

CANCER REGISTRATION IN DEVELOPING COUNTRIES:

THE AIRTUM-EUROMED EXPERIENCE

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- **INTRODUCTION**
- **CANCER REGISTRATION IN OCCUPIED PALESTINIAN TERRITORIES**
- **CANCER REGISTRATION IN ALGERIA**
- **FROM REGISTRATION TO ANALYTICAL INVESTIGATIONS**

EUROMED CANCER REGISTRY PROGRAM

- **2008:** The “Euromed Cancer Registries Network” project was promoted by the Italian Ministry of Health in collaboration with AIRTUM after specific activities promoted by few Italian cancer registries
- **2009,** the Italian MOH approved and financed for the first year AIRTUM for conducting program
- **2010,** the Italian MOH financed for the second year AIRTUM for continuing the program
- **2011,** the Italian MOH financed the Italian Health Institute (istituto Superiore di Sanità, Rome, ISS) for continuing -in collaboration with AIRTUM- the third year of the Euromed program – deadline **May, 2013**

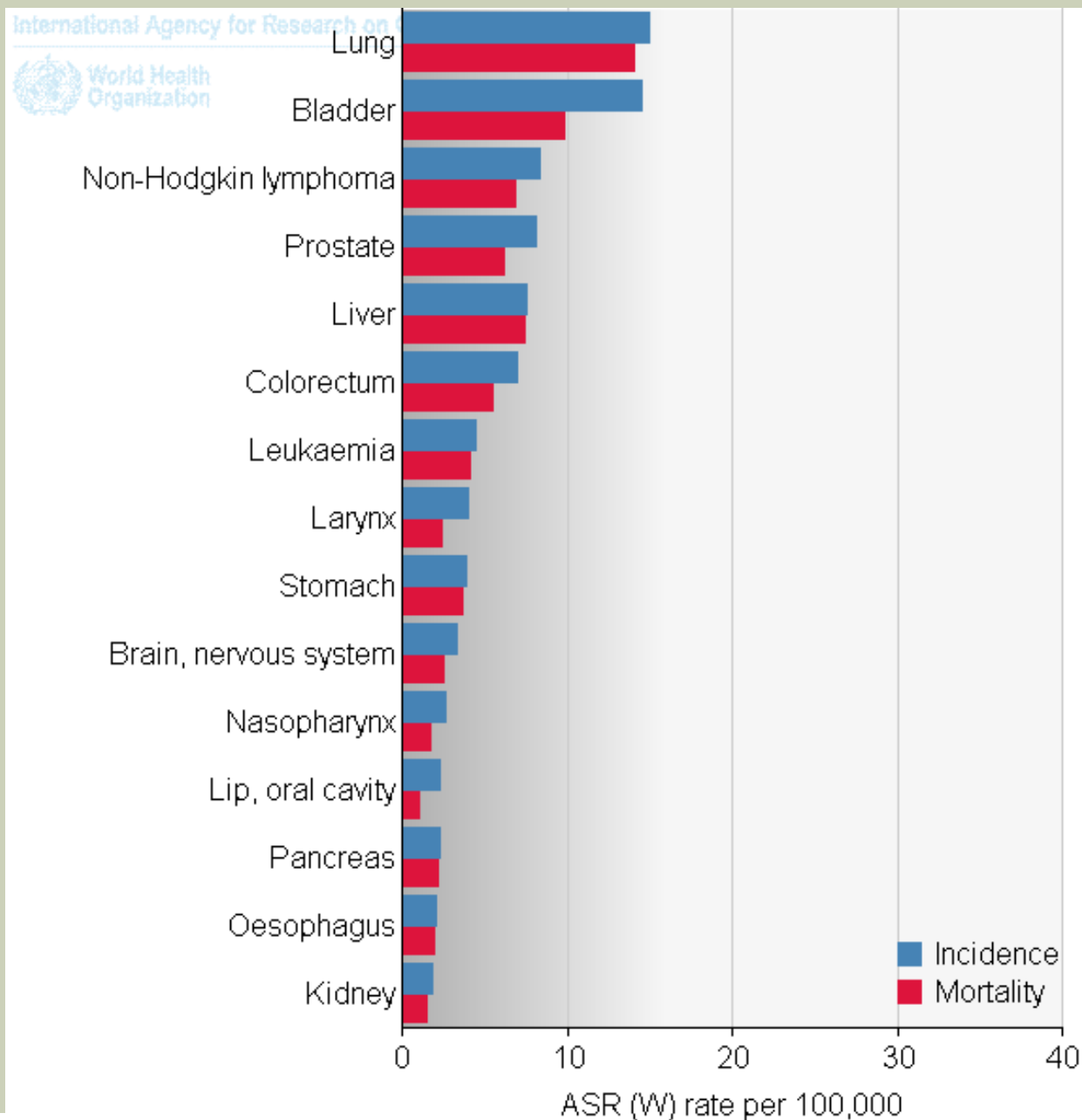
EUROMED CANCER REGISTRY: AIMS

General:

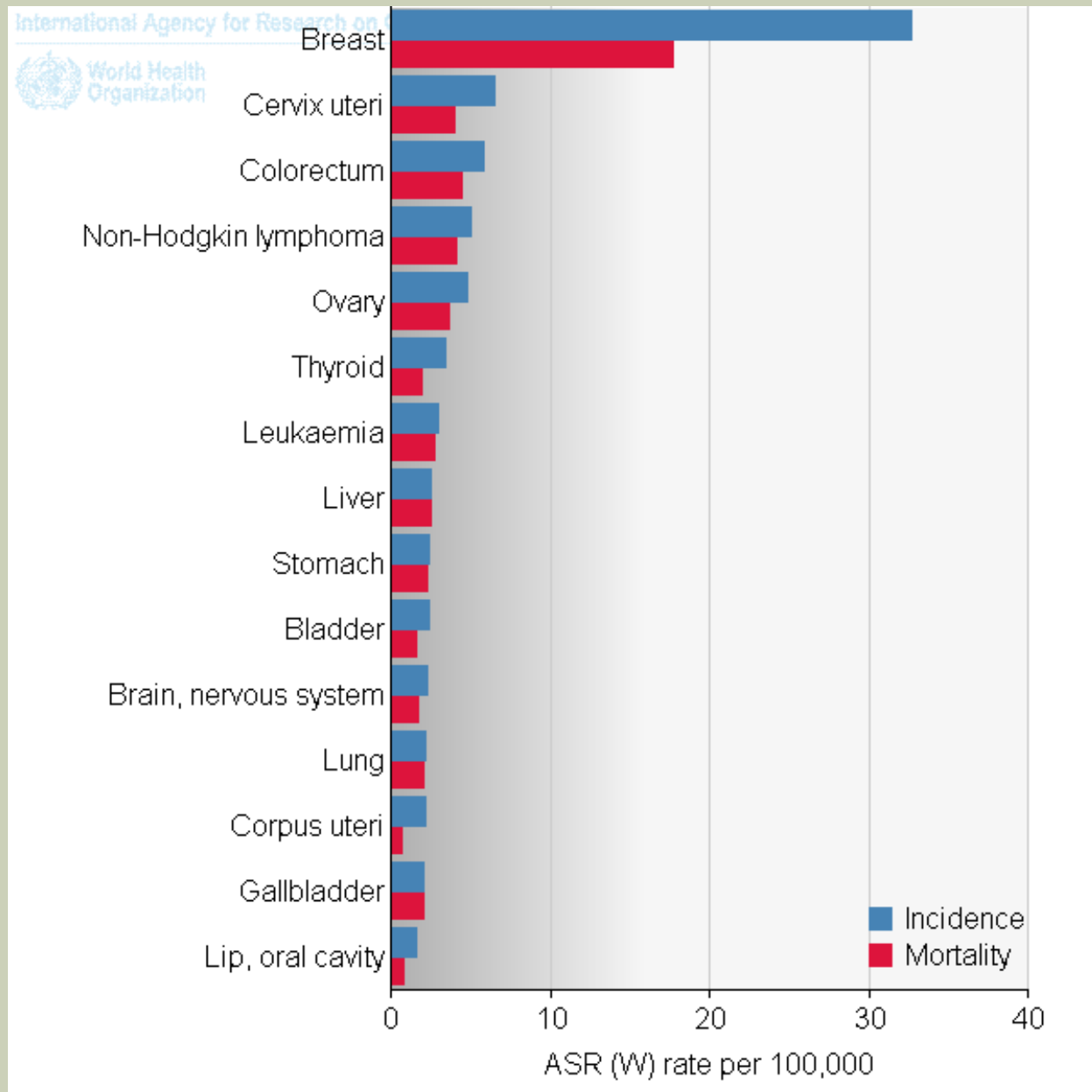
Contributing to support the control of the spread of neoplastic diseases in limited resource Countries facing the Mediterranean rim.

Specific:

- **Improving the quality** of data from the cancer registries active in Mediterranean Countries and the information flows;
- **training the personnel for**
 - data collection,
 - use of standard statistical software
 - use statistical models



GLOBOCAN 2008 (IARC) - Incidence and mortality rates NORTHERN AFRICA, WOMEN



EUROMED: PARTICIPATING CENTRES

- SETIF CANCER REGISTRY, ALGERIA
- IZMIR CANCER REGISTRY, TURKEY
- MALTA NATIONAL CANCER REGISTRY, MALTA
- NATIONAL CANCER REGISTRY, AND RESEARCH CHILDREN'S CANCER HOSPITAL, CAIRO - EGYPT
- REGISTRES DES CANCERS DE RABAT, AND REGISTRE DU CANCER DU GRAND CASABLANCA, -MOROCCO
- BENGHAZI CANCER REGISTRY, LYBIA
- STATISTICAL OFFICER OF CYPRUS HEALTH MONITORING, CYPRUS
- JORDAN CANCER REGISTRY
- WEST BANK AND GAZA, - OCCUPIED PALESTINIAN TERRITORIES
- REGISTRE DU CANCER DE LA TUNISIE CENTRALE, TUNISIE

WEST BANK & GAZA

Under Israeli Occupation
Since 1967

- 1949 Armistice (Green Line)
- Green box: Palestinian Authority
- Yellow box: Israeli control
- Red line: Wall/fence
- Red line with dots: Roads
- Black triangle: Israeli Settlement

0 10 20 mi
0 10 20 30 km



Population :

3.760.000 West Bank

1.416.000 Gaza Strip

49.3% women

<15 years = 48.8%

0-4 years, largest group: 19%

≥65 years : 2.5%

Health personnel:

1533 physicians

3621 nurses

1427 others

Health informatics:

The WHO has described the PNA's Health Information System (HIS) as

“incomplete, fragmented, unreliable, and outdated”.

Health in the Occupied Palestinian Territory 3

Lancet 2009; 373: 1041-49

Cardiovascular diseases, diabetes mellitus, and cancer in the occupied Palestinian territory

Published Online

March 5, 2009

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6736(09)60109-4

Abdullatif Hussini, Niveen M E Abu-Rmeileh, Nahed Mikki, Tarik M Ramahi, Heidar Abu Ghosh, Nadim Barghuthi, Mohammad Khalili, Espen Bjertness, Gard Holmboe Ottesen, Jk Jervell

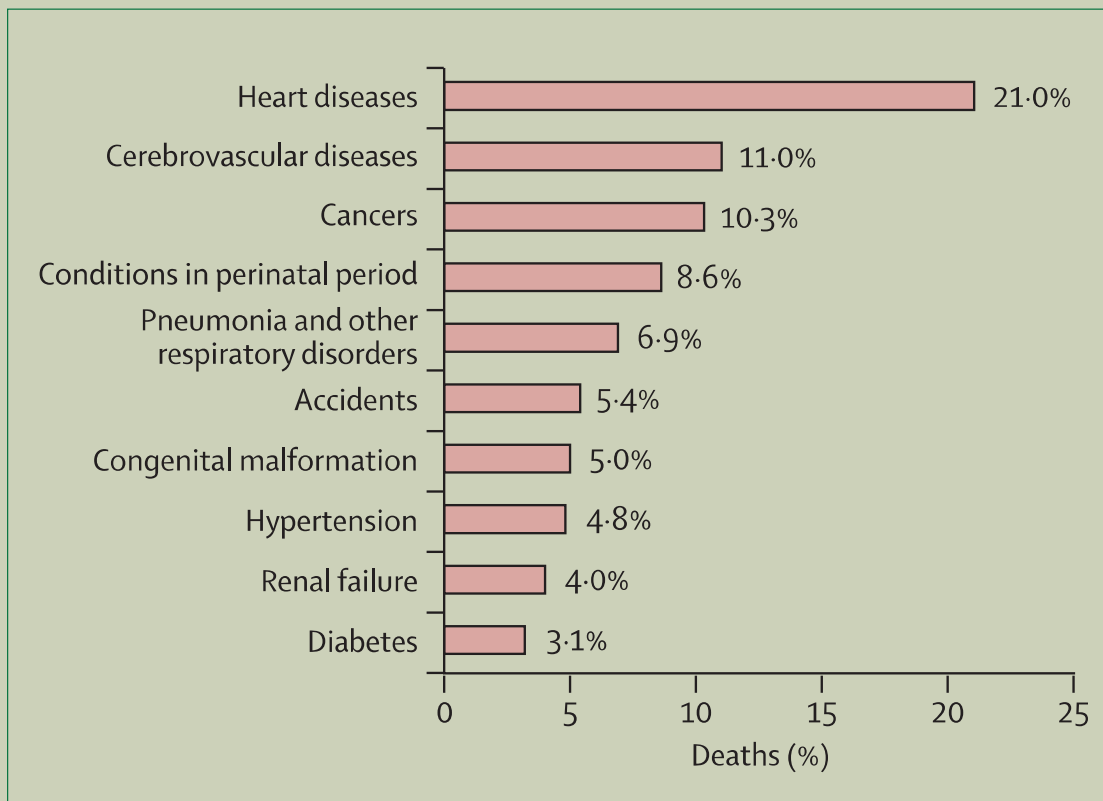


Figure 1: Leading causes of death in the occupied Palestinian territory in 2005

Reproduced from Ministry of Health⁶ with permission.

Health in the Occupied Palestinian Territory 3

Cardiovascular diseases, diabetes mellitus, and cancer in the occupied Palestinian territory

AbuJilatif Hussaini, Niveen MEAbu-Rmeileh, Nahed Mikki, Tarik M Ramahi, Hidar Abu Ghosh, Nadim Barghouti, Mohammad Khalili, Esam Eljtrass, Gerdt Holmboe-Ottesen, Jakob Vel

	West Bank Palestinians	Israeli Arabs	Israeli Jews	Jordanians	Lebanese
Women					
Year(s)	1998–2001 ³⁵	1996–2001 ³⁶	1996–2001 ³⁶	1996–2001 ³⁶	1998 ³⁷
Age-adjusted incidence (per 100 000 population)	88.5	128.7	272.1	112.2	134.8
Total cancer cases					
Year	2005 ⁶	2000 ³⁶	2002 ³⁶	2002 ³⁶	1998 ³⁷
Breast	31.4%	27.7%	31.5%	32.5%	46.7%
Colon and rectum	9.2%	9.6%	14.1%	9.0%	11.5%
Thyroid	5.5%	7.0%	3.6%	5.4%	..
Corpus uteri	4.4%	5.0%	4.1%	2.4%	6.5%
Ovary	3.8%	3.2%	2.7%	4.1%	5.9%
Cervix uteri	1.0%	2.0%	1.7%	2.2%	2.3%
Lung and bronchus	3.0%	3.5%	4.6%	2.3%	4.5%
Men					
Year(s)	1998–2001 ³⁵	1996–2001 ³⁶	1996–2001 ³⁶	1996–2001 ³⁶	1998 ³⁷
Age-adjusted incidence (per 100 000 population)	108.0	175.7	282.6	115.2	154.2
Total cancer cases					
Year	2005 ⁶	2000 ³⁶	2002 ³⁶	2002 ³⁶	1998 ³⁷
Lung	13.8%	19.0%	9.8%	12.2%	14.1%
Prostate	11.3%	8.4%	17.5%	7.5%	14.2%
Colon and rectum	9.6%	9.9%	14.1%	9.1%	12.3%
Non-Hodgkin lymphoma	5.0%	7.7%	5.7%	7.1%	4.2%
Stomach	4.7%	3.4%	4.3%	4.7%	7.9%

Table 4: Age-adjusted cancer incidence and site-specific proportions of all cancers in the occupied Palestinian territory and in neighbouring countries

CANCER REGISTRATION IN GAZA, 2010

- Cases registered in 2010
 - Men= 427, (53,8/100.000)
 - Women= 504, (65,9/100.000)
- Most common sites in men:
 - Lung
 - Leukemia
 - Colorectum
 - Lymphomas
 - Prostate
- Most common sites in women:
 - Breast
 - Colorectum
 - Leukemia
 - Lymphomas
 - Thyroid

CANCER REGISTRATION IN ALGERIA, WILLAYA OF SETIF



Algeria, Setif Wilaya (1998-2002)

SETIF - ALGERIA POPULATION: 1.365.488 inhabitants

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Men (50.1%)

58.0%, < 25 years

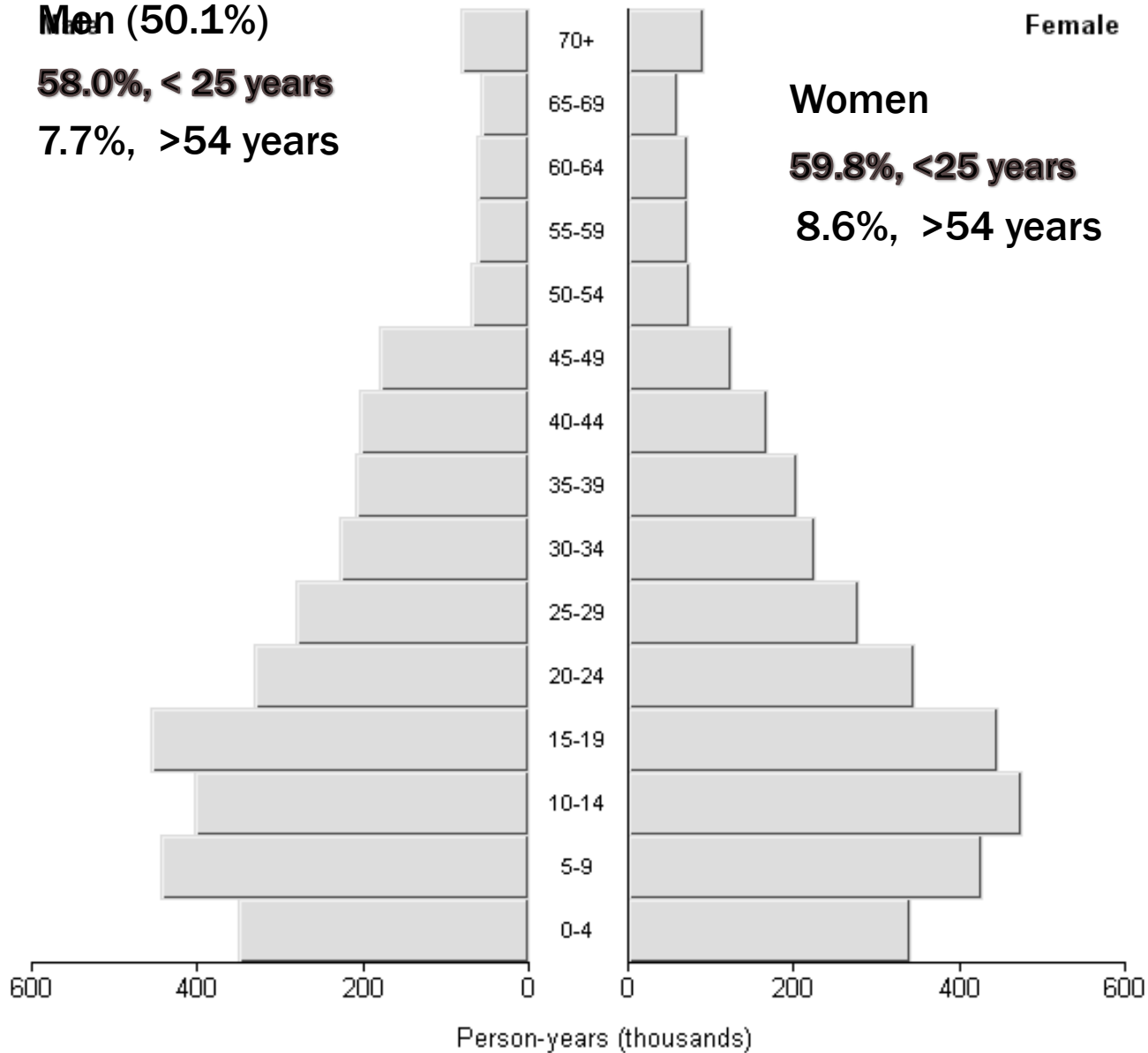
7.7%, >54 years

Female

Women

59.8%, <25 years

8.6%, >54 years



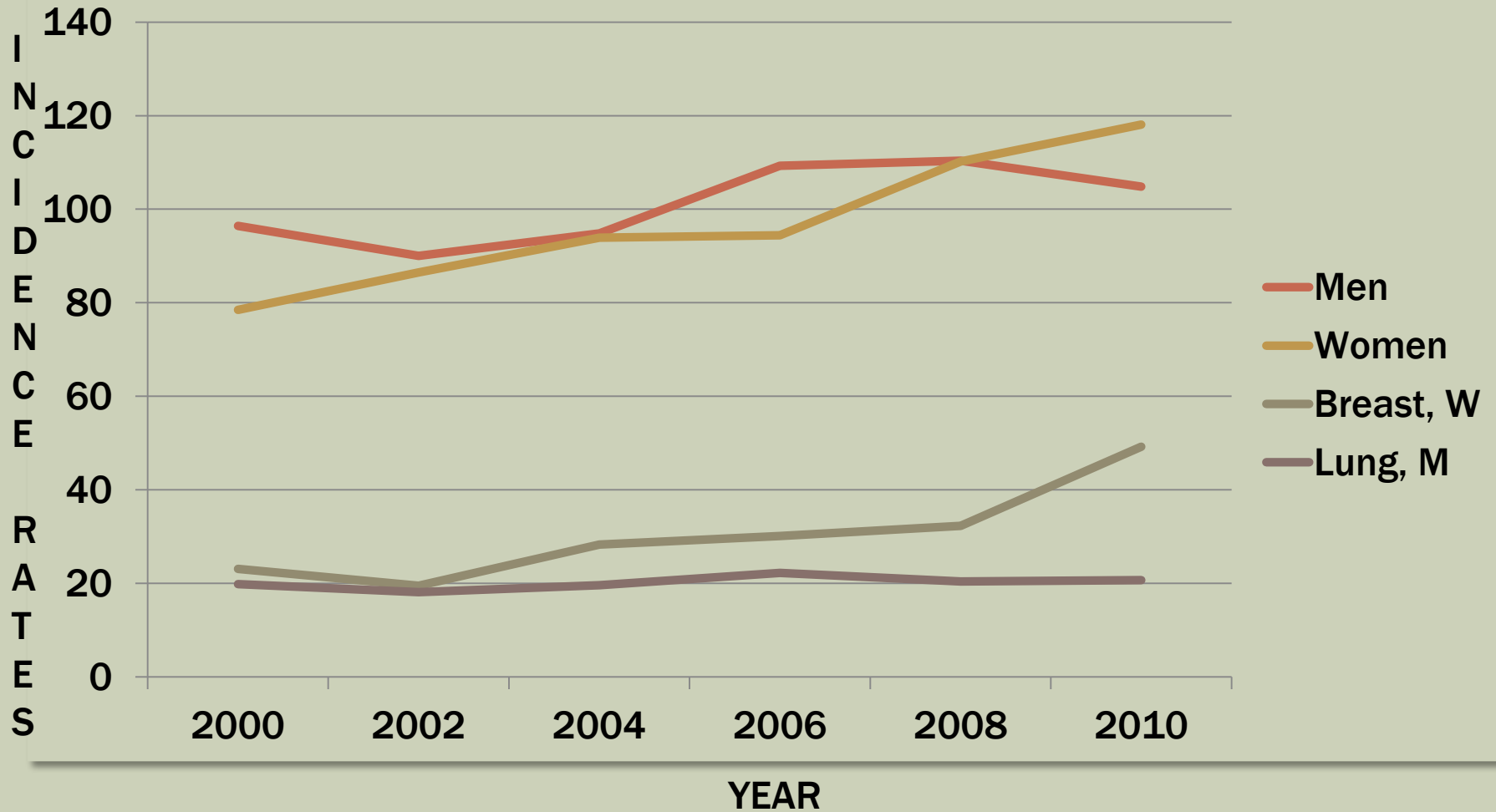
INCIDENCE OF MOST COMMON CANCER SITES, SETIF, 2010 -MEN

Site/type	Number of yearly diagnoses	Incidence rate (STD, x100 000)	%
Lung	105	20,7	17,3
Colon-rectum	69	11,6	11,4
Bladder	58	10,2	9,6
Prostate	43	8,2	7,1
Nasopharynx	41	5,8	6,8
Stomach	35	6,6	5,8
Larynx	34	6,4	5,6
Non-Hodgkin lymphomas	26	3,7	4,1
Central nervous system	24	3,5	3,8
Leukemias	16	2,8	2,6

INCIDENCE OF MOST COMMON CANCER SITES, SETIF, 2010 -WOMEN

Site/type	Number of yearly diagnoses	Incidence rate (STD, x100 000)	%
Breast	336	49,2	43,4
Colon-rectum	68	11,4	8,8
Thyroid	46	6,4	5,9
Cervix	44	7,7	5,7
Gallbladder, biliary tract	28	4,7	3,6
Non-Hodgkin lymphomas	28	4,1	3,6
Lung	24	4,0	3,1
Central nervous system	24	3,3	3,1
Nasopharynx	20	3,0	2,6
Stomach	17	2,9	2,2

INCIDENCE OF MOST COMMON CANCER SITES, SETIF, 2000-2010



EUROMED/AIRTUM PROGRAM:
HOSPITAL_BASED CASE-CONTROL STUDY ON RISK FACTORS FOR
SELECTED CANCER SITES, SETIF CANCER REGISTRY

- Types/sites of interest :
 - Breast, female
 - Prostate
 - Bladder
 - Nasopharyngeal cancer
 - Liver and biliary tract cancers
 - Colon-rectum
 - Non-Hodgkin lymphoma
 -

EUROMED/AIRTUM PROGRAM: HOSPITAL_BASED CASE-CONTROL STUDY ON RISK FACTORS FOR SELECTED CANCER SITES, SETIF CANCER REGISTRY

- Risk factors investigated:
 - Socio-demographic
 - Personal habits:
 - Smoking
 - Diet
 - Physical activity
 - Alcohol consumption
 - Familiarity and reproductive
 - Occupation
 - Medical history