

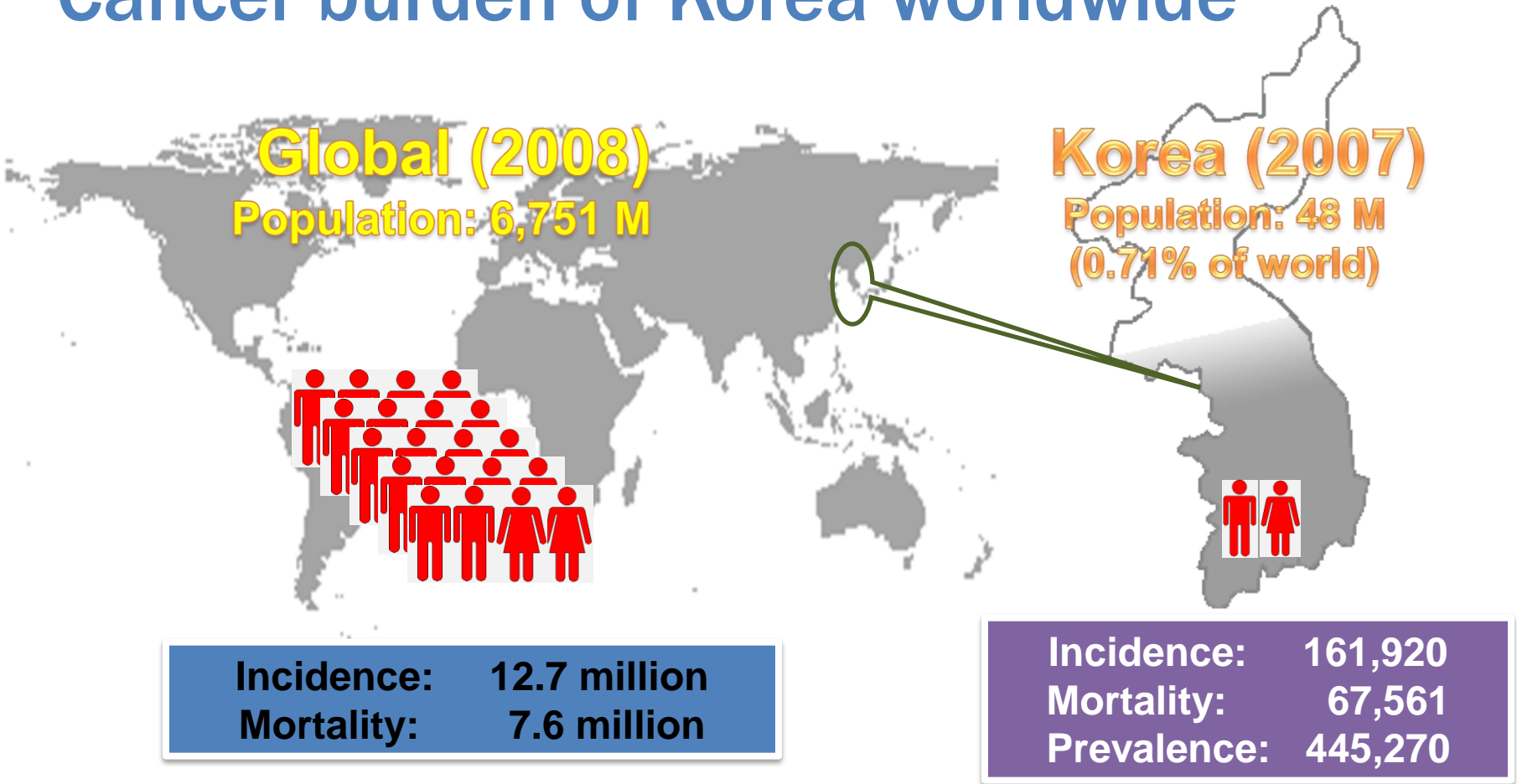
International Workshop on control of cancer as a part of NCD

Cancer Control in Korea

National Cancer Control Institute, Nation Cancer Center

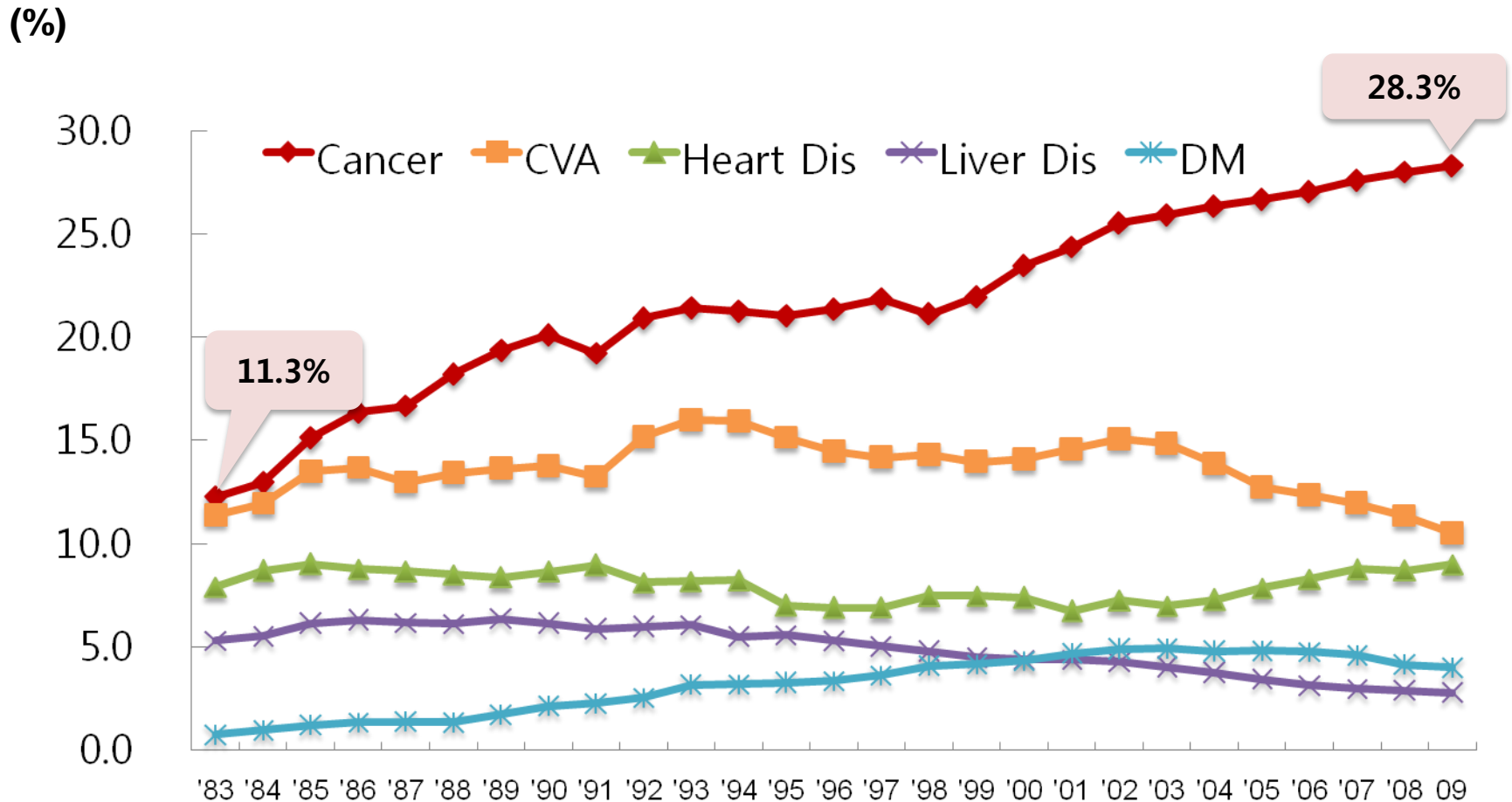
Park, Eun-Cheol

Cancer burden of Korea worldwide



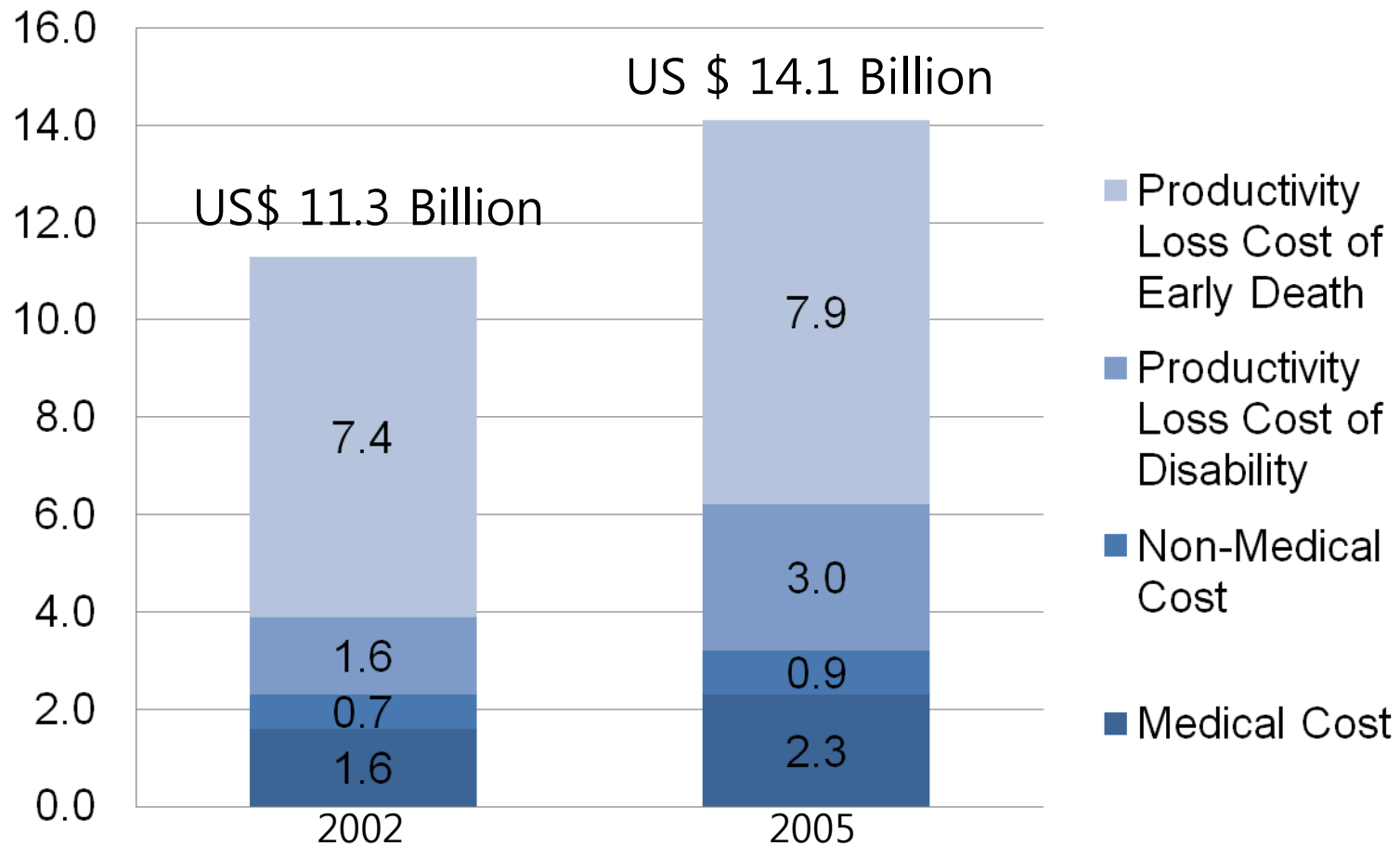
Source: GOLOBOCAN 2008, IARC, 2010

Causes of Death in Korea



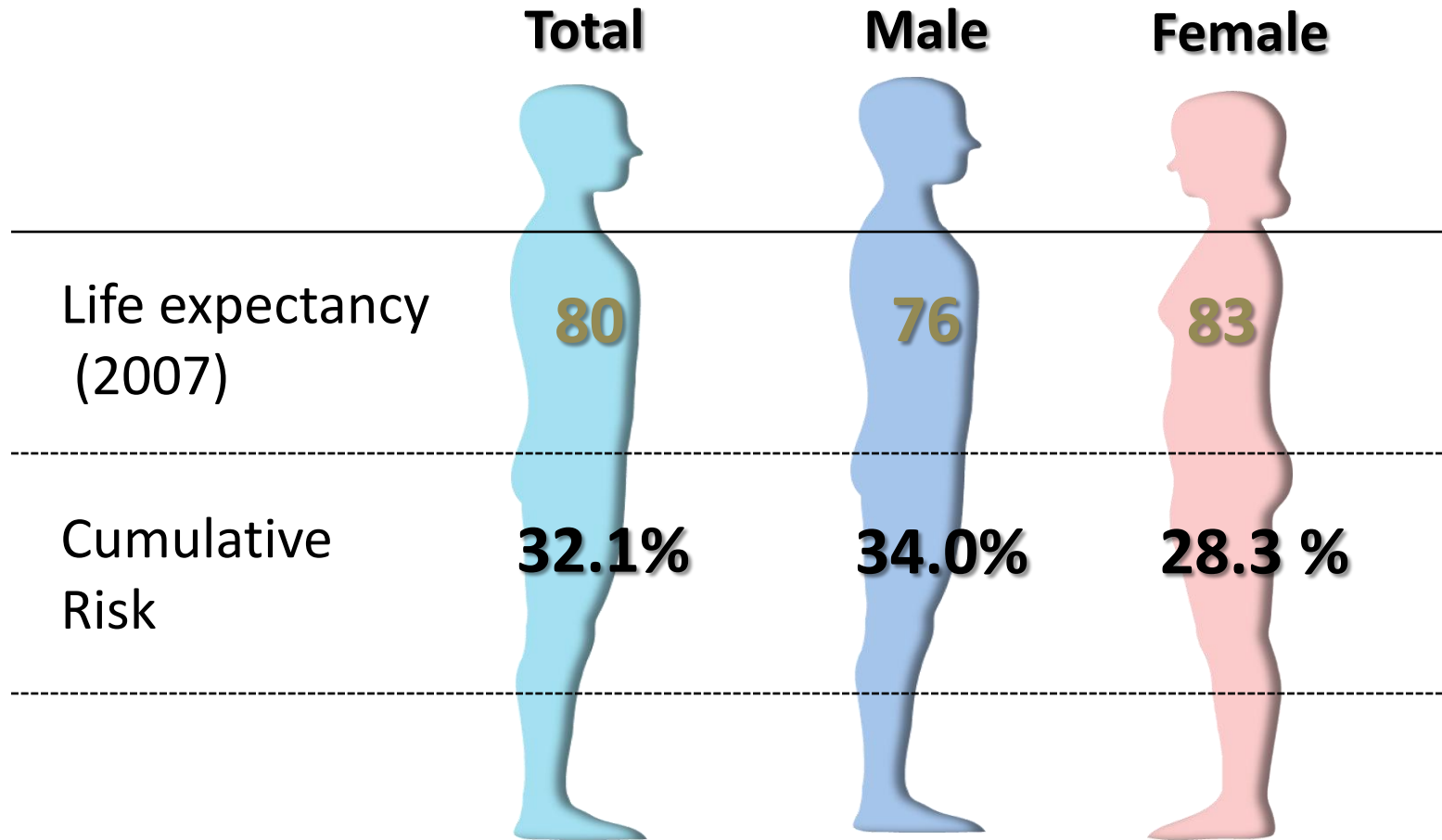
Source: Korea National Statistical Office, 2010

Economic Burden of Cancer



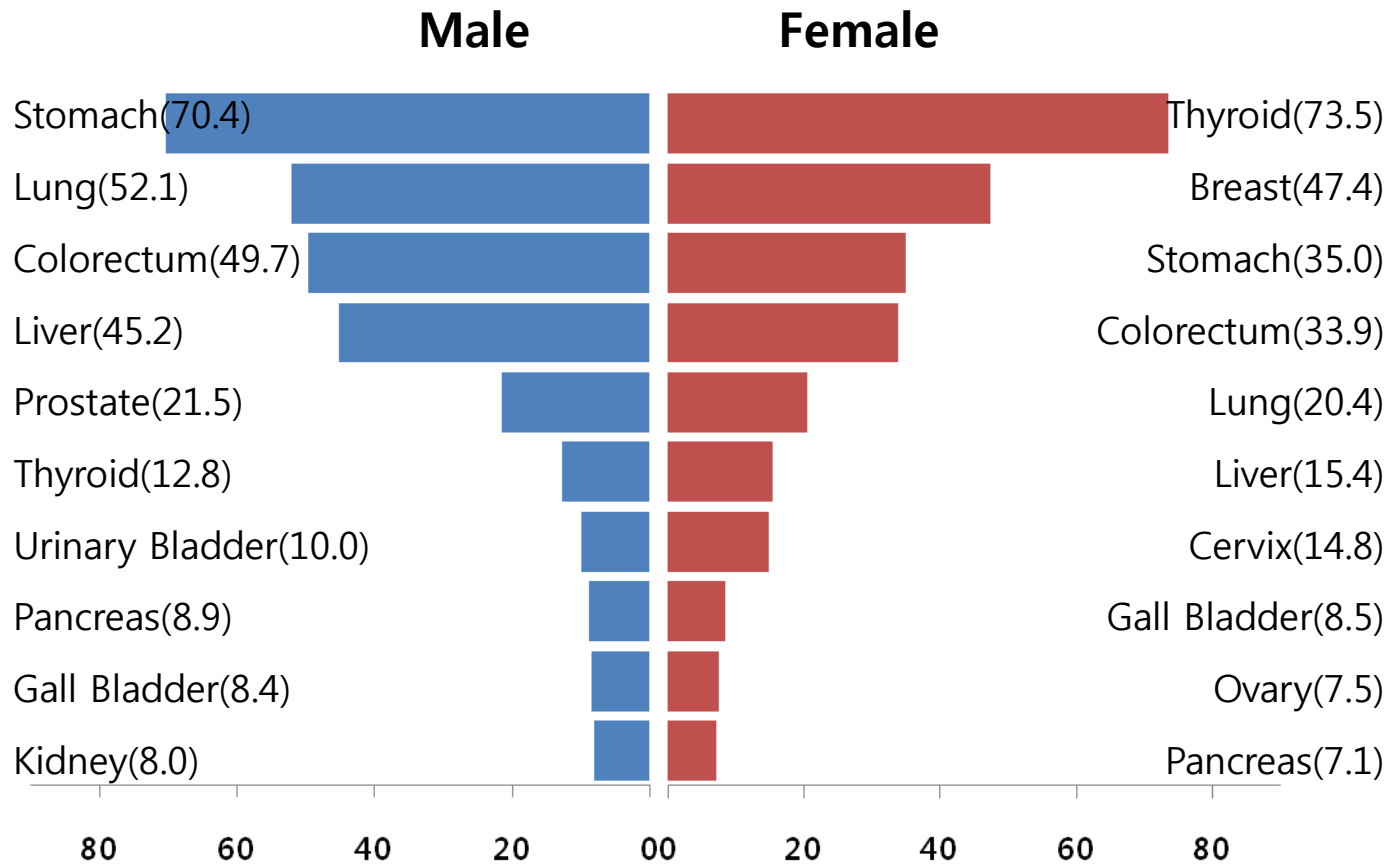
Kim SG et al, 2008

Cumulative Risk of Cancer in Korea

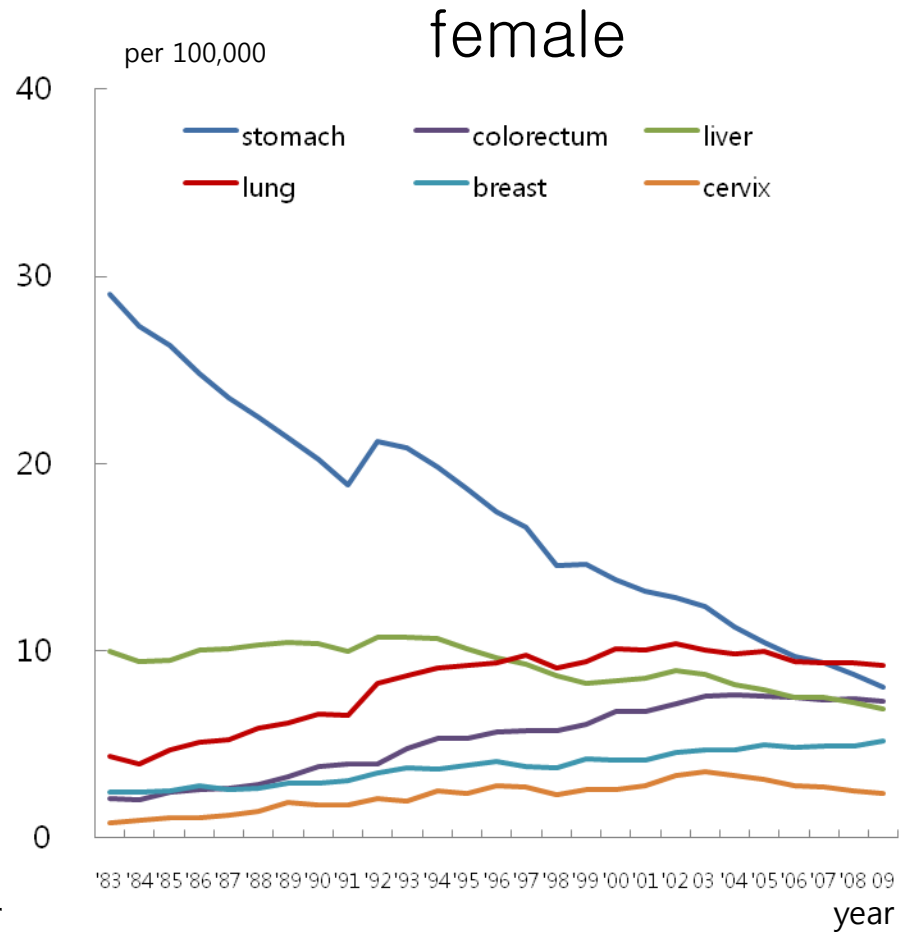
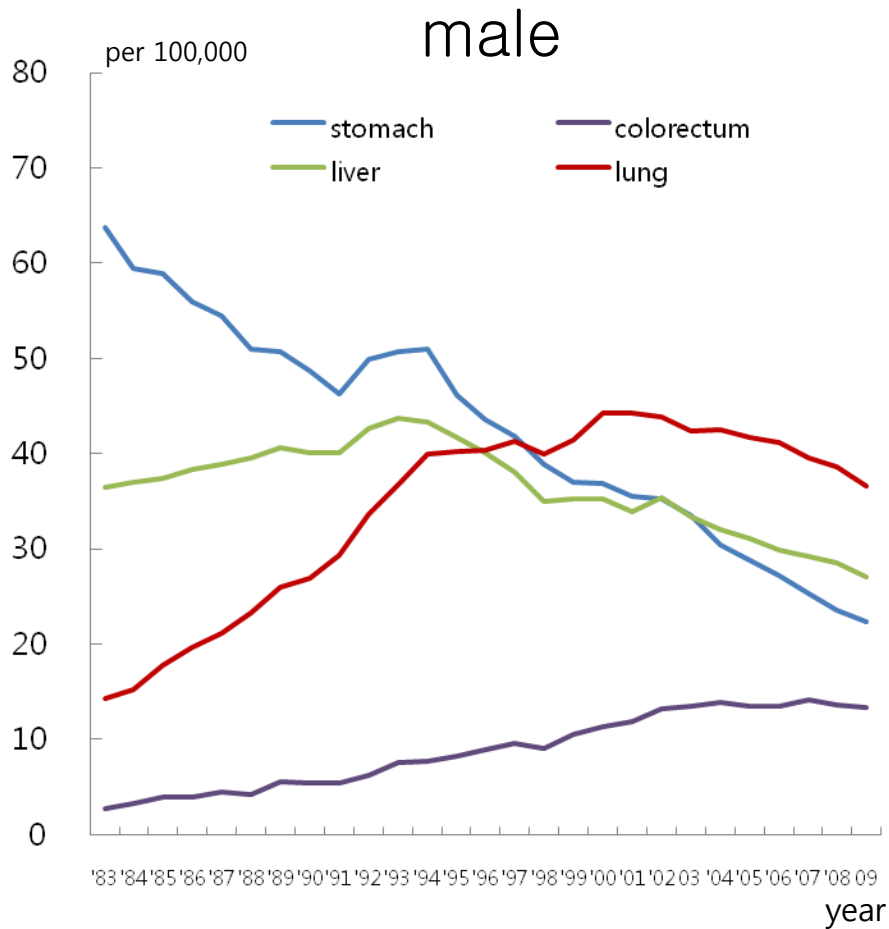


Major Cancer Site, 2007

Unit: cases/100,000

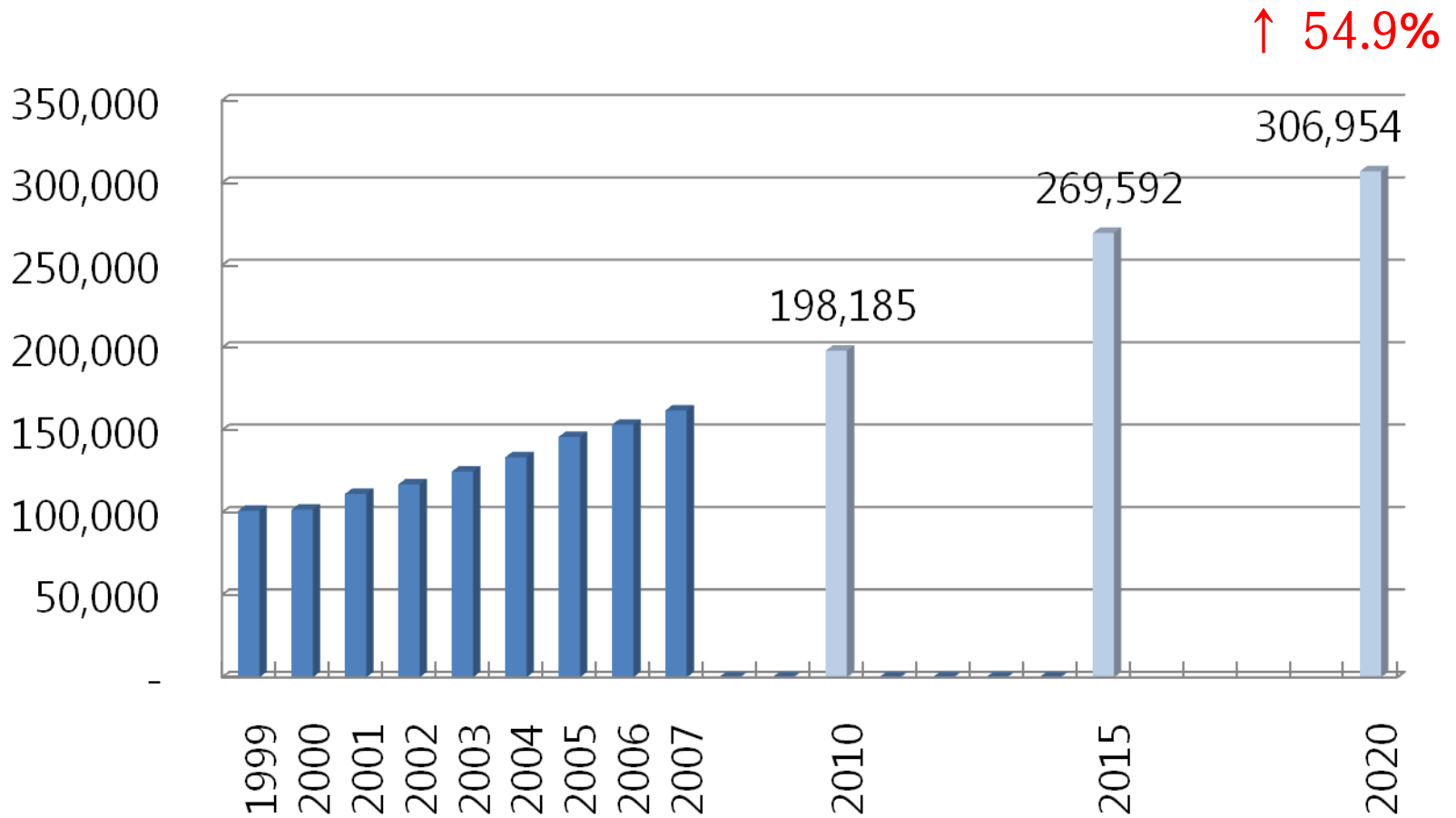


Trend of major cancer death rates



Source: Korea National Statistical Office, 2010

Expected Cancer Cases

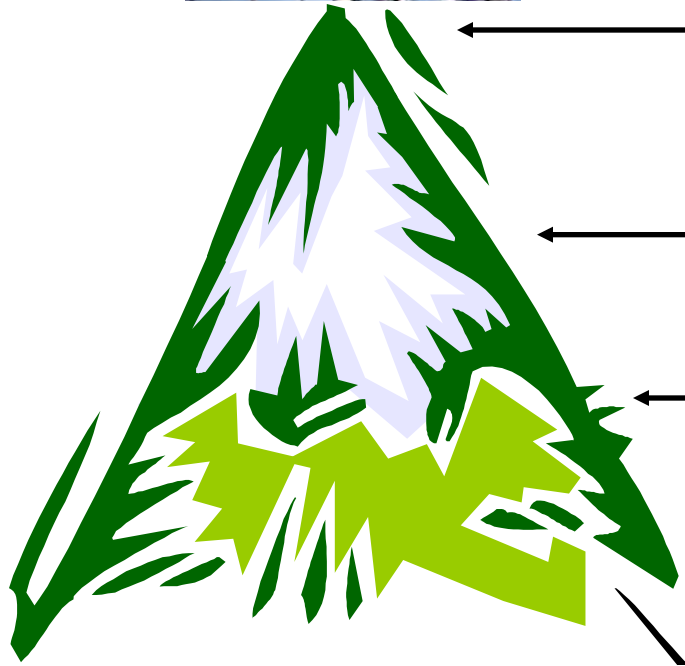


10 year Plan of Cancer Control

The background of the slide is a solid blue color. At the bottom, there is a horizontal band of white, fluffy clouds against a lighter blue sky, suggesting a horizon line.

Basic Principle of Cancer Control

WHO, 2002



■ 1/3: Prevention
Anti-smoking campaign
HBV vaccination

■ 1/3: Early detection
Screening

■ 1/3: Palliative care

Add effective distribution of therapeutic resources and research

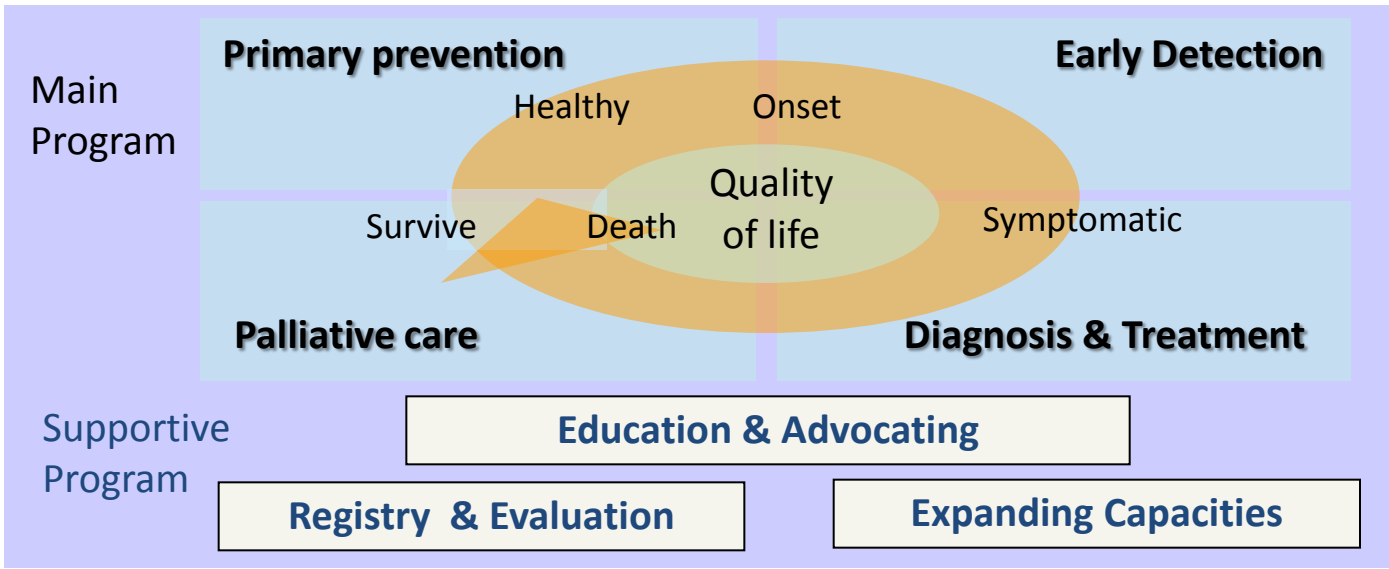
10-Year Plan of Cancer Control

- 1st 10-Year Plan of CC (1996-2005)
 - Constructing Infra-structure of CC
 - Building Capacity of Cancer Control
 - Setting Program of Cancer Control
- 2nd 10-Year Plan of CC (2006-2015)
 - Operating CC Program effectively and efficiently

2nd 10-Year Plan for Cancer Control (2006-2015)

Reduction of Cancer Burden

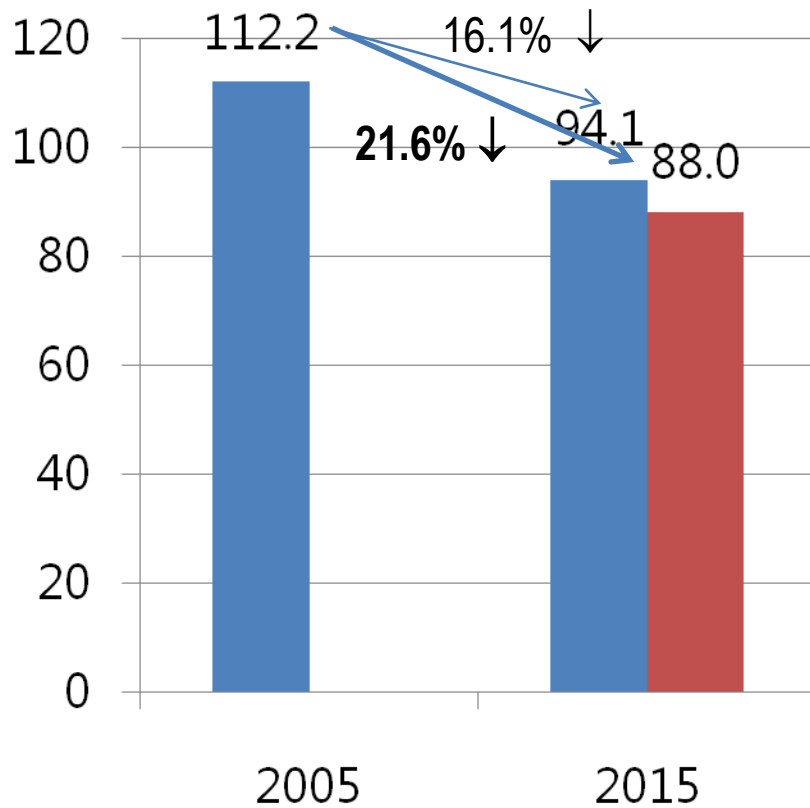
Incidence ↓ Mortality ↓ Survival ↑



Understand cancer biology/pathology Develop new diagnosis & treatment Provide evidence for policy-makers

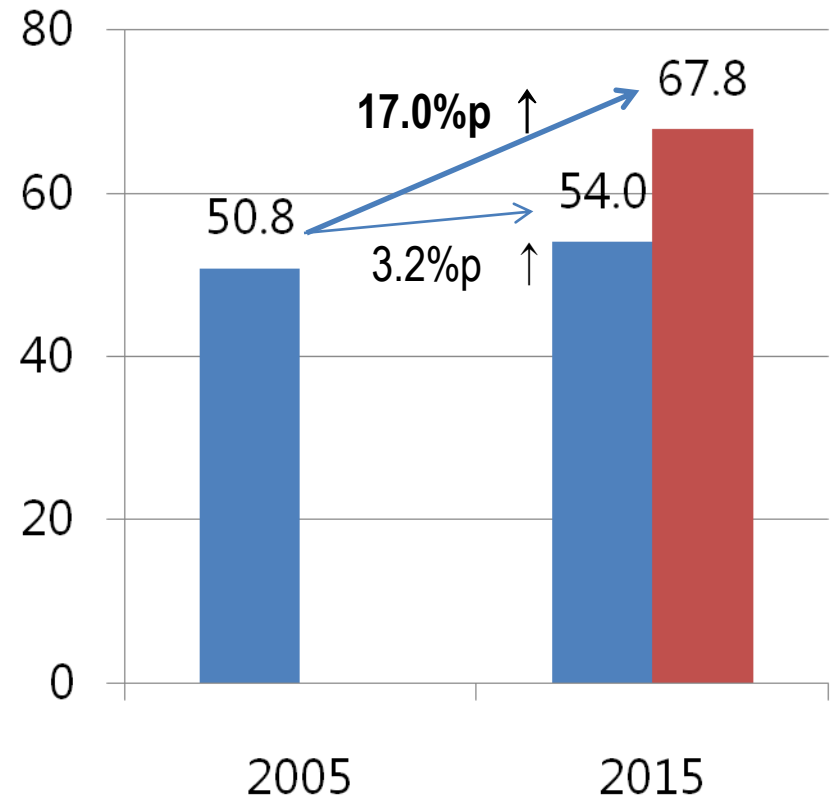
Research Basic / Translational / Clinical / Policy

Objectives



■ Mortality ■ Objective

Cancer Mortality Rate(per 100,000)



■ Mortality ■ Objective

5 Year Survival Rate(%)

Primary Prevention: Anti-smoking program

- Increase in Tax on Cigarettes
- Anti-smoking campaign & education
 - Ban on smoking in public places
 - Warning on cigarette packets
 - Education program for youth
 - Say 'No' campaign for second hand smoking
- Prohibit promoting the sale of tobacco
 - Ban on cigarette advertising
 - Prohibition of sales to teenagers

PP: Quitline service for smoking cessation

- Smoking cessation counseling
 - by telephone since April 2006
 - ARS, On-line portal services
- Collaboration with 251 Health Centers for pharmacotherapy : NRT and Medical drug by all the health centers charge free



CLICK! (방문예약) quitline.hp.go.kr

금연상담전화

우리 아버지가 달라졌어요

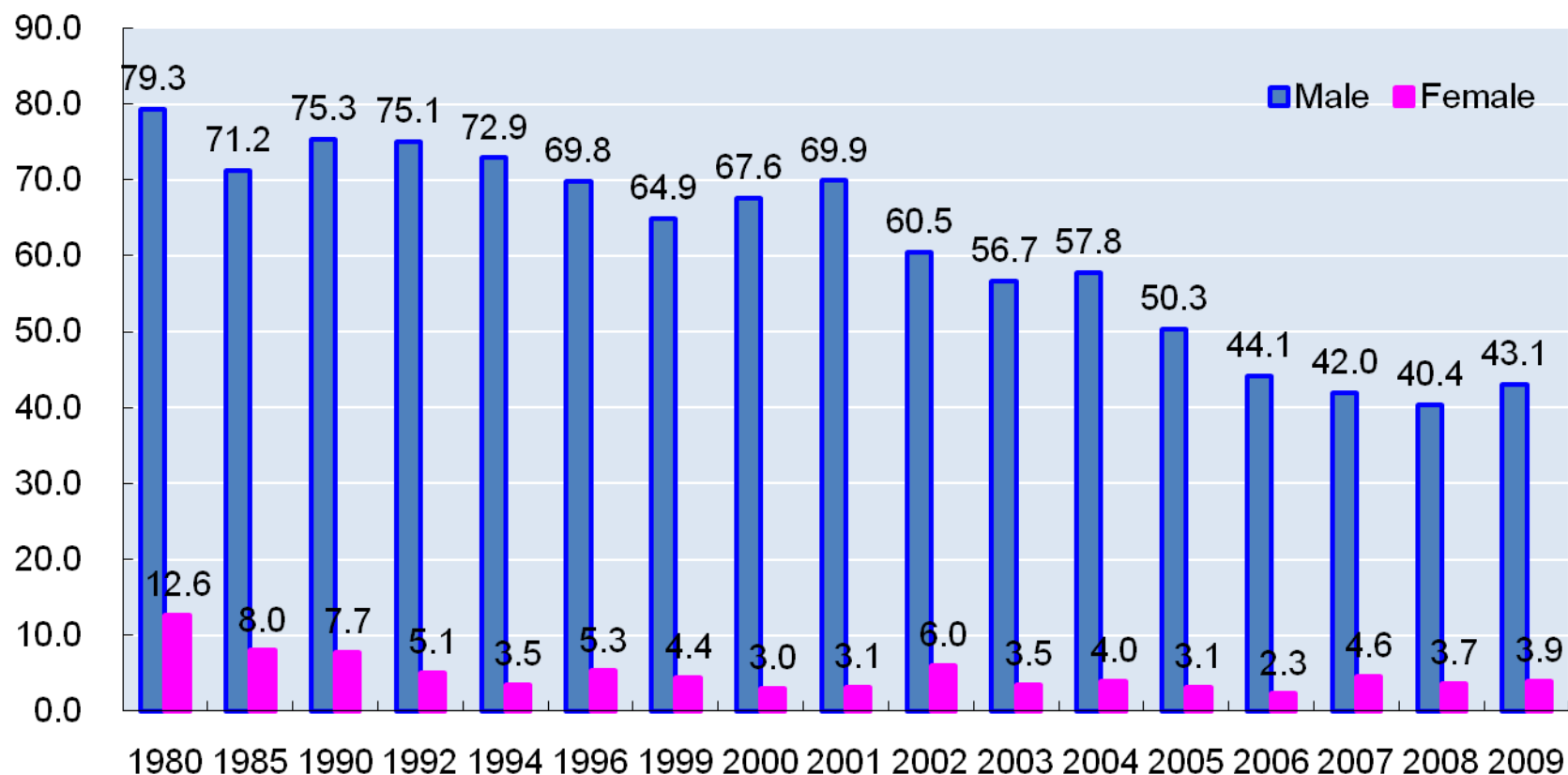
금연 콜센터에 전화주시면 모든 흡연자가 달라집니다.
 가족의 건강이 중요하시죠?
 가족들도 당신의 금연을 기다리고 있습니다.
 지금 **금연콜센터**에 전화주세요.
전문 금연상담사가 당신의 흡연습관에 맞는 금연상담 서비스를 **무료**로 제공해드립니다.
 당신이 달라지면 가족의 표정도 달라집니다.

금연 콜센터 ☎ **1544-9030** **금연성공**

상담시간 월 ~ 금요일 : 오전8시~오후10시
토요일 : 오전8시~낮12시

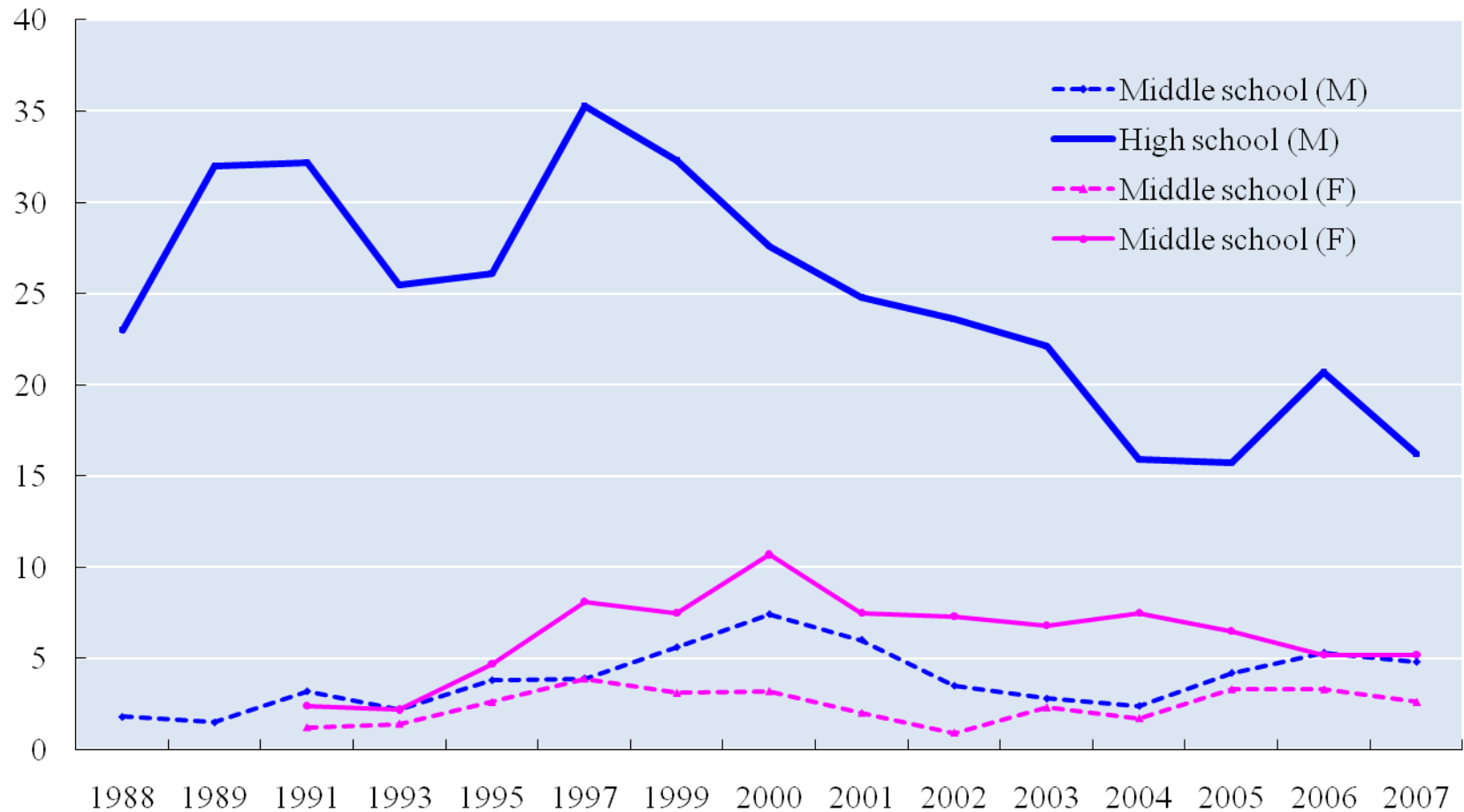
금연콜센터
보건복지부 국립암센터

PP: Smoking prevalence : Adults



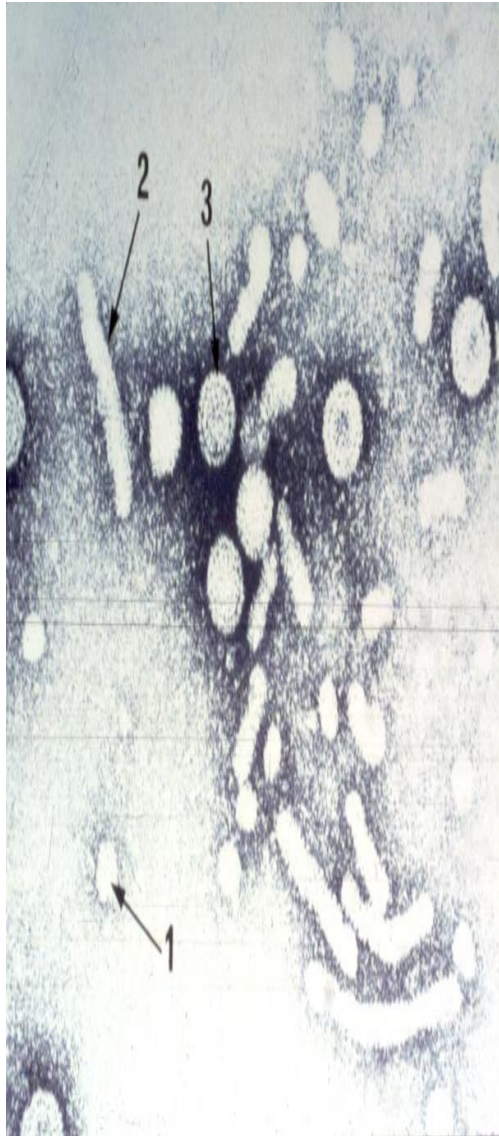
Source: Ministry of Health & Welfare, Korean Association of Smoking & Health

PP: Smoking prevalence : Youths



Source: Ministry of Health & Welfare, Korean Association of Smoking & Health

PP: Hepatitis B vaccination



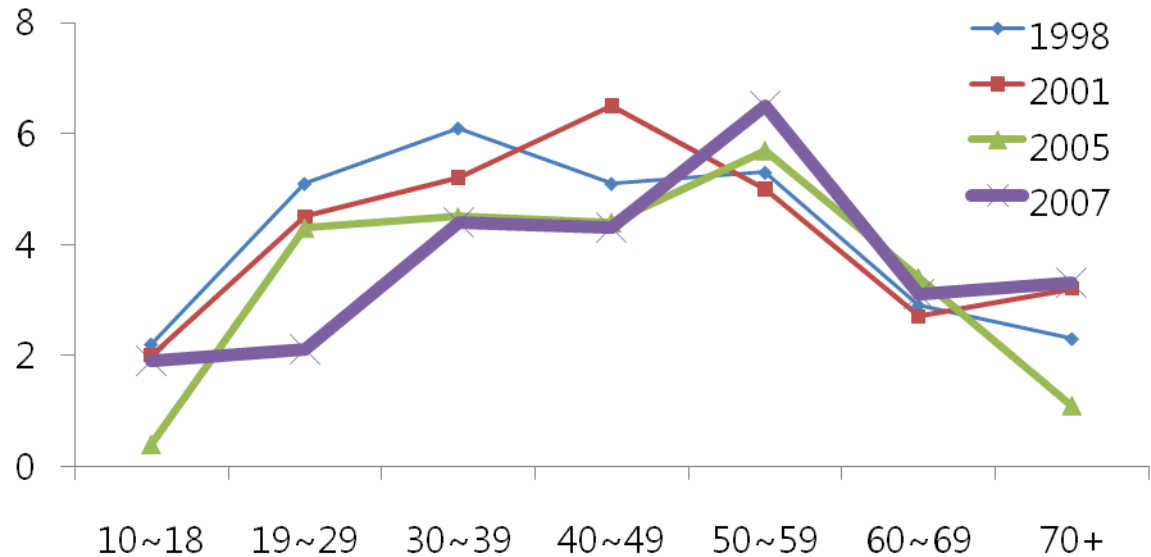
■ HBV vaccination History in Korea

□ 1985: Temporary basis

□ 1995: Regular basis

(Nationwide childhood immunization)

Positive rate(%) of HBsAg



PP: 10 Action Codes of Cancer Prevention



암예방의 첫걸음은
"국민암 예방 수칙"의 실천

“암”
건강 생활 실천과 조기 검진으로
예방할 수 있습니다!!

국민암 예방수칙

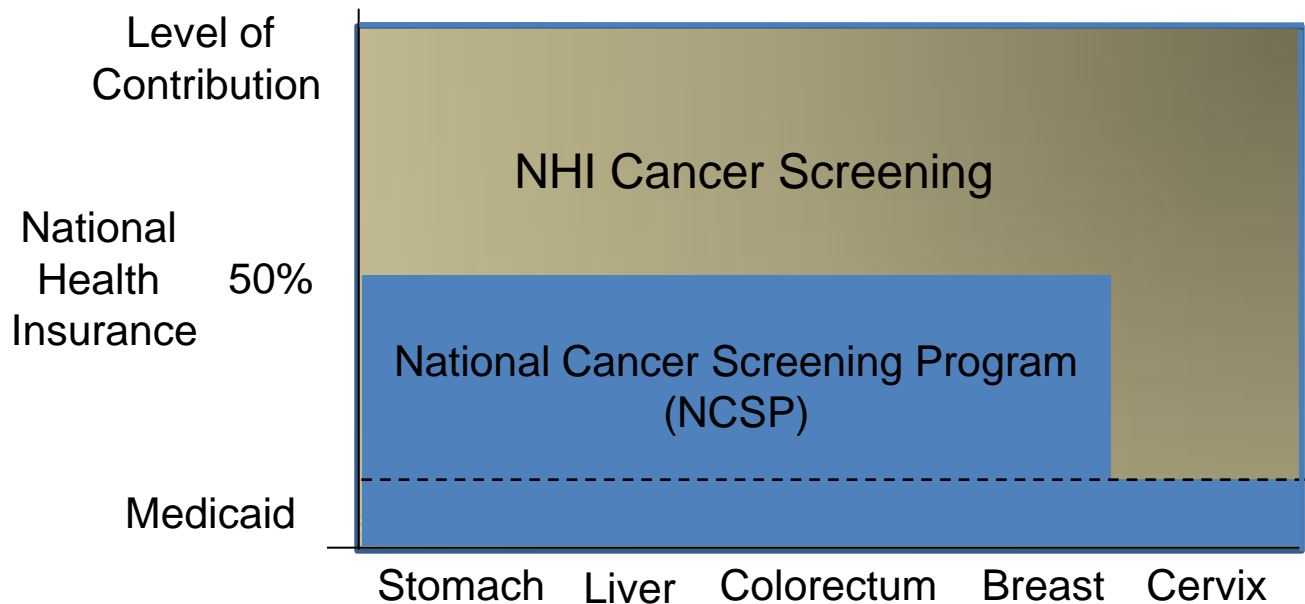
- 담배를 피우지 말고, 남이 피우는 담배 연기도 피하기
- 채소와 과일을 충분히 먹고, 다채로운 식단으로 균형 잡힌 식사하기
- 음식을 짜지 않게 먹고, 탄 음식을 먹지 않기
- 술은 하루 두 잔 이내로만 마시기
- 주 5회 이상, 하루 30분 이상, 맘이 날 정도로 걷거나 운동하기
- 자신의 체격에 맞는 건강 체중 유지하기
- 예방접종 지침에 따라 B형 간염 예방접종 받기
- 성 매개 감염병에 걸리지 않도록 안전한 성생활 하기
- 발암성 물질에 노출되지 않도록 작업장에서 안전 보건 수칙 지키기
- 암 조기 검진 지침에 따라 검진을 빠짐없이 받기

보건복지부
www.mhwr.go.kr

국립암센터
NATIONAL CANCER CENTER
www.ncc.na.or.kr

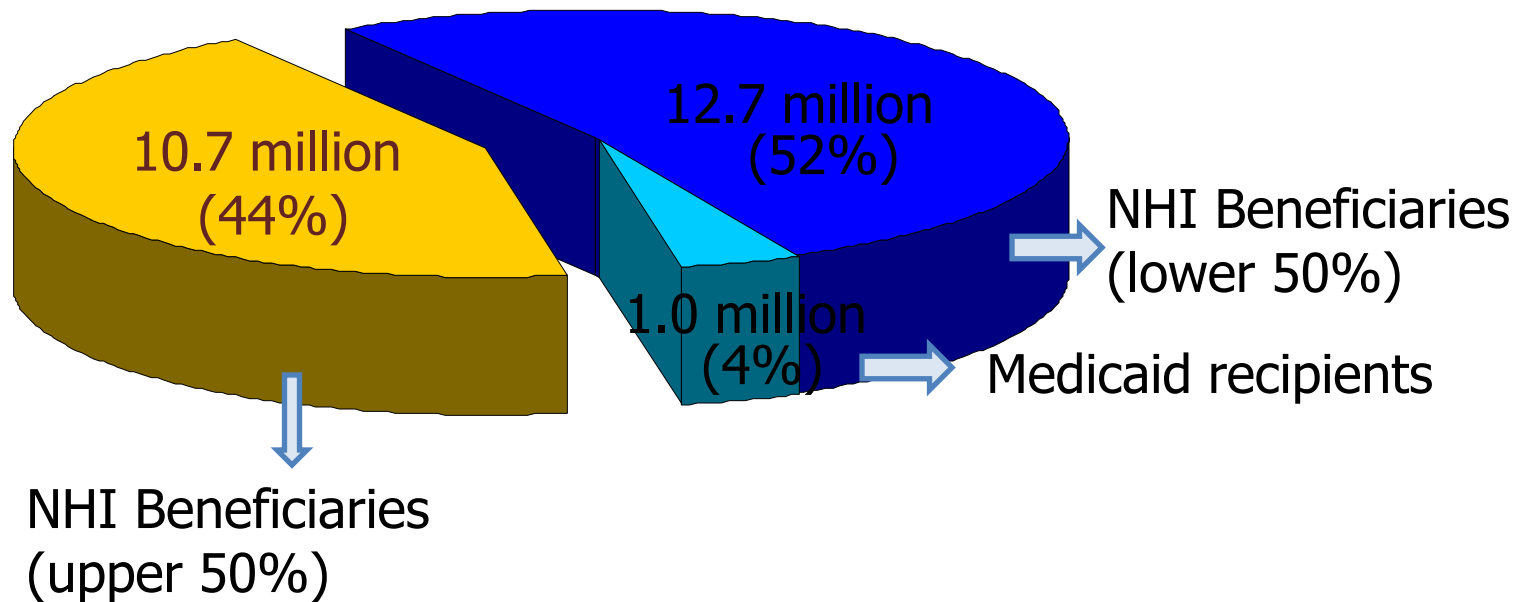
Early Detection: Organized Cancer Screening

- Nationwide organized cancer screening program
- Managed by two systems
 - Upper 50% contributors: National Health Insurance Screening Program
 - Lower 50% contributors & Medicaid: National Cancer Screening Program








ED: Population Coverage for NCSP

- Source population for screening: 24.4 million
 - Women ≥ 30 yrs and men ≥ 40 yrs
- No. of persons covered by NSCP: 13.7 million
 - Coverage rate: 56%

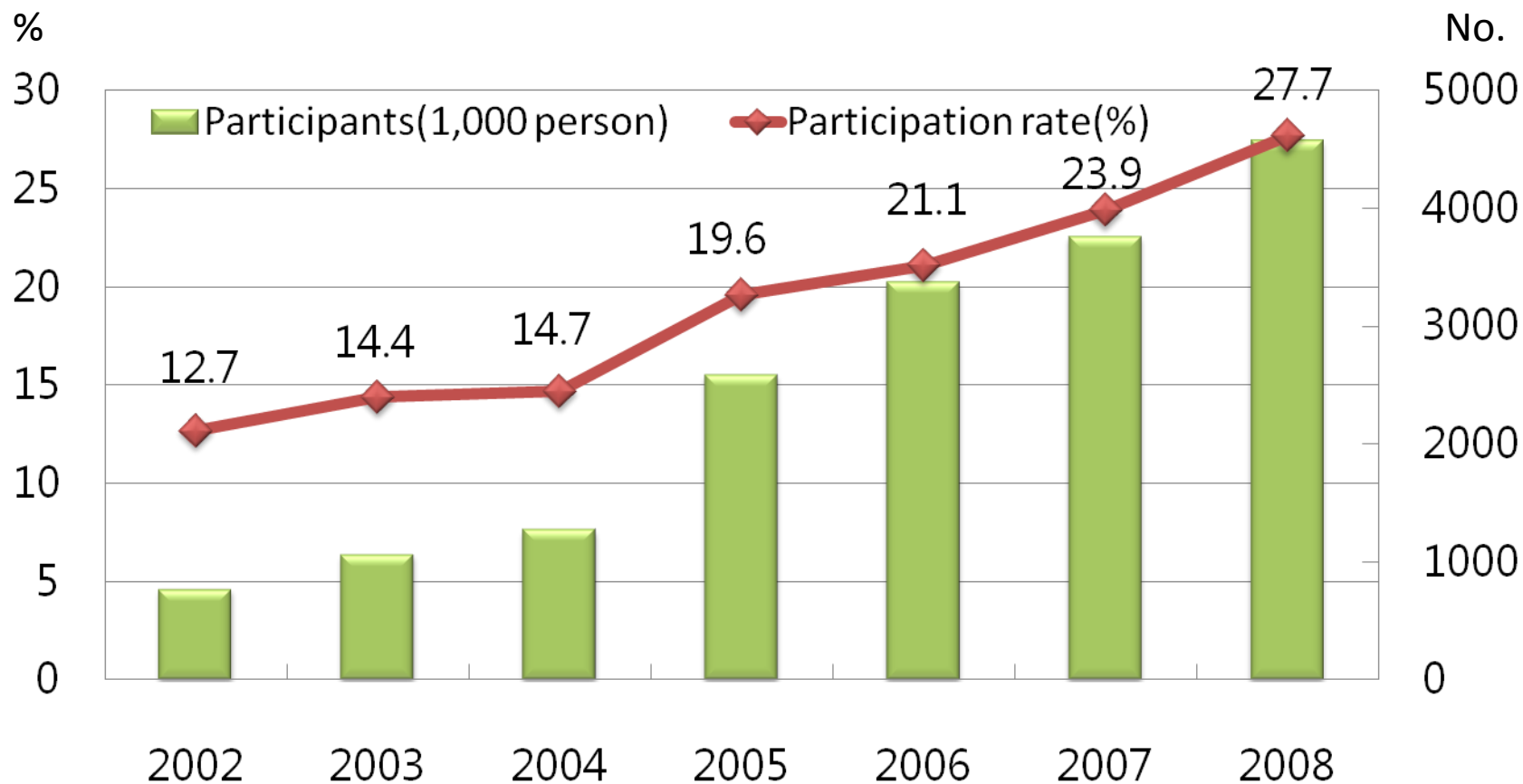


ED: Screening Guideline of NCSP

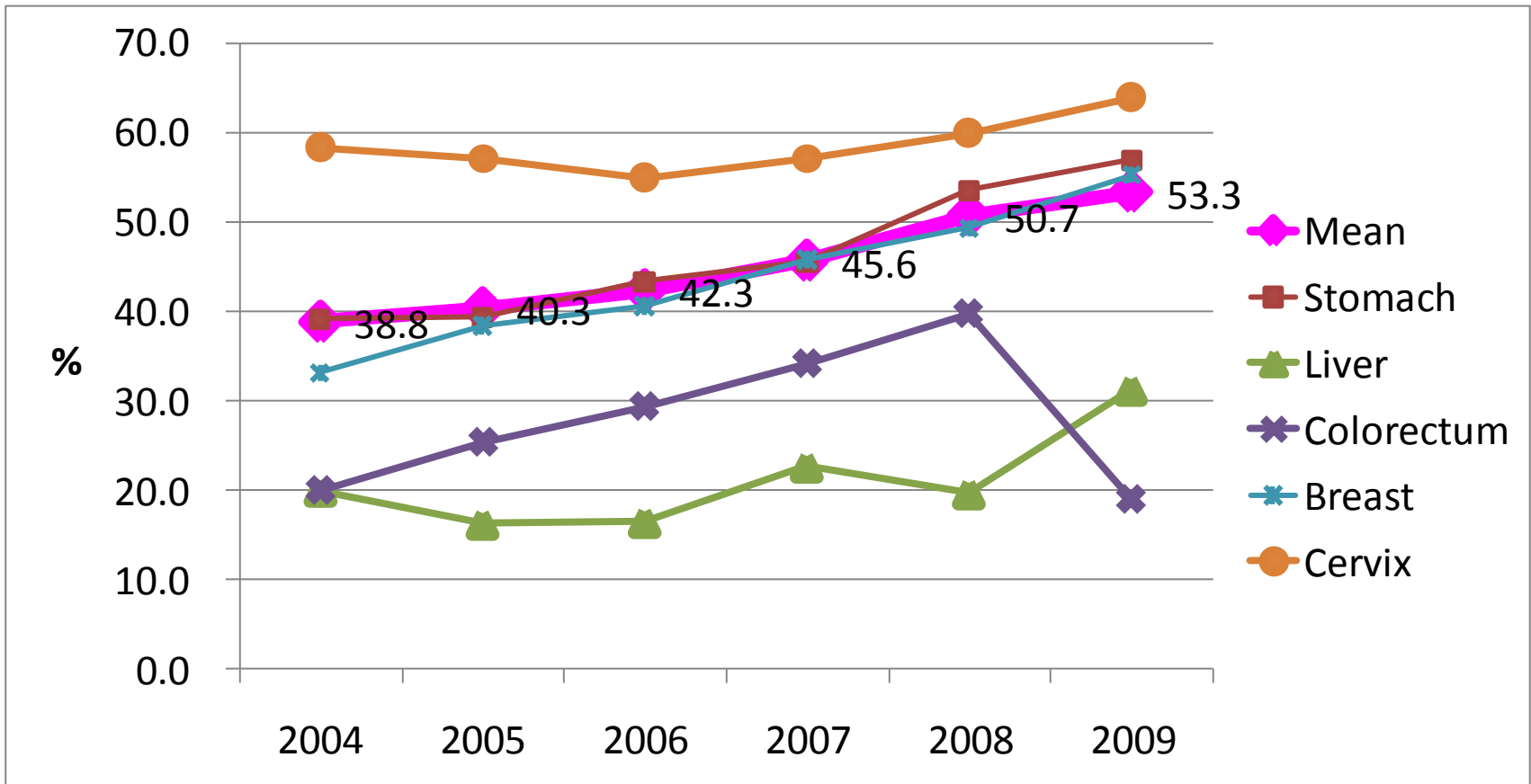
Cancer	Age	Interval	Methods
 Stomach	≥40	2 yrs	Gastro-endoscopy or UGI
 Liver	≥40 high risk group*	6 mo	Liver sonography & AFP
 Colorectum	≥50	1 yr	FOBT → colonoscopy or DCBE
 Breast	≥40, women	2 yrs	Mamography & CBE
 Cervix	≥30, women	2 yrs	Pap smear

* 40 & over with HBsAg positive or anti-HCV positive or liver cirrhosis

ED: Participation Rate of NCSP



ED: Cancer screening rates with recommendations



Source: Korea National Cancer Screening Survey 2004-2009

ED: Evaluating Cancer Screening Units

■ 2006-2007

- Enactment for Evaluation of Cancer Screening Unit (ECSU) passed by revision of Cancer Control Act (Oct. 28, 2006)
- Model test with 5 hospitals
- Establishing three year period evaluation system

■ 2008-2010

- 2008: evaluation of general hospitals
- 2009: evaluating of hospitals
- 2010: evaluating of clinics

Medical Care: 5Year Relative Survival rate

(단위: %)

site	Korea ('03-'07)	USA ¹⁾ ('99-'05')	Canada ²⁾ ('98-'00)	Japan ³⁾ ('97-'99)
All Cancer	57.1	66.1	60	54.3
Stomach	61.2	25.7	22	62.1
Liver	21.7	13.1	14	23.1
Cervix	80.5	70.6	75	71.5
Colorectum	68.7	65.2	59/61 ⁴⁾	65.2
Thyroid	98.8	96.9	97	92.4
Breast	89.5	89.1	87	85.5
Lung	16.7	15.6	15	25.6
Pancreas	7.6	5.5	6	6.7
Prostate	82.4	99.7	94	75.5

1) Horner MJ, Ries LAG, Krapcho M, Neyman N, Aminou R, Howlander N, et al (eds). SEER Cancer Statistics Review, 1975-2006, National Cancer Institute. 2009

2) Statistics Canada. Cancer Survival Statistics 1992-2000,

3) National Cancer Center in Japan. Cancer Statistics in Japan, 2008

4) Colon/Rectum

MC: Cancer Patient Financial Aid Program

- Financial support to the lower income group
 - Medicaid
 - Participants of NCSP
 - Under age 18
- Provide 30-70% of out of pocket medical expenditure

MC: Challenges of Medical Care

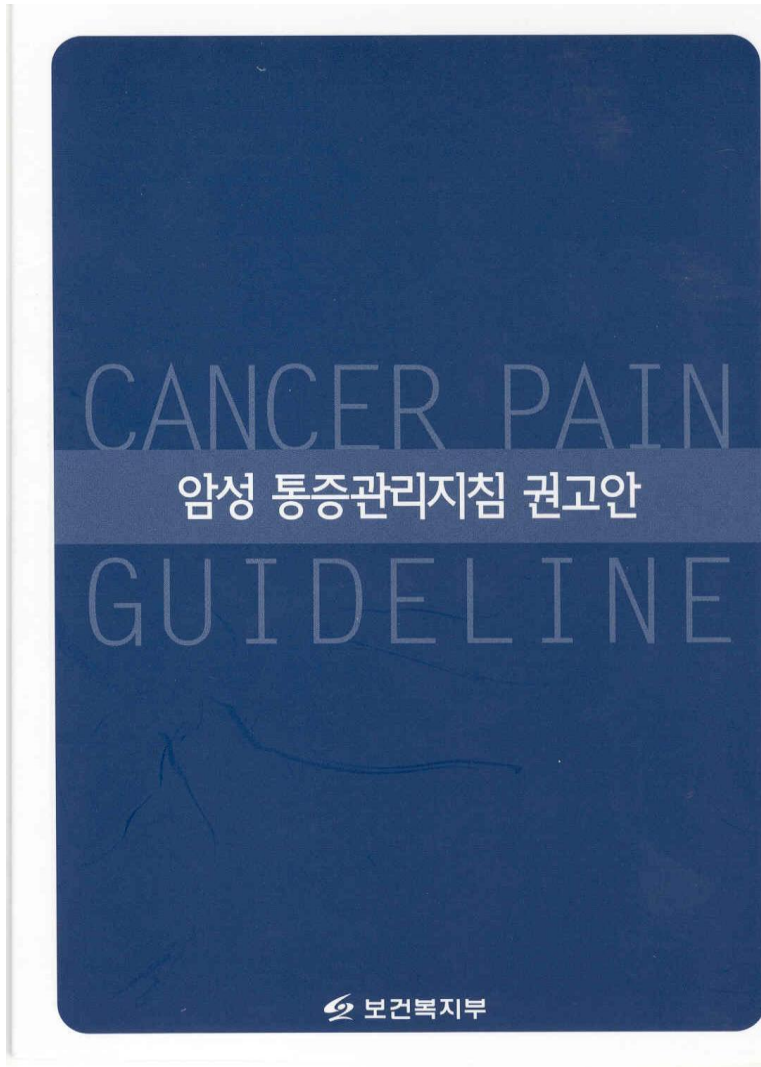
- Reducing variation of care quality
 - Assessment of quality including patient's satisfaction
 - Public reporting and Pay for performance (P4P)
- Increasing benefit coverage of National Health Insurance and the amount of financial aid

Palliative Care

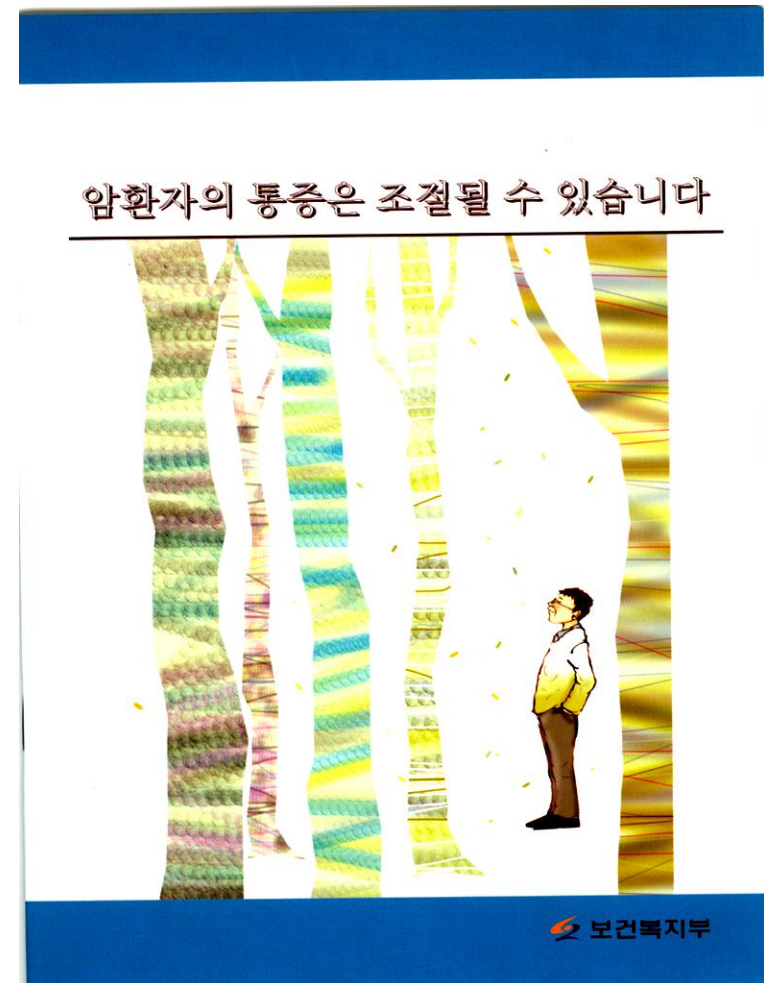
- Supporting hospice care facilities
- Providing home-based care of Public Health Center
- Providing education program to the health care providers for palliative care
- Publishing cancer pain control guideline for providers and patients

PC: Cancer Pain Control Guideline

for Health Care Providers



for Patients



Education & Advocating: NCIC

- National Cancer Information Center(2005-)



Web Portal

<http://www.cancer.go.kr/>



Center

1577-8899

EA: NCIC

- More than 30 education materials
 - Leaflet, booklet, panel and DVD
 - Distributing to public and professionals



Expanding Capacities: NCC

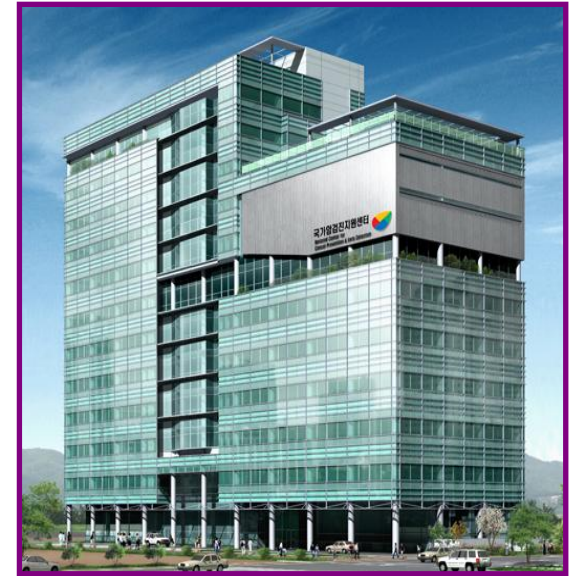
- National Cancer Center



Research Institute



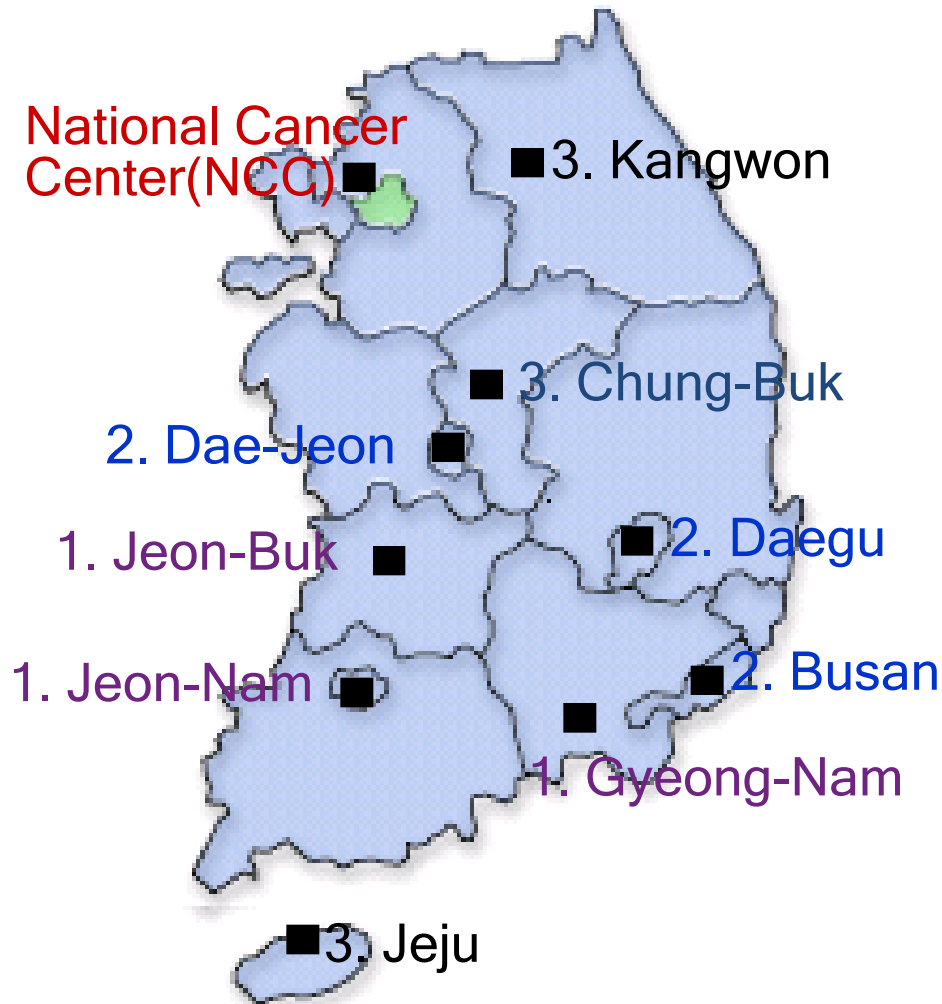
Hospital



National Cancer
Control Research
Institute

Constructing Infra-structure of CC

- 9 Regional Cancer Center



Year	Financial & technical supports
2004	By MOHW (NCC) & Regional Gov
2005	
2006	

Registry & Evaluation: Cancer Registry

- Cancer Registry

Korea Central Cancer Registry

Headquarters: NCC

start; 1980 Hospital
based CR

Coverage: 90% of
cancer cases

Survey for NHI claims- Medical Record
review for unregistered cancer cases

8 Regional Cancer Registry

Seoul
Busan
Daegu
Gwangju
Incheon
Daejeon
Ulsan
Jeju

Regional CRs

KCCR

Site-
specific
CR

Breast, Cervix...

Coverage: 50% of
population

Site-specific Cancer Registry

RE: Cancer Registry

■ Cancer Registry

International Agency for Research on Cancer
Centre International de Recherche sur le Cancer

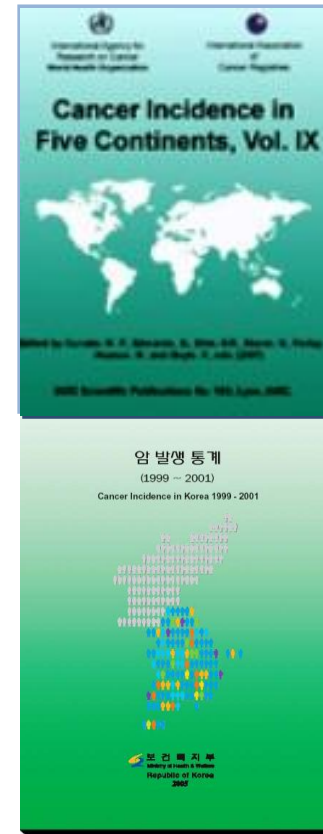
CANCERMondial

http://www-dep.iarc.fr

IARC, 150 Cours Albert Thomas, 69632 Lyon Cedex 08, France. Tel: +33 (0)4 77376465 - Fax: +33 (0)4 77376079

Home links to our databases: CIS I-VIII (Original) CIS I-VIII (Updated) CIS I-VIII (Detailed) CIS IX WHO GLOBOCAN 2002

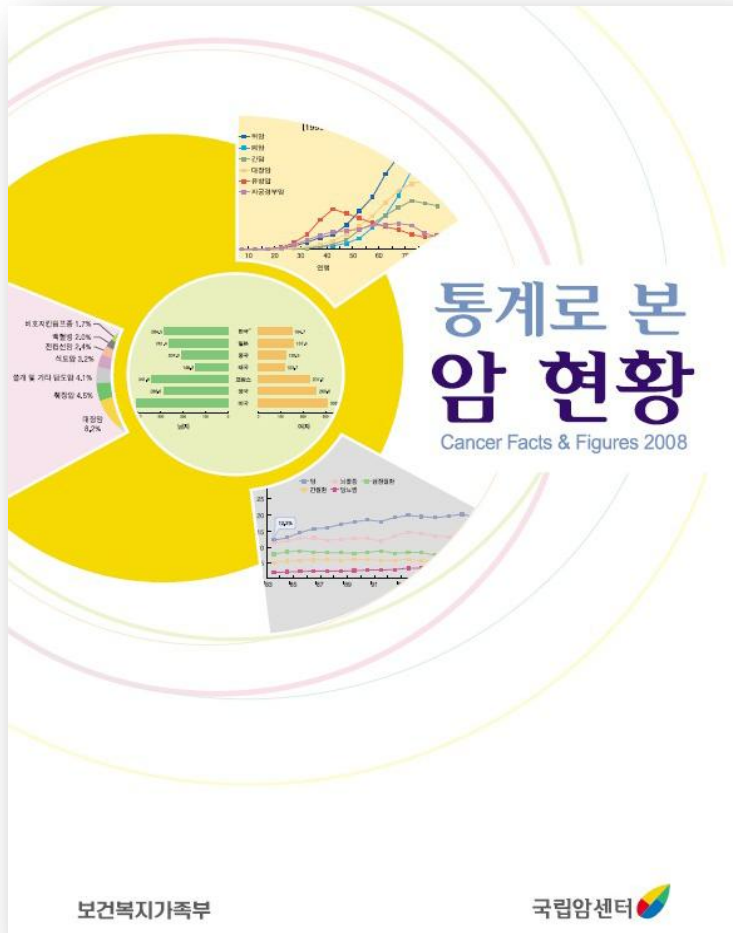
CIS Vol. IX	Registry/ population	Period	Person-years (million)
About			
CIS volume IX			
Contributors	Italy, Sondrio	1998-2002	0.9
▶ Introductory chapters			
▶ Registry contact and address	Italy, Syracuse Province	1999-2002	1.6
▶ Registry population list	Italy, Torino	1998-2002	4.5
Chapters (PDF/Excel)			
1. Introduction	Italy, Umbria Region	1998-2002	4.1
▶ Geographical coverage	Italy, Varese Province	1998-2000	2.4
2. Techniques of registration	Italy, Veneto Region	1998-2001	8.0
▶ Registry background	Japan, Aichi Prefecture	1998-2002	5.3
3. Classification and coding	Japan, Fukui Prefecture	1998-2002	4.1
▶ Coding practices	Japan, Hiroshima	1996-2000	5.6
4. Histological group	Japan, Miyagi Prefecture	1998-2002	11.8
5. Comparability, quality of data	Japan, Nagasaki Prefecture	1998-2002	7.6
▶ Registration practices	Japan, Osaka Prefecture	1998-2002	44.0
6. Processing of data	Japan, Yamagata Prefecture	1998-2002	6.2
7. Age-standardization			
Tables (PDF)			
Cancer registry tables			
Summary tables			
▶ By site (three-digit rubrics)	Korea	1999-2002	19.0
▶ By site (four-digit rubrics)	Korea, Busan	1998-2002	19.0
▶ By histological type	Korea, Daegu	1998-2002	12.6
Indices of data quality	Korea, Daejeon	1998-2002	6.9
On-line analysis			
Age-specific tables (PDF)	Korea, Gwangju	1998-2002	6.8
Summary tables	Korea, Incheon	1998-2002	12.7
▶ By site	Korea, Jeju-do	2000-2002	1.6
▶ By population	Korea, Seoul	1998-2002	49.3
Graph	Korea, Ulsan	1999-2002	4.7
▶ Age-specific curves			
Download			
Acknowledgements	Kuwait, Kuwaitis	1998-2002	4.3
Errors in Volume VIII	Kuwait, Non-Kuwaitis	1998-2002	6.6



IARC CI5 Vol. 9 web page (<http://www-dep.iarc.fr/>) (2007. 11)

RE: Cancer Fact Book

■ Cancer Fact Book

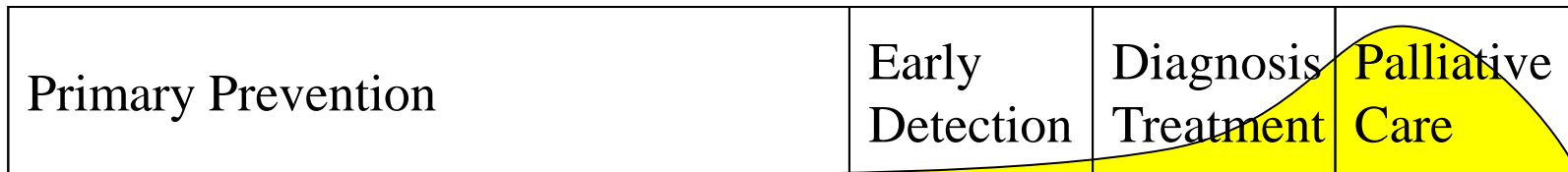


- 1 Cancer Burden
- 2 Cancer Prevention
- 3 Cancer Screening
- 4 Cancer Care Costs
- 5 Palliative Care / Cancer Survivor
- 6 Cancer Infrastructure
- 7 10 year Cancer Control Plan

Research

- Develop new diagnosis & treatment Methods, especially Anti-Cancer drug
- Provide evidence for policy-making

Develop new technology



Evidence for program

Key Success Factors

- Fund
 - Tabaco sales tax by Health Promotion Act(1995)
 - 15 cents / 1.5-2.0 dollars / pack (~2004)
 - 35 cents / 1.9-2.5 dollars / pack (2005~)
 - Fund(2008) : 1.9 billion US\$
- Long-term Plan
 - 10-year Cancer Control Plan(1996~)
- Cancer Registry
 - Since 1980

Weakness

- Government driven cancer control
 - Plan & fund from the Government
- A few activities of cancer NGO
 - A few donation for cancer control
- A few evidences of cancer control programs



National Cancer Control Institute
National Cancer Center

Brief History of NCC

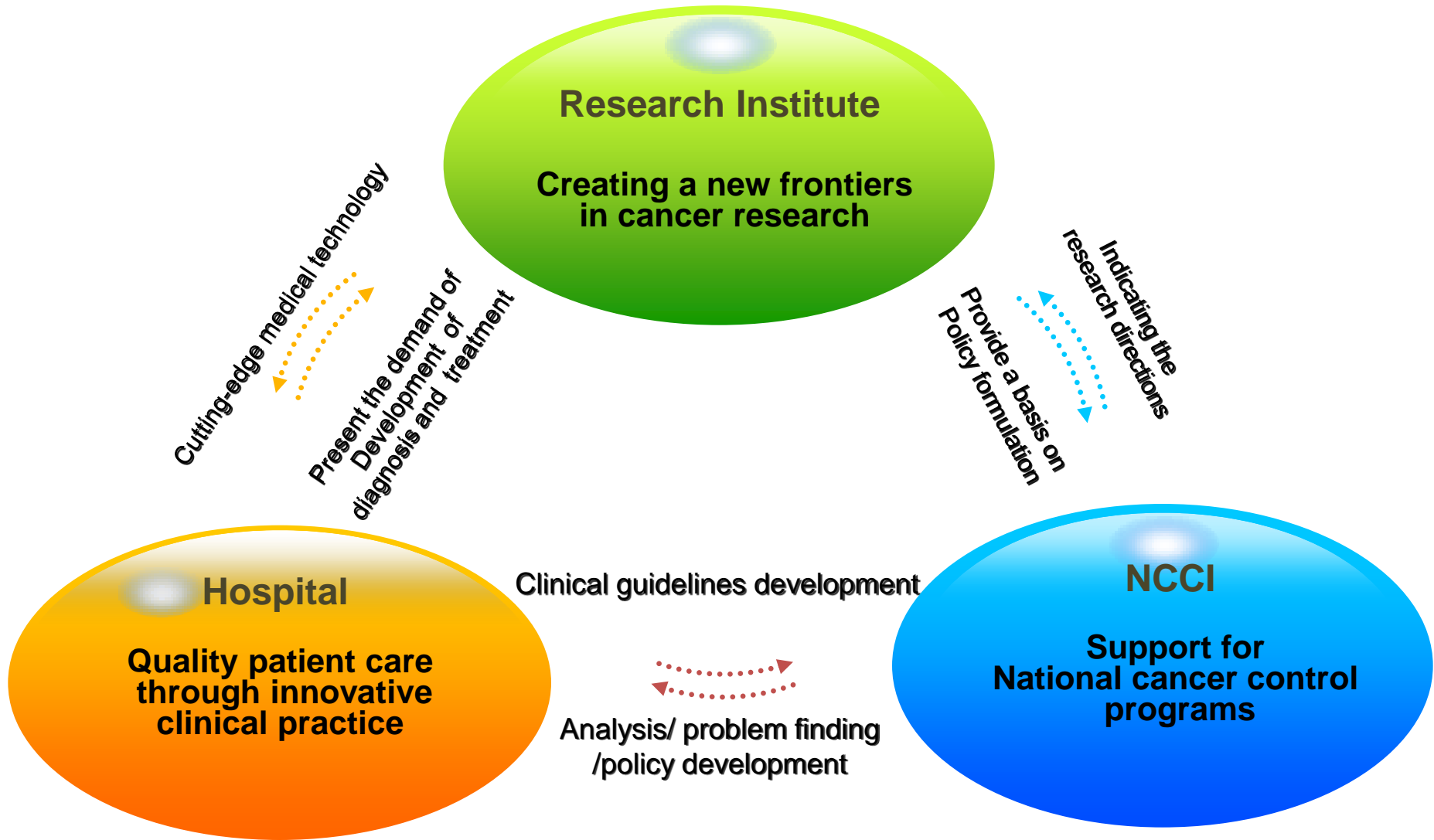
- 1989. 12. Plan to Establish NCC Formulated by MOHW
- 2000. 01. National Cancer Center Act enacted
- 2001. 06. Inauguration Ceremony Held
- 2002. 03. Nat'l Screening Guideline for 5 Common Cancers Developed
- 2005. 04. **Nat'l Cancer Control Institute Established**
- 2005. 06. Research Building Completed
- 2005. 10. 'Vision 2020' Announced
- 2007. 03. Proton Therapy System Introduced
- 2007. 06. Nat'l Cancer Prevention & Detection Building Completed

Vision Statement of NCC

We protect the people from cancer and give a hope through innovative research, the best medical care, support for efficient national cancer control programs, and education & training of cancer experts.



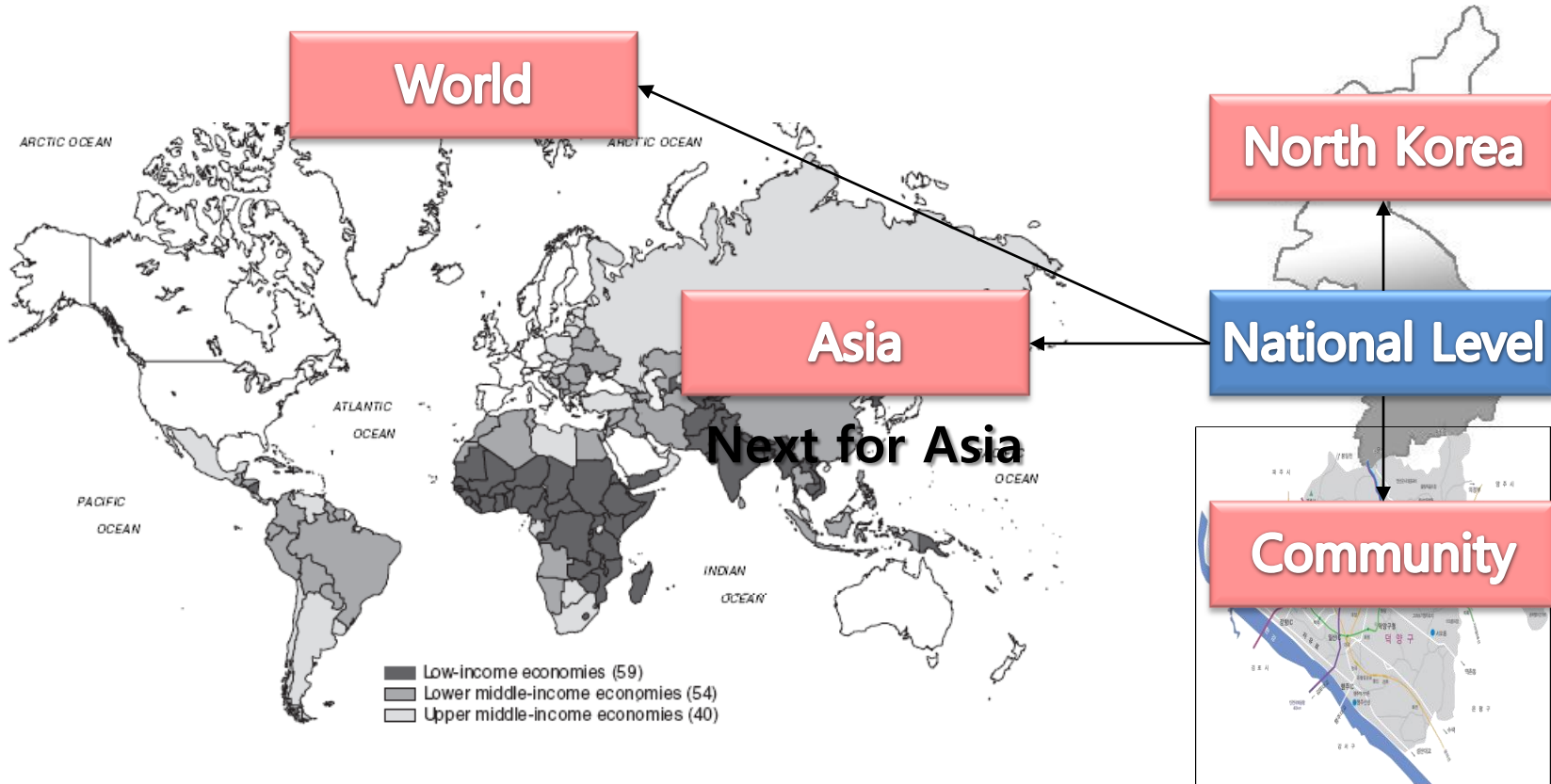
Functions of NCC Korea



National Cancer Control Institute

- Think-Tank for cancer control policy
 - Planning and evaluating the National Cancer Control Programs
- Supporting National Cancer Control Programs
 - Prevention, Screening, Palliative care
- Operating Central Cancer Registry, National Cancer Information Center(NCIC) and Quitline
- Research for cancer control

Direction of NCCP



Next for Asia

- Asian Pacific Rim Region
- 2000
 - Incidence cases 3 M
 - Mortality cases 2 M
- 2050
 - Incidence cases 7.8 M (2.6 times)
 - Mortality cases 5.7 M (2.9 times)

Source: Yang BH, et al. 2004

Next for Asia

- Sharing experiences of cancer control
 - Success and failure
- Korea, Asian countries and WHO

Thank your for your attention

