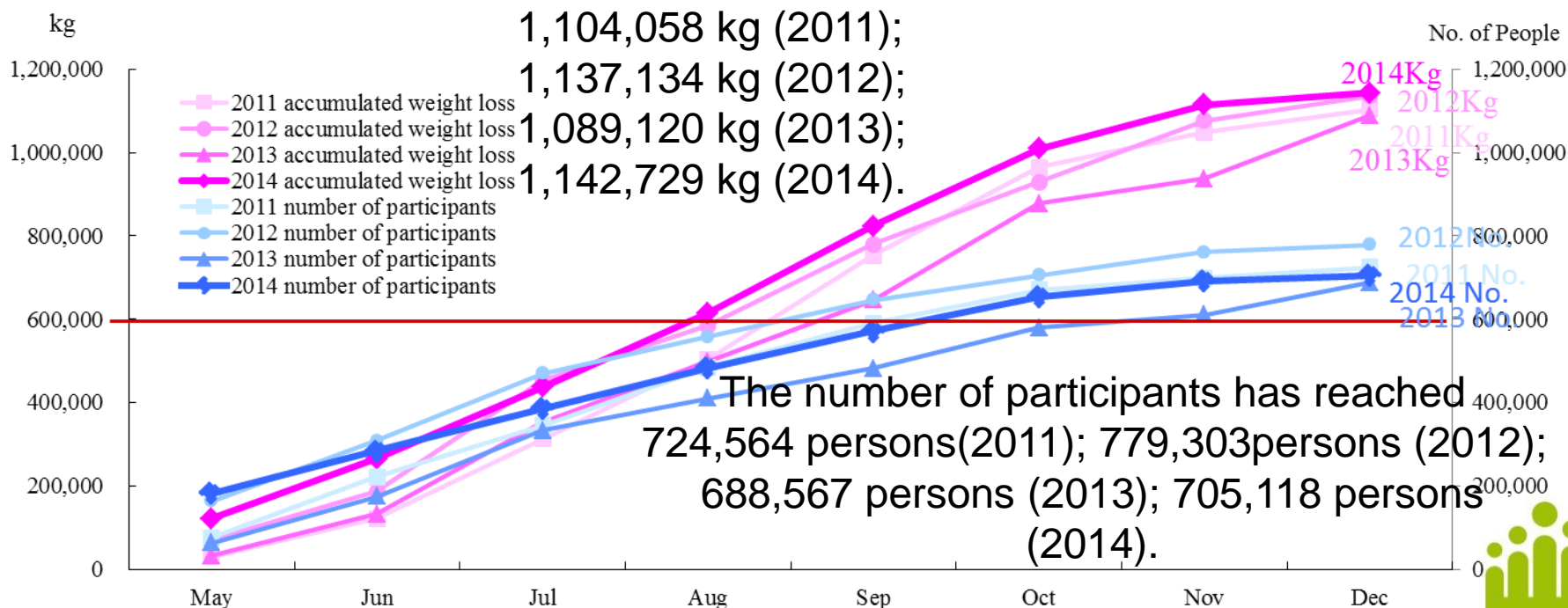
嘉義市政府衛生局 邀您一起享瘦

廣告經費由國健署撥款

The Impact on Health

Progress of Campaign 2011-2014

- Anyone aged 6 to 64 who was overweight or had excessive body fat levels could form a team and join this weight management campaign.
- The target of weight loss has been achieved 1,104,058 kilograms(2011); 1,137,134 kilograms(2012); 1,089,120 kilograms (2013); 1,142,729 kilograms (2014).
- And each participant lost an average of **1.5** kilograms.



Aug. 27th, 2014 - 600 tons weightloss achieved

Oct. 8th, 2014 - 600,000 achieved total participants

Nov. 28th, 2014 - 22 cities/counties have achieved the goals set by HPA



A health-promoting symbol for people and for patients

Long-distance cycling & active aging



“Love Moves Us Forward” , the third time, brings the aged cycling around Taiwan 100 k.m. to realize the ideal of active aging. Dec.25th ,2015

Taiwanese Anti-Cancer Association



The cycling trip, titled “Unbeatable rider, 1,000km challenge,” is held each year to encourage cancer patients to exercise more often, and the will to go ahead in fulfilling their dreams, as well as to fight cancer bravely.

Bicycle Events by Civil Groups

Ching Guang Cultural & Educational Foundation



“2014 Happy Deer Journey, Thousands Bike Riding, Anti-smoking Anti-drug propaganda” campaign - August 24, 2014

Ching Guang Cultural & Educational Foundation



“2013 Energy Saving, Carbon Reduction, and Love Our Earth, Healthy Bike Riding for Anti-smoking Anti-drug propaganda” campaign - October 6, 2013

這樣騎鐵馬，安全又時尚



文 / 邱淑嫻

騎自行車是國人第三大喜好的運動項目，其實，騎自行車時機，不限於休閒或運動，它更是復古又時尚的交通工具，不論是上下班、上下學、購物，都是環保又健身、男女老少皆宜的「動態交通」(active transportation) 與綠色交通方式。

在全球抗暖化行動中，騎自行車節能減碳、省油錢、不污染環境；而在全球抗老化的健康風潮中，更因為交通是日常生活必要的一環，把交通與運動結合，有利於養成習慣，再也不能拿「沒時間」做藉口，難怪先進國家要積極將自行車納入交通系統規劃中。

騎自行車不僅與其他運動一樣，可以增進心肺耐力，預防或改善慢性病，包括心血管疾病、糖尿病、高血壓、肥胖、大腸癌與乳癌、憂鬱症、失智症等風險，延長壽命並提高生活品質，而且，它的強度比走路高；對於想控制體重或增強心肺功能的人而言，也能消耗更高熱量、達到更佳效果，能增強腿部與背部肌肉強度；與跑步相比，則是對於下肢關節的體重負荷輕得多，比慢跑更適合退化性關節炎患者。

避險，先從自己做起

讓兒童從小騎自行車上下學或休閒，可增加戶

外活動時間，預防近視、肥胖，並養成運動習慣、增加自信。

自行車好處多多，但也有風險。一是空氣汙染，二是道路事故。改善這兩者最有效的方法，是增加使用自行車的人數以及建構友善的自行車系統，所以，政府角色很重要。然而，個人也必須採取一些有效的避險措施，才能安全健康的享受騎乘樂趣：

一、基本檢查：應檢查自行車之煞車握把開合是否正常運作，手把、踏板、鏈條無異常鬆動、座墊高度是否合宜、輪胎胎面花紋是否完整，紋溝深度是否足夠及胎壓是否正常。

二、保持人車被看見、聽見的配備：鈴號、前燈、車尾燈、反光板，穿戴螢光衣物，可以提醒其他各類用路者注意，並增加夜間能見度，是國人常忽略，但非常重要的防護配備。

三、配戴安全帽：雖沒立法要求，但非常重要！

四、不要因車擠而太靠近路邊。路邊危險障礙多，又不易被看見。

五、要做任何動作時（例如起動、轉彎、停止），要看著用路者、注意後方來車，讓用路者看得出來你的意圖；可以比手勢顯示右轉或左轉。

六、遵守交通號誌及規則。

七、經過停下的車子時要與其車門保持寬距，避免其突然開門。

八、避免騎於卡車或公車等大型車輛旁。

九、避免與其他腳踏車並騎或緊接。

十、勿使用耳機、手機。

十一、選擇車輛較不擁擠的時段，或避開塞車路線，可以減少空氣汙染暴露。☑

(作者為國健署署長，家庭醫學專科醫師、流行病學博士)

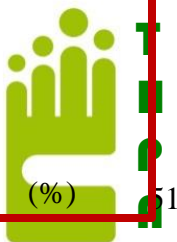
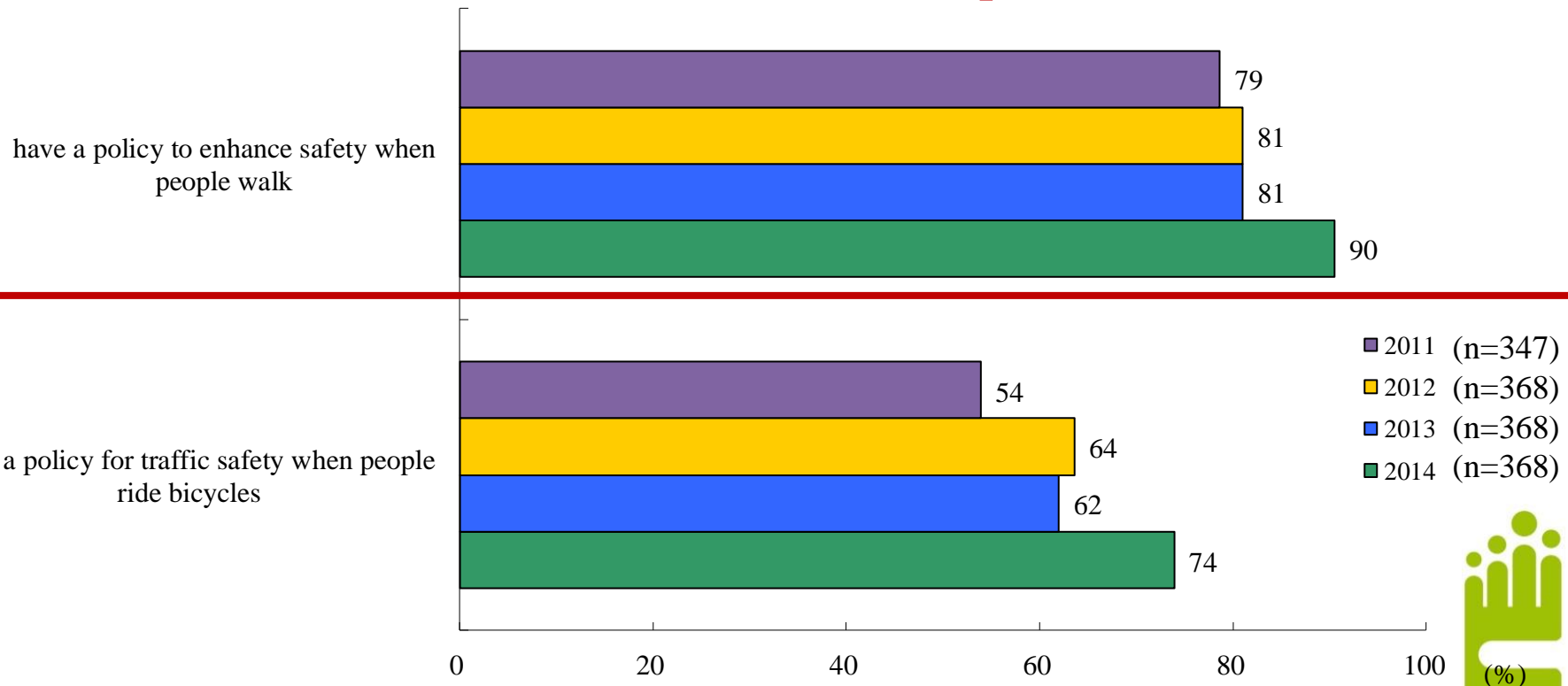
Riding bicycle this way is safe & fashionable!



Results

Strategy 18: Enhance traffic safety in areas where people walk or ride bicycles

- Does your local government have a policy to enhance safety when people walk (such as pedestrian crosswalk and proper green light time) or **a policy for traffic safety when people ride bicycles?**
=> Presence of traffic interventions to support cycling in townships has **increase from 54% in 2011 to 74% of townships in 2014**



International Comparison

- Indicator: length of cycling routes shared by ten thousand population: low

Country	Total Length of Cycling Routes (km)	Population(ten thousand)	Indicator (km/ten thousand population)
Netherland	19,000	1640	11.59
Japan	78,638	12,805	6.14
UK	21,000	6,094	3.45
Denmark	12,405	5,626	2.20
Germany	7,500	8,200	0.91
Taiwan (2007)	709	2,295	0.31
Taiwan (2008)	846	2,303	0.37
Taiwan (2009)	1,300	2,311	0.56
Taiwan (2010)	1,636	2,316	0.71
Taiwan (2011)	2,272	2,322	0.98
Taiwan (2012)	2,272	2,331	0.97
Taiwan (2013)	2,847.2	2,337	1.22
Taiwan (2014)	4486	2,343	1.9
Taiwan (2016 Goal)	6,282.4	2,350	2.67

Taiwan, 2016,

2.67

Taiwan, 2014, 1.9

Source:

Taiwan's data: 2013 National Council for Sustainable Development Network

Other country: Sports Administration, Ministry of Education <http://bike.sac.gov.tw/option.php?mid=4&pid=34>

Comments

Cycling is an example to offer total solution towards UN 2030 Development Agenda

- Promotion of cycling has co-benefits on health for all, protection of environments & economic growth.
- However, it is still more for sports and tourism, less for daily transportation.

Promotion strategies

- **Clear concept and positioning:** cycling is not just another vehicle; it must be taken seriously
- **Leadership and advocacy**
- **Reinforcing policy:** health benefits/price of gasoline
- **Whole package of knowledge on vehicles and users:** diversity on price & function, comfort, equipment for people and vehicles (helmets, headlight, reflective stripe...).
- **Supportive environment:** tracks in downtown, parking in workplaces & buildings.
- **Promotion:** schools, workplaces, communities.

Evidence, love & collaboration.

Promotion.
Prevention.
Protection.
Participation!



Taiwan
Health
Promotion
Administration

Ministry of Health & Welfare